

クロコブタケからの血管新生阻害活性物質の探索
～血管内皮細胞増殖阻害活性を指標として～

Search for Antiangiogenic Constituents
from *Hypoxylon truncatum*
～ Evaluation of Antiproliferative Activities
against Vascular Endothelial Cells～

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略語一覽

ALK	anaplastic lymphoma kinase
AML	acute myelogenous leukemia
BAD	Bcl2 antagonist of cell death
Bcr-Abl	bcr-abl fusion protein
BRAF	v-raf murine sarcoma viral oncogene homolog B1
CCR4	C-C chemokine receptor type 4
CD	cluster of differentiation
CHCl ₃	chloroform
CML	chronic myelogenous leukemia
COSY	correlated spectroscopy
COX	cyclooxygenase
CTLA-4	cytotoxic T-lymphocyte antigen 4
DMSO	dimethyl sulfoxide
DNMT	DNA methyltransferase
EGFR	epidermal growth factor receptor
EI	electron ionization
Elk1	<i>ets</i> -like gene product
EML4	echinoderm microtubule-associated protein-like 4
ERK	extracellular signal-regulated kinase
ext.	extract
FBS	fetal bovine serum
f. c.	final concentration
Flk-1	fetal liver kinase 1
Flt-1	fms-like tyrosine kinase 1

Flt-4	fms-like tyrosine kinase 4
Fr.	Fraction
Fyn	proto-oncogene tyrosine-protein kinase Fyn
GIST	gastrointestinal stromal tumor
Grb2	growth factor receptor-bound protein 2
HCl	hydrogen chloride
HER2	human EGFR-related 2
HDAC	histone deacetylase
Hh	hedgehog
HMBC	heteronuclear multiple bond connectivity
HMQC	heteronuclear multiple quantum coherence
HR	high resolution
HUAEC	human umbilical artery endothelial cells
HUVEC	human umbilical vein endothelial cells
insol.	insoluble
JAK	Janus kinase
KDR	kinase domain receptor
Lck	lymphocyte cell-specific protein-tyrosine kinase
MAP	mitogen-activated protein kinase
MCL	mast cell leukemia
MEK	MAPK/ERK kinase
MEM	minimum essential medium
MeOH	methanol
mp	melting point
mTOR	mammalian target of rapamycin

MTT	methyl thiazolyl tetrazorium
ND	not determination
NET	neuroepithelial cell-transforming gene protein
NHDF	normal human dermal fibroblast
<i>n</i> -hexane	normal-hexane
OD	optical density
ODS	octadecylsilyl
PBS	phosphate buffered saline
PDGFR	platlet derived growth factor receptor
Ph+ALL	Philadelphia-positive subtype of acute lymphoblastic leukemia
Raf	<i>raf</i> gene product
RANKL	receptor activator of nuclear factor- κ B ligand
Ras	<i>ras</i> oncogene product
RB	retinoblastoma-associated protein
rpm	rotation per minute
Rt	retention time
SEGA	subependymal giant cell astrocytoma
Shb	SH2 domain-containing adapter protein B
SH2	Src homology 2 domain
sol.	solution
TSAD	T cell-specific adapter protein
WST-8	2-(2-methoxy-4-nitrophenyl)-3-(4-nitrophenyl)-5-(2,4-disulfophenyl)-2H-tetrazolium, monosodium salt
5-FU	5-fluoropyrimidine-2,4(1H,3H)-dione (fluorouracil)

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序論

第一章 キノコ

現在，地球上には約 150 万種の生物が存在することが確認されており，生物界は細胞構造やエネルギーの摂取法により生産者，消費者，還元者に大別される．生産者である植物は，太陽エネルギーを光合成により二酸化炭素を固定して有機物を作り出し，消費者である動物は植物が生産した有機物や他の動物を食する．さらに，植物や動物は，還元者である菌類によって分解されて再び無機物へと還元され，これら三生物群が共同生活を営むことによって永遠の生命と生活が保証されている．菌類の生態系における役割として，生物の死骸を分解する分解者としての働きが強調される．しかし，実際に菌類の生態を観察すると，分解者としての働きはもちろんのこと，植物病原菌に代表される寄生者や線虫捕食菌のような捕食者，あるいは，樹木や藻類，昆虫類と相利共生する共生者といった多芸多才な生態を観察できる．

陸生菌類の 2 大系統といえる担子菌類と子囊菌類は様々な陸上生物の寄生者または共生者であり，強力な分解者でもある．担子菌亜門は約 3 万種からなり，菌類の 3 分の 1 を占める大きなグループである．担子菌類は海水や淡水中からも報告されるが，ほとんどが陸生であることから陸上で多様化した系統であると考えられている．子囊菌亜門は 5674 属，約 6 万 4 千種からなる菌類で最も大きなグループで，真核生物の中でも多様性に富む生物群の一つである．子囊菌類は陸上および水中のいずれにも広く分布している．地球上の極限的な場所，例えば南極大陸の凍結した岩の内部，深海の木材や堆積物などから子囊菌類が分離された報告もある．また，子囊菌の種の約 40% が藻類との共生体である地衣を形成し，地球の陸上表面の約 8% を被覆している．

「キノコ」と呼ばれる大形の生殖器官、つまりは子実体を形成する菌は一部であり、その大部分が担子菌亜門に、それ以外は子囊菌亜門に属する (Fig. 1). この俗にキノコと呼ばれる菌類はシダ植物や種子植物と時代を同じくして地球上に出現し、長い進化の歴史を背景に、生活体は単純であるが極めて複雑多彩な子実体をもつようになった.^{1,2)}

昔から一部のキノコ類は、食用だけでなく薬用としても利用されてきた. 中国最古の薬物書『神農本草経』の上品には「赤芝」、「黒芝」、「青芝」、「白芝」、「黄芝」、「紫芝」の六芝および「茯苓」が、中品には「猪苓」および「桑耳」が、下品には「雷丸」が収載されている. 六芝のうち主なものは紫芝と赤芝で、これらは靈芝と称するマンネンタケ *Ganoderma lucidum* (Leyss. ex. Fr.) Karst またはその近縁種の子実体である. 茯苓と猪苓は「桂枝茯苓丸」、「猪苓湯」、「五苓散」などの漢方処方に使用される. 桑耳は『薬性論』においては桑櫟 (そうじ), 桑黄 (そうおう) とも呼ばれ、それぞれキクラゲの類、サルノコシカケの類をさす. 梁の『本草経集注』には「鬼蓋 (きがい)」と「馬勃 (ばぼつ)」があげられている. 鬼蓋はヒトヨタケ科のヒトヨタケ *Coprinus atramentarius* (Bull.) Fr. の子実体で小児の諸癰などに用いられる. 馬勃はホコリタケ科のオニフスベ *Lasiosphaera fenzlii* Reich. などの子実体で、止血、抗炎症薬として用いられる. 唐代の『新修本草』には「槐耳」が収載されているが、これはエンジュ (中国名: 槐) *Sophora japonica* L. につくキクラゲ *Auricularia auricula* (L. ex Hook.) Underw. で、止血薬として用いられ、また食用にもしている. 『酉陽雜俎 (ゆうようざっそ)』には「猢猻眼 (こそんがん)」の名がみられるが、これは桑黄と同類とされている. 日本でも「梅寄生」と称する生薬に抗がん作用があるとして民間で用いられているが、これも同様

のものである。「雷丸」はサルノコシカケ科のライガンキン *Polyporus mylittae* Cook. et Mass. の菌核で，条虫駆除薬とする．『本草拾遺』には，「土菌」と「鬼筆」が収載されている．土菌のうちの 1 種「仙人帽」は，スッポンタケ科のキヌガサタケ *Dictyophora indusiata* Fisch. で，血病に主効があるとされている．鬼筆はスッポンタケ科のキツネノタイマツ *Phallus rubicundus* (Bosc.) Fr. の子実体などで，できものに外用する．宋代の『図経本草』の「杉菌」は心痛を治すキノコで，おそらくモエギタケ科のスギタケ *Pholiota squarrosa* (Fr.) Quél. の子実体であるという説もあるが確かではない．『証類本草』には「蟬花（現在では金蟬花）」と称する変わった真菌類が登場する．これはセミ科の幼虫に寄生したバツカクキン科のセミタケ *Cordyceps sobolifera* (Hill.) Berk. et Broome の菌核（寄生虫体）および子座で，小児の驚癇，夜啼きなどに用いている．元代の『日用本草』には「香蕈」や「天花蕈」などが収載されている．香蕈はキシメジ科のシイタケ *Lentinus edodes* (Berk.) Sing. で，食用キノコとして最もよく使われるものであるが，薬としては胃腸障害，貧血症などに用いられている．天花蕈はキシメジ科のヒラタケ *Pleurotus ostreatus* (Jacq. ex Fr.) Quél. で，これも食用キノコである．明代の『本草綱目』には食用キノコとして名高いキシメジ科のマツタケ *Tricholoma matsutake* (S. Ito et Imai) Sing. も，「松蕈」の名で収載され，「小便が濁って禁ぜざるを治す」とその効を誌している．清代の『本草從新』には，「冬虫夏草」が収載されている．^{3,4)}

近年ではキノコ類が制がん剤として注目されている．現在，抗悪性腫瘍剤としてクレスチン[®]，レンチナン[®]，シゾフィラン（ソニフィラン[®]）の 3 剤が臨床において使用されている．これらはそれぞれカワ

ラタケ *Coriolus versicolor* (L.: Fr.) Quél. の培養菌糸体，シイタケ *Lentinula edodes* (Berk.) Sing., スエヒロタケ *Schizophyllum commune* Fr.: Fr. から得られる多糖またはタンパク質 - 多糖複合体との混合物であり，いずれも他の化学療法や放射線療法と組み合わせて使われている．

キノコが産生する二次代謝産物には他の菌類にはみられない特徴的な構造をもつものがある．担子菌は高等植物に似てシキミ酸経路が発達しており，しばしばテルフェニルキノンが得られる．その他，メバロン酸経路由来のテルペン類も多く，中でも酢酸－マロン酸経路のポリアセチレンは担子菌に特有である．アミノ酸由来の呈味の強い殺蟻物質イボテン酸，幻覚性のあるインドール化合物，致死性毒のヘテロ環状ペプチドなどもキノコ由来の独特な二次代謝産物である．⁴⁾

しかし，キノコの二次代謝産物や，菌類の分類について，系統だった研究はまだまだ充分であるとは言い難い．自然環境の保護が叫ばれる昨今において，自然界の秩序を正しく理解するために菌類研究の展開は必要不可欠である．

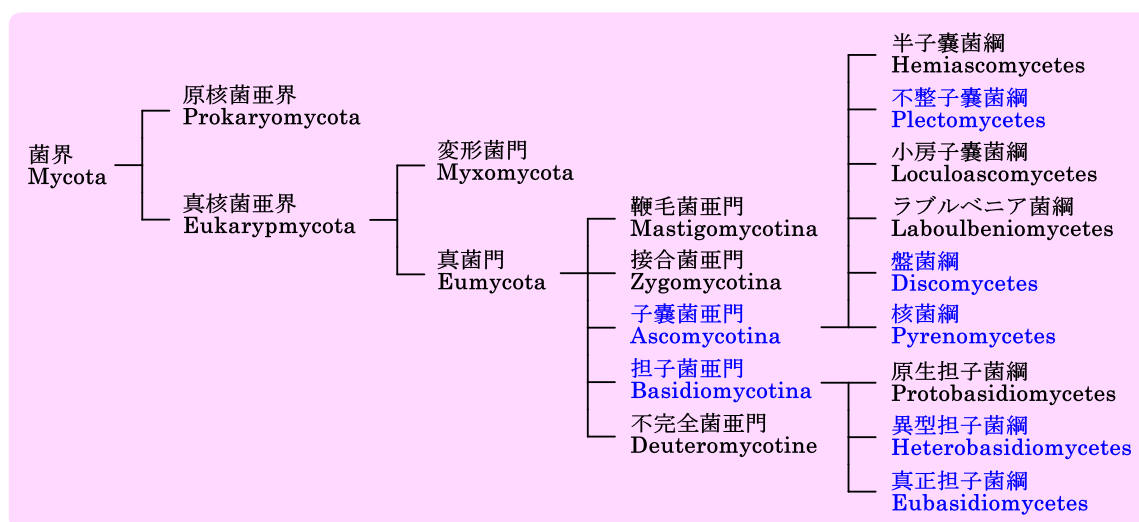


Fig. 1. Classification of Mycota ¹⁾

第二章 細胞増殖

細胞の成長とは，細胞の質量の大部分を占めるタンパク質や膜，細胞小器官やその他の構成要素を合成することにより細胞の大きさを増加させる過程である．細胞はある程度の大きさになると，成長を止めるか分裂をする．分裂から次の分裂までを細胞周期（cell cycle）と呼び，細胞分裂は，核が分裂する有糸分裂（mitosis）と細胞質が二つに分かれる細胞質分裂（cytokinesis）に分けられる．多細胞生物においては，細胞の成長と分裂がどのようにして連携しているのか，いまだ未知な部分が多い．細胞，組織そして生体の大きさを制御する分子機構は，生物学の中でも興味深く神秘的な課題の一つである．

第一節 CDK とサイクリン

細胞周期の制御機構を構成する中心的な因子は，サイクリン依存性キナーゼ（cyclin-dependent kinase；CDK）である．細胞周期の進行に従い，このキナーゼ活性は急激に変化し，それによって細胞周期の進行を制御するタンパク質のリン酸化状態とそれによる活性化状態に変化がもたらされる．CDK タンパク質の細胞内濃度は細胞周期を通じて一定であるので，CDKの活性の変動は，原則的にサイクリン（cyclin）として知られる制御サブユニットの量の変動に依存している．

CDK（cyclin-dependent kinase）

CDK はセリン／スレオニンキナーゼの一ファミリーで，定義上すべての CDK はその酵素活性に調節サブユニットであるサイクリンの結

合を必要とする．CDK の機能は，細胞周期の各過程において細胞内の数多くのタンパク質の特異的なアミノ酸配列上のセリンもしくはスレオニン残基をリン酸化することである．⁵⁾

1987 年に Nurse らによりヒトの CDK1 が，1991 年に Tsai・Harlow・Meyerson，あるいは Elledge らにより CDK2 がそれぞれ同定されてから，これまでに CDK11 までが同定されている（Fig. 2）．このうちの CDK1，2，4 および 6 のわずか 4 種が細胞周期の制御に直接関わっている．細胞周期の各過程は，CDK1 と 2 という 2 つの CDK によって制御されており，主に M 期と S 期にそれぞれ作用する．さらに，細胞外因子に応答して細胞周期への進行を調節する 2 つの重要な CDK4 と 6 が存在する．その他に PCTAIRE や PFTAIRE，CCRK，CHED，CRK7 といった高度に関連する分子も CDK ファミリーの一員と称されるが，それぞれの活性化調節サブユニットはいまだ同定されていない．^{6,7)}

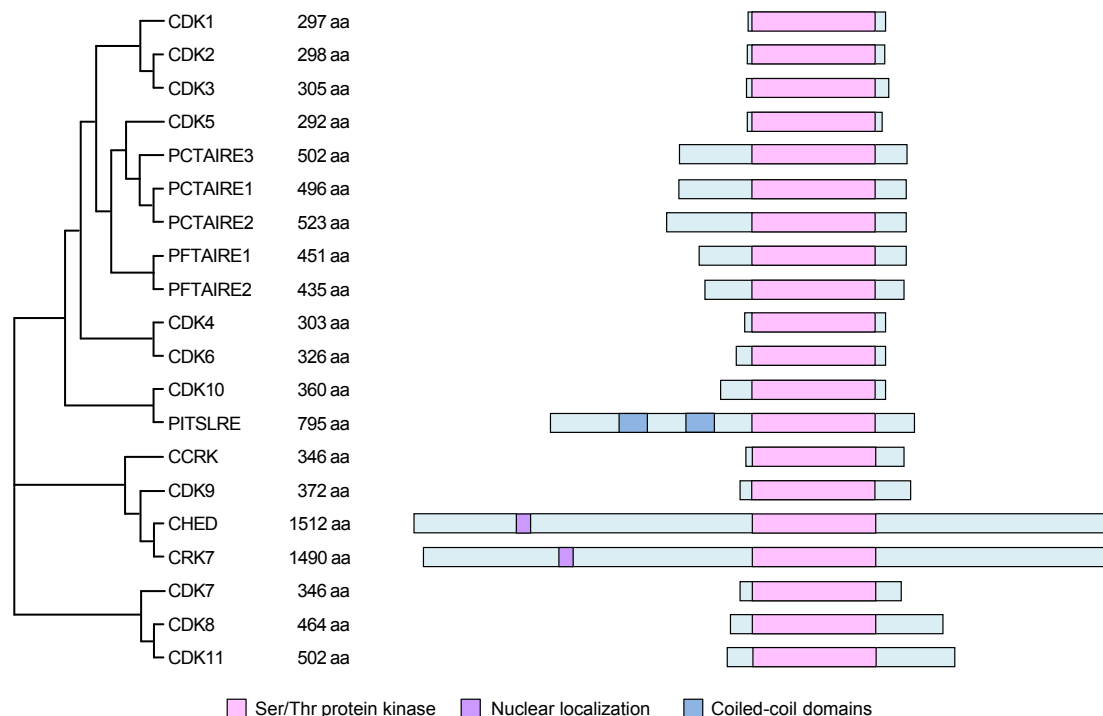


Fig. 2. The Mammalian CDK Family ⁷⁾

サイクリン

サイクリンは CDK ファミリーに属する分子と結合し活性化させるという特徴を示す．ほとんどのサイクリンは細胞周期を通じてその細胞内濃度を劇的に変化させ，それによって CDK 活性が周期的に変化し，細胞周期制御の中心的役割を担っている．サイクリンの細胞内濃度は主にサイクリン遺伝子発現とサイクリンタンパク質の分解によって調節されている．

現在までに，「cyclin-box」と呼ばれる 150 のアミノ酸残基からなる保存されたストレッチをもつ 29 のサイクリン関連分子が同定されている (Fig. 3)．このドメインは 5 つのヘリックス領域からなり，これによって CDK などのパートナータンパク質と結合する．

細胞周期に関わるサイクリンは，主に細胞周期における発現の時期とその機能によって G1 期サイクリン (サイクリン D)，G1/S 期サイクリン (サイクリン E)，S 期サイクリン (サイクリン A) および M 期サイクリン (サイクリン B) の 4 つのクラスに分類される．

サイクリン A には，別々の遺伝子にコードされたサイクリン A1 とサイクリン A2 が存在する．サイクリン A1 は生殖細胞および初期胚の細胞であり，サイクリン A2 は発生初期および成体で発現するが，細胞周期における機能に関して 2 つのサブタイプ間でほとんど差はない．サイクリン B にはサイクリン B1 とサイクリン B2，サイクリン B3 が存在するものの，サイクリン B3 は分裂に関して明確な機能をもっていない．細胞周期において，サイクリン B1 の方がより重要だと考えられ，よく研究されている．⁵⁾

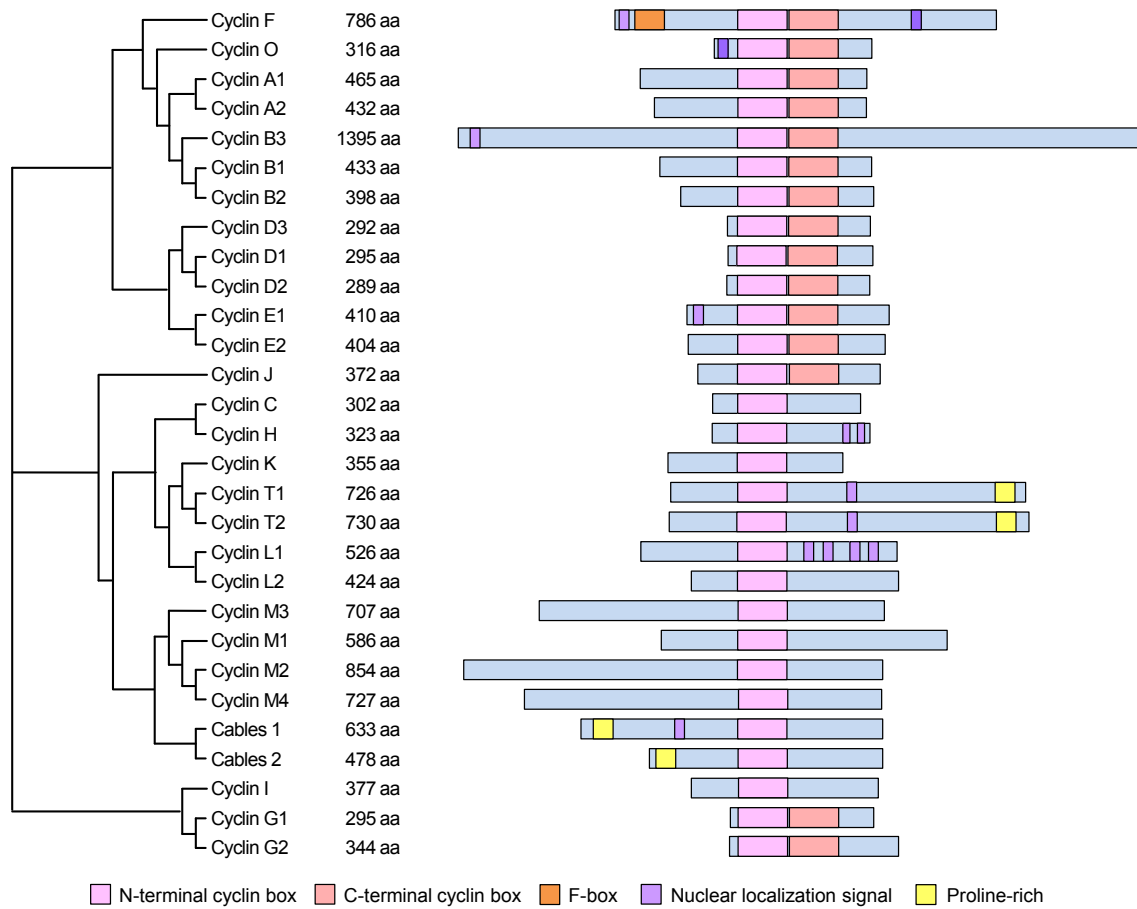


Fig. 3. Mammalian Proteins with A Cyclin-box Domain ⁷⁾

第二節 細胞周期

「細胞 (cellula)」という名称が 17 世紀半ばに付与されて以来、約 200 年を経て「細胞は細胞に由来する (Omnis cellula e cellula)」という概念が提唱された。さらに約 100 年を要してはじめて、この「細胞に由来する」過程が G1 期 (Gap1 phase) – S 期 (Synthesis phase) – G2 期 (Gap2 phase) – M 期 (Mitotic phase) という 4 つの位相として定義された。しかし細胞周期という用語がいつから使用されるようになったのかは定かではない。

細胞周期のうち、有糸分裂の時期を M 期といい、M 期と M 期の間の長い期間を間期 (interphase) という。間期はさらに G1, S, G2 期に分けられる。S 期は核の DNA の複製がおこる時期であり、M 期から S 期の始まりまでの期間が G1 期、つまり最初のギャップ期である。S 期を完了すると、細胞は二番目のギャップ期である G2 期に入る。この時期に細胞分裂の最終段階に到達し、タンパク質の合成が増加する (Fig. 4).⁶⁾

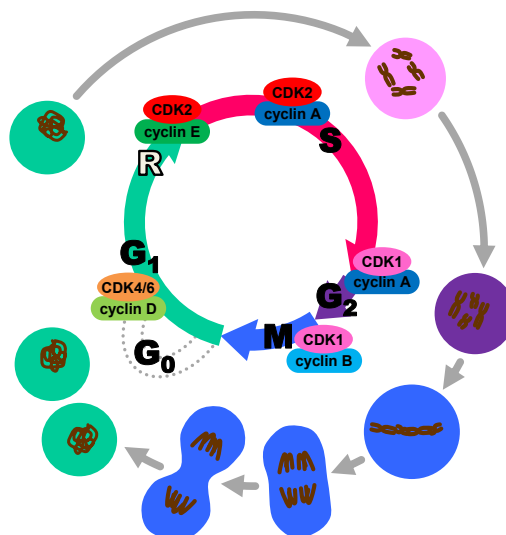


Fig. 4. Overview of Cell Cycle

多細胞生物では新たな細胞は必要とされるときにのみ作り出されるよう、組織特異的な遺伝子のプログラミングと、他の細胞が分泌する分裂促進因子（mitogen；マイトジェン）と呼ばれる細胞外タンパク質から受け取るシグナルによって、その増殖が制御されている。培養細胞から分裂促進因子を除去したときなどには、細胞は細胞周期から完全に脱出して G0 期と呼ばれる特別な休止状態に入る。

細胞外からのシグナルである分裂促進因子によって、細胞周期の初期の現象を引き起こすサイクリン D-CDK4/6 の活性化が起こる。分裂促進因子は、Ras-MAP キナーゼ経路の活性化を介してサイクリン D 遺伝子の発現を誘導する。休止期の細胞にわずかに残るサイクリン D-CDK4/6 は、グリコーゲンシンターゼキナーゼ 3 β （glycogen synthase kinase 3; GSK3 β ）によって阻害的リン酸化を受けているが、分裂促進因子の刺激はサイクリン D の脱リン酸化を引き起こす。さらに、活性をもつサイクリン D-CDK4/6 複合体の形成には補助因子が必要であり、p27 や p21 などの Cip/Kip ファミリータンパク質が両サブユニットと相互作用することでこれらの結合が強くなる。安定化したサイクリン D-CDK4/6 複合体は標的である RB タンパク質が存在する核に蓄積する。

RB タンパク質には pRB, p107, p130 の三つの関連タンパク質が存在し、それぞれが E2F と呼ばれる特定のタンパク質複合体ファミリーと結合する。E2F 複合体は、E2F ファミリータンパク質のサブユニットと、DP ファミリータンパク質のサブユニット一つずつから成るヘテロ二量体であり、G1/S 期の標的遺伝子のプロモーターに存在する特定の DNA 配列に結合する。E2F タンパク質は、その機能によって活性化 E2F と抑制性 E2F の 2 種類に分けられる。休止期の細胞では、

活性化 E2F はリン酸化された RB タンパク質, pRB によって抑制されており, 一方, G1/S 期遺伝子のプロモーターは抑制性 E2F と p107 もしくは p130 との複合体によって抑制されている. RB ファミリータンパク質は, 活性化したサイクリン D-CDK4/6 複合体依存的にリン酸化されて E2F から解離する. DNA 上の抑制性 E2F は, pRB と結合していない活性化 E2F に置き換わり, G1/S 期遺伝子の発現が活性化され, これによって細胞周期のスタートが切られる (Fig. 5).⁵⁾

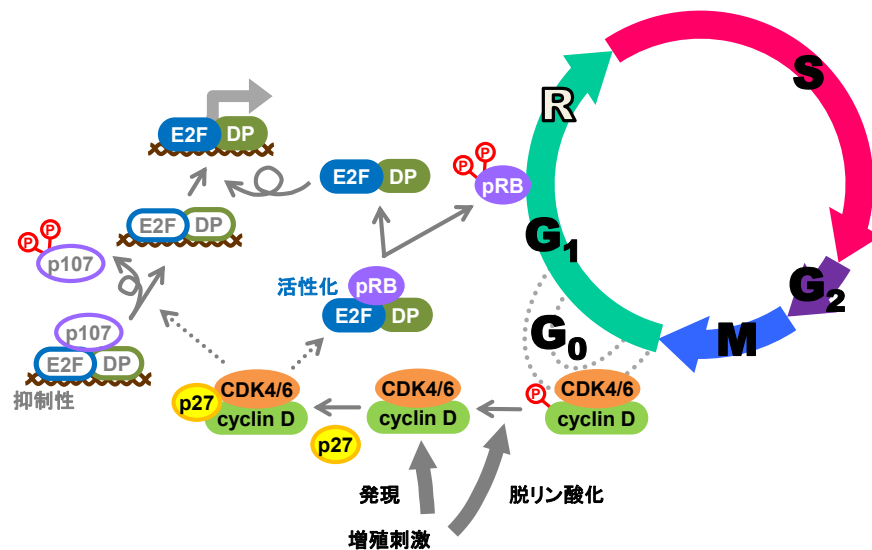


Fig. 5. G1 Phase of Cell Cycle

G1/S 期遺伝子産物の中で決定的に重要なのは, G1/S 期サイクリンのサイクリン E と S 期サイクリンのサイクリン A の二つである. サイクリン E は CDK2 と複合体を形成するが, 細胞周期に入る際の CDK2 の活性は p27 によって部分的に抑制されている. サイクリン D-CDK4/6 複合体の量が増加することで p27 の流通量が減少し, さらに p27 がタンパク質分解を受け不活性化されることでサイクリン E-CDK2 の活性化が促進される. G1 期後期になると, ホスファターゼ

Cdc25A による CDK2 の阻害的リン酸化の除去が起こり，サイクリン E-CDK2 複合体の活性はさらに上昇する．サイクリン D-CDK4/6 は部分的な RB タンパク質のリン酸化と E2F の活性化しか行わない．E2F の完全な活性化は，サイクリン E-CDK2 複合体の活性が G1 期後期に上昇し，RB タンパク質が完全にリン酸化されたときに起こる（正のフィードバック）．そして S 期初期になるとサイクリン E-CDK2 がサイクリン E の Thr380 をリン酸化するなどして，ユビキチン化を経てサイクリン E が分解される．

サイクリン A は CDK2 と複合体を形成するが，サイクリン A-CDK2 の活性化は DNA の複製を開始するために必要である．サイクリン E-CDK2 と同様に，サイクリン A-CDK2 複合体は p27 によって部分的に抑制されるので，完全な活性化には p27 の除去が必要である．また，サイクリン A-CDK2 の活性化は Cdc25A による脱リン酸化にも依存している．サイクリン A-CDK2 は活性化されると，複製開始点の pre-replication complex をリン酸化し，DNA 合成が開始される (Fig. 6). ⁵⁾

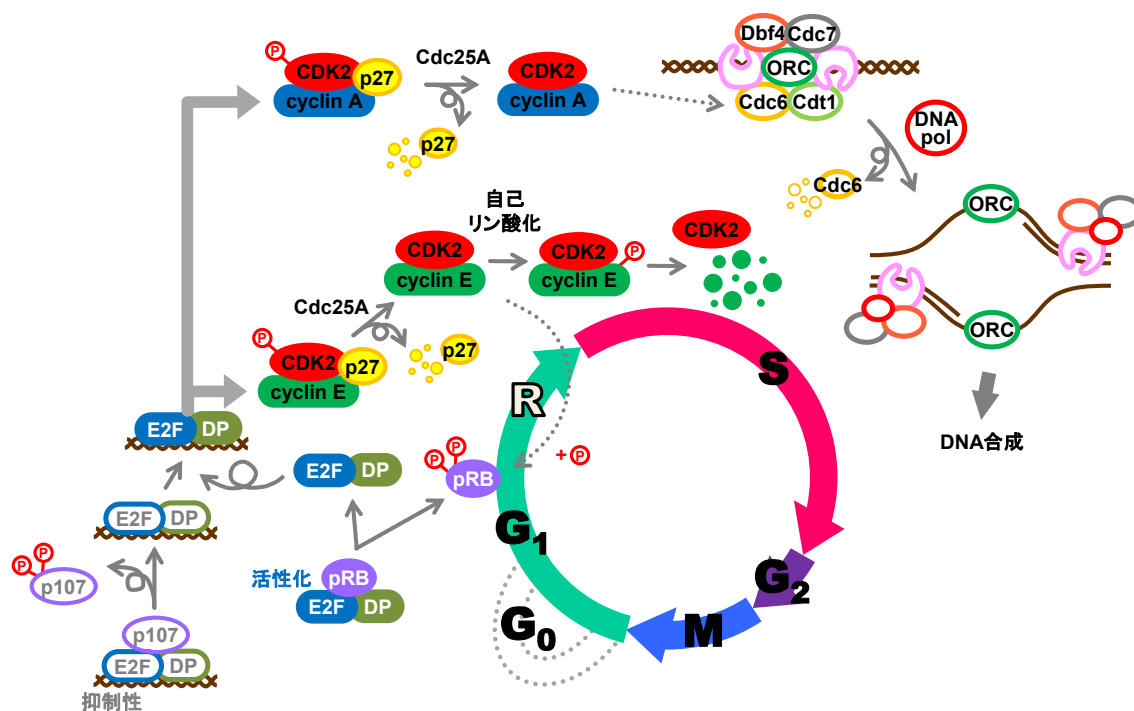


Fig. 6. G1 and S Phases of Cell Cycle

サイクリン A はまた，サイクリン B とともに M 期開始における主要かつ必須な制御因子でもある．サイクリン A は M 期前期にはそのパートナーを CDK1 に変え，活性化した状態で核内に存在する．染色体の凝縮などといった M 期最初の核内での事象は，おそらくサイクリン A-CDK1 複合体によって開始される．

サイクリン B は G2 期に発現量が上昇し，細胞質に存在する．サイクリン B-CDK1 複合体の活性化は M 期初期の初めに細胞質で始まり，とりわけ中心体で顕著である．M 期初期に蓄積した不活性化状態のサイクリン B-CDK1 は，Cdc25 ファミリーホスファターゼによって CDK1 の阻害的リン酸化が除かれ活性化される．サイクリン A-CDK1 は Cdc25 などをリン酸化し，サイクリン B-CDK1 を活性化するフィードバックを手助けする．M 期前期の後半には，ほとんどのサイクリン

ン B-CDK1 は突然核内に移行し，核膜崩壊を誘導する．その後間もなく核膜は消失し，サイクリン B-CDK1 は細胞全体に分布される．一部は細胞質に残り，中心体の分離やゴルジ体の再構築など M 期に起こる他の事象を推し進める．さらに，染色体凝縮の完了も誘導する (Fig. 7).⁵⁾

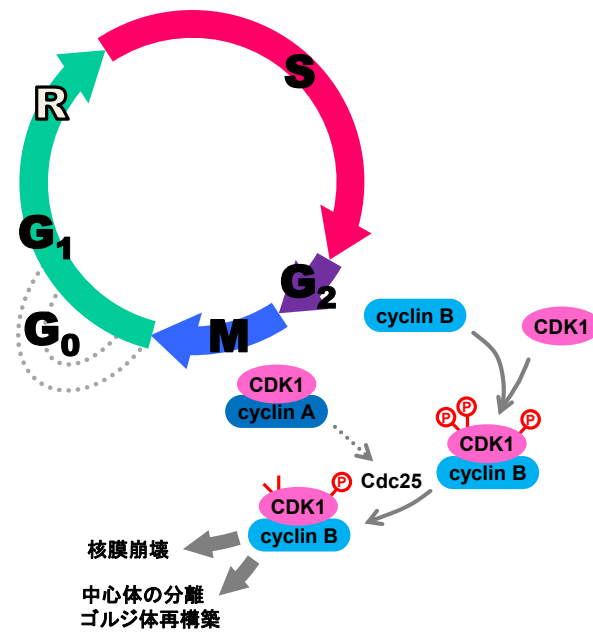


Fig. 7. G2 and M Phases of Cell Cycle

第三章 血管新生とがん

血管は、全身に分布し血液の灌流を可能にする生体にとって基本的な組織の一つである。血管は、内腔を覆う一層の血管内皮細胞と血管基底膜、その周囲を取り囲む壁細胞（動静脈においては平滑筋細胞、毛細血管においては周皮細胞（ペリサイト））により構成されている（Fig. 8）。

生体内で血管が形成される現象は、脈管形成（*vasculogenesis*）と血管新生（*angiogenesis*）の二つに大別される。脈管形成は、胎生期において胎児外の卵黄嚢に血島と呼ばれる細胞集団が形成されることに始まる。血島の内側の細胞は血球に分化し、外側付近の細胞は内皮細胞に分化して原始血管叢を形成する（Fig. 9）。一方、血管新生とは既存の血管から新たな血管ネットワークが形成される現象のことである。この血管新生の過程は、脈管形成の終了後、臓器中に血管が張り巡らされる際に観察されるが、成熟固体の生理的、病的血管新生でも同様の機序が観察される。⁸⁾

血管新生の生物学的な基礎研究は、固形腫瘍の発育が腫瘍血管新生に依存しているとの仮説がされ開始された。近年、血管の分子生物学のめざましい発展とともに、血管新生はがんの増殖と遠隔転移に深く関与していること、また、血管新生には多くの因子が関与することが明らかになった。^{8,9)}

血管新生は、①ペリサイトの離解、②細胞外マトリックスの消化、③内皮細胞の遊走と増殖、④内皮細胞による管腔形成、⑤ペリサイトによる血管の成熟化のプロセスからなる。通常では、ペリサイトから分泌される Ang-1（*angiopoietin-1*）が内皮細胞上の受容体 TIE2

(tyrosine kinase with Ig and EGF homology domain) に結合し、内皮細胞から PDGF (platelet-derived growth factor; 血小板由来増殖因子) が産生される。この PDGF の刺激により、ペリサイトが内皮細胞を取り囲むように集積するとともに、細胞外マトリックスを介して血管構造を安定化している。しかし、低酸素や低栄養状態になると、内皮細胞や周囲の間葉系細胞から Ang-1 のアンタゴニストの Ang-2 (angiotensin-2) の産生が高まる。Ang-2 が TIE2 と結合し、一過性に TIE2 を不活性化させて下流のシグナル伝達を競合的に阻害すると、ペリサイトは内皮細胞との接着を失い、離解する。ペリサイトが離解した部分の内皮細胞は、血管新生促進因子の刺激を受けやすくなる。血管新生促進因子の中でも特に、VEGF (vascular endothelial growth factor; 血管内皮増殖因子) が重要である。内皮細胞同士は VE-カドヘリンという細胞間接着因子により接着しているが、VEGF の刺激により VE-カドヘリンがリン酸化されることで内皮細胞同士の接着が弱まる。さらに、VEGF の刺激を受けた内皮細胞は種々のプロテアーゼを産生し、基底膜や周囲の細胞外マトリックスを消化する。内皮細胞は接着因子であるインテグリンを介して細胞外マトリックスに接着し、接着方向に向かって遊走する。基底膜を破り、間質へと浸潤した内皮細胞は、遊走と増殖によってその細胞数を増加していく。この際、隣接した内皮細胞同士は VE-カドヘリンにより接着する。このようにして形成された未熟な血管は、ペリサイトが接着することで成熟化する。Ang-1 が TIE2 に結合し、内皮細胞が刺激されて PDGF の産生を促進することで、ペリサイトは内皮細胞に続いて遊走、増殖し、新生血管の周囲を取り囲む。ペリサイトから産生された TGF- β (transforming growth factor β) により内皮細胞の遊走と増殖は停止し、新たな基底

膜が形成され，成熟した血管が構築される（Fig. 10-a）.

腫瘍血管新生は正常な血管新生と異なる部分がある．がん細胞は，はじめは自身により $1\text{-}2\text{mm}^3$ まで成長するが，それ以上の大きさになるとがん細胞の周囲では低酸素状態となり，二酸化炭素，一酸化窒素，COX-2 などの上昇が起こる．このうち特に低酸素状態を引き金として，VEGF をはじめとする様々な血管新生促進因子が分泌され，がん細胞へ向かって血管の新生が誘導される．腫瘍血管新生では，Ang-2 の分泌が優勢であるためペリサイトが欠如あるいは減少していると考えられており，がん細胞から分泌される持続的な VEGF の刺激により，未成熟な新生血管が構築されるプロセスを繰り返す．その中で，脆弱，不規則，無秩序，透過性亢進などの特徴をもつ腫瘍血管が形成されていく．こうして新たな血管を形成したがん細胞は，栄養素や酸素を取り込み，二酸化炭素や乳酸などの老廃物を排泄して，加速度的に成長するとともに，新たな組織へと転移する（Fig. 4-b）.⁸⁾

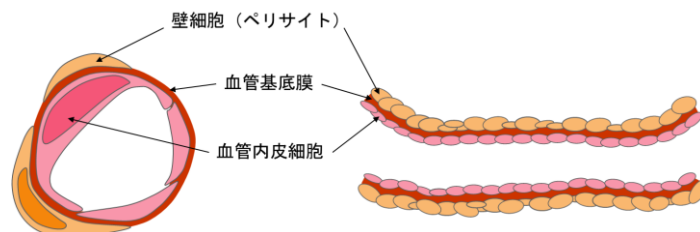


Fig. 8. Anatomy of Blood Vessel ⁶⁾

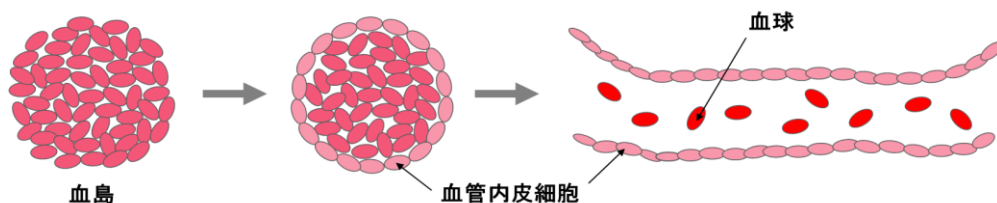


Fig. 9. Process of Vasculogenesis ⁴⁾

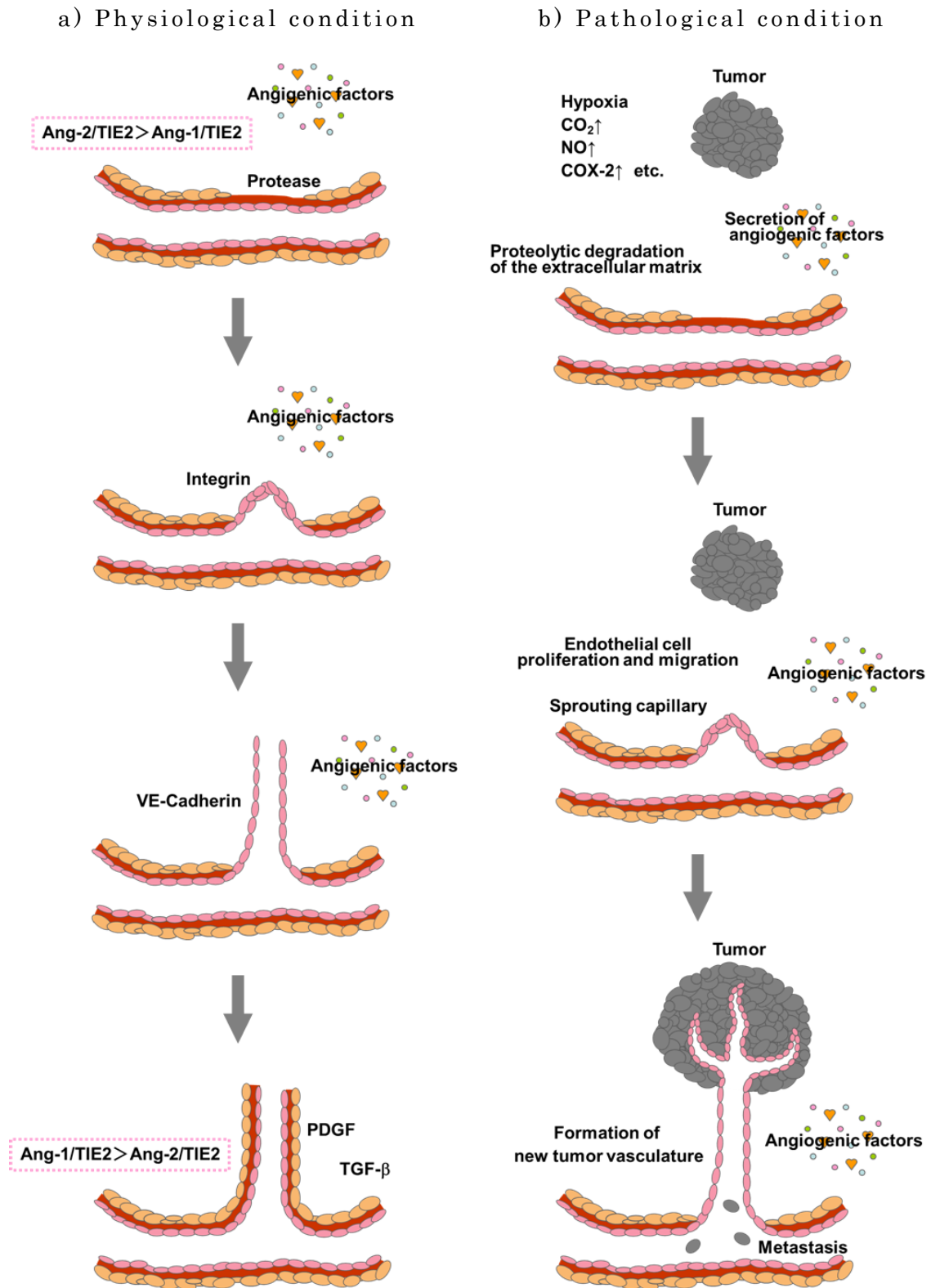


Fig. 10. Process of Physiological and Pathological Angiogenesis

第四章 VEGF と VEGF 受容体

血管新生は一般に，促進因子と抑制因子のバランスによって制御される．実際に，様々な腫瘍において血管新生促進因子の発現亢進と抑制因子の発現低下が確認されている．促進因子の一つである VEGF はその受容体，VEGFR (VEGF receptor; VEGF 受容体) を介して，血管新生において重要な役割を担っている．¹⁰⁾

第一節 VEGF

VEGF は，血管内皮細胞特異的な増殖促進作用と血管透過性亢進作用をもつ因子として単離された分子量 23 kD のサブユニットがジスルフィド結合によりホモダイマーを形成した糖タンパク質である．VEGF ファミリーとして VEGF-A, PlGF (placenta growth factor; 胎盤由来増殖因子), VEGF-B, VEGF-C, VEGF-D, パラポックスウイルス由来の VEGF-E, ヘビ毒由来の VEGF-F が知られている．アミノ酸配列の相同性は 30-50% 程度であるが，8 つのシステイン残基が保存されているという特徴をもつ．ヒトには 23 対の染色体があり，ヒト VEGF 遺伝子は 7 番染色体上に存在する．遺伝子 DNA は 8 つのエクソンからなり，DNA を鋳型として RNA が合成されるが，転写の際のスプライシングの違いにより大きさの異なる mRNA が産生される．^{7,8)} VEGF-A は単に VEGF と呼ばれ，血管新生に最も関わりが深いといわれる．VEGF-A はスプライシングの違いにより，ヒトゲノムにおいて 9 つのアイソフォームが確認されており，中でも VEGF-A₁₆₅ は最も豊富に存在する (Fig. 11).^{11,12)}

VEGF はほとんどの臓器をはじめ，上皮系細胞，繊維芽細胞，平滑筋細胞，心筋細胞など様々な細胞や，多くの固形腫瘍とそれに由来する細胞株において発現している．また，低酸素状態に反応して転写が誘導されるという大きな特徴があり，VEGF の転写開始点の上流には HIF-1 (hypoxia-inducible factor-1；低酸素誘導因子) が結合する配列が存在する．⁸⁾

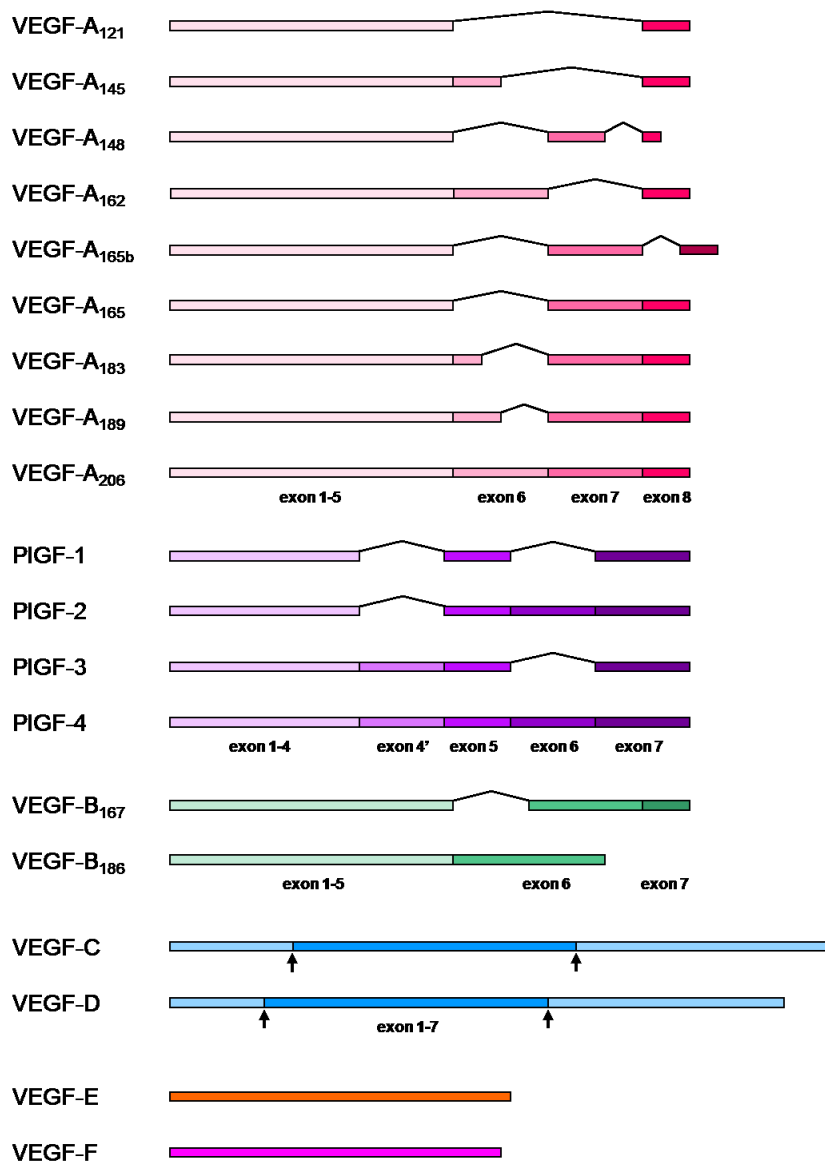


Fig. 11. Comparison of Structures of the VEGF Family ^{11,12)}

第二節 VEGF 受容体

VEGFR には, VEGFR-1 (Flt-1), VEGFR-2 (KDR/Flk-1), VEGFR-3 (Flt-4) の 3 種が存在する. これらは, 細胞外ドメイン, 膜貫通ドメイン, チロシンキナーゼドメインをもつ典型的な受容体型チロシンキナーゼである. VEGFR-1 および 2 は, 細胞外ドメイン内に 7 つの Ig 様構造をもち, キナーゼドメイン内には約 70 のアミノ酸のキナーゼ挿入領域をもつ. VEGFR-3 も類似の構造をもつが, 5 番目の Ig 様ドメインが開裂し, ジスルフィド結合で架橋されている. ^{9,11)}

VEGFR はそのリガンドである VEGF および PlGF が結合することで活性化するが, VEGF-A は VEGFR-1 および 2 と結合する. VEGF-C および D は VEGFR-2 および 3 と結合するが, PlGF, VEGF-B および VEGF-E はそれぞれ VEGFR-1, 2 に特異的に結合する (Fig. 12).

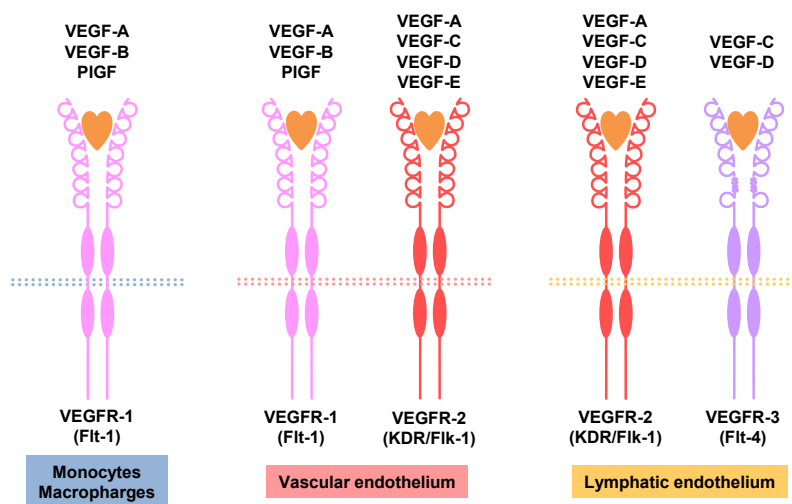


Fig. 12. Interactions of VEGF Family with Their Receptors ¹³⁾

このうち、血管新生に最も関わりが深いのは血管内皮細胞に発現している VEGFR-2 であり、2 番目と 3 番目の Ig 様ドメインを介して VEGF-A と結合し、受容体の二量体化が起こる。受容体が相互にリン酸化しあえる距離まで近づき、キナーゼドメインが活性化されると、受容体の自己リン酸化が起こり細胞内へとシグナルが伝達される。VEGFR-2 の主な自己リン酸化部位には 951, 1054, 1059, 1175, 1214 番目のチロシン残基 (Y951, Y1054, Y1059, Y1175, Y1214) がある。リン酸化された Y1175 (pY1175) は PLC γ (phospholipase C- γ ; ホスホリパーゼ C- γ) 経路により血管内皮細胞増殖のシグナル伝達を行う。PLC γ はその SH2 ドメインを介して Y1175 と結合し、PIP2 (phosphatidylinositol 4,5-bisphosphate; ホスファチジルイノシトール 4,5 - ニリン酸) を DAG (diacylglycerol; ジアシルグリセロール) と IP3 (inositol 1,4,5-trisphosphate; イノシトール 1,4,5 - トリン酸) に加水分解する。DAG は PKC (phosphokinase C; プロテインキナーゼ C) を、PKC は Ras を介することなく Raf を活性化し、MAPK (mitogen-activated protein kinase; 分裂促進因子活性化タンパク質キナーゼ) カスケードである Raf-MEK-ERK 経路を介してシグナルを核内へと伝える。活性化された ERK は核内へ移行し、標的である転写因子 Elk1 を活性化して遺伝子転写を行い、細胞増殖のシグナルを伝達する。pY1175 はさらに、アダプター分子の Shb にも結合する。Shb を介して PI3K (phosphatidylinositol-3 kinase; ホスファチジルイノシトール 3-キナーゼ) がリン酸化されると、細胞の遊走を調節する接着斑の会合が誘導される。pY1214 は Grb2 の SH2 ドメインを介して Grb2 に結合する。Y1214 のリン酸化は Cdc42 や p38MAPK の活性化に必要であり、アクチンの再構成を引き起こす。

pY951 は TSAd (T-cell-specific adaptor protein) と結合する． Y951 を介した VEGFR-2 と TSAd の結合もまた，アクチンの再構成や細胞の遊走に必要不可欠である (Fig. 13)．

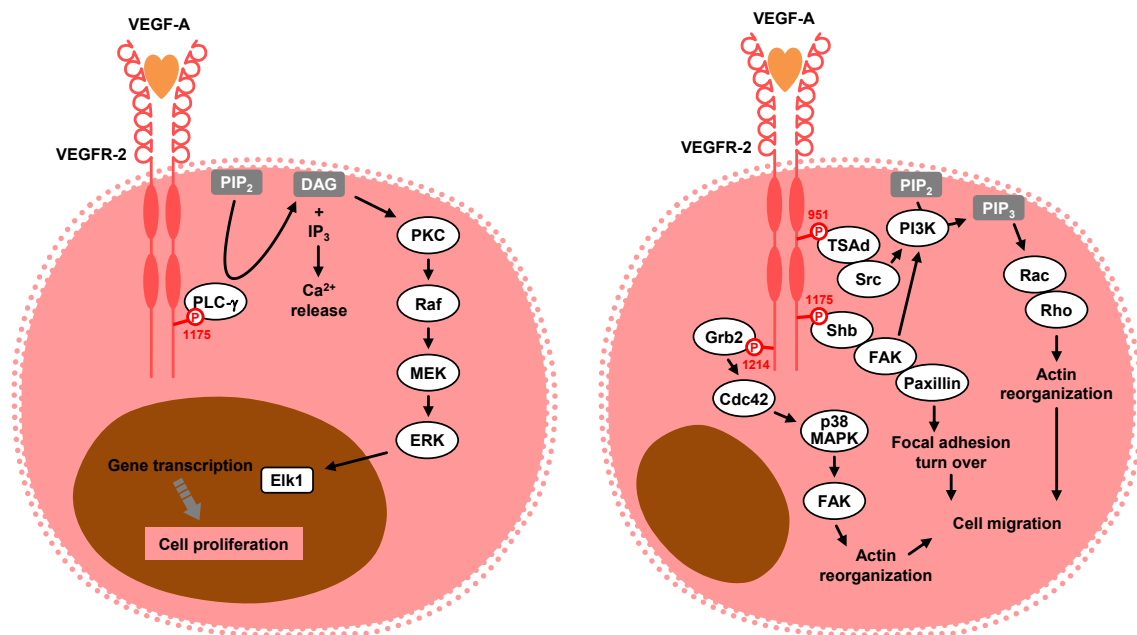


Fig. 13. VEGF-A/VEGFR-2 Signaling in Vascular Endothelial Cell Proliferation and Migration ¹³⁾

VEGFR は VE-カドヘリン， β -カテニン，PI3K と複合体を形成することで，内皮細胞の生存にも関与する．PI3K の活性化により PIP₃ (phosphatidyl- inositol 3,4,5-trisphosphate ; ホスファチジルイノシトール 3,4,5-三リン酸) が増加すると Akt が活性化される．Akt の活性化は BAD やカスパーゼ 9 に作用し，アポトーシス促進経路を阻害することで細胞の生存を引き起こす (Fig. 14). ¹³⁾

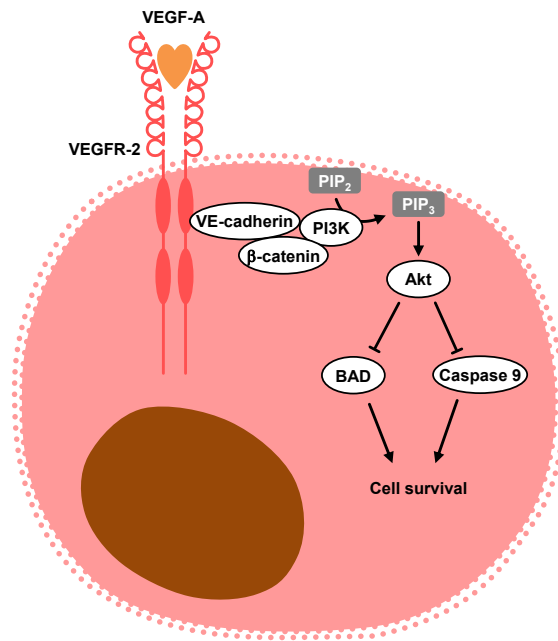


Fig. 14. VEGF-A/VEGFR-2 Signaling in Vascular Endothelial Cell Survival ¹³⁾

第五章 分子標的治療薬

がん化学療法は，メトトレキサートやシクロホスファミドといった DNA 合成を阻害する抗がん剤の使用が中心的であった 1960 年代以降，抗がん性抗生物質やプラチナ製剤などの新たな抗がん剤が導入されるとともに進歩し，治癒の期待できるがんも増えてきた．しかし，従来の抗がん剤を用いる治療法でほとんど効果が得られないものも多い．一方で，がんのベーシックサイエンスの発展に伴い，がん細胞の特性を規定する様々な分子機構が明らかになってきた．これらの分子機構に関与する分子を明確にし，その機能を制御することで治療に結びつけようとする分子標的治療の研究が現在，勢力的に展開されている．¹⁴⁾

分子標的の理想条件としては，がん特異的であること（特異性），機能修飾によりがんの生育が阻止されること（奏功性），生命維持に直結する生理機能をもたないこと（安全性）が挙げられる．従来の抗悪性腫瘍薬はいずれもそれ自体が細胞毒性を示すのに対し，分子標的治療薬の中には，単独では影響を与えないが併用によって顕著な抗腫瘍効果を示すものもあると予想される．⁹⁾

これまでに世界では 47 剤，日本では 29 剤のがん分子標的薬が承認されている（Table 1）．これら 47 剤を化学的特性で分類すると，30 剤が低分子医薬品，16 剤がモノクローナル抗体医薬品，1 剤が受容体／IgG 抗体 Fc 融合タンパク質医薬品となる．これら分子標的治療薬を標的から分類すると，シグナル伝達系阻害剤，細胞周期阻害剤，血管新生阻害剤，プロテアソーム阻害剤，ヒストン脱アセチル化酵素阻害剤，スプライシング阻害剤，テロメラーゼ阻害剤，抗体療法などがある．その内訳は全 47 剤中の 60% に相当する 28 剤が，シグナル伝

達や細胞周期,血管新生に関与するキナーゼを標的としたものである.
15) 2008年1月には VEGFRなどをターゲットとするソラフェニブ(ネクサバル®), 同年4月にはスニチニブ(スーテント®)といったキナーゼ阻害剤が国内で承認された. 血管内皮細胞はがん細胞と異なり遺伝的に安定しているため,これを標的とした治療薬は耐性を生じにくい. また,ベバシズマブ(アバスチン®)は VEGF に対するヒト型モノクローナル抗体であり,2004年に世界初の血管新生阻害剤として米国で認可され,日本でも2007年に承認された. 日本では,ベバシズマブは,FOLFOX や FOLFILI といった静注 5-FU 系抗悪性腫瘍薬を含む化学療法との併用が原則となっており,有意な延命効果を示している. さらに, VEGFR-2 の抗体で治療するとがんの血管構築を正常血管の構築に近いものにするにより,抗がん剤のがんへの蓄積が増大する可能性が示唆されている. 14)

現在,国内外では延べ 442 化合物が低分子性分子標的抗がん剤の臨床試験ステージにあり,その標的数は 95 に上る. このうちの 65%にあたる 289 剤がキナーゼ阻害剤であり,その内訳は,マルチターゲット型阻害剤(26 剤),チロシンキナーゼ阻害剤(114 剤),セリン/スレオニンキナーゼ阻害剤(149 剤)である. 15) イマチニブは,標的酵素 BCR-ABL を産生するフィラデルフィア染色体の発見から承認まで約 40 年の月日を要したが,2011年に米国で承認された ALK 阻害薬クリゾチニブではその標的である EML4-ALK の発見から承認までわずか 4 年であった. このことから臨床試験ステージにおけるキナーゼを標的とする阻害剤開発が盛んであることがわかる.

まるで「奇跡の新薬」のように思われる分子標的治療薬であるが,これも使用期間が長期間になるにつれ,腫瘍の薬剤抵抗性が発現する

という問題が生じてきた．そこで治療前後の腫瘍細胞を比較してがん再発後に特異的な二次変異を同定し，薬剤耐性の原因を明らかにする研究も始められている．また，耐性の出現を回避するという観点から，細胞増殖におけるシグナル伝達系での阻害箇所を垂直もしくは水平方向に増やして併用療法を行う手法も注目を集めている．一方，皮膚障害を高頻度で発症することも分子標的薬の特徴である．従来の「薬疹」はアレルギー機序により発症するため，治療の中止，休薬が原則である．分子標的治療薬の皮膚障害の多くは，薬剤の効果の一端であり，防ぎようの無い副作用として生じることから，皮膚障害をコントロールしつつがん治療を継続するという新たな課題が残されている．¹⁶⁾

今後，臨床試験ステージにある薬剤が優れた治療成績を収め，分子標的抗がん剤の治療効果が量，質ともに充実することを期待しつつ，さらに効果が大きく副作用や薬剤耐性の生じる可能性の低い新規開発候補化合物の創成が望まれている．

Table 1. Molecular-targeted Drugs ¹⁵⁾

一般名 (商品名)	標的分子	適応がん種	日本承認
Rituximab (Rituxan)	CD20	B細胞性非ホジキンリンパ腫, MCL	2001年
Trastuzumab (Herceptin)	Her2	乳がん, 胃がん	2001年
Imatinib (Gleevec)	Bcr-Abl/Kit	CML, GIST, Ph+ALL	2001年
Gefitinib (Iressa)	EGFR	非小細胞肺癌	2002年
Gemtuzumab ozogamicin (Myelotarg)	CD33	再発・難治性 AML	2005年
Bortezomib (Velcade)	Proteasome	多発性骨髄腫, MCL	2006年
Bevacizumab (Avastin)	VEGF	大腸がん, 非小細胞肺癌, 乳がん, グリオブラストーマ, 腎細胞がん, 卵巣がん	2007年
Erlotinib (Tarceva)	EGFR	非小細胞肺癌, 膵がん	2007年
Cetuximab (Erbix)	EGFR	大腸がん, 頭頸部がん	2008年
Sorafenib (Nexavar)	Multi-kinases	腎細胞がん, 肝細胞がん	2008年
Sunitinib (Sutent)	Multi-kinases	GIST, 腎細胞がん, NET	2008年
Ibritumomab tiuxetan (Zevalin)	CD20	B細胞性非ホジキンリンパ腫, MCL	2008年
Dasatinib (Sprycel)	Bcr-Abl/Src	CML, Ph+ALL	2009年

Table 1. Molecular-targeted Drugs (Continued) ¹⁵⁾

一般名 (商品名)	標的分子	適応がん種	日本承認
Lapatinib (Tykerb)	EGFR/Her2	乳がん	2009 年
Nilotinib (Tasigna)	Bcr-Abl	CML	2009 年
Panitumumab (Vectibix)	EGFR	大腸がん	2010 年
Temsirolimus (Torisel)	mTOR	腎細胞がん	2010 年
Everolimus (Afinitor)	mTOR	腎細胞がん, SEGA, NET, 乳がん, 腎血管筋脂肪腫	2010 年
Azacitidine (Vidaza)	DNMT	骨髄異形成症候群	2011 年
Vorinostat (Zolinza)	HDAC	皮膚 T 細胞性リンパ腫	2011 年
Ruxolitinib (Jakafi)	JAK	骨髄線維症	2011 年
Pazopanib (Votrient)	Multi-kinases	腎細胞がん, 軟部腫瘍	2012 年
Denosumab (Ranmark)	RANKL	多発性骨髄腫による骨病変及び固形がん骨転移による骨病変	2012 年
Crizotinib (Xalkori)	ALK	非小細胞肺癌	2012 年
Axitinib (Inlyta)	Multi-kinases	腎細胞がん	2012 年
Mogamulizumab (Poteligeo)	CCR4	成人 T 細胞白血病リンパ腫	2012 年
Ofatumumab (Arzerra)	CD20	慢性リンパ性白血病	2013 年
Regorafenib (Stivarga)	Multi-kinases	大腸がん, GIST	2013 年
Pertuzumab (Perjeta)	Her2	乳がん	2013 年
Brentuximab vedotin (Adcetris)	CD30	再発・難治性ホジキンリンパ腫, 未分化大細胞リンパ腫	申請中
Trastuzumab emtansine (Kadcyla)	Her2	乳がん	申請中
Afatinib (Gilotrif)	EGFR/Her2	非小細胞肺癌 (EGFR/exon19del, L858R)	申請中
Vandetanib (Caprelta)	Multi-kinases	甲状腺髄様がん	Phase III
Bosutinib (Bosulif)	Bcr-Abl/Src	CML	Phase III
Ipilimumab (Yervoy)	CTLA-4	メラノーマ	Phase III
Decitabine (Dacogen)	DNMT	骨髄異形成症候群	Phase I/II
Vemurafenib (Zelboraf)	BRAF (V600E)	メラノーマ (BRAF/V600E)	Phase I/II
Carfilzomib (Kyprolis)	Proteasome	多発性骨髄腫	Phase I/II
Panatinib (Iclusig)	Bcr-Abl (T315I)	CML, Ph+ALL	Phase I/II
Romidepsin (Istodax)	HDAC	皮膚 T 細胞性リンパ腫	Phase I/II
Alemtuzumab (Campath)	CD52	慢性リンパ性白血病	Phase I
Ziv-aflibercept (Zaltrap)	VEGF	大腸がん	Phase I
Cabozantinib (Cometriq)	Multi-kinases	甲状腺髄様がん	Phase I
Tositumomab (Bexxar)	CD20	再発・難治性非ホジキンリンパ腫	未治験
Vismodegib (Erivedge)	Hh signaling	基底細胞がん	未治験
Dabrafenib (Tafinlar)	BRAF (V600E)	メラノーマ (BRAF/V600E)	未治験
Trametinib (Mekinist)	MEK	メラノーマ (BRAF/V600E/K)	未治験

本論

研究目的

動植物の分類や生態に関する調査，研究が進展する中，菌類の研究はいまだ未成熟である．Hawksworth によれば，菌類の現存種数が 9 万 7 千種であるとすれば総種数は 150 万と推定されるが，水中の菌類や生植物体内生息菌（endophyte），昆虫体内・体表生息菌，深部土壤環境生息菌などは調査が乏しく，これらを追加するとその数は大幅に増えるものと考えられる．一方，人類は菌類を有用か有害かに二分し，その有用な働きを利用して発酵・醸造食品を作り，また菌体そのものである「キノコ」を食用として利用してきた．さらに近代になると，菌類のもつ二次代謝物産生能に着目し， β -ラクタム系抗生物質や高脂血症治療薬の開発が行われるようになった．日本には 2500 種程度のキノコが生息するが，その中には伝統的に薬用として使われるものや，産生される多糖が抗がん剤として用いられるキノコも知られている．このようにキノコは，生物活性を有する独特な二次代謝物を生産するため，薬用資源としての期待が高まっている．

さて，悪性新生物は，1980 年代に脳血管疾患を抜いてから今日に至るまで，日本人の死亡原因の第一位を維持している．一方，ヒトがん遺伝子やがん抑制遺伝子が発見され，がんが遺伝子疾患であることが証明された．これら遺伝子の産物をターゲットとする分子標的治療薬の開発が活発になり，現在世界で 40 を超える分子標的抗がん剤が承認されている．中でも，がんの成長や転移に関わる血管新生を標的とする薬剤は，最も注目を集める分子標的治療薬の一つである．しかし，奇跡の新薬のように思われる薬剤であっても，予期せぬ副作用や耐性の出現，効果に個人差が大きいなど克服すべき課題は多く，より良い

治療薬の創成のために Me-too-drug の開発や骨格ホッピングアプローチ、バイオアイソスター探索などが盛んに行われている。

以上の背景から著者は、血管内皮細胞の増殖阻害活性を指標として子囊菌クロコブタケ (*Hypoxylon truncatum*) 子実体の二次代謝産物から、血管新生阻害剤のリード化合物の探索研究を展開した。すでにクロコブタケ子実体からは数種の benzo[j]fluoranthene 誘導体が単離、構造決定されているものの、詳細な成分探索とその生物活性についての報告はない。また、天然から見出された他の benzo[j]fluoranthene 誘導体もその生理活性についての報告は数少ない。本研究では特に、hypoxylonol C の *in vitro* における血管新生阻害作用およびその作用機序の解明を目指して創薬研究を展開した。

第一章 クロコブタケ (*Hypoxylon truncatum*) 子実体からの HUVEC 増殖阻害化合物の探索



クロコブタケはチャワントケ亜門，フンタマカビ綱，クロサイワイタケ目，クロサイワイタケ科，ヒポキシロン属に属する不食性のキノコである。子座は黒色できわめて硬く，子囊殻を埋没又は半埋没する。子座の形は半球形から平らに広がるものなど変化に富む。ナラなどの広葉樹の枯幹に多く，シイタケ栽培のほだ木に生じた場合，シイタケの発育を競合的に阻害し病害菌となる。¹⁸⁾

すでに当研究室の倉持らはクロコブタケ子実体抽出物から，benzo[*j*]fluoranthene 誘導体の hypoxylonol A (1)，B (2)，C (3) および D (4) を単離し，その平面構造を報告した。^{19,20)}

一方，Anderson らは 5-methylmellein (5) を，²¹⁾ 浅川らは 4,5,4',5'-tetrahydroxy-1,1'-binaphthyl (6)，truncatone (7)，*Linyphia triangularis* の性フェロモンである 3*R*-hydroxybutyric acid (8)，8 の二量体である 3*R*-(3*R*-hydroxybutyryloxy)butyric acid (9)，8 の三量体である 3*R*-[3*R*-(3*R*-hydroxybutyryloxy)butyryloxy]butyric acid (10) をそれぞれ単離，報告している。^{22,23)} さらに，クソニンジン *Artemisia annua* の茎の内生菌 *H. truncatum* (strain No. IFB-18)

から, daldinone C (11) および D (12) が単離されている. 前者は CD スペクトルによる励起子キラリティー法を用いて, その不斉中心である 9, 10, 19 位がそれぞれ *S*, *R*, *S* であり, 後者の 9, 10, 16, 19 位はそれぞれ *S*, *R*, *S*, *S* であると決定された. なお, daldinone C (11) および D (12) はヒト結腸・直腸がん培養株 SW1116 細胞に対して細胞毒性を示し, その IC₅₀ はそれぞれ 49.5 μM および 41.0 μM であり, 5-fluorouracil と同程度であると報告されている. ²⁴⁾

その他, 天然資源より 10 種の benzo[*j*]fluoranthene 誘導体が単離, 報告されている. ゴムタケ *Bulgaria inquinans* より紫色結晶の bulgarhodin (13) および bulgarein (14) が, ²⁵⁾ チャコブタケ *Daldinia concentrica* より daldinone A (15) および B (16) が単離されている. Daldinone A (15) の絶対構造は CD スペクトルによる励起子キラリティー法により決定されており, daldinone B (16) の不斉中心は NOESY によりその相対配置が確認されている. ²⁶⁾ また, 地中海に生息する海綿 *Aplysina aerophoba* より分離された菌 *Hortaea werneckii* からは hortein (17) が得られた. ²⁷⁾ *Cladosporium cf. cladosporioides* からは, 4 種の benzo[*j*]fluoranthene 誘導体 (18~21) が単離された. 化合物 18 の相対立体構造は NOESY と X 線結晶解析の結果より明らかになっている. 化合物 19~21 は ¹H-¹H カップリング定数を 18 と比較し, その相対立体構造を決定した. 18 は IL-2 産生抑制作用及び Fyn, Lck, Abl, EGFR などのチロシンキナーゼに対する阻害活性をもつことが報告されている. ^{28,29)} また *Garcinia atroviridis* の葉から単離された Xylariaceae 属の菌 PSU-A80 からは xylarenol (22) が得られている. 本品の 1 位および 3 位の相対立体配置は, 差 NOE により決定されたが, 6b 位の立体配置は未決定である. ³⁰⁾

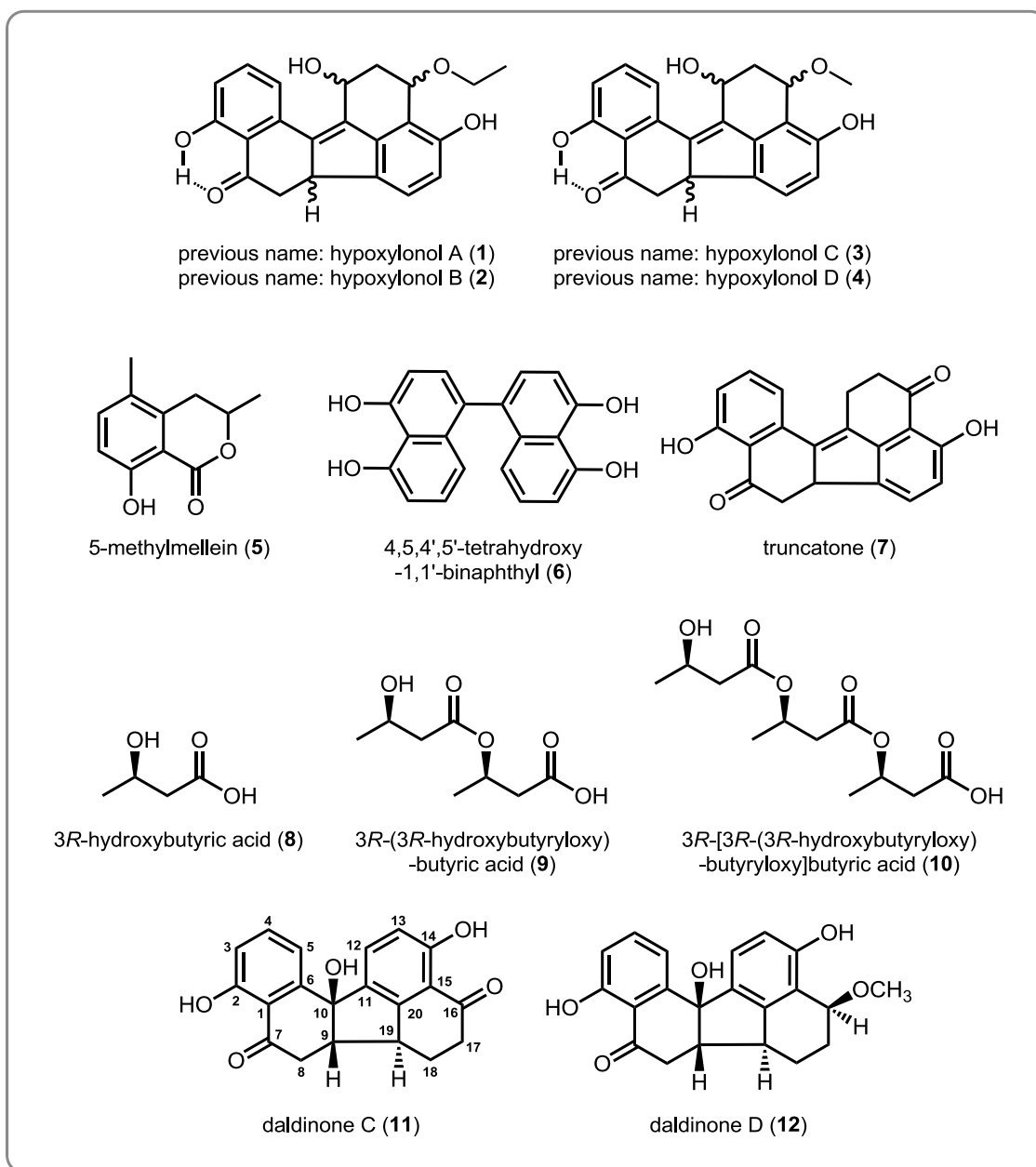


Fig. 15. Isolated Compounds from *H. truncatum*

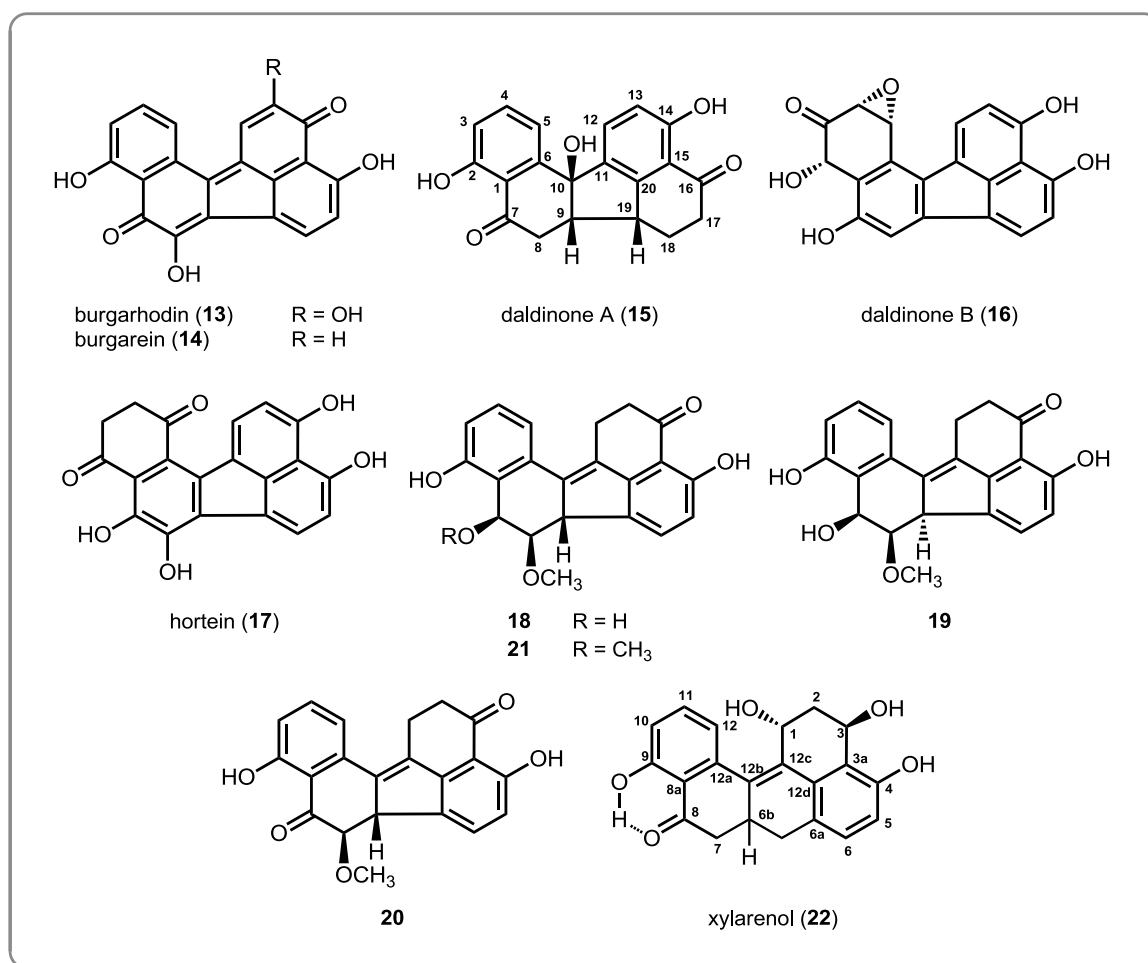


Fig. 16. Benzo[*j*]fluoranthene Derivatives from Natural Resources

第一節 HUVEC 増殖阻害

血管内皮細胞の増殖は血管新生において必要不可欠なステップであり，VEGF はその促進因子として重要な役割を果たしている．

本研究では，HUVEC 増殖阻害化合物の探索を目的としたエキスの分画，化合物の精製を，HUVEC 増殖阻害活性を指標として行った．すなわち，1 nM の VEGF および sample を培養した HUVEC に添加し，WST-8 試薬を用いたホルマザン法により，その細胞増殖阻害活性を測定した．細胞増殖阻害活性は VEGF のみを添加した場合の細胞生存率を control とし，control に対する sample の IC_{50} ($\mu\text{g/mL}$) として数値化して評価した．なお，positive control として doxorubicin を用いた．

第二節 クロコブタケ子実体抽出エキスの HUVEC 増殖阻害活性

本研究にはクロコブタケ *H. truncatum* は、2009 年 9 月に東京都東久留米市にて採集したものを用いた。このクロコブタケ子実体から菌糸体を誘導し、DNA 塩基配列に基づく真菌同定法により、*H. truncatum* であると同定した。

乾燥クロコブタケ子実体 402 g を CHCl_3 、MeOH で順次抽出し、 CHCl_3 エキス (15.9 g)、MeOH エキス (45.6 g) をそれぞれ作成した。MeOH で抽出後、残渣が着色していたので、さらに acetone で抽出し、acetone エキス (14.3 g) を作成した。

これらのエキスについて HUVEC 増殖阻害試験を実施したところ、 CHCl_3 エキスに HUVEC 増殖阻害活性が認められた。

そこでまず、 CHCl_3 エキスについて HUVEC 増殖阻害活性化合物の単離を試みた。

第三節 クロコブタケ子実体 CHCl_3 エキスからの HUVEC 増殖阻害化合物の探索

HUVEC 増殖阻害活性が認められたクロコブタケ子実体 CHCl_3 エキス (15.9 g) を, silica gel の column chromatography (以下 Si. C. C.) にて分画し, Fr. A~E の 5 つの画分を得た (Fig. 17). それぞれについて HUVEC 増殖阻害試験を行ったところ, Fr. B (2.3 g) と Fr. D (5.1 g) に阻害活性が認められた. Fr. B は Fr. D より強い阻害活性を示したが, 両画分の収量と TLC 上でのスポットの挙動から, 含有成分の単離が容易と思われる Fr. D をさらに分画することとした.

Fr. D を Si. C. C. により分画し, Fr. D-a~D-e を得た. この分画の過程で Fr. D-d の一部が CHCl_3 により沈殿したので, 可溶部と不溶部に分離した. この不溶部は単一の化合物であり, HT-1 と仮称した. HT-1 は新規化合物であったので, hypoxylonol C (23) と命名した. また, CHCl_3 可溶部 Fr. D-d-sol., を Sephadex LH-20 C. C., Si. C. C., ODS HPLC を用いて分離, 精製し, HT-2 と仮称する単一の化合物を得た. HT-2 は新規化合物であったため, hypoxylonol F (24) と命名した. Hypoxylonol C (23) および F (24) はいずれも HUVEC 増殖阻害試験において細胞増殖阻害活性を示した.

続いて HUVEC 増殖阻害活性類似化合物の探索を目的として, TLC 上のスポットと HUVEC 増殖阻害活性を指標に, Fr. D-b および Fr. D-d-sol. を分画した. まず, Fr. D-b を ODS C. C., ODS HPLC を用いて分離, 精製し, HT-3~6 と仮称する 4 種の化合物を得た. MS, 各種 NMR などのスペクトルデータを用いた構造解析の結果, HT-3~6 はそれぞれ当研究室の倉持らによりクロコブタケから単離され, 平

面構造が明らかとなつて いる previous name: hypoxylonol C (3), B (2), D (4), A (1) であると同定した.^{19,20)} そこでさらに立体構造を決定するため, X線結晶解析および NMR データ, CD スペクトルを詳細に検討し, これらの絶対構造を推定した. その構造的特徴から, HT-3 (previous name: hypoxylonol C (3)) を hypoxylonol B (25), HT-4 (previous name: hypoxylonol B (2)) を hypoxylonol D (26), HT-5 (previous name: hypoxylonol D (4)) を hypoxylonol E (27), HT-6 (previous name: hypoxylonol A (1)) を hypoxylonol A (28) に改名した (Fig. 19).

なお, hypoxylonol D (26) および E (27) は 比較的強い HUVEC 増殖阻害活性を示した (Table 4).

次に, Fr. B を Si. C. C. により分画し, Fr. B-a~B-f を得た. これら 6 画分のうち, Fr. B-c~B-f の 4 画分に阻害活性が認められた. Fr. B-c に hypoxylonol 類に特徴的なスポット (TLC にて UV 365 nm 照射下で橙色) が見られたため, さらに Si. C. C. により分画し, 5 画分を得た. このうち, TLC において既知の hypoxylonol 類と同様の UV 吸収を示すが, R_f 値の異なるスポットを含む Fr. B-c-2 を 70% MeOH 可溶部と不溶部に分画した. Hypoxylonol 類は比較的極性の化合物であるが, H₂O-MeOH 系の混合溶媒にも可溶である. Fr. B-c-2 の 70% MeOH 可溶部を ODS C. C. および Si. C. C. を用いてさらに分画し, HT-7 と仮称する単一の化合物を 3.5 mg 得た. HT-7 は新規化合物であったので, hypoxylonol G (29) と命名した.

Fr. B-b は HUVEC 増殖阻害活性を示さなかったが, TLC において極低極性部分に hypoxylonol 類の特徴的なスポットを認めたので, これを Si. C. C. により分画し, 5 つの画分を得た. 目的のスポットを含

む Fr. B-b-3 をさらに ODS C. C. および Si. C. C. にて分離, 精製し, HT-8 と仮称する単一の化合物を 31.8 mg 得た. 各種スペクトルデータの解析の結果, HT-8 は浅川らにより既にクロコブタケ (*H. truncatum*) から単離, 報告のある既知化合物 truncatone (7) であると同定した.²²⁾ なお, HUVEC 増殖阻害試験において, hypoxylonol G (29) は比較的強い細胞増殖阻害活性を示した.

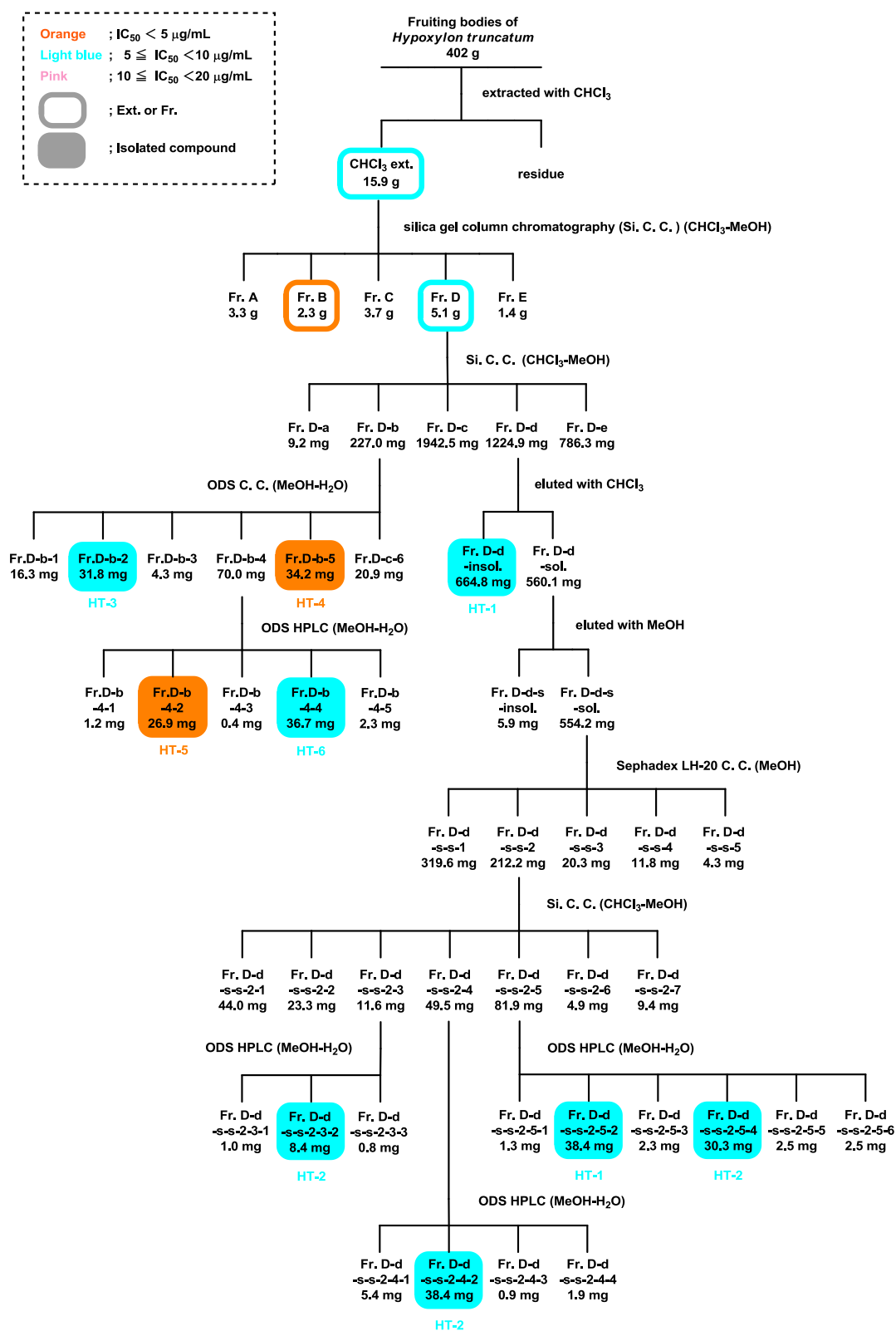


Fig. 17. Isolation Procedure of *H. truncatum* CHCl_3 ext. Fr. D

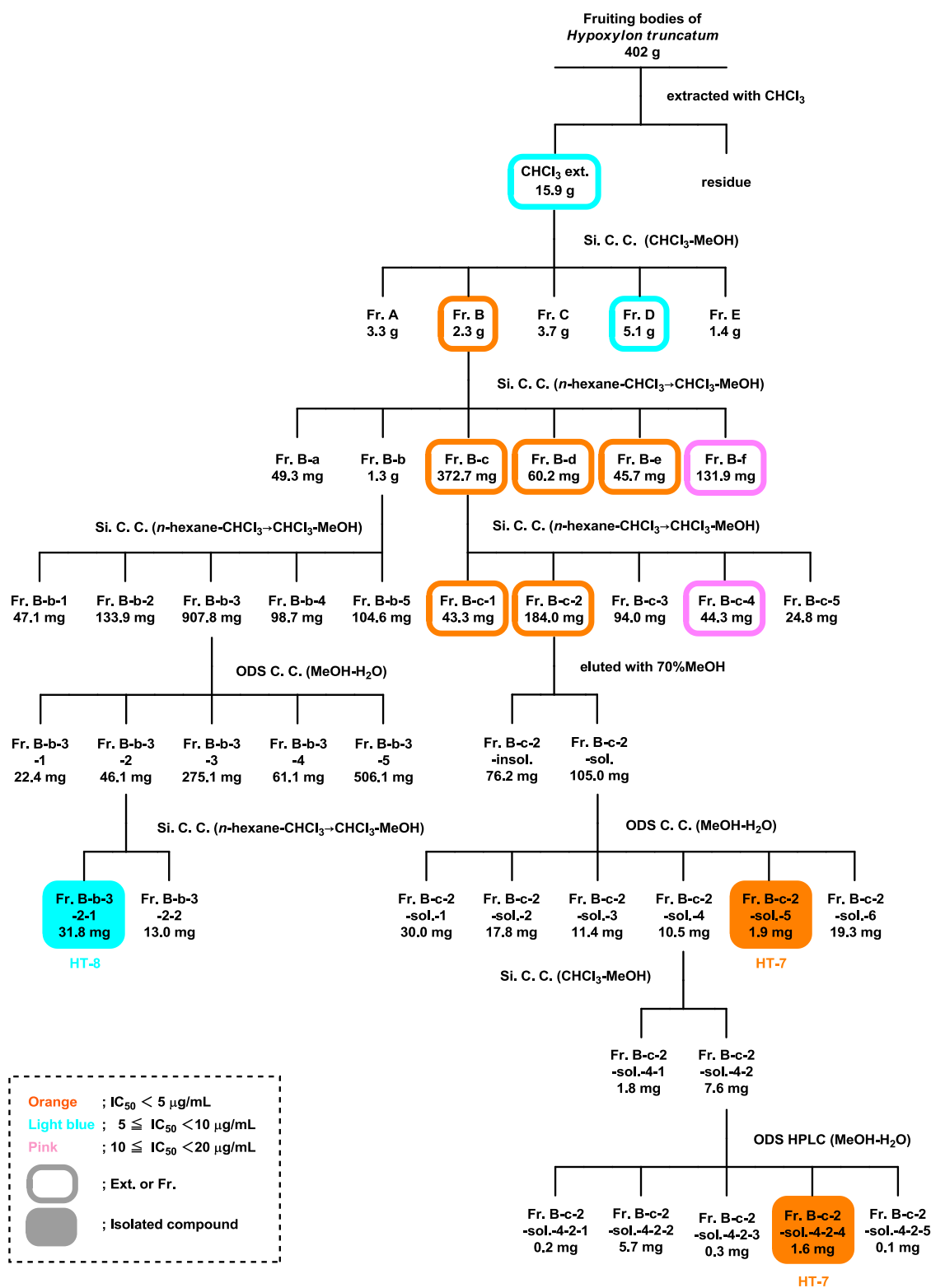


Fig. 18. Isolation Procedure of *H. truncatum* CHCl_3 ext. Fr. B

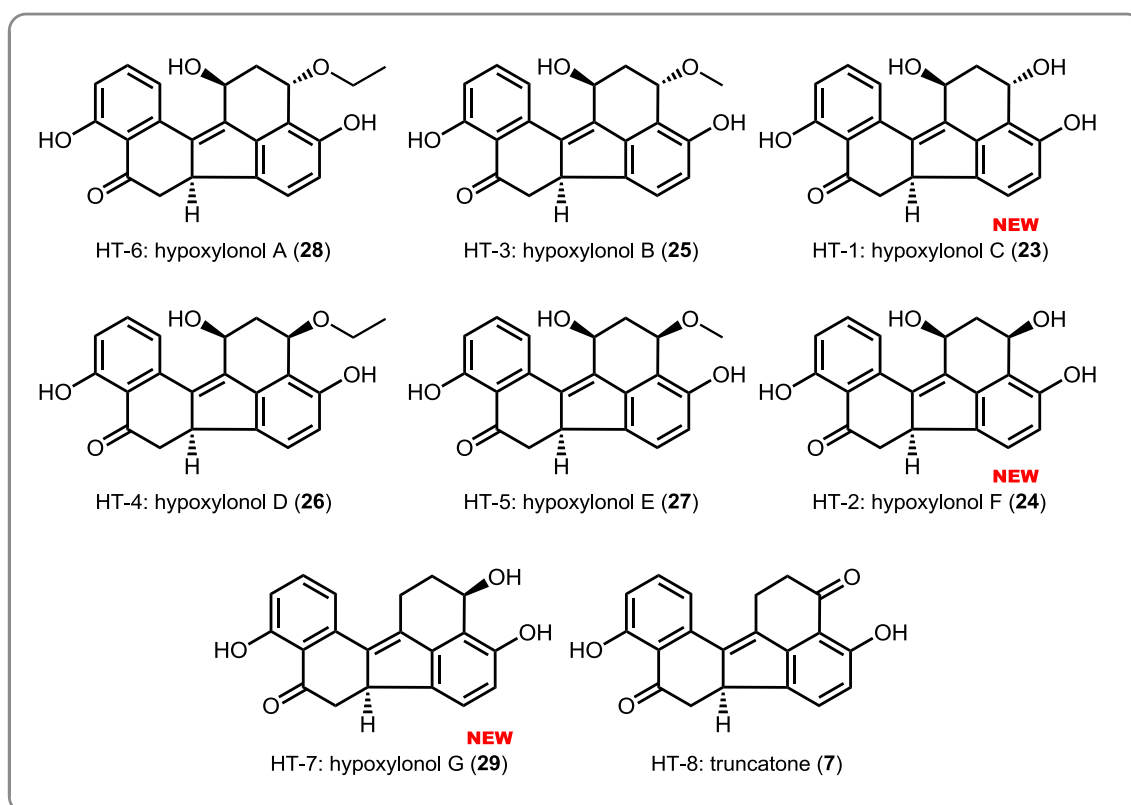


Fig. 19. Isolated Compounds from *H. truncatum* CHCl₃ ext.

Table 2. Effect of the Compounds from *H. truncatum* CHCl₃ ext.
on HUVEC Prolifelation Assay

Sample name	IC ₅₀ (μM)
doxorubicin	0.41
hypoxylonol A (28)	15
hypoxylonol B (25)	24
hypoxylonol C (23)	21
hypoxylonol D (26)	6.9
hypoxylonol E (27)	7.4
hypoxylonol F (24)	17
hypoxylonol G (29)	8.4
truncatone (7)	16

第四節 クロコブタケ子実体 MeOH エキスからの構造類縁体の探索

クロコブタケ子実体 MeOH エキスは HUVEC 増殖阻害活性を示さなかったが、TLC 上で hypoxylonol 類に特徴的なスポットが認められたため、構造類縁体の単離を試みた。すなわち、MeOH エキス (45.6 g) を CHCl₃ 可溶部 (34.8 g) と不溶部 (9.3 g) に分け、可溶部を Si. C. C. にて分画し、Fr. A~F の 6 つの画分を得た (Fig. 20)。これら 6 画分に対して HUVEC 増殖阻害試験を行ったところ、Fr. A と Fr. B, Fr. D に阻害活性が認められた。特に Fr. D (7.9 g) に CHCl₃ エキスより得た hypoxylonol 類とは異なるスポットが含まれていたため、Fr. D の分離を行った。

Fr. D をさらに Si. C. C. によって、Fr. D-a~D-f の 6 画分に分離し、既知の hypoxylonol 類とは異なるスポットを含む Fr. D-b (897 mg) および Fr. D-c (3.3 g) を分離することとした。まず、Fr. D-c を Si. C. C. により 5 つの画分に分離し、目的のスポットを含む Fr. D-c-4 (1.8 g) を ODS C. C. によりさらに分画した。最後に Fr. D-c-4-2 を Si. C. C. にて精製し、HT-9 と仮称した単一の化合物を 13.4 mg 得た。

一方、Fr. D-b を Si. C. C. にて 5 つに分けたうちのひとつの画分である Fr. D-b-3 (30.0 mg) を ODS C. C., ODS HPLC にて精製、単離すると、HT-10 と仮称した単一の化合物 (7.3 mg) が得られた。

各種スペクトルデータの解析の結果、いずれも新規化合物であったため、それぞれ hypoxylonol H (**30**) および I (**31**) と命名した。

なお、先の Fr. E (1.6 g) は阻害活性を示さないが、hypoxylonol 類を含むことが予想されたので単離を試みた。すなわち、Fr. E を Fr. E-a~E-f に分離してから、目的のスポットを含む Fr. E-e (337.0 mg)

を Si. C. C. にてさらに 4 画分に分離した. 続いて Fr. E-e-3 (175.1 mg) を ODS C. C. にて 5 つの画分に分け, Fr. E-e-3-3 (40.5 mg) を Si. C. C. 続いて ODS HPLC にて精製し, HT-11 と仮称した Fr. E-e-3-3-2-2 (7.2 mg) を単一の化合物として得た. さらに Fr. E-e-3-3-2-3 (14.0 mg) を精製すると, HT-11 (1.1 mg) および 12 と仮称した化合物 (5.5 mg) が得られた.

各種スペクトルデータの解析の結果, HT-11 および 12 は新規化合物であったため, それぞれ hypoxylonol J (**32**) および K (**33**) と命名した. 以上のように, 東久留米市で採集したクロコブタケ子実体の MeOH エキスから hypoxylonol H (**30**) から K (**33**) と命名した 4 つの新規天然物の単離に成功した.

なお, hypoxylonol I (**31**) は有意に HUVEC 増殖阻害活性を示したが, hypoxylonol H (**30**), J (**32**) および K (**33**) は阻害活性を示さなかった.

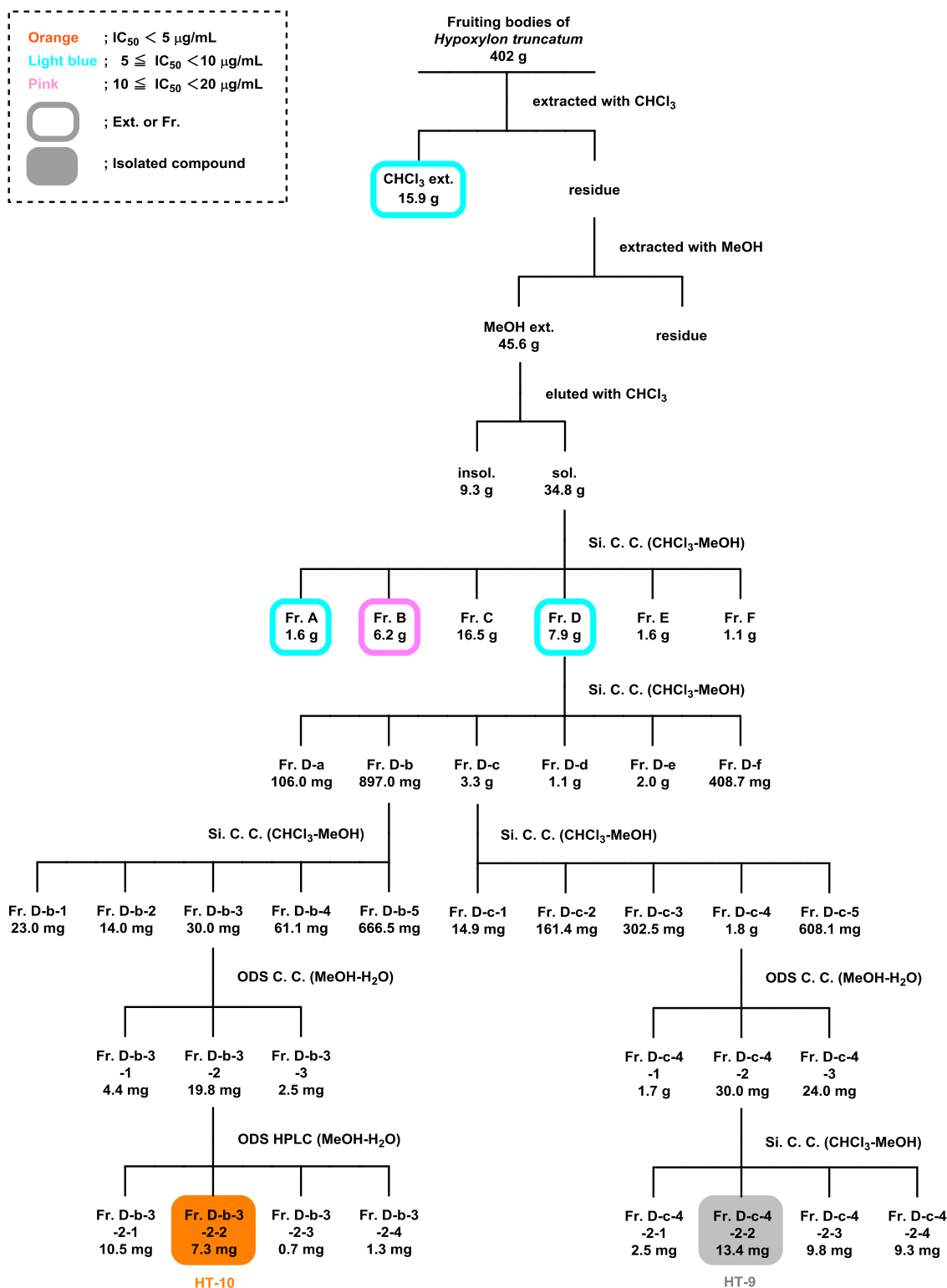


Fig. 20. Isolation Procedure of *H. truncatum* MeOH ext. Fr. D

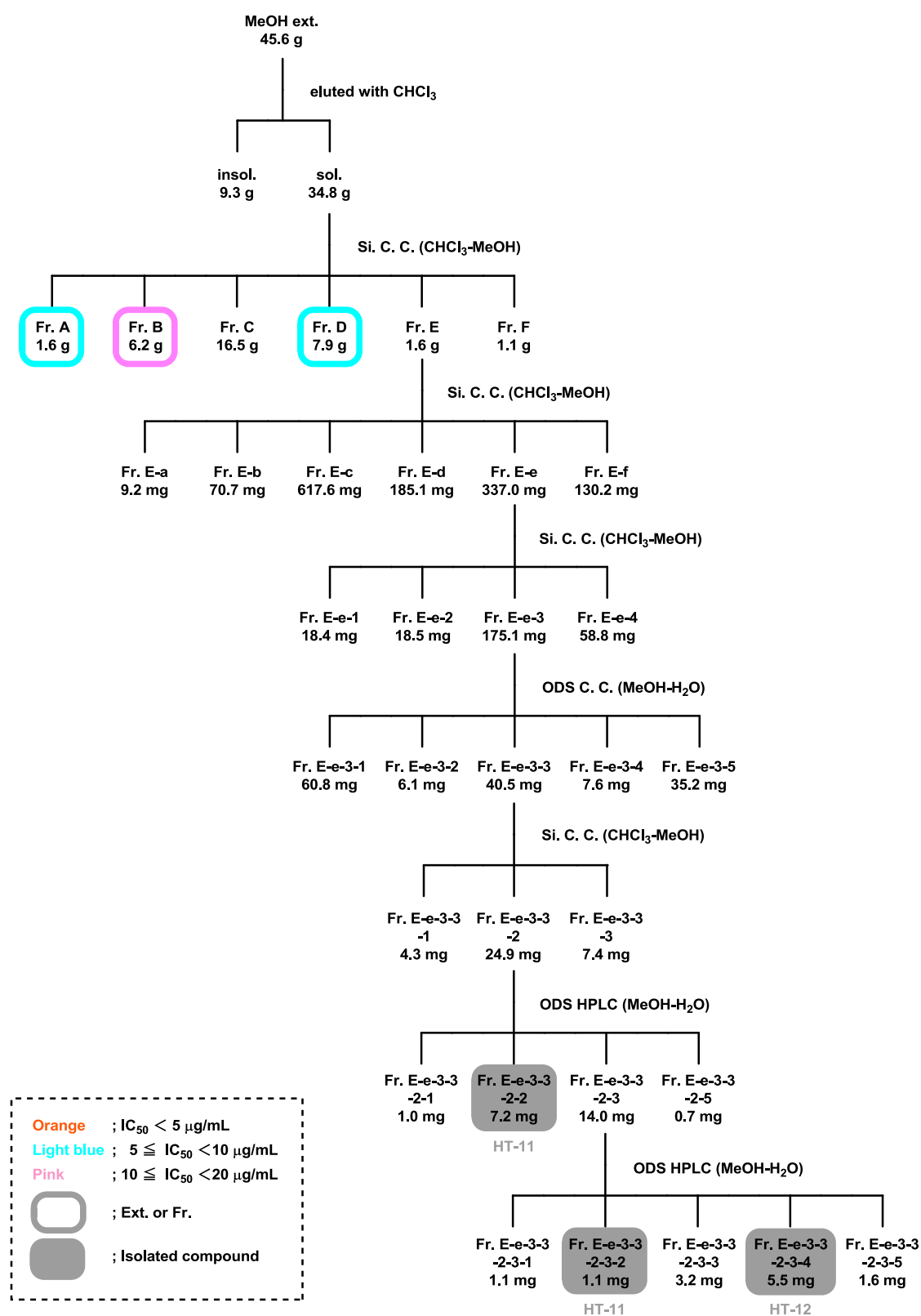


Fig. 21. Isolation Procedure of *H. truncatum* MeOH ext. Fr. E

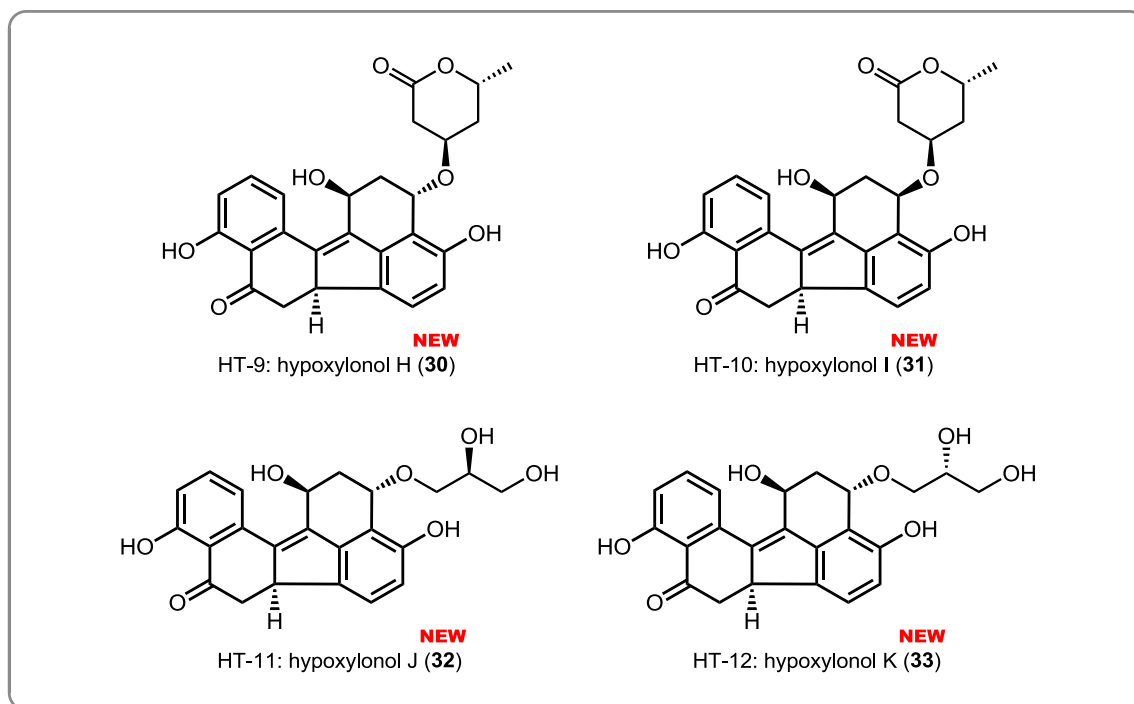


Fig. 22. Isolated Compounds from *H. truncatum* MeOH ext.

Table 3. Effect of the Compounds from *H. truncatum* MeOH ext.
on HUVEC Prolifelation Assay

Sample name	IC ₅₀ (μM)
doxorubicin	0.41
hypoxylonol H (30)	> 100
hypoxylonol I (31)	5.8
hypoxylonol J (32)	63
hypoxylonol K (33)	50

第五節 Hypoxylonol 類の構造解析

HT-1 : hypoxylonol C (23)

HT-1 は 183°C に分解点をもつ無色針状結晶として 703.2 mg 得られた。HR-FABMS (neg.) における分子イオンピーク m/z : 335.0925 ($[M-H]^-$) から求めた分子式は $C_{20}H_{16}O_5$ である。IR スペクトルにおいて 3375 cm^{-1} , 3250 cm^{-1} に水酸基由来の吸収, 1630 cm^{-1} にカルボニル基由来の吸収が認められた。また, ^1H -NMR (Table 4) において, 2 つの水酸基のシグナルが δ_H 4.27 (1H, s) と δ_H 5.14 (1H, brd, 4.2) に, 1 つのフェノール性水酸基のシグナルが δ_H 8.60 (1H, s) に, さらに水素結合した 1 つのフェノール性水酸基のシグナルが δ_H 12.59 (1H, s) にそれぞれ観測された。さらに ^{13}C -NMR (Table 4) では 1 つのカルボニル基のシグナルが δ_C 205.3 に観測された。一方, ^1H および ^{13}C -NMR, HMQC より, 2 つの sp^3 -メチレン基, 酸素と結合したものを 2 つ含む 3 つの sp^3 -メチン基, 5 つの sp^2 -メチン, 酸素と結合したものを 2 つ含む 9 つの sp^2 -4 級炭素の存在が推測された。

さらに ^1H - ^1H COSY より, δ_H 3.37 の水素は δ_H 4.10 の水素と, δ_H 7.54 の水素は δ_H 6.83 および δ_H 7.48 の水素とそれぞれ隣接していることが示唆された。また, HMBC より δ_H 6.83 の水素から δ_C 115.0 の sp^2 -4 級炭素および δ_C 163.0 の酸素が結合した sp^2 -4 級炭素に, δ_H 7.54 の水素から δ_C 138.9 の sp^2 -4 級炭素および δ_C 163.0 の炭素に, δ_H 7.48 の水素から δ_C 115.0 の炭素および δ_C 137.1 の sp^2 -4 級炭素に相関が認められ, δ_H 3.37 の水素から δ_C 115.0 の炭素および δ_C 205.3 のカルボニル炭素に, δ_H 4.10 の水素から δ_C 137.1 および δ_C 205.3 の炭素に相関が認められたことから, 左半分の部分構造単位としてヒドロナフタレン

構造を推定した。

同様に ^1H - ^1H COSY より， δ_{H} 2.14 の水素は δ_{H} 5.47 および δ_{H} 5.59 の水素と， δ_{H} 6.67 の水素は δ_{H} 7.28 の水素とそれぞれ隣接していることが示唆された。HMBC より， δ_{H} 8.60 の水素から δ_{C} 113.8 の sp^2 -メチン炭素， δ_{C} 120.0 の sp^2 -4 級炭素および δ_{C} 155.1 の酸素が結合した sp^2 -4 級炭素に， δ_{H} 6.67 の水素から δ_{C} 135.9 の sp^2 -4 級炭素および δ_{C} 155.1 の炭素に， δ_{H} 7.28 の水素から δ_{C} 143.5 の sp^2 -4 級炭素および δ_{C} 155.1 の炭素に相関が認められた。また， δ_{H} 2.46 の水素から δ_{C} 120.0 および δ_{C} 137.5 の sp^2 -4 級炭素に， δ_{H} 5.14 の水素から δ_{C} 64.9 の酸素が結合した sp^3 -メチン炭素に， δ_{H} 4.27 の水素から δ_{C} 137.5 の炭素に， δ_{H} 5.59 の水素から δ_{C} 143.5 の炭素に相関が認められたことから，右半分としてヒドロナフタレン構造を推定した。

さらに HMBC より， δ_{H} 2.30 の水素から δ_{C} 135.9 の炭素に， δ_{H} 7.28 の水素から δ_{C} 49.2 の sp^3 -メチン炭素に相関が認められた。この二つの部分構造は δ_{C} 49.2 の炭素と δ_{C} 135.9 の炭素で，また， δ_{C} 137.1 の炭素と δ_{C} 137.5 の炭素で結合していると予想した。

以上の結果から HT-1 の平面構造を明らかにすることができた。しかし，これらのデータからは構造中に存在する 1 位，3 位および 6b 位の相対立体配置を決定できなかったため，NOESY 実験を行ったが相対立体配置決定のための有用な知見は得られなかった。そこで，HT-1 を *n*-hexane-acetone 系にて結晶化させ X 線結晶解析を行った。その結果，1，3 および 6b 位の立体配置はそれぞれ *S*，*S* および *R* であることが明らかになった (Fig. 24)。本化合物は新規化合物であったので，hypoxylonol C (23) と命名した (Fig. 25)。

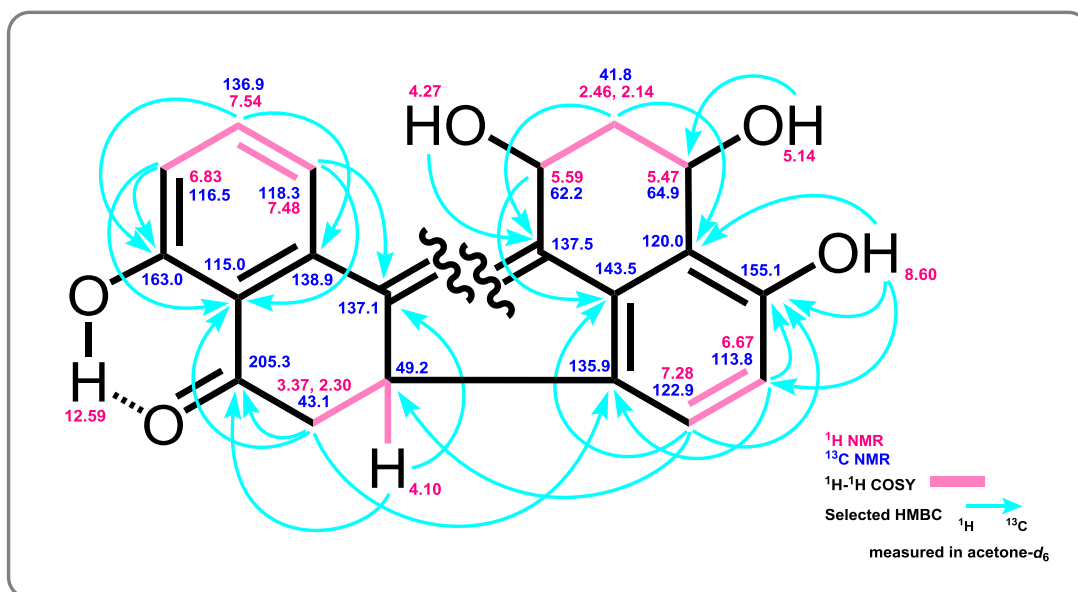


Fig. 23. ^1H - ^1H COSY and HMBC Correlations of HT-1 in acetone- d_6

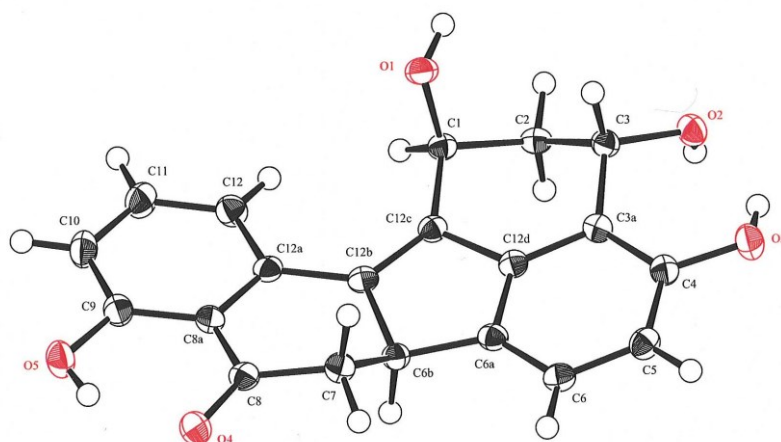
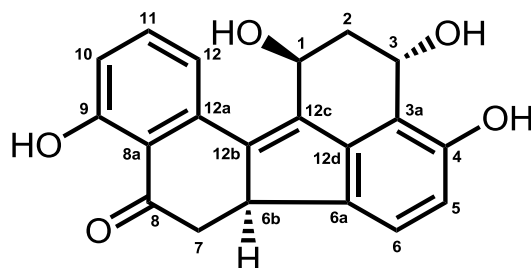


Fig. 24. ORTEP Drawing of HT-1 Obtained by X-ray Analysis

Table 4. ^1H - and ^{13}C -NMR Spectral Data of Hypoxylonol C (**23**)in acetone- d_6

Position	δ_{C} , mult.	δ_{H} (J in Hz)
1	62.2, CH	5.59 (1H, dd, 8.5, 4.3)
2	41.8, CH_2	2.14 (1H, ddd, 13.1, 8.5, 3.2) 2.46 (1H, dt, 13.1, 4.3)
3	64.9, CH	5.47 (1H, t, 3.2)
3a	120.0, C	
4	155.1, C	
5	113.8, CH	6.67 (1H, d, 8.0)
6	122.9, CH	7.28 (1H, d, 8.0)
6a	135.9, C	
6b	49.2, CH	4.10 (1H, dd, 13.9, 5.6)
7	43.1, CH_2	2.30 (1H, dd, 16.4, 13.9) 3.37 (1H, dd, 16.4, 5.6)
8	205.3, C	
8a	115.0, C	
9	163.0, C	
10	116.5, CH	6.83 (1H, dd, 7.9, 1.2)
11	136.9, CH	7.54 (1H, t, 7.9)
12	118.3, CH	7.48 (1H, dd, 7.9, 1.2)
12a	138.9, C	
12b	137.1, C	
12c	137.5, C	
12d	143.5, C	
1-OH		4.27 (1H, s)
3-OH		5.14 (1H, br d, 4.2)
4-OH		8.60 (1H, s)
9-OH		12.59 (1H, s)

Fig. 25. Structure of Hypoxylonol C (**23**)

HT-2 : hypoxylonol F (24)

HT-2 は 187°C に分解点をもつ黄色板状結晶として 77.1 mg 得られた。HR-FABMS (pos.) における分子イオンピーク m/z : 337.1074 ($[M+H]^+$) から求めた分子式は $C_{20}H_{16}O_5$ である。IR スペクトルにおいて 3375 cm^{-1} に水酸基由来の吸収, 1630 cm^{-1} にカルボニル基由来の吸収が認められた。 ^1H -NMR (Table 5) において, δ_H 12.58 (1H, s) に水素結合した 1 つの水酸基のシグナルが, ^{13}C -NMR (Table 5) において, δ_C 205.7 に 1 つのカルボニル基のシグナルが観測された。さらに, ^1H および ^{13}C -NMR, HMQC より, 2 つの sp^3 -メチレン基, 酸素と結合したものを 2 つ含む 3 つの sp^3 -メチン基, 5 つの sp^2 -メチン, 酸素と結合したものを 2 つ含む 9 つの sp^2 -4 級炭素の存在が推測された。

次に, ^1H - ^1H COSY より, δ_H 2.33 の水素は δ_H 4.10 の水素と, δ_H 7.52 の水素は δ_H 6.81 および δ_H 7.47 の水素とそれぞれ隣接していることが示唆された。また HMBC より, δ_H 6.81 の水素から δ_C 115.6 の sp^2 -4 級炭素に, δ_H 7.52 の水素から δ_C 139.2 の sp^2 -炭素および δ_C 163.3 の酸素に結合した sp^2 -4 級炭素に, δ_H 12.58 の水素から δ_C 116.8 の sp^2 -メチン炭素に相関が認められた。さらに, δ_H 2.33 の水素から δ_C 205.7 のカルボニル炭素に, δ_H 3.39 の水素から δ_C 115.6 の炭素に, δ_H 4.10 の水素から δ_C 137.3 の sp^2 -4 級炭素に, δ_H 7.47 の水素から δ_C 137.3 および δ_C 115.6 の炭素に相関が認められたことから, Fig. 26 に示す左半分のヒドロナフタレン構造を確認した。

一方, ^1H - ^1H COSY より, δ_H 2.25 の水素は δ_H 5.36 および δ_H 5.37 の水素と, δ_H 6.68 の水素は δ_H 7.28 の水素とそれぞれ隣接していることが示唆された。HMBC より, δ_H 6.68 の水素から δ_C 120.7 の sp^2 -4

級炭素および δ_c 136.4 の sp^2 -4 級炭素に、 δ_H 7.28 の水素から δ_c 144.0 の sp^2 -4 級炭素および δ_c 155.4 の酸素に結合した sp^2 -4 級炭素に相関が認められた。また、 δ_H 2.25 および δ_H 2.47 の水素から δ_c 138.8 の sp^2 -4 級炭素に、 δ_H 5.36 の水素から δ_c 120.7 の炭素および δ_c 144.0 の炭素に相関が認められたことから、Fig. 26 に示す右半分のヒドロナフタレン構造を明らかにした。

最後に、HMBC より、 δ_H 4.10 の水素から δ_c 138.8 の炭素に、 δ_H 2.33 の水素から δ_c 136.4 の炭素に相関が認められた。この二つの部分構造は δ_c 50.0 の炭素と δ_c 136.4 の炭素、 δ_c 137.3 の炭素と δ_c 138.8 の炭素で結合していると推定した。

なお、HT-2 の ^1H および ^{13}C -NMR のスペクトルデータは hypoxylonol C (23) と類似しており、以上の結果から本化合物は hypoxylonol C (23) の立体異性体であると予想した。1 位および 3 位の水素が、 δ_H 2.25 の 2 位水素と 8.5 Hz でカップリングしていることから、1 位と 3 位は *cis* 配置であることが示唆される。しかし、以上のデータからはこれらの水素と 6b 位水素の相対立体配置を決定できない。そこで、HT-2 の X 線結晶解析を行った。その結果、1, 3 および 6b 位の立体配置はそれぞれ *S*, *R* および *R* であることが明らかになった (Fig. 27)。本化合物は新規化合物であったので、hypoxylonol F (24) と命名した (Fig. 28)。

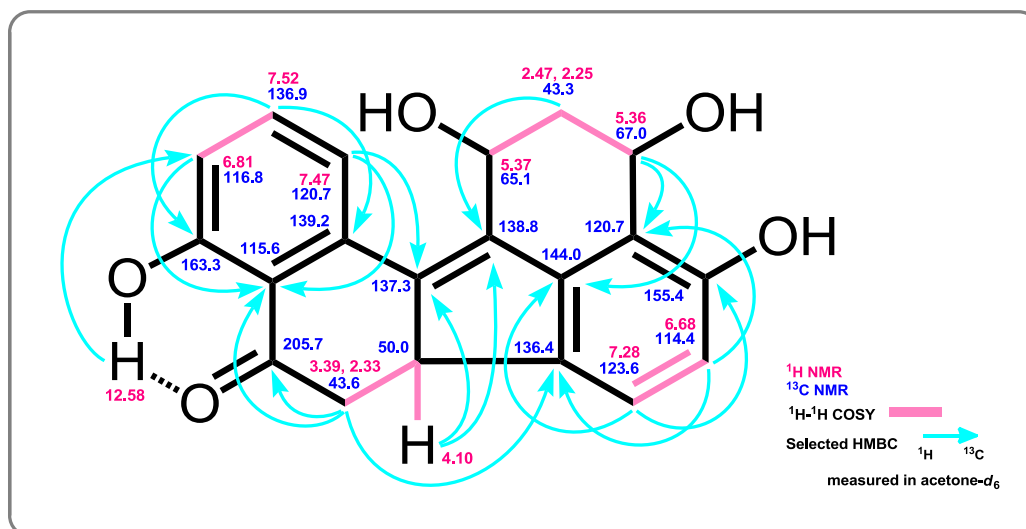


Fig. 26. ^1H - ^1H COSY and HMBC Correlations of HT-2 in acetone- d_6

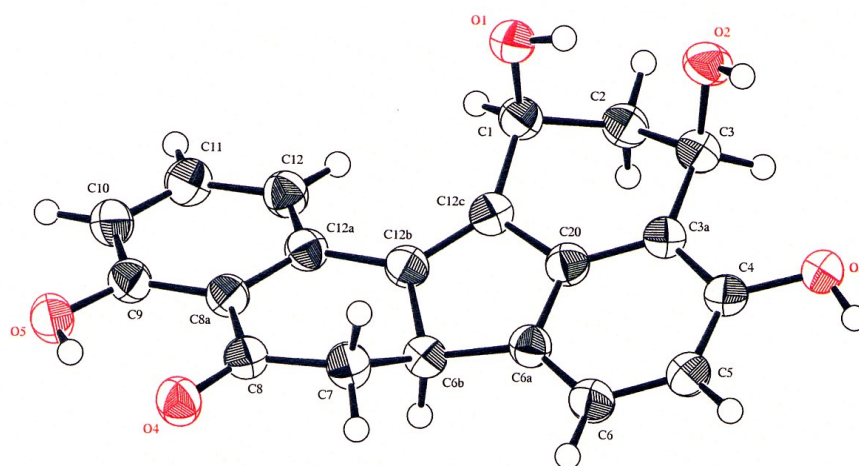


Fig. 27. ORTEP Drawing of HT-2 Obtained by X-ray Analysis

Table 5. ^1H - and ^{13}C -NMR Spectral Data of Hypoxylonol F (**24**)

in acetone- d_6		
Position	δ_{C} , mult.	δ_{H} (J in Hz)
1	65.1, CH	5.37 (1H, d, 8.5)
2	43.3, CH ₂	2.25 (1H, dt, 12.6, 8.5)
		2.47 (1H, dt, 12.6, 4.4)
3	67.0, CH	5.36 (1H, d, 8.5)
3a	120.7, C	
4	155.4, C	
5	114.4, CH	6.68 (1H, d, 8.0)
6	123.6, CH	7.28 (1H, d, 8.0)
6a	136.4, C	
6b	50.0, CH	4.10 (1H, ddd, 13.8, 5.5, 2.4, 0.7)
7	43.6, CH ₂	2.33 (1H, dd, 16.5, 13.8)
		3.39 (1H, dd, 16.5, 5.5)
8	205.7, C	
8a	115.6, C	
9	163.3, C	
10	116.8, CH	6.81 (1H, dd, 7.9, 1.3)
11	136.9, CH	7.52 (1H, t, 7.9)
12	120.7, CH	7.47 (1H, dd, 7.9, 1.3)
12a	139.2, C	
12b	137.3, C	
12c	138.8, C	
12d	144.0, C	
9-OH		12.58 (1H, s)

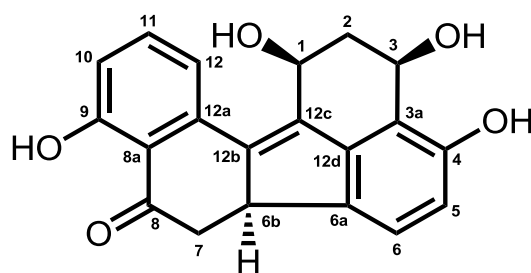


Fig. 28. Structure of Hypoxylonol F (**24**)

HT-3 : hypoxylonol B (25)

HT-3 は融点 $163\sim 165^{\circ}\text{C}$ の黄色柱状結晶として 31.8 mg 得られた. HR-EIMSにおける分子イオンピーク m/z : 350.1152 から求めた分子式は $\text{C}_{21}\text{H}_{18}\text{O}_5$ である. IR スペクトルにおいて 3400cm^{-1} に水酸基由来の吸収, 1620cm^{-1} にカルボニル基由来の吸収がそれぞれ観測された. また, ^1H -NMR (Table 6) において δ_{H} 4.18 (1H, s) に水酸基のシグナルが, δ_{H} 8.38 (1H, s) にフェノール性水酸基のシグナルが, δ_{H} 12.58 (1H, s) に水素結合した水酸基の存在が観測された. また, ^{13}C -NMR (Table 6) において δ_{C} 206.1 にカルボニル基のシグナルが観測された. なお, ^1H および ^{13}C -NMR のスペクトルデータを HT-1 および 2 と比較すると, 3 位の水酸基のシグナルが消失し, メトキシ基のシグナル (δ_{H} 3.44 (3H, s), δ_{C} 56.4) が現れた. これらのデータから HT-3 はクロコブタケから単離され, その平面構造のみ報告のある hypoxylonol B (25) と推定し, HT-3 の ^1H および ^{13}C -NMR スペクトルを hypoxylonol B (25) の文献値^{19,20)}と比較したところ良く一致したため, HT-3 は hypoxylonol B (25) であると同定した.

なお, 25 の X 線結晶解析から, 1, 3 および 6b 位の立体配置はそれぞれ *S*, *S* および *R* であることを明らかにした (Fig. 29).



Table 6. ^1H - and ^{13}C -NMR Spectral Data of Hypoxylonol B (**25**)

in acetone- d_6

Position	δ_{C} , mult.	δ_{H} (J in Hz)
1	63.4, CH	5.49 (1H, m)
2	39.6, CH_2	2.13 (1H, ddd, 13.1, 8.9, 3.4) 2.39 (1H, ddd, 13.1, 5.6, 4.6)
3	72.8, CH	4.96 (1H, dd, 5.6, 3.4)
3a	118.8, C	
4	155.2, C	
5	114.0, CH	6.73 (1H, d, 8.1)
6	123.9, CH	7.30 (1H, dd, 8.1, 0.7)
6a	136.8, C	
6b	49.7, CH	4.06 (1H, dddd, 13.9, 5.5, 2.3, 0.7)
7	43.6, CH_2	2.27 (1H, dd, 16.4, 13.9) 3.38 (1H, dd, 16.4, 5.5)
8	206.1, C	
8a	115.6, C	
9	163.3, C	
10	116.8, CH	6.81 (1H, dd, 7.7, 1.7)
11	136.9, CH	7.54 (1H, t, 7.7)
12	120.7, CH	7.49 (1H, dd, 7.7, 1.7)
12a	139.2, C	
12b	137.8, C	
12c	138.7, C	
12d	145.1, C	
1-OH		4.18 (1H, s)
4-OH		8.38 (1H, s)
9-OH		12.58 (1H, s)
3-OCH ₃	56.4, CH_3	3.44 (3H, s)

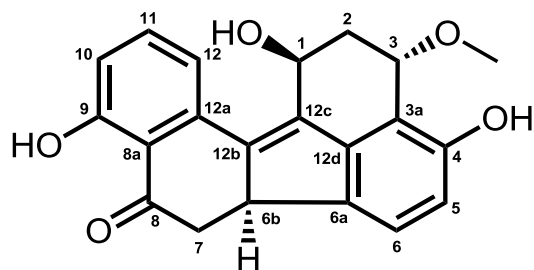


Fig. 30. Structure of Hypoxylonol B (**25**)

HT-4 : hypoxylonol D (26)

HT-4 は融点 $152\sim 154^{\circ}\text{C}$ の黄色粉末として 34.2 mg 得られた. HR-EIMS における分子イオンピーク m/z : 364.1308 から求めた分子式は $\text{C}_{22}\text{H}_{20}\text{O}_5$ である. IR スペクトルにおいて 3400cm^{-1} に水酸基由来の吸収, 1620cm^{-1} にカルボニル基由来の吸収がそれぞれ認められた. ^1H -NMR (Table 7) において δ_{H} 4.25 (1H, d, 7.1) に水酸基のシグナルが, δ_{H} 8.54 (1H, s) にフェノール性水酸基のシグナルが, δ_{H} 12.60 (1H, s) に水素結合した水酸基のシグナルが観測された. ^{13}C -NMR (Table 7) において δ_{C} 206.1 にカルボニル基のシグナルが観測された. さらに, ^1H および ^{13}C -NMR のスペクトルデータを HT-1 および 2 と比較すると, 新たに酸素に結合した 1 つの sp^3 -メチレン基 (δ_{H} 3.72 (1H, dq, 9.3, 7.0, δ_{H} 3.86 (1H, dq, 9.3, 7.0)), δ_{C} 65.1) および 1 つのメチル基 (δ_{H} 1.22 (3H, t, 7.0), δ_{C} 15.9) が見られたことから, エトキシ基の存在が示唆された. これらのデータから HT-4 はクロコブタケから報告のある hypoxylonol D (26) であると予想し, HT-4 の ^1H および ^{13}C -NMR スペクトルデータを hypoxylonol D (26) の文献値²⁰⁾と比較したところ良く一致したため, HT-4 は hypoxylonol D (26) であると同定した.

なお, 26 の 1 位, 3 位および 6b 位の ^1H および ^{13}C -NMR のスペクトルデータを HT-5 (hypoxylonol E (27)) と比較すると, その化学シフト値, カップリングパターンおよびカップリング定数が, また, CD スペクトルは hypoxylonol E (27) および F (24) とよく一致した (Fig. 31). したがって, 1, 3 および 6b 位の立体配置をそれぞれ *S*, *R* および *R* であると推定した (Fig. 32).

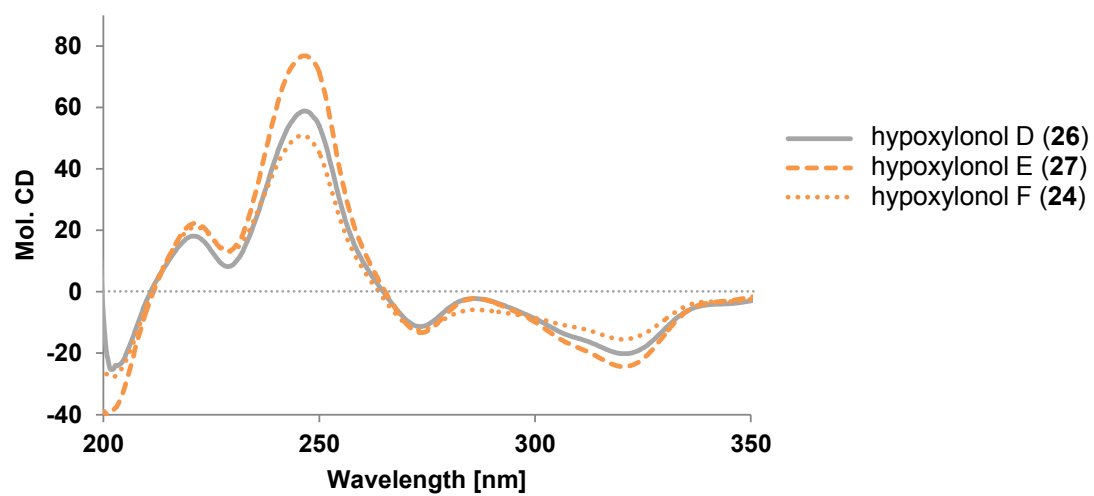
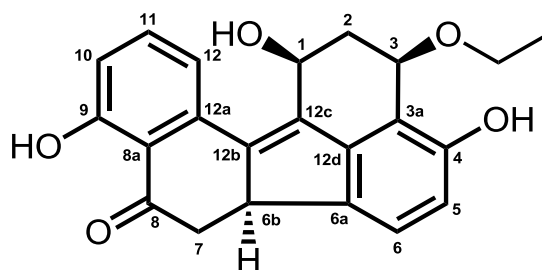


Fig. 31. CD spectra of Hypoxylonol D (26), E (27) and F (24)

Table 7. ^1H - and ^{13}C -NMR Spectral Data of Hypoxylonol D (**26**)in acetone- d_6

Position	δ_{C} , mult.	δ_{H} (J in Hz)
1	64.3, CH	5.35 (1H, m)
2	38.5, CH_2	2.34 (1H, dt, 13.4, 6.3) 2.41 (1H, dt, 13.4, 4.4)
3	73.1, CH	5.15 (1H, dd, 6.3, 4.4)
3a	118.7, C	
4	155.3, C	
5	114.2, CH	6.72 (1H, d, 7.8)
6	124.0, CH	7.30 (1H, d, 7.8)
6a	136.7, C	
6b	49.6, CH	4.06 (1H, dddd, 13.9, 5.6, 1.7, 0.7)
7	43.4, CH_2	2.36 (1H, dd, 16.4, 13.9) 3.39 (1H, dd, 16.4, 5.6)
8	206.1, C	
8a	115.6, C	
9	163.5, C	
10	116.9, CH	6.82 (1H, dd, 7.8, 1.5)
11	137.1, CH	7.54 (1H, t, 7.8)
12	119.8, CH	7.50 (1H, dd, 7.8, 1.5)
12a	139.1, C	
12b	137.6, C	
12c	138.8, C	
12d	144.2, C	
1-OH		4.25 (1H, d, 7.1)
4-OH		8.54 (1H, s)
9-OH		12.60 (1H, s)
3-O CH_2CH_3	65.1, CH_2	3.72 (1H, dq, 9.3, 7.0) 3.86 (1H, dq, 9.3, 7.0)
3-O CH_2CH_3	15.9, CH_3	1.22 (3H, t, 7.0)

Fig. 32. Structure of Hypoxylonol D (**26**)

HT-5 : hypoxylonol E (27)

HT-5 は融点 162~164°C の黄色板状結晶として 26.9 mg 得られた． HR-EIMSにおける分子イオンピーク m/z : 350.1156 から求めた分子式は $C_{21}H_{18}O_5$ である． IR スペクトルにおいて 3375cm^{-1} に水酸基由来の吸収, 1630cm^{-1} にカルボニル基由来の吸収がそれぞれ認められた． また, $^1\text{H-NMR}$ (Table 8) において δ_{H} 4.16 (1H, d, 7.1) に水酸基のシグナルが, δ_{H} 8.50 (1H, s) にフェノール性水酸基のシグナルが, δ_{H} 12.60 (1H, s) に水素結合した水酸基のシグナル存在が, また, $^{13}\text{C-NMR}$ (Table 8) において δ_{C} 205.7 にカルボニル基のシグナルが観測された． さらに, メトキシ基のシグナル (δ_{H} 3.51 (3H, s), δ_{C} 56.9) が観測された． これらのデータから HT-5 は hypoxylonol B (25) の立体異性体としてクロコブタケから単離の報告がある hypoxylonol E (27) と推定し, HT-5 の ^1H および $^{13}\text{C-NMR}$ スペクトルデータを hypoxylonol E (27) の文献値²⁰⁾と比較したところ良く一致したため, HT-5 は hypoxylonol E (27) であると同定した．

なお, 27 の X 線結晶解析より, 1 および 3, 6b 位の立体配置はそれぞれ *S*, *R* および *R* であることを明らかにした (Fig. 33)．

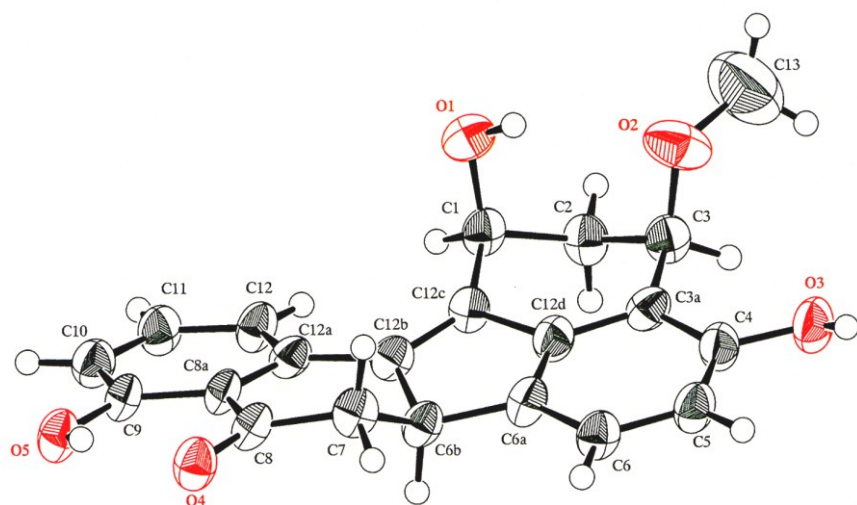
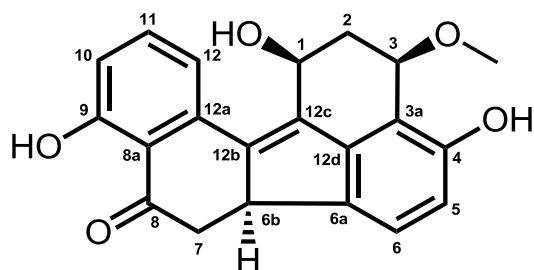


Fig. 33. ORTEP Drawing of HT-5 Obtained by X-ray Analysis

Table 8. ^1H - and ^{13}C -NMR Spectral Data of Hypoxylonol E (**27**)in acetone- d_6

Position	δ_{C} , mult.	δ_{H} (J in Hz)
1	64.2, CH	5.35 (1H, m)
2	38.0, CH_2	2.38 (2H, dt, 3.9, 2.2)
3	74.5, CH	5.02 (1H, dd, 5.9, 3.9)
3a	118.4, C	
4	155.3, C	
5	114.3, CH	6.72 (1H, d, 8.1)
6	124.1, CH	7.31 (1H, d, 8.1)
6a	136.7, C	
6b	49.5, CH	4.05 (1H, dddd, 13.9, 5.5, 1.7, 0.7)
7	43.3, CH_2	2.35 (1H, dd, 16.4, 13.9) 3.38 (1H, dd, 16.4, 5.5)
8	205.7, C	
8a	115.6, C	
9	163.5, C	
10	117.0, CH	6.82 (1H, dd, 7.7, 1.5)
11	137.1, CH	7.53 (1H, t, 7.7)
12	119.7, CH	7.49 (1H, dd, 7.7, 1.5)
12a	139.1, C	
12b	137.7, C	
12c	138.7, C	
12d	144.2, C	
1-OH		4.16 (1H, d, 7.1)
4-OH		8.50 (1H, s)
9-OH		12.60 (1H, s)
3- OCH_3	56.9, CH_3	3.51 (3H, s)

Fig. 34. Structure of Hypoxylonol E (**27**)

HT-6 : hypoxylonol A (28)

HT-6 は融点 $111\sim 113^{\circ}\text{C}$ の黄色粉末として 36.7 mg 得られた． HR-EIMS における分子イオンピーク m/z : 364.1307 から求めた分子式は $\text{C}_{22}\text{H}_{20}\text{O}_5$ である． IR スペクトルにおいて 3375cm^{-1} に水酸基由来の吸収， 1630cm^{-1} にカルボニル基由来の吸収がそれぞれ認められた． ^1H -NMR (Table 9) において $\delta_{\text{H}} 8.42$ (1H, s) にフェノール性水酸基のシグナルが， $\delta_{\text{H}} 12.58$ (1H, s) に水素結合した水酸基のシグナルが， ^{13}C -NMR (Table 9) において $\delta_{\text{C}} 206.1$ にカルボニル基のシグナルが観測された． 本品の ^1H および ^{13}C -NMR のスペクトルデータを HT-3 と比較すると，メトキシ基のシグナルが消失し，代わりに酸素に結合した sp^3 -メチレン基 ($\delta_{\text{H}} 3.64$ (1H, dq, 9.3, 7.0), $\delta_{\text{H}} 3.79$ (1H, dq, 9.3, 7.0), $\delta_{\text{C}} 64.5$) およびメチル基 ($\delta_{\text{H}} 1.21$ (3H, t, 7.0), $\delta_{\text{C}} 15.9$) のシグナルが見られたことから，エトキシ基の存在が示唆された． これらのデータから HT-6 はクロコブタケから単離の報告がある hypoxylonol A (28) と予想し， HT-6 の ^1H および ^{13}C -NMR スペクトルデータを hypoxylonol A (28) の文献値^{19,20)}と比較したところ良く一致したため， HT-6 は hypoxylonol A (28) であると同定した．

なお， 28 の 1 位， 3 位および 6b 位の ^1H および ^{13}C -NMR のスペクトルデータを hypoxylonol B (25) と比較すると，その化学シフト値，カップリングパターンおよびカップリング定数が類似しており，また， CD スペクトルは hypoxylonol B (25) および C (23) とよく一致していた (Fig. 35)． 以上の結果から， 28 の 1, 3 および 6b 位の立体配置をそれぞれ *S*, *S* および *R* であると推定した (Fig. 36)．

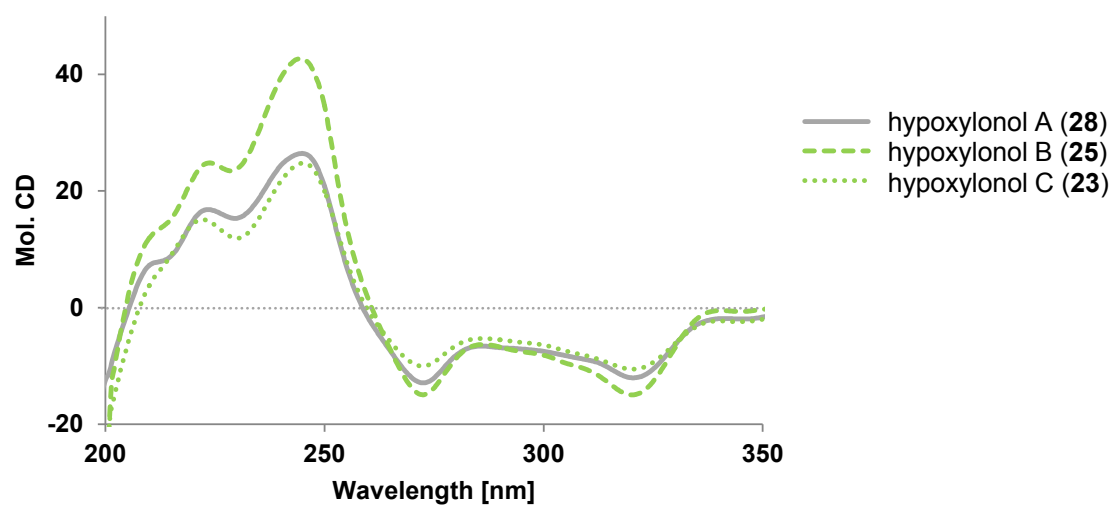
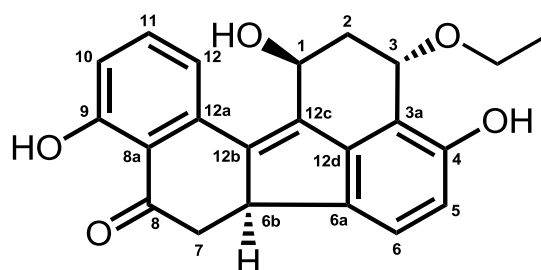


Fig. 35. CD spectra of Hypoxylonol A (28), B (25) and C (23)

Table 9. ^1H - and ^{13}C -NMR Spectral Data of Hypoxylonol A (**28**)in acetone- d_6

position	δ_{C} , mult.	δ_{H} (J in Hz)
1	63.4, CH	5.52 (1H, m)
2	39.8, CH_2	2.19 (1H, ddd, 13.2, 8.3, 3.4) 2.41 (1H, ddd, 13.2, 6.1, 4.4)
3	71.5, CH	5.09 (1H, dd, 6.1, 3.4)
3a	119.2, C	
4	155.2, C	
5	114.0, CH	6.71 (1H, d, 7.8)
6	123.8, CH	7.29 (1H, dd, 7.8, 0.7)
6a	136.7, C	
6b	49.7, CH	4.07 (1H, dddd, 13.9, 5.5, 2.2, 0.7)
7	43.6, CH_2	2.27 (1H, dd, 16.3, 13.9) 3.38 (1H, dd, 16.3, 5.5)
8	206.1, C	
8a	115.7, C	
9	163.3, C	
10	116.9, CH	6.81 (1H, dd, 7.8, 1.5)
11	137.0, CH	7.53 (1H, t, 7.8)
12	120.5, CH	7.49 (1H, dd, 7.8, 1.5)
12a	139.2, C	
12b	137.7, C	
12c	138.7, C	
12d	145.0, C	
4-OH		8.42 (1H, s)
9-OH		12.58 (1H, s)
3- OCH_2CH_3	64.5, CH_2	3.64 (1H, dq, 9.3, 7.0) 3.79 (1H, dq, 9.3, 7.0)
3- OCH_2CH_3	15.9, CH_3	1.21 (3H, t, 7.0)

Fig. 36. Structure of Hypoxylonol A (**28**)

HT-7: hypoxylonol G (29)

HT-7 は黄色粉末として 3.5 mg 得られた。HR-FABMS における分子イオンピーク m/z : 321.1132 ($[M+H]^+$) から求めた分子式は $C_{20}H_{16}O_4$ である。IR スペクトルにおいて 3367 cm^{-1} に水酸基由来の吸収, 1629 cm^{-1} にカルボニル基由来の吸収がそれぞれ認められた。 ^1H -NMR (Table 10) において, δ_H 12.60 (1H, s) に水素結合した水酸基のシグナルが, ^{13}C -NMR (Table 10) において δ_C 206.2 にカルボニル基のシグナルが観測された。さらに, ^1H および ^{13}C -NMR, HMQC より, 3つの sp^3 -メチレン基, 酸素原子と結合したものを 1つ含む 2つの sp^3 -メチン基, 5つの sp^2 -メチン, 酸素原子と結合したものを 2つ含む 9つの sp^2 -4級炭素の存在が推測された。

HT-7 の ^1H および ^{13}C -NMR のスペクトルデータを HT-2 と比較すると, 酸素原子と結合した sp^3 -メチンが 1つ少なく, その代わりに sp^3 -メチレンが 1つ多い。 ^1H - ^1H COSY, NOESY および HMBC を詳細に解析し, Fig. 37 に示すように HT-7 の平面構造を決定した。

HT-7 の CD スペクトルを測定したところ, hypoxylonol E (27) および F (24) と良く一致したので, 6b 位の絶対立体配置を *R* 配置であると決定した (Fig. 38)。また, δ_H 7.12 の 12 位水素と δ_H 2.98 および δ_H 3.08 の 1 位水素間に NOESY 相関が観測された。1 位と 3 位の β 配置が 1,3-ジアキシャルの関係になると, 12 位水素と 1 位の α 配置の水素のみに NOESY 相関が観測されると予想される。したがって, 1 位と 3 位は α 配置が 1,3-ジアキシャルの関係になると推定された。さらに, δ_H 2.98 の 1 位水素と δ_H 5.38 の 3 位水素間に NOESY 相関が観測されたことから, 3 位水素は α 配置, 水酸基は β 配置であると推定した。 δ_H 1.94 の 2 位水素と δ_H 5.38 の 3 位水素が 10.2 Hz でカップリン

グしていることは、これを支持するものである．以上より，HT-7 の構造を Fig. 40 に示すように推定した．本化合物は新規化合物であったので，hypoxylonol G (29) と命名した．

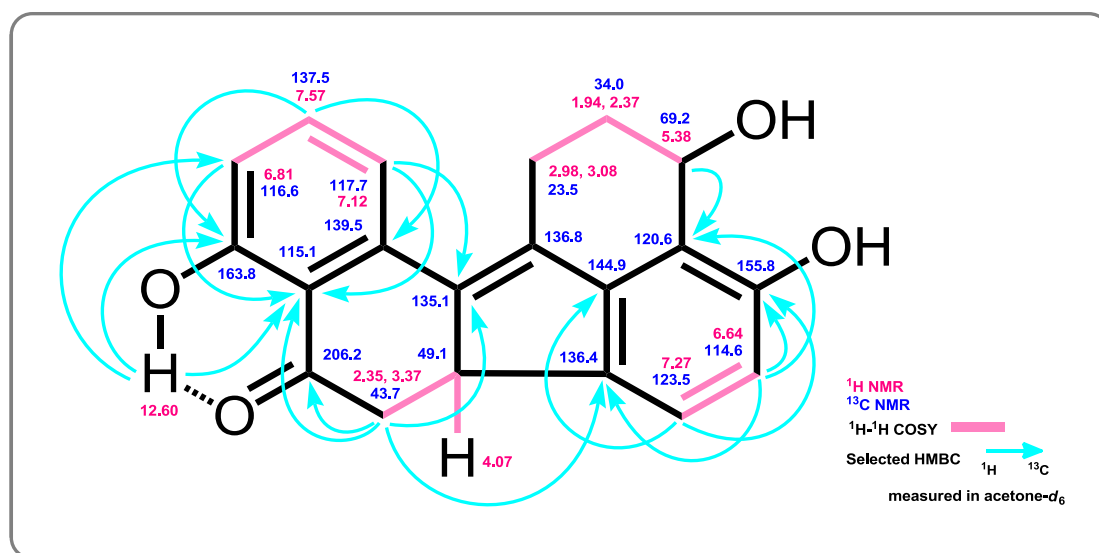


Fig. 37. ^1H - ^1H COSY and HMBC Correlations of HT-7 in acetone- d_6

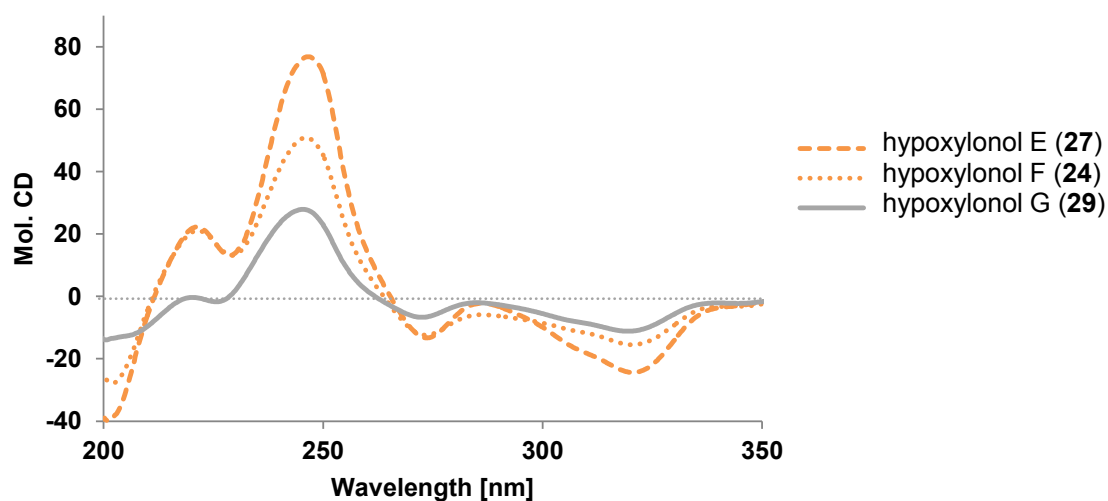


Fig. 38. CD spectra of Hypoxylonol E (27), F (24) and G (29)

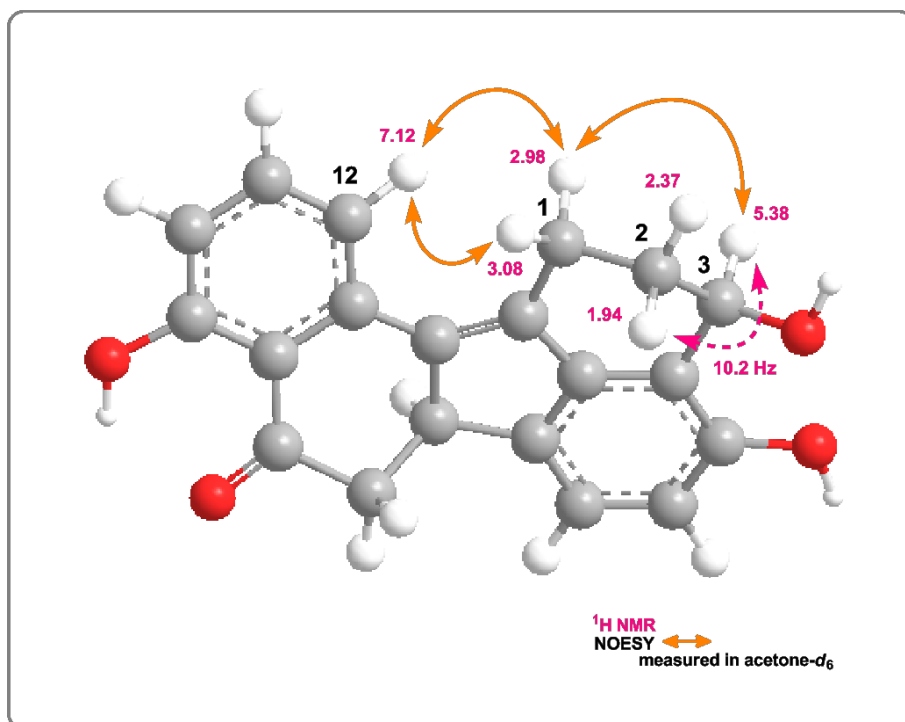
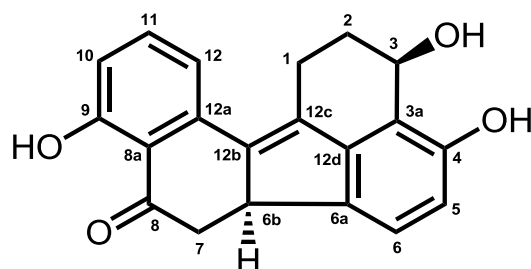


Fig. 39. NOESY Correlations of HT-7 in acetone-*d*₆

Table 10. ^1H - and ^{13}C -NMR Spectral Data of Hypoxylonol G (**29**)

in acetone- d_6		
Position	δ_{C} , mult.	δ_{H} (J in Hz)
1	23.5, CH_2	2.98 (1H, m) 3.08 (1H, m)
2	34.0, CH_2	1.94 (1H, m) 2.37 (1H, m)
3	69.2, CH	5.38 (1H, dd, 10.2, 4.4)
3a	120.6, C	
4	155.8, C	
5	114.6, CH	6.64 (1H, d, 7.6)
6	123.5, CH	7.27 (1H, d, 7.6)
6a	136.4, C	
6b	49.1, CH	4.07 (1H, dt, 13.9, 5.6)
7	43.7, CH_2	2.35 (1H, dd, 16.3, 13.9) 3.37 (1H, dd, 16.3, 5.6)
8	206.2, C	
8a	115.1, C	
9	163.8, C	
10	116.6, CH	6.81 (1H, dd, 8.3, 1.0)
11	137.5, CH	7.57 (1H, t, 8.3)
12	117.7, CH	7.12 (1H, dd, 8.3, 1.0)
12a	139.5, C	
12b	135.1, C	
12c	136.8, C	
12d	144.9, C	
9-OH		12.60 (1H, s)

Fig. 40. Structure of Hypoxylonol G (**29**)

HT-8: truncatone (7)

HT-8 は融点 205~207°C の黄色板状結晶として 31.8 mg 得られた. HR-FABMS における分子イオンピーク m/z : 319.0965 ($[M+H]^+$) から求めた分子式は $C_{20}H_{14}O_4$ である. IR スペクトルにおいて 3333 cm^{-1} に水酸基由来の吸収, 1643 cm^{-1} にカルボニル基由来の吸収がそれぞれ認められた. ^1H -NMR (Table 11) において δ_H 10.61 (1H, s) および δ_H 12.54 (1H, s) に水素結合した 2 つの水酸基のシグナルが, ^{13}C -NMR (Table 11) において δ_C 201.5 および δ_C 204.0 に 2 つのカルボニル基のシグナルが観測された. さらに, ^1H および ^{13}C -NMR, HMQC より, 3 つの sp^3 -メチレン基, 1 つの sp^3 -メチン基, 5 つの sp^2 -メチン, 酸素と結合したものを 2 つ含む 9 つの sp^2 -4 級炭素の存在が推測された.

HT-8 は HT-7 と比較すると, 酸素と結合したメチン基が消失し, その代わりにカルボニル基が 1 つ多い. ^1H - ^1H COSY および HMBC を詳細に解析し, Fig. 41 に示すように HT-8 の平面構造を決定した. 各種スペクトルデータが文献値²²⁾と良く一致したことから, を浅川らによりクロコブタケから単離報告のある truncatone (7) であると同定した. Truncatone (7) の 6b 位の絶対立体配置を明らかにすべく, X 線結晶解析を行った. その結果, truncatone (7) の 6b 位の絶対立体配置は *R*であることを明らかにした (Fig. 42).

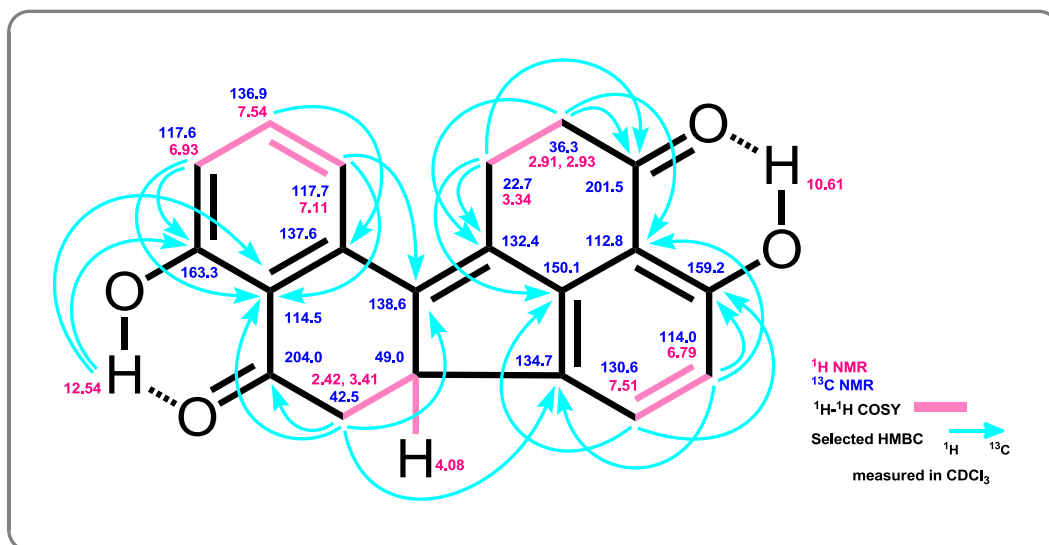


Fig. 41. ^1H - ^1H COSY and HMBC Correlations of HT-8 in CDCl_3

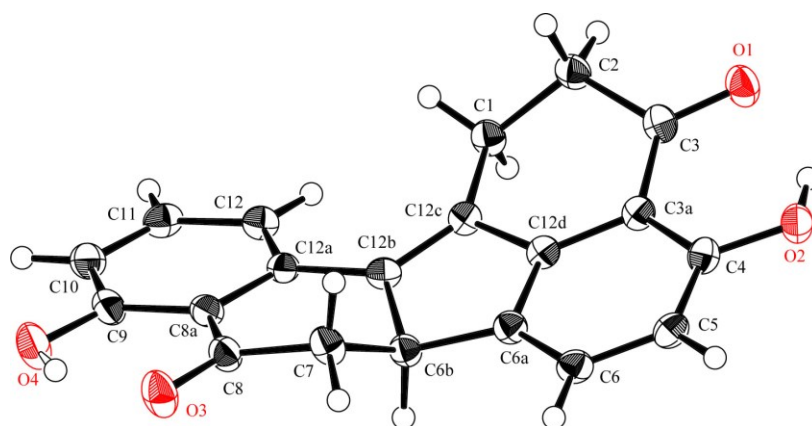


Fig. 42. ORTEP Drawing of HT-8 Obtained by X-ray Analysis

Table 11. ^1H - and ^{13}C -NMR Spectral Data of Truncatone(7) in CDCl_3

Position	δ_{C} , mult.	δ_{H} (J in Hz)
1	22.7, CH_2	3.34 (2H, m)
2	36.3, CH_2	2.91 (1H, d, 2.9) 2.93 (1H, d, 7.3)
3	201.5, C	
3a	112.8, C	
4	159.2, C	
5	114.0, CH	6.79 (1H, d, 7.8)
6	130.6, CH	7.51 (1H, d, 7.8)
6a	134.7, C	
6b	49.0, CH	4.08 (1H, td, 14.1, 5.9)
7	42.5, CH_2	2.42 (1H, dd, 16.9, 14.1) 3.41 (1H, dd, 16.9, 5.9)
8	204.0, C	
8a	114.5, C	
9	163.3, C	
10	117.6, CH	6.93 (1H, d, 8.3)
11	136.9, CH	7.54 (1H, t, 8.3)
12	117.1, CH	7.11 (1H, d, 8.3)
12a	137.6, C	
12b	138.6, C	
12c	132.4, C	
12d	150.1, C	
4-OH		10.61 (1H, s)
9-OH		12.54 (1H, s)

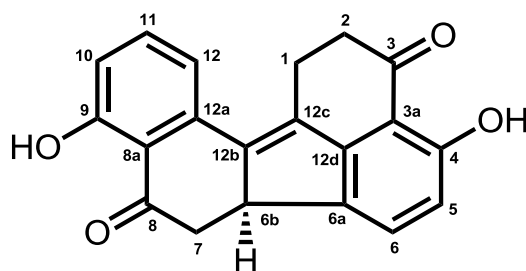


Fig. 43. Structure of Truncatone (7)

HT-9 : hypoxylonol H (30)

HT-9 は黄色固体として 13.4 mg 得られた． HR-FABMS における分子イオンピーク m/z : 449.1596 ($[M+H]^+$) から求めた分子式は $C_{26}H_{24}O_7$ である． IR スペクトルにおいて 3414 cm^{-1} に水酸基由来の吸収， 1710 cm^{-1} および 1620 cm^{-1} にカルボニル基由来の吸収が認められた． また， ^{13}C -NMR (Table 12) において δ_c 173.8 および δ_c 206.7 に 2 つのカルボニル基のシグナルが観測された． さらに， ^1H および ^{13}C -NMR, HMQC より， 1 つのメチル基， 4 つの sp^3 -メチレン基， 酸素と結合したものを 4 つ含む 5 つの sp^3 -メチン基， 5 つの sp^2 -メチン， 酸素と結合したものを 2 つ含む 9 つの sp^2 -4 級炭素の存在が推測された．

次に， ^1H - ^1H COSY および HMBC を詳細に解析したところ， HT-9 は benzo[*j*]fluoranthene 骨格を有する hypoxylonol 類であると考えられた．

ここで， 残りの 1 つのメチル基， 2 つのメチレン基， 酸素の結合した 2 つのメチン基， 1 つのカルボニル炭素は， 側鎖を構成するものであると考えた． すなわち ^1H - ^1H COSY より， δ_H 1.40 のメチル水素， δ_H 4.82 のメチン水素， δ_H 1.74， 2.43 のメチレン水素， δ_H 4.24 のメチン水素， δ_H 2.58 のメチレン水素という配列を見出した． δ_H 1.40 の水素から δ_c 74.8 の酸素に結合したメチン炭素および δ_c 35.4 のメチレン炭素への， δ_H 1.74 の水素から δ_c 74.8 の炭素への， δ_H 2.58 の水素からの δ_c 68.8 の酸素が結合したメチン炭素への HMBC 相関は， この配列を支持するものである． さらに， δ_H 2.58 の水素から δ_c 173.8 のカルボニル炭素に HMBC 相関が見られたこと， このカルボニル炭素は 173.8 ppm と比較的高磁場にあることから， 側鎖の末端はカルボキシ

ル基であることが示唆された．また， δ_{H} 5.10 の水素から δ_{C} 68.8 の炭素へ HMBC 相関が見られたことから，この側鎖が酸素原子を介して benzo[*j*]fluoranthene 骨格の 3 位に結合した，Fig. 44 に示すような平面構造であると考えた．

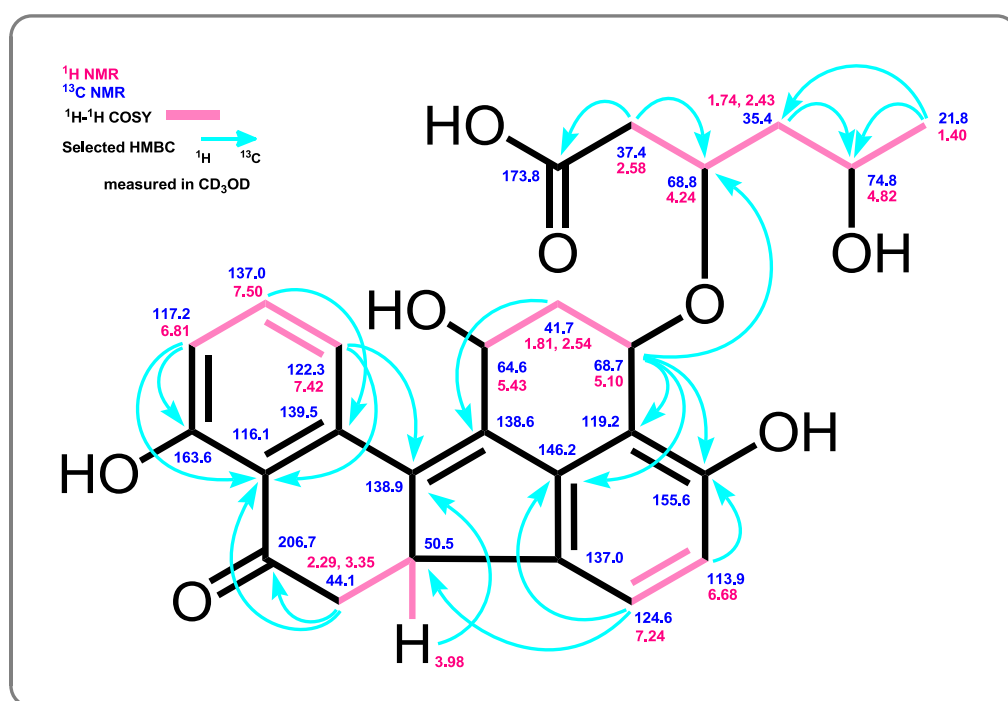


Fig. 44. ^1H - ^1H COSY and HMBC Correlations of HT-9 in CD_3OD

しかし，この構造の分子式は $\text{C}_{26}\text{H}_{26}\text{O}_8$ （分子量 466）と，実測値と H_2O （分子量 18）の分だけ過剰になってしまう．このことから，側鎖がさらにもう一箇所脱水結合していると考え，その箇所を明らかにすべく，HT-9 のジアゾメタンによるメチル化を行った．Fig. 44 に示す推定構造が正しいとすれば， δ_{C} 155.6， δ_{C} 163.3 および δ_{C} 173.8 の炭素に結合した 3 つの酸性水酸基がメチル化されるはずである．しかしながら， ^1H -NMR において δ_{H} 3.87 にメトキシル基由来のピークが新

たに 1 本増加したのみで, δ_{H} 3.87 の水素から δ_{C} 155.6 の炭素に HMBC 相関が観測されたことから, メチル化されたのは δ_{C} 155.6 の炭素に結合する水酸基であった (Fig. 45). これより側鎖は δ_{C} 64.6 の炭素に結合する水酸基と脱水結合しているか, あるいは側鎖が環状構造であると考えられた.

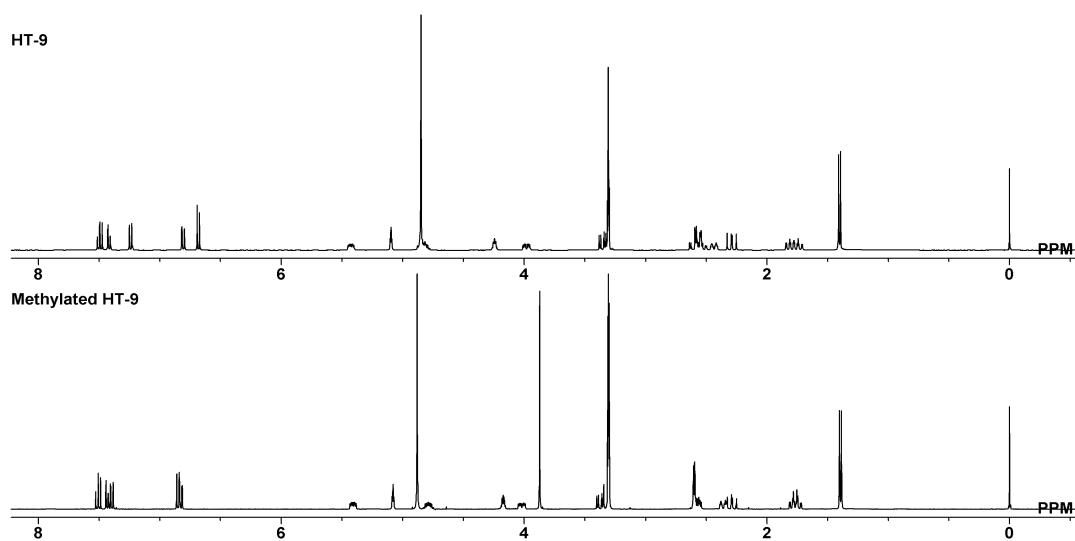


Fig. 45. ^1H -NMR Spectra of HT-9 and Methylated HT-9 in CD_3OD

側鎖の詳細な構造を明らかにすべく, long-range HMBC の測定を行った. 通常の HMBC は 2~3 結合先の H-C 相関を測定できる. 本法はそのパルスシーケンス中の 2-^3J_{CH} に依存する多量子遷移を作る時間 Δ_2 を, $^4J_{\text{CH}}$ に変更することで 4 結合先の H-C 相関を観測する方法である. その結果, δ_{H} 1.40 の水素から δ_{C} 173.8 の炭素に相関が見られ, 側鎖は α -ピロン環構造であると推測された. 1710 cm^{-1} に観測された IR スペクトルの吸収もこのラクトン構造を支持するものである. また, HT-9 の CD スペクトルは, hypoxylonol B (**25**) および C (**23**) とよ

い一致が見られた (Fig. 46). 以上より, HT-9 の構造を Fig. 47 に示すように決定した.

HT-9 の立体配置を決定すべく結晶化を試みたが, 良好な単結晶を得ることが出来なかった. そこで, ジアゾメタンによる HT-9 のメチル化により得られた 4-*O*-メチル化体 (Me-HT-9) の結晶化を試みた. Me-HT-9 は *n*-hexane-acetone 系にて黄色針状結晶として得られた. X 線結晶解析の結果, Me-HT-9 の 1, 3, 6b, 4' および 6' 位の立体配置はそれぞれ *S*, *S*, *R*, *R* および *R* であることが明らかになった (Fig. 48). したがって, HT-9 の 1, 3, 6b, 4' および 6' 位の立体配置をそれぞれ *S*, *S*, *R*, *R* および *R* であると決定した (Fig. 49).

HT-9 は新規化合物であったので, hypoxylonol H (30) と命名した.

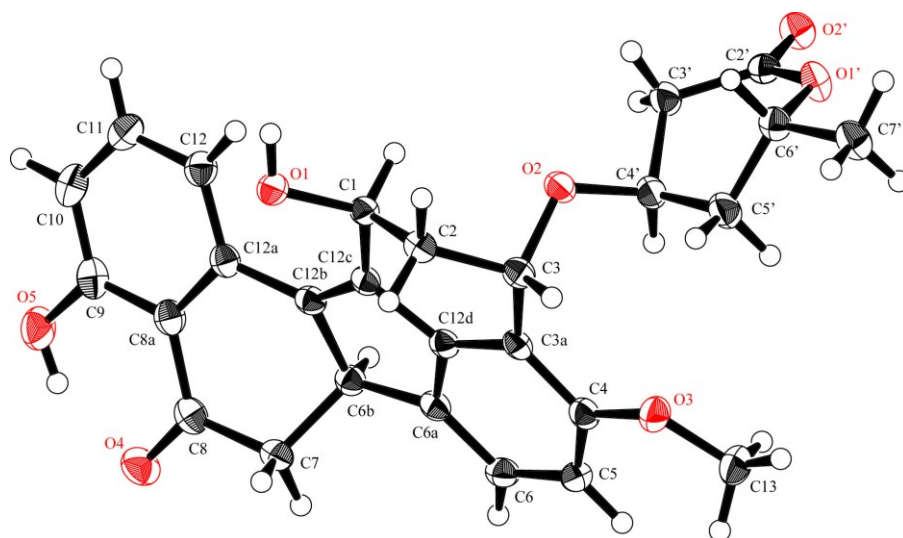


Fig. 48. ORTEP Drawing of Me-HT-9 Obtained by X-ray Analysis

Table 12. ^1H - and ^{13}C -NMR Spectral Data of Hypoxylonol H (**30**)in CD_3OD

position	δ_{C} , mult.	δ_{H} (J in Hz)
1	64.6, CH	5.43 (1H, ddd, 11.2, 4.7, 2.9)
2	41.7, CH_2	1.81 (1H, m) 2.54 (1H, m)
3	68.7, CH	5.10 (1H, t, 2.9)
3a	119.2, C	
4	155.6, C	
5	113.9, CH	6.68 (1H, d, 8.3)
6	124.6, CH	7.24 (1H, d, 8.3)
6a	137.0, C	
6b	50.5, CH	3.98 (1H, ddd, 14.0, 5.4, 2.9)
7	44.1, CH_2	2.29 (1H, dd, 16.6, 14.0) 3.35 (1H, dd, 16.6, 5.4)
8	206.7, C	
8a	116.1, C	
9	163.6, C	
10	117.2, CH	6.81 (1H, dd, 7.8, 1.5)
11	137.0, CH	7.50 (1H, t, 7.8)
12	122.3, CH	7.42 (1H, dd, 7.8, 1.5)
12a	139.5, C	
12b	138.9, C	
12c	138.6, C	
12d	146.2, C	
2'	173.8, C	
3'	37.4, CH_2	2.58 (2H, dt, 16.9, 4.9)
4'	68.8, CH	4.24 (1H, m)
5'	35.4, CH_2	1.74 (1H, m) 2.43 (1H, m)
6'	74.8, CH	4.82 (1H, m)
6'- CH_3	21.8, CH_3	1.40 (3H, d, 6.3)

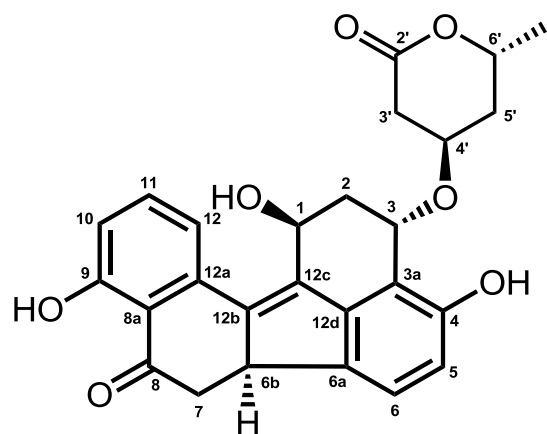


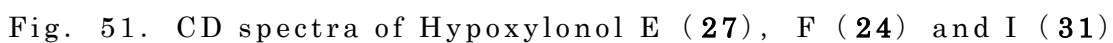
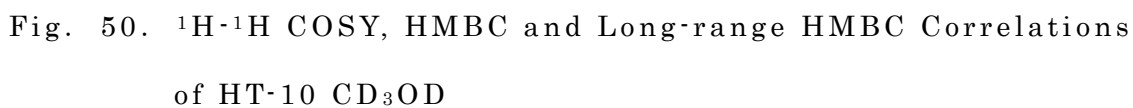
Fig. 49. Structure of Hypoxylonol H (**30**)

HT-10 : hypoxylonol I (31)

HT-10 は黄色固体として 7.3 mg 得られた。HR-FABMS における分子イオンピーク m/z : 448.1522 ($[M]^+$) から求めた分子式は $C_{26}H_{24}O_7$ である。IR スペクトルにおいて 3456 cm^{-1} および 3236 cm^{-1} に水酸基由来の吸収, 1716 cm^{-1} にカルボニル基由来の吸収がそれぞれ認められた。また, ^{13}C -NMR (Table 13) において δ_c 173.6 および δ_c 206.3 に 2 つのカルボニル基のシグナルが観測された。さらに, ^1H および ^{13}C -NMR, HMQC より, 1 つのメチル基, 4 つの sp^3 -メチレン基, 水素と結合したものを 4 つ含む 5 つの sp^3 -メチン基, 5 つの sp^2 -メチン, 酸素と結合したものを 2 つ含む 9 つの sp^2 -4 級炭素の存在が推測された。

次に, ^1H - ^1H COSY, HMBC および long-range HMBC を詳細に解析したところ, HT-10 は benzo[*j*]fluoranthene 骨格を有し, HT-9 と同じ平面構造をもつ hypoxylonol 類であると考えられた (Fig. 50)。

カップリング定数より 1, 3 位が *cis* 配置であること, CD スペクトルが hypoxylonol E (27), F (24) と良い一致を示したことより, HT-10 の 1, 3 および 6b 位の絶対立体配置を *S*, *R* および *R* 配置であると決定した (Fig. 51)。HT-9 同様, 側鎖を含む HT-10 の立体配置を決定すべく, ジアゾメタンによる HT-10 のメチル化により得られた 4-*O*-メチル化体 (Me-HT-10) の X 線結晶解析を試みた。その結果, Me-HT-10 の相対立体配置を Fig. 52 のように推定することが出来た。しかしながら, 良好な単結晶でなかったため, その結晶構造の決定には至っていない。以上より, HT-10 の構造を Fig. 53 のように推定した。本化合物は新規化合物であったので, hypoxylonol I (31) と命名した。



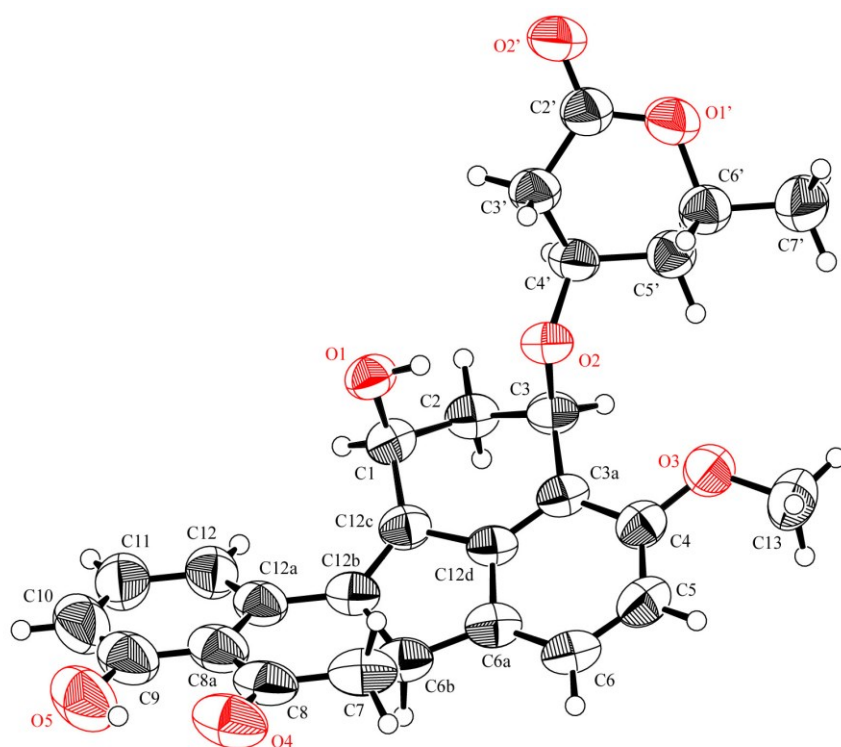


Fig. 52. ORTEP Drawing of Me-HT-10 Obtained by X-ray Analysis

Table 13. ^1H - and ^{13}C -NMR Spectral Data of Hypoxylonol I (**27**)in CD_3OD

position	δ_{C} , mult.	δ_{H} (J in Hz)
1	63.2, CH	5.55 (1H, t, 2.9)
2	36.2, CH_2	2.00 (1H, td, 15.1, 3.4) 2.72 (1H, td, 15.1, 2.9)
3	67.8, CH	5.13 (1H, t, 2.9)
3a	118.8, C	
4	155.7, C	
5	114.2, CH	6.71 (1H, d, 8.3)
6	124.7, CH	7.27 (1H, d, 8.3)
6a	137.0, C	
6b	49.8, CH	4.01 (1H, dd, 13.7, 5.7)
7	43.8, CH_2	2.40 (1H, dd, 16.3, 13.7) 3.36 (1H, dd, 16.3, 5.7)
8	206.3, C	
8a	116.0, C	
9	164.2, C	
10	117.8, CH	6.84 (1H, dd, 7.8, 1.0)
11	138.0, CH	7.54 (1H, t, 7.8)
12	118.5, CH	7.49 (1H, dd, 7.8, 1.0)
12a	139.7, C	
12b	139.7, C	
12c	137.4, C	
12d	144.6, C	
2'	173.6, C	
3'	36.9, CH_2	2.75 (1H, m) 2.78 (1H, d, 4.3)
4'	69.3, CH	4.38 (1H, m)
5'	35.2, CH_2	1.64 (1H, ddd, 14.4, 11.5, 2.9) 2.33 (1H, br d, 14.4)
6'	74.8, CH	4.83 (1H, m)
6'- CH_3	21.6, CH_3	1.33 (3H, d, 6.3)

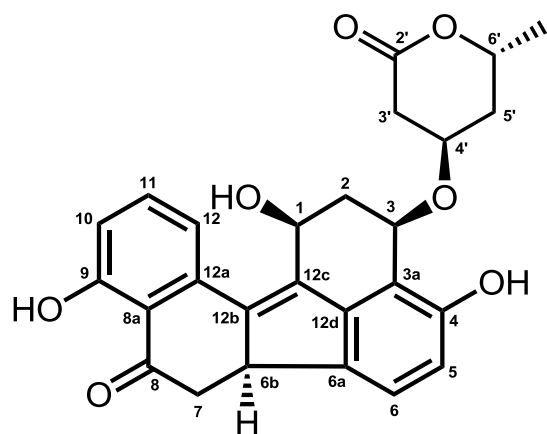


Fig. 53. Structure of Hypoxylonol I (**31**)

HT-11 : hypoxylonol J (32)

HT-11 は黄色固体として 8.3 mg 得られた．HR-FABMS における分子イオンピーク m/z : 411.1437 ($[M+H]^+$) から求めた分子式は $C_{23}H_{22}O_7$ である．IR スペクトルにおいて 3343 cm^{-1} に水酸基由来の吸収， 1732 cm^{-1} にカルボニル基由来の吸収の吸収がそれぞれ認められた．また， ^{13}C -NMR (Table 14) において δ_c 206.7 にカルボニル基のシグナルが観測された．さらに， ^1H および ^{13}C -NMR, HMQC より，酸素と結合したものを 2 つ含む 4 つの sp^3 -メチレン基，酸素と結合したものを 3 つ含む 4 つの sp^3 -メチン基，5 つの sp^2 -メチン，酸素と結合したものを 2 つ含む 9 つの sp^2 -4 級炭素の存在が確認された．

次に， ^1H - ^1H COSY および HMBC を詳細に解析したところ，HT-11 は benzo[*j*]fluoranthene 骨格を有する hypoxylonol 類であると考えられた (Fig. 54)．

ここで，残りの酸素の結合した 2 つのメチレン基および酸素の結合した 1 つのメチン基は側鎖を形成するものであると考えた． ^1H - ^1H COSY より， δ_H 3.63, 3.79 のメチレン水素， δ_H 3.76 のメチン水素， δ_H 3.53 のメチレン水素という配列が示唆された． δ_H 3.63, 3.79 の水素から δ_c 72.5 の酸素の結合したメチン炭素および δ_c 64.6 の酸素の結合したメチレン炭素への， δ_H 3.76 の水素から δ_c 64.6 の炭素への， δ_H 3.53 の水素から δ_c 71.2 の酸素の結合したメチレン炭素への HMBC 相関は，この配列を支持するものである．さらに， δ_H 5.03 の水素から δ_c 71.2 の炭素へ HMBC 相関が見られたことから，この側鎖が酸素原子を介して benzo[*j*]fluoranthene 骨格の 3 位に結合した平面構造を推定した．CD スペクトルが hypoxylonol B (25), C (23) と良い一致を示したので，HT-11 の 1, 3 および 6b 位の絶対立体配置を *S*, *S* お

よび *R* 配置であると推定した (Fig. 55). 側鎖の 2'位の立体配置は, HT-12 が *S* 配置であることから, *R* 配置であると考えている.

HT-11 は新規化合物であったので, hypoxylonol J (**32**) と命名した.

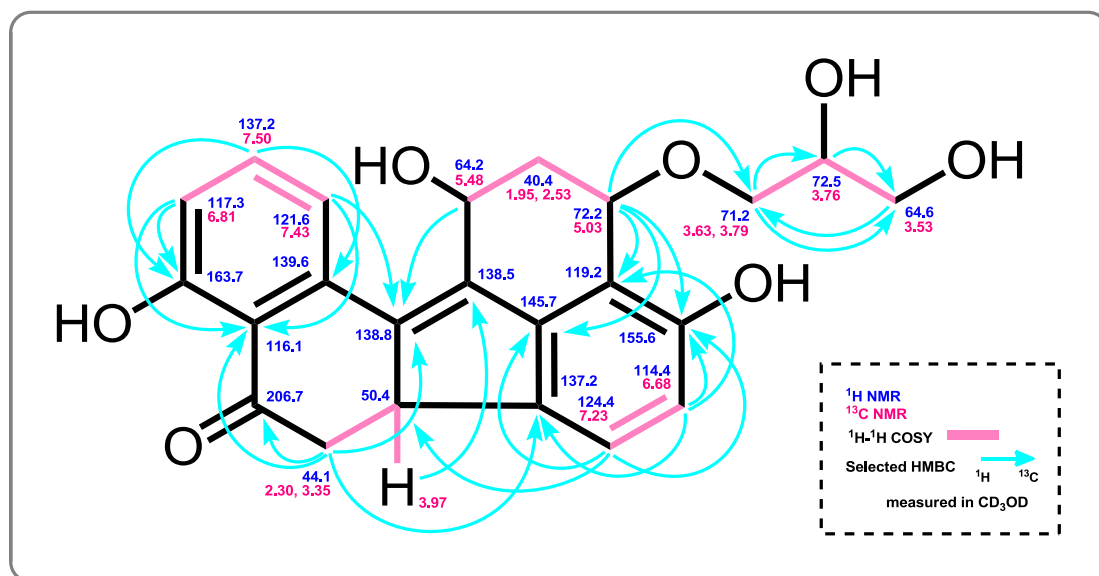


Fig. 54. ^1H - ^1H COSY and HMBC Correlations of HT-11 in CD_3OD

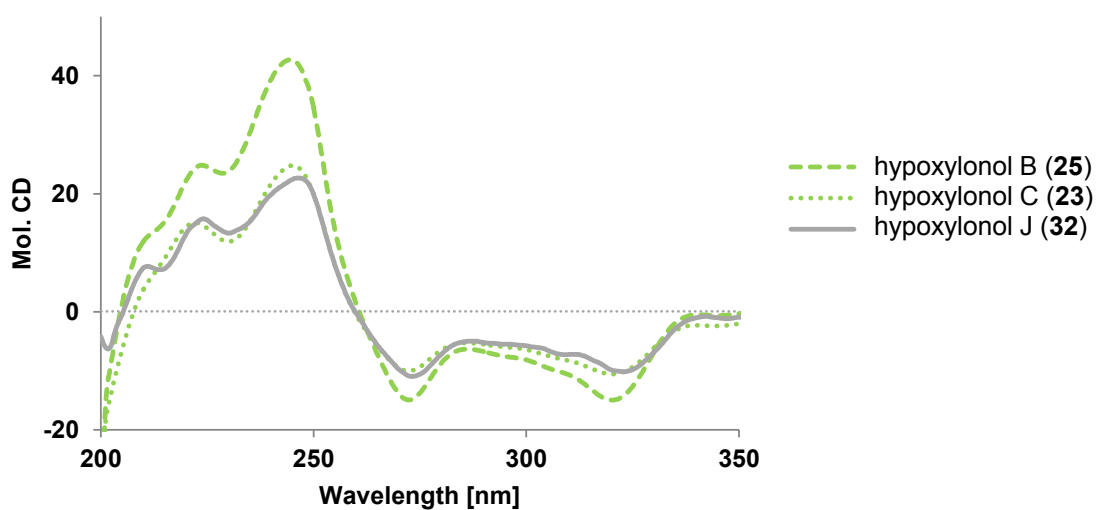
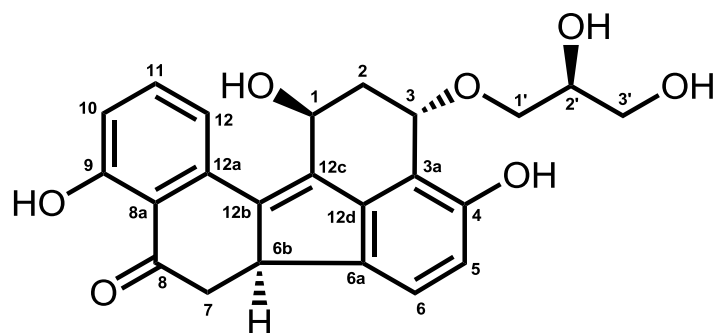


Fig. 55. CD spectra of Hypoxylonol B (**25**), C (**23**) and J (**32**)

Table 14. ^1H - and ^{13}C -NMR Spectral Data of Hypoxylonol J (**32**) in CD_3OD

position	δ_{C} , mult.	δ_{H} (J in Hz)
1	64.2, CH	5.48 (1H, m)
2	40.4, CH_2	1.95 (1H, ddd, 13.1, 9.8, 3.2) 2.53 (1H, td, 13.1, 4.6)
3	72.2, CH	5.03 (1H, dd, 4.6, 3.2)
3a	119.2, C	
4	155.6, C	
5	114.4, CH	6.68 (1H, d, 8.0)
6	124.4, CH	7.23 (1H, d, 8.0, 0.5)
6a	137.2, C	
6b	50.4, CH	3.97 (1H, ddd, 13.9, 5.5, 2.2)
7	44.1, CH_2	2.30 (1H, dd, 16.4, 13.9) 3.35 (1H, dd, 16.4, 5.5)
8	206.7, C	
8a	116.1, C	
9	163.7, C	
10	117.3, CH	6.81 (1H, dd, 7.8, 1.0)
11	137.2, CH	7.50 (1H, t, 7.8)
12	121.6, CH	7.43 (1H, dd, 7.8, 1.0)
12a	139.6, C	
12b	138.8, C	
12c	138.5, C	
12d	145.7, C	
1'	71.2, CH_2	3.63 (1H, m) 3.79 (1H, m)
2'	72.5, CH	3.76 (1H, m)
3'	64.6, CH_2	3.53 (2H, m)

Fig. 56. Structure of Hypoxylonol J (**32**)

HT-12 : hypoxylonol K (33)

HT-12 は融点 170~172°C の黄色板状結晶として 5.5 mg 得られた。HR-FABMS (pos.) における分子イオンピーク m/z : 411.1450 ($[M+H]^+$) から求めた分子式は $C_{23}H_{22}O_7$ である。IR スペクトルにおいて 3335 cm^{-1} に水酸基由来の吸収が認められた。また、 ^{13}C -NMR (Table 15) において δ_c 206.7 にカルボニル基のシグナルが観測された。さらに、 ^1H および ^{13}C -NMR, HMQC より、酸素と結合したものを 2 つ含む 4 つの sp^3 -メチレン、酸素と結合したものを 3 つ含む 4 つの sp^3 -メチン、5 つの sp^2 -メチン、酸素と結合したものを 2 つ含む 9 つの sp^2 -4 級炭素の存在が確認された。

次に、 ^1H - ^1H COSY および HMBC を詳細に解析したところ、HT-12 は benzo[*j*]fluoranthene 骨格を有し、HT-11 と同じ平面構造をもつ hypoxylonol 類であると思われた (Fig. 57)。CD スペクトルが hypoxylonol B (25), C (23) と良い一致を示したことより、HT-12 の 1, 3 および 6b 位の絶対立体配置は *S*, *S* および *R* 配置であると推定した (Fig. 58)。最後に、2'位の絶対立体配置を決定するため、本品の X 線結晶解析を行った。その結果、2'位の立体配置は *S* であることを明らかにした (Fig. 59)。本化合物は新規化合物であったので、hypoxylonol K (33) と命名した。

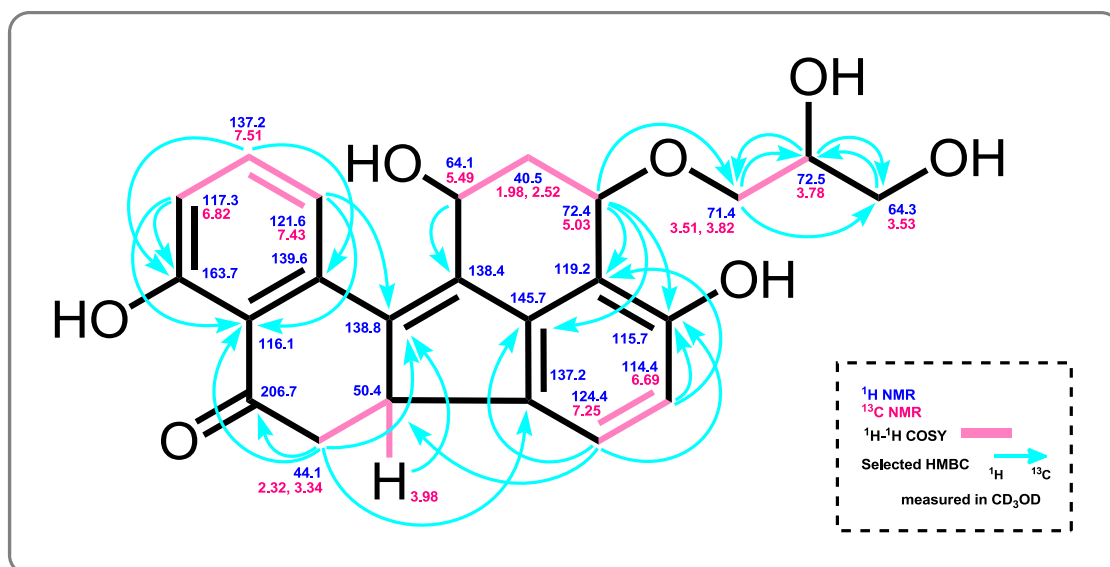


Fig. 57. ^1H - ^1H COSY and HMBC Correlations of HT-12 in CD_3OD

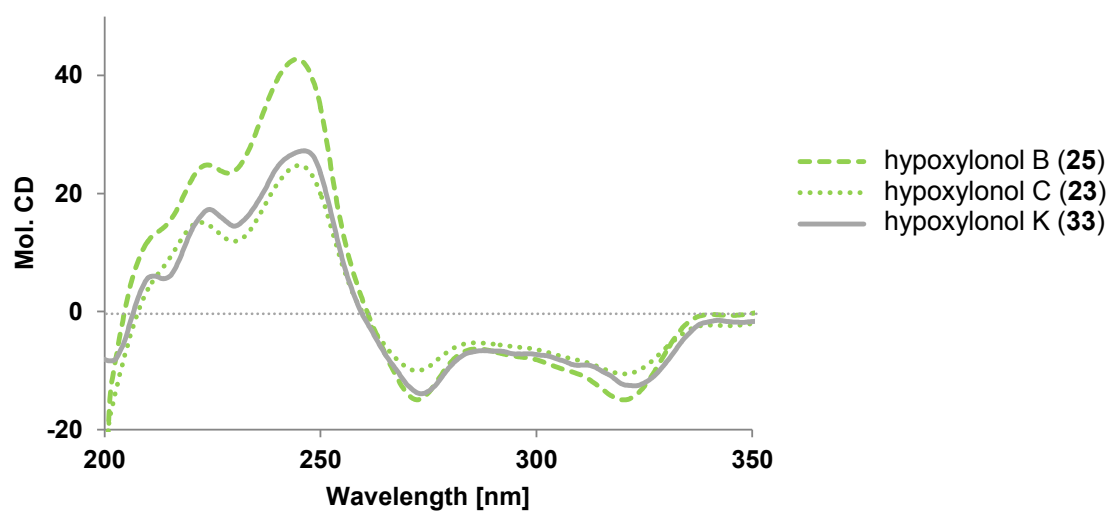


Fig. 58. CD spectra of Hypoxylonol B (25), C (23) and K (33)

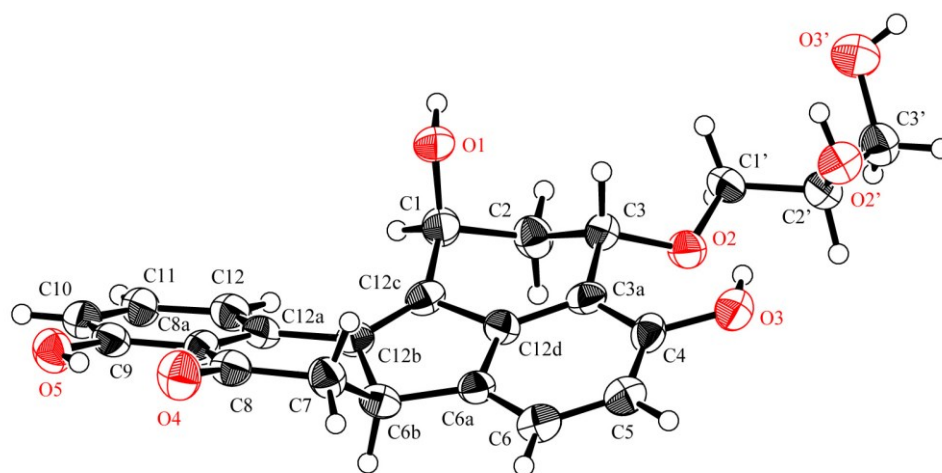
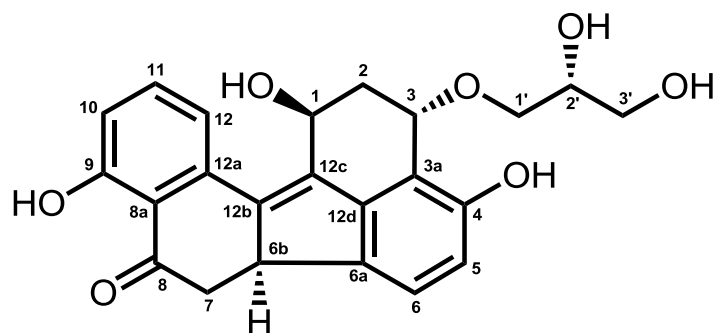


Fig. 59. ORTEP Drawing of HT-12 Obtained by X-ray Analysis

Table 15. ^1H - and ^{13}C -NMR Spectral Data of Hypoxylonol K (**33**) in CD_3OD

position	δ_{C} , mult.	δ_{H} (J in Hz)
1	64.1, CH	5.49 (1H, ddd, 9.7, 4.8, 2.5)
2	40.5, CH_2	1.98 (1H, ddd, 13.2, 9.7, 3.2) 2.52 (1H, td, 13.2, 4.8)
3	72.4, CH	5.03 (1H, dd, 4.8, 3.2)
3a	119.2, C	
4	155.7, C	
5	114.4, CH	6.69 (1H, d, 8.0)
6	124.4, CH	7.25 (1H, d, 8.0, 0.5)
6a	137.2, C	
6b	50.4, CH	3.98 (1H, ddd, 14.0, 5.5, 2.3)
7	44.1, CH_2	2.32 (1H, dd, 16.4, 14.0) 3.34 (1H, dd, 16.4, 5.5)
8	206.7, C	
8a	116.1, C	
9	163.7, C	
10	117.3, CH	6.82 (1H, dd, 7.8, 1.1)
11	137.2, CH	7.51 (1H, t, 7.8)
12	121.5, CH	7.43 (1H, dd, 7.8, 1.1)
12a	139.6, C	
12b	138.8, C	
12c	138.4, C	
12d	145.7, C	
1'	71.4, CH_2	3.51 (1H, m) 3.82 (1H, m)
2'	72.5, CH	3.78 (1H, m)
3'	64.3, CH_2	3.53 (2H, m)

Fig. 60. Structure of Hypoxylonol K (**33**)

第二章 血管新生阻害作用の検討

血管新生阻害剤の新規シード化合物の探索を目的として、クロコブタケ子実体抽出エキスについて血管内皮細胞増殖阻害活性を指標としながら成分探索した結果、12種の化合物を単離・構造解明に成功した。

このうち、hypoxylonol D (26), E (27), G (29) および I (31) の4種は IC_{50} 値がそれぞれ 6.1 μ M, 4.1 μ M, 8.4 μ M および 5.8 μ M であり、比較的強い HUVEC 増殖阻害活性を示した。これら4種に比べ、hypoxylonol C (23) は IC_{50} 値が 16 μ M と阻害活性がやや弱いものの主成分である。

そこで、hypoxylonol C (23) を用いて、血管新生において内皮細胞の増殖に続くステップである内皮細胞の遊走および管腔形成を阻害するのか、他の細胞種の増殖も同様に阻害するのかを検討した。また、細胞増殖阻害試験に用いたホルマザン法は生細胞数を吸光度の大きさに反映させて検出する方法であり、死細胞の数を検出する方法ではない。本化合物が細胞毒性により見かけ上の細胞増殖阻害活性を示しているのか、殺細胞作用を示すことなく細胞の増殖を阻害しているのか、適切に判定するため、細胞毒性試験も併せて行った。

第一節 細胞選択性

がんなどの新生血管を標的とした治療薬は、血管新生阻害剤と呼ばれる。VEGF やその受容体を中心とした分子標的治療薬の研究開発が進み、臨床研究成果も報告されている。最近では、新生血管だけでなくがん細胞も同時に標的とするマルチキナーゼ阻害剤が注目され、その臨床応用が進んでいる。

そこで、静脈の内皮細胞である HUVEC の増殖を第一の標的としてスクリーニングを行った。本実験では動脈の内皮細胞である HUAEC の増殖に対し、HUVEC と同様の作用を示すか否かについて検討した。また、hypoxylonol 類が子宮頸部がん細胞である HeLa 細胞や正常細胞である NHDF の増殖に対し、どのように作用するかについて併せて検討した。HUAEC, HeLa 細胞および NHDF 増殖阻害活性は、培養した細胞に sample を添加し、その細胞増殖阻害活性を WST-8 または MTT を用いたホルマザン法の測定結果で判定した。なお、hypoxylonol G (29) は収量が少なかったため、HeLa 細胞および NHDF については試験を実施しなかった。

Hypoxylonol D (26), E (27), G (29) および I (31) は HUAEC に対して HUVEC と同程度の増殖阻害活性を示した。NHDF に対しては、hypoxylonol D (26), E (27) および F (24) は比較的強い細胞増殖阻害活性を示した。しかしながら HUVEC, HUAEC と比較してその細胞増殖阻害活性に有意な差はみられなかった。一方、HeLa 細胞に対し HUVEC, HUAEC に比べて強い増殖阻害活性を示したものは truncatone (7) だけであった (Table 16)。

Table 16. Effect of the Compounds from *H. truncatum* on HUAEC, HeLa cells and NHDF Growth inhibitory Assay

Sample name	IC ₅₀ (μM)		
	HUAEC	HeLa	NHDF
doxorubicin	0.19	0.015	0.52
hypoxylonol A (28)	16	30	14
hypoxylonol B (25)	21	49	26
hypoxylonol C (23)	16	48	22
hypoxylonol D (26)	6.1	22	8.8
hypoxylonol E (27)	4.1	17	8.3
hypoxylonol F (24)	14	26	7.7
hypoxylonol G (29)	9.1		
truncatone (7)	24	13	19
hypoxylonol H (30)	83	> 100	51
hypoxylonol I (31)	5.0	21	14
hypoxylonol J (32)	54	65	73
hypoxylonol K (33)	40	77	68

第二節 細胞毒性試験

クロコブタケ子実体抽出エキスより得られた **hypoxylonol C (23)** が，細胞毒性により見かけ上の細胞増殖阻害活性を示しているのか，殺細胞作用を示すことなく細胞増殖を阻害しているのかを適切に判定すべく，細胞毒性試験を行った．一般に，細胞はネクローシスを起こすと細胞膜が破壊され，細胞内容物が細胞外へと漏出する．また，アポトーシスを起こした細胞は *in vitro* においては二次的なネクローシスを起こす．本試験法は，細胞死によって培地に漏出した細胞内容物中の LDH (lactate dehydrogenase; 乳酸脱水素酵素) 活性を測定することで細胞の LDH 放出量を算出し，細胞毒性を判定する方法である．すべての細胞の総 LDH 放出量に対する，sample 添加時の LDH 放出量の割合をパーセントで表し，阻害活性を判定した．

Hypoxylonol C (23) は 30 μM 以下の濃度において LDH 放出量が 10% 以下であった (Fig. 61)．したがって，**hypoxylonol C (23)** は 30 μM 以下では細胞毒性を示すことなく，細胞増殖阻害活性を示すものと判断した．

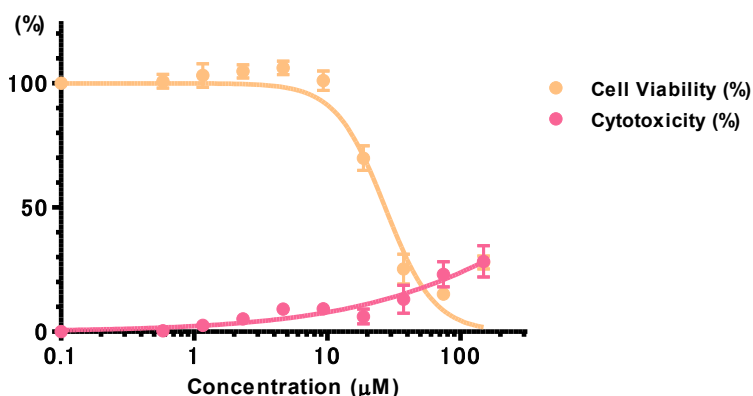


Fig. 61. Cytotoxicity of Hypoxylonol C

第三節 HUVEC 遊走阻害試験

血管新生は血管内皮細胞の増殖，遊走，管腔形成のステップを踏んで起こる．血管内皮細胞の増殖を阻害した hypoxylonol C (**23**) が，血管新生の第二のステップである内皮細胞の遊走に対し，どのような影響を及ぼすのかについて検討した．

本試験法は BD Falcon セルカルチャーインサートを用いて行った．すなわち，sample とともに HUVEC をインサート内で培養し，下部ウェルプレートの培地中の VEGF により誘導され，インサートの小孔を通過しメンブレン裏側へと遊走した細胞を観察した．遊走細胞は Dif-Quik を用いて簡便迅速メイ・ギムザ染色を行った．

VEGF 添加条件では，非添加条件と比較して HUVEC の遊走が促進された．これに対し，VEGF および hypoxylonol C (**23**) 20 μ M, 10 μ M, 1 μ M 添加時には遊走細胞の有意な減少が確認された (Fig. 62)．このことより，hypoxylonol C (**23**) は濃度依存的に HUVEC の遊走を阻害することが明らかになった．

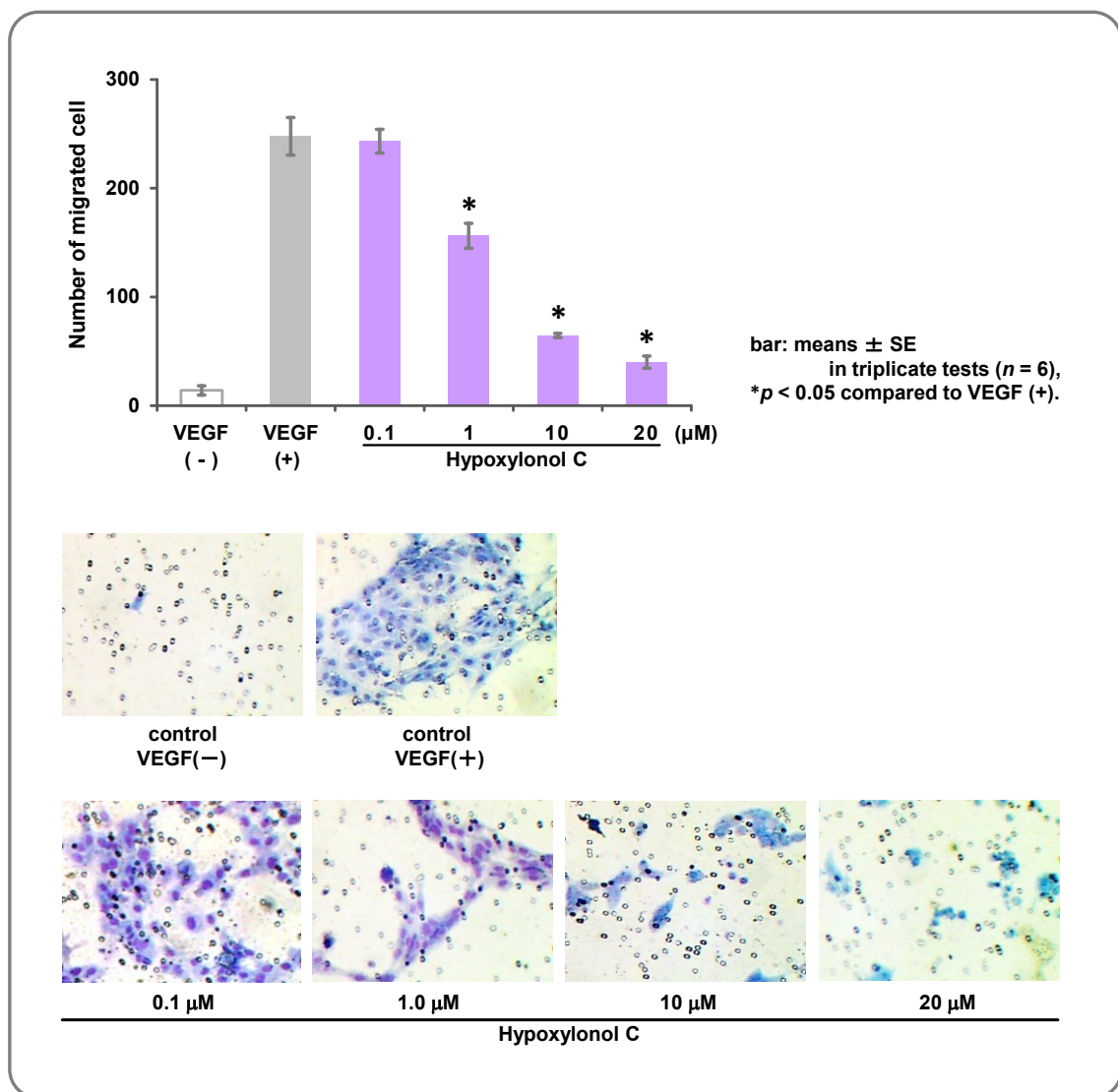


Fig. 62. Inhibitory Effect of Hypoxylonol C for Migration of HUVEC

Table 17. Inhibitory Effect of Hypoxylonol C for Migration of HUVEC

Sample name	Concentration (μM)	Inhibition (%)
hypoxylonol C (23)	20	1.9
	10	39.1
	1	78.4
	0.1	88.9

第四節 HUVEC 管腔形成阻害試験

次に，血管内皮細胞の増殖および遊走に続く，血管新生の第三のステップである管腔形成に対する，hypoxylonol C (23) の作用について検討した．

本試験は，クラボウ社の血管新生キットを用いて行った．NHDF と共培養した HUVEC に，VEGF と hypoxylonol C (23) を添加し，11 日間培養した．形成した血管をマウス抗ヒト CD31 抗体で染色し，顕微鏡下写真撮影した．CD31 は PECAM-1 (platelet endothelial cell adhesion molecule-1) とも呼ばれ，血管内皮細胞のジャンクションに発現する膜内在性糖タンパク質である．

VEGF 添加条件では，非添加条件と比較して HUVEC の管腔形成が促進された．これに対し，VEGF および hypoxylonol C (23) 20 μ M, 10 μ M, 1 μ M 添加時には HUVEC の管腔形成の減少が観察された．さらに，形成された管腔の分岐点数および長さの有意な減少が確認された (Fig. 63)．このことより，hypoxylonol C (23) は濃度依存的に HUVEC の管腔形成を阻害することが明らかになった．

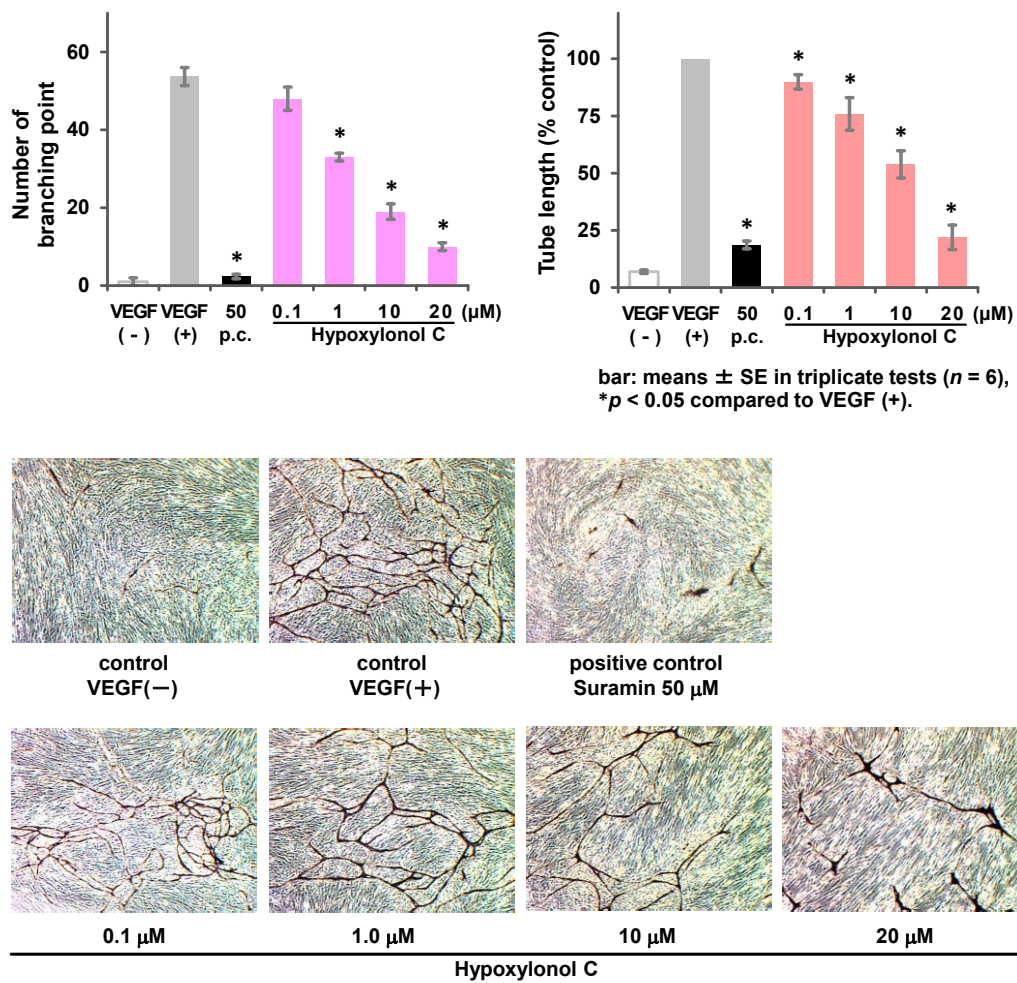


Fig. 63. Inhibitory Effect of Hypoxylonol C for Tube Formation of HUVEC

第三章 標的分子の探索

これまでの実験により, HUVEC 増殖阻害活性を有する hypoxylonol C (23) が *in vitro* において血管新生阻害作用を有することが明らかになった. Hypoxylonol 類と類似の基本骨格をもつ化合物 20 は Fyn, Lck, Abl, EGFR といったチロシンキナーゼに対して阻害活性をもつことが報告されている.^{29,30)} しかしながら, hypoxylonol 類を含むその他の構造類縁体の生物活性に関する詳細な報告はまだなく, hypoxylonol 類の血管新生阻害作用の機序も不明である.

血管新生は, その促進因子と抑制因子のバランスによって制御されており, その中核を担うのが VEGFR を介したシグナル伝達経路である. 受容体型チロシンキナーゼである VEGFR は 3 種のサブタイプをもつ. 中でも VEGFR-2 である KDR は, そのリガンド VEGF-A と結合して自己リン酸化を経て, 下流へと伝えるシグナルが血管内皮細胞の生存や増殖, 遊走に関与している.¹³⁾ そこで, hypoxylonol C (23) が KDR のチロシンリン酸化能に与える影響について検討した.

さらに, hypoxylonol C (23) の血管新生における分子レベルの標的を探索するために, cDNA マイクロアレイ解析を用いて網羅的な作用機序の解析を行い, リアルタイム RT-PCR にてその結果を検証した.

第一節 KDR リン酸化阻害試験

腫瘍細胞が作り出す低酸素状態より分泌促進された VEGF は，血管内皮細胞に発現するその受容体 KDR に結合して，細胞内に細胞外からのシグナルを伝達する．このシグナル伝達は血管内皮細胞の生存，増殖，遊走に大きく関与することから，VEGF/KDR シグナル伝達系は血管新生制御の中核を担うと考えられている．KDR は受容体型チロシンキナーゼであり，VEGF と結合して二量体を形成し，そのチロシン残基を自己リン酸化することで下流の分子へシグナルを伝達する．

そこで，*in vitro* において血管新生阻害作用を示した hypoxylonol C (23) が，VEGF/KDR シグナル伝達経路に影響を及ぼし血管新生阻害作用を示す可能性について検討すべく，KDR リン酸化阻害試験を行った．本試験は，リコンビナントヒト KDR および Universal Tyrosine Kinase Assay Kit を用いて，ELISA 法により行った．96-well plate の底面に固相化されたチロシンを KDR によりリン酸化させ，抗リン酸化チロシン抗体を用いてリン酸化されたチロシンを検出する．10%DMSO 添加条件に対する sample 添加条件の吸光度をパーセントで表し，KDR リン酸化阻害活性を数値化した．

その結果，hypoxylonol C (23) は 300 μM における KDR リン酸化阻害率が 2.5% であり，阻害活性をほとんど示さなかった．

Table 18. Inhibitory Effect of Hypoxylonol C for KDR Phosphorylation

Sample name	Conc. (μM)	Conc. ($\mu\text{g/mL}$)	Inhibition (%)
Ki8751	213	100	85.5
hypoxylonol C (23)	300	100	2.5

第二節 cDNA マイクロアレイ解析を用いた標的分子の探索

Hypoxylonol C (23) は, *in vitro* において血管新生阻害作用を示したが, その制御の中核を担う KDR のリン酸化能には影響を及ぼさなかった. そこで次に, 本化合物の血管新生阻害作用の機序を明らかにすべく, cDNA マイクロアレイ解析を用いて網羅的に標的分子の探索を行うこととした.

まず, 1 nM の VEGF を含む培地中で, hypoxylonol C (23) 20 μ M 添加条件および非添加条件の HUVEC を 24 時間培養した. その後, 両条件の HUVEC より total RNA を抽出し, cDNA マイクロアレイに供した. cDNA マイクロアレイは TORAY 社のヒト全遺伝子型 DNA チップ Human Oligo chip 25k を用い, 二色法にて行った. 本チップには 24461 遺伝子が搭載されている. 本操作は TORAY 社に委託した.

Hypoxylonol C (23) 非添加条件に比べ, 添加条件において 1.5 倍以上の変化が見られた遺伝子を, 発現変動のあった遺伝子と定義し, 1489 遺伝子を発現増加したもの, 862 遺伝子を発現低下したものとして選別した (付表 1). これら 2351 の遺伝子について, DAVID (<http://david.abcc.ncifcrf.gov/summary.jsp>) および KEGG (<http://www.genome.jp/kegg/pathway.html>) を用いてパスウェイ解析を行った結果, Table 19 および 20 に示す合計 28 のパスウェイ中の遺伝子に多くの変動が見られた. 中でも, 細胞周期と細胞接着のパスウェイ中の遺伝子発現に変動が多く見られることから, hypoxylonol C (23) は HUVEC のこれらの遺伝子発現に影響を与え, 血管新生阻害作用を示していることが示唆された. なお, Fig. 64~66 中の赤色の星印の遺伝子が, 発現変動のあった遺伝子である.

Table 19. The Pathways including up-regulated genes

Pathway name	Gene number
GnRH signaling pathway	11
Pyrimidine metabolism	10
Glycine, serine and threonine metabolism	9
Arachidonic acid metabolism	9
Glycerophospholipid metabolism	9
Cysteine and methionine metabolism	7
Aminoacyl-tRNA biosynthesis	7
Metabolism of xenobiotics by cytochrome P450	7
RNA polymerase	5
Alpha-Linolenic acid metabolism	4
Vitamin B6 metabolism	3

Table 20. The Pathways including down-regulated genes

Pathway name	Gene number
Regulation of actin cytoskeleton	21
Cell cycle	17
Focal adhesion	15
Endocytosis	14
Gap junction	12
Oocyte meiosis	12
Cell adhesion molecules (CAMs)	11
Tight junction	11
Vascular smooth muscle contraction	10
Pathogenic Escherichia coli infection	9
p53 signaling pathway	9
Progesterone-mediated oocyte maturation	9
Fc gamma R-mediated phagocytosis	9
Adherens junction	8
Steroid biosynthesis	6
DNA replication	5
Terpenoid backbone biosynthesis	4

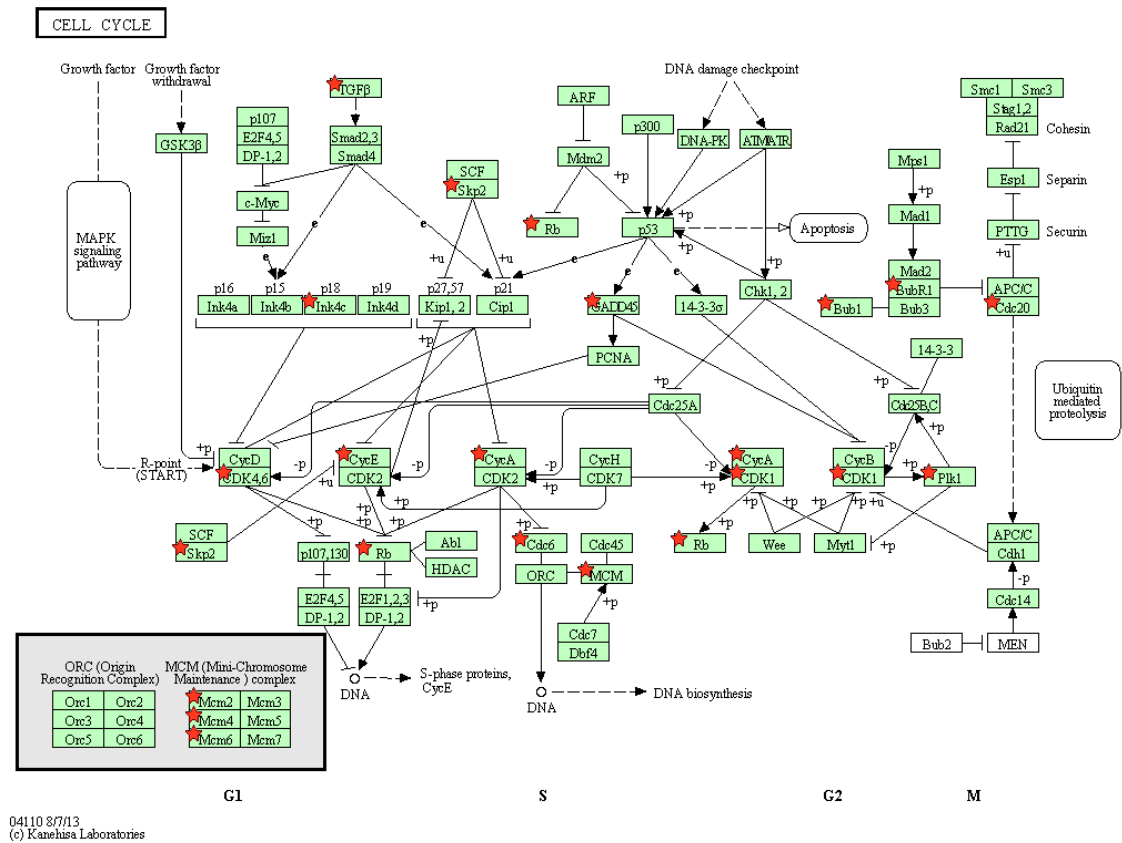


Fig. 64. Pathway of Cell Cycle

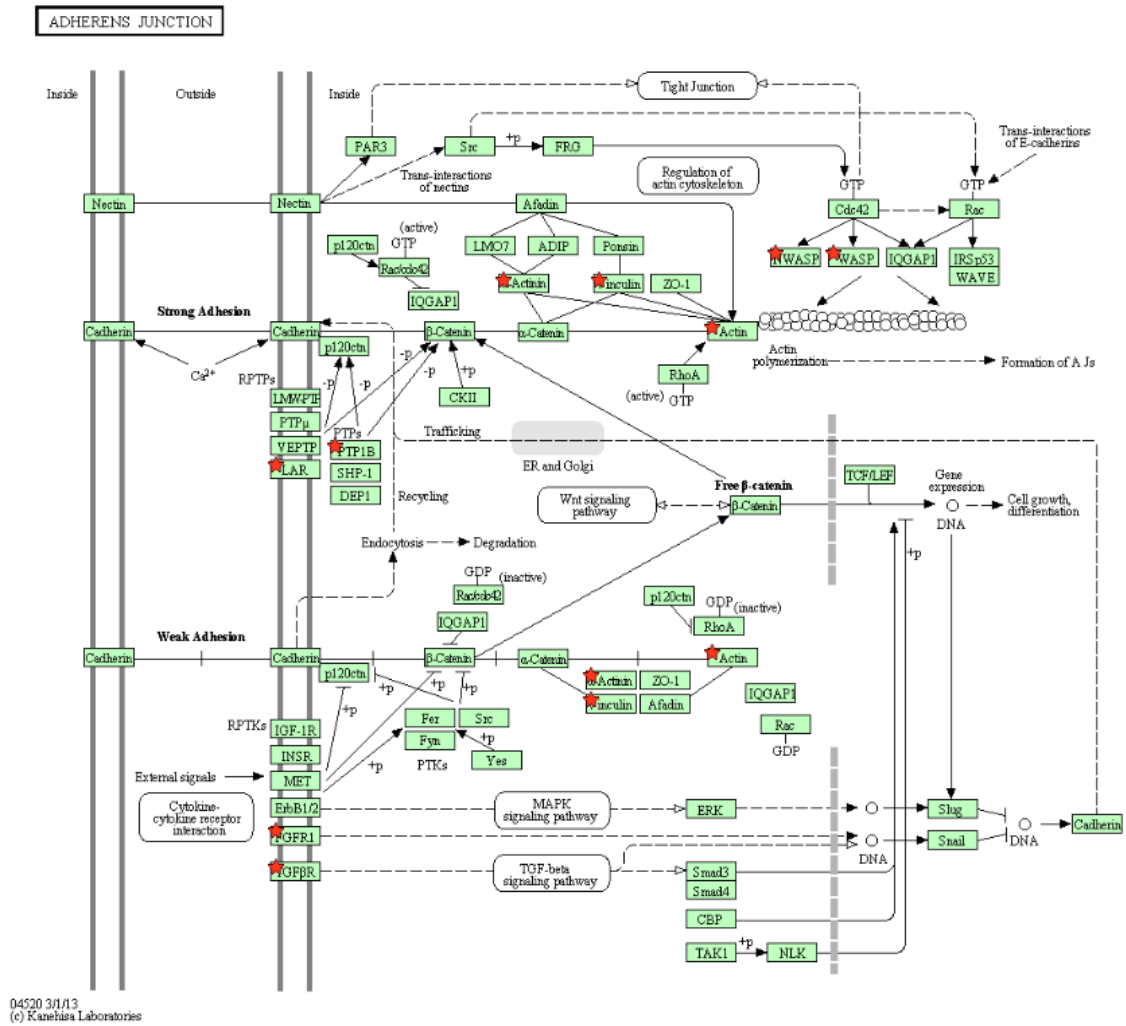


Fig. 65. Pathway of Adherens Junction

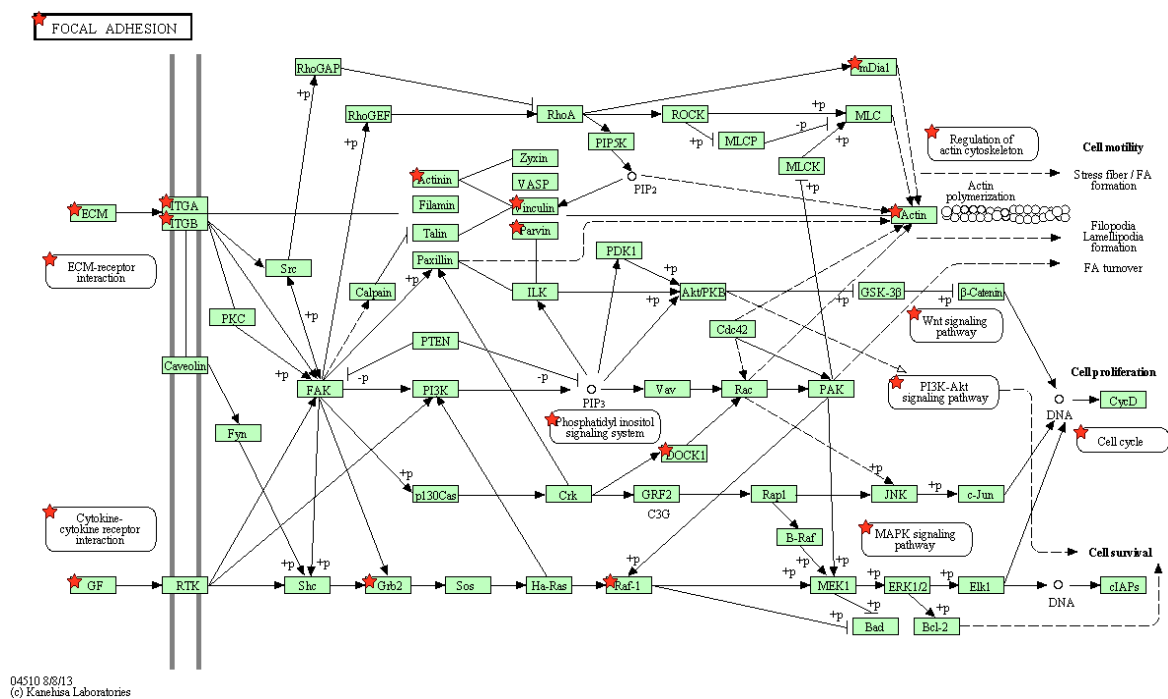


Fig. 66. Pathway of Focal Adhesion

第三節 リアルタイム RT-PCR

先の cDNA マイクロアレイ解析により, hypoxylonol C (**23**) は細胞周期および細胞接着のパスウェイ中の遺伝子発現に影響を与えることが示唆された. そこで, cDNA マイクロアレイ解析において発現低下が見られた遺伝子について, その mRNA 発現の差異をリアルタイム RT-PCR にて検証した.

cDNA マイクロアレイと同様に, 1 nM の VEGF と hypoxylonol C (**23**) 20 μ M 添加条件および非添加条件で 24 時間培養した HUVEC から total RNA を抽出して cDNA を合成し, リアルタイム PCR を行った. 解析は $\Delta\Delta C_t$ 法で行った.

細胞周期のパスウェイ中, 細胞周期の制御機構を構成する中心的な因子, サイクリンおよび CDK の多くに遺伝子発現の低下が見られた. そこで, 各種サイクリンおよび CDK の mRNA を測定したところ, hypoxylonol C (**23**) によりサイクリン A, B および CDK1 の mRNA 発現低下が認められた. Fig. 67 中, cDNA マイクロアレイ解析において遺伝子発現の低下を示したものは青色のバーで, 示さなかったものは白色のバーで表している.

一方, 細胞接着に関わる多くの遺伝子にも発現の低下が見られたため, 同様に mRNA を測定した. その結果, VE-カドヘリン, アクチン, インテグリン α_3 および β_1 の mRNA 発現低下が認められた (Fig. 68).

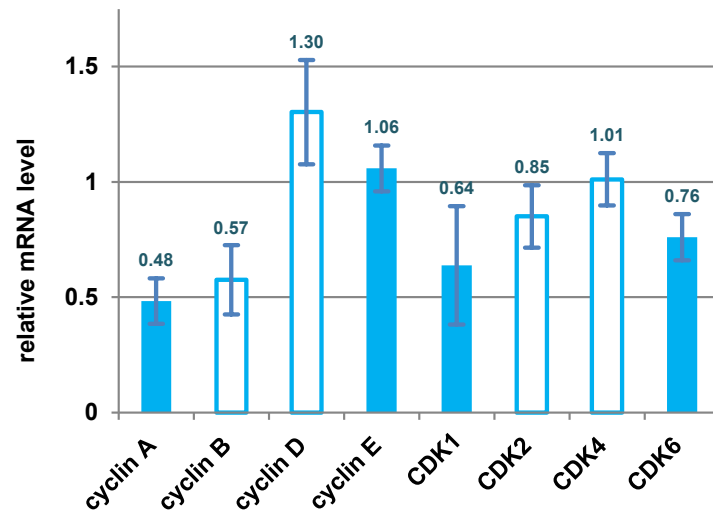


Fig. 67. Effect of Hypoxylonol C on mRNA Expression of Cyclins and CDKs

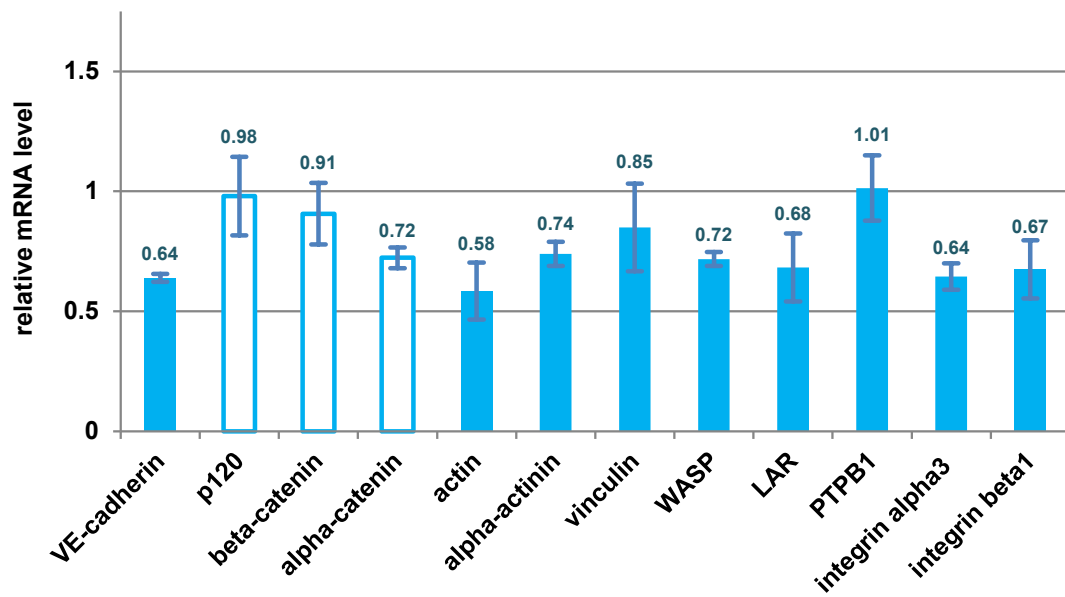


Fig. 68. Effect of Hypoxylonol C on mRNA Expression of Adhesion Molecules

結語

本研究では,血管新生阻害による新たな抗がん剤開発を目的とし,クロコブタケ子実体抽出物より, HUVEC 増殖阻害活性を有する天然化合物の探索を行った. さらに, 活性化合物の血管新生阻害作用について検討し, その機序の解明を試みた.

まず, クロコブタケ子実体 CHCl_3 抽出エキスが HUVEC 増殖阻害活性を示し, 次にこの抽出エキスを, HUVEC 増殖阻害活性を指標として分離を行い, HT-1~8 と仮称する 8 種の化合物を単離し, その構造解析を行った. HT-1 および 2 は各種スペクトルデータから, benzo[j]fluoranthene を基本骨格にもつ新規化合物であることを見出し, それぞれ hypoxylonol C (23) および F (24) と命名した. Hypoxylonol C および F は, X 線結晶解析によりその絶対構造を明らかにした. HT-3, 4, 5 および 6 は各種スペクトルデータより, 既知化合物 hypoxylonol A (28), B (25), D (26) および E (27) であると同定した. Hypoxylonol B (25) および E (27) は, X 線結晶解析により, これまで未決定であった絶対構造を明らかにした. さらに, hypoxylonol A (28) および D (26) の立体配置は, hypoxylonol B (25), C (23), E (27) および F (24) とその NMR スペクトルおよび CD スペクトルを比較することで確認した. HT-7 は各種スペクトルデータの解析から, 新規 hypoxylonol 類であり, hypoxylonol G (29) と命名した. Hypoxylonol G (29) の絶対立体配置は, hypoxylonol B (25), C (23), E (27) および F (24) とその CD スペクトルを比較することで確認した. HT-8 は各種スペクトルデータより, truncatone (7) であると同定し, その絶対構造を X 線結晶解析により明らかにした. 一方, MeOH 抽出エキスは HUVEC 増殖阻害活性をほとんど示さなかったが, 構造類縁体の探索を目的に

分離を行った．その結果，HT-9～12 と仮称した 4 種の新規化合物を単離，構造解析し，それぞれ hypoxylonol H (30), I (31), J (32) および K (33) と命名した．

Hypoxylonol D (26), E (27), G (29) および I (31) は比較的強い HUVEC 増殖阻害活性を示した．この結果から，hypoxylonol 類は，3 位の立体が *R* 配置であること，3 位の水酸基に疎水性の置換基が結合していると HUVEC 増殖阻害活性が増強される傾向が見られた．

第二章では，クロコブタケ子実体抽出エキスから得られた 12 種の化合物について，動脈内皮細胞である HUAEC に対する増殖阻害活性を試験した．12 種のうち，hypoxylonol D (26), E (27), G (29) および I (31) が HUVEC と同等の比較的強い活性を示した．一方，収量の少ない hypoxylonol G (29) を除く 11 種について，正常細胞である NHDF およびがん細胞である HeLa 細胞に対する細胞選択性を検討した．NHDF に対し hypoxylonol D (26), E (27) および F (24) は比較的強い細胞増殖阻害活性を示した．しかしながら HUVEC, HUAEC と比較してその細胞増殖阻害活性に有意な差がみられなかった．一方，HeLa 細胞に対し HUVEC, HUAEC と同等以上に強い増殖阻害活性を示したものは truncatone (7) だけであった．

次に，hypoxylonol C (23) が細胞毒性により見かけ上の細胞増殖阻害活性を示しているのか，殺細胞作用を示すことなく細胞増殖を阻害しているのかを判定すべく，細胞毒性試験を行った．その結果，hypoxylonol C (23) は 30 μ M 以下の濃度において LDH 放出量が 10% 以下であった．以上の結果から，hypoxylonol C (23) は 30 μ M

以下では殺細胞作用を示すことなく，細胞増殖阻害活性を示すことを見出した．

そこで，**23** の血管新生阻害作用を検討した．はじめに **23** の血管内皮細胞の遊走に対する影響について検討した．VEGF による HUVEC の遊走誘導条件下，**23** を 20 μ M，10 μ M，1 μ M 添加すると遊走細胞数の減少が見られた．このことより，**23** は濃度依存的に HUVEC の遊走を阻害することを明らかにした．続いて，**23** の血管内皮細胞の遊走の次のステップである管腔形成に対する影響について検討した．NHDF と共培養した HUVEC に VEGF を添加後，**23** を 20 μ M，10 μ M，1 μ M 加えると，形成された管腔の分岐点数および長さが濃度依存的に減少した．以上の結果より，HUVEC 増殖阻害活性を有する **23** が *in vitro* において血管新生阻害作用を示すことを明らかにした．

最後に，hypoxylonol C (**23**) の血管新生阻害作用の作用機序の解明を試みた．血管新生は，その促進因子と抑制因子のバランスによって制御されており，その中核を担うのが VEGFR を介したシグナル伝達経路である．中でも VEGFR-2 である KDR がそのリガンド VEGF-A と結合して自己リン酸化を起こし，下流へと伝えるシグナルが血管内皮細胞の生存や増殖，遊走に関与している．そこで，hypoxylonol C (**23**) が KDR のチロシンリン酸化能に与える影響について検討したところ，hypoxylonol C (**23**) は KDR リン酸化阻害活性を示さなかった．次に，本化合物の血管新生阻害作用の機序を明らかにすべく，cDNA マイクロアレイ解析を用いて網羅的に標的分子を探索した．1 nM の VEGF および hypoxylonol C (**23**: 20 μ M) 添加条件および非添加条件で HUVEC を 24 時間培養し，両者間の

遺伝子発現の差異を二色法にて検出した。すなわち，**23**を添加しない場合に比べ，添加した際に 1.5 倍以上の増減が見られた遺伝子を，発現変動のあった遺伝子と定義し，これら遺伝子についてパスウェイ解析した。その結果，細胞周期と細胞接着のパスウェイ中の遺伝子発現に多くの変動が見られたことから，**23**は HUVEC のこれらの遺伝子発現に影響を与え，血管新生阻害作用を示す可能性が示唆された。

続いて，cDNA マイクロアレイ解析において発現低下が見られた遺伝子について，その mRNA 発現の差異をリアルタイム RT-PCR にて検証した。cDNA マイクロアレイと同条件で抽出した total RNA を用いて cDNA を合成し，リアルタイム PCR を行った。解析は $\Delta\Delta C_t$ 法で行った。細胞周期のパスウェイ中，hypoxylonol C (**23**)によりサイクリン A および B，CDK1 の mRNA 発現低下が認められた。一方，細胞接着に関わる遺伝子中，VE-カドヘリンおよびアクチン，インテグリン α_3 ， β_1 の mRNA 発現低下が認められた。

サイクリン A および B，CDK1 は細胞周期の M 期開始において主要かつ必須な因子である。Hypoxylonol C (**23**)はこれらの mRNA 発現レベルの低下を介して HUVEC の有糸分裂に影響を与え，その増殖阻害活性を示した可能性が考えられる。また，**23**はサイクリン A および B，CDK1 などの細胞周期制御因子に加え，アクチンや VE-カドヘリン，インテグリン α_3 ， β_1 などの接着因子の mRNA 発現レベルの低下も引き起こした。アクチンは重合，脱重合することで糸状仮足や葉状仮足を形成し，細胞の遊走はこれらと接着因子の働きにより引き起こされる。³¹⁾テガタチドリ *Gymnadenia conopsea* (L.) R. Br. やオニノヤガラ *Gastrodia elata* Blume をはじめとする多くの

植物より単離報告のある 4-hydroxybenzyl alcohol は血管新生の多段階を阻害するが，アクチンの核周辺への凝集を引き起こし血管内皮細胞の遊走を阻害する。³²⁾ タイサンボク *Magnolia grandiflora* L. より得られた honokiol を誘導体化した 5-formylhonokiol は，アクチン骨格の構築を阻害することで血管内皮細胞の遊走を阻害する。³³⁾ 一方で，Piao らの報告によれば，大豆より得られるイソフラボン，genistein は VE-カドヘリンやインテグリン αV といった接着因子の mRNA 発現レベルを低下させることで，血管内皮細胞の増殖や管腔形成を阻害しているという。³⁴⁾ また，Ahn らは，ブラジル産プロポリスに含まれる artepillin C による血管内皮細胞の VE-カドヘリンの発現レベルの低下が，血管新生阻害作用を示すことを報告している。³⁵⁾ 細胞周期への影響以外に，hypoxylonol C (**23**) はこれらの化合物同様，細胞骨格を形成する分子や，血管内皮細胞特異的な接着因子の mRNA 発現レベルの低下により血管新生阻害活性を示す可能性が示唆された。

これまでに天然資源より benzo[j]fluoranthene 誘導体の単離および構造決定，また，それらの化合物が示す生物活性に関する報告は数少ない．今回単離した benzo[j]fluoranthene 誘導体が *in vitro* において血管新生阻害作用を示したことは，この骨格を有する天然化合物が新たな創薬リードとしての可能性を見出したといえる．さらに本研究を通してそのメカニズムの一端を明らかにすることが出来た．

世界各国が新たな医薬品の創成を競い合う中，創薬ターゲットの枯渇やシード化合物としての低分子化合物の可能性の限界，新薬開

発までにかかる莫大な費用と長い研究期間，ドラッグ・ラグなど，様々な問題が生じている．そのような潮流の中で，ハイスループットスクリーニングや *in silico* 創薬などの新たな技術開発にともない，新規医薬品の開発は，新規低分子化合物から核酸医薬や抗体医薬へと確実にシフトしている．しかし，アスピリンがセイヨウシロヤナギ *Salix alba* L. から，タキソールがタイヘイヨウイチイ *Taxus brevifolia* Nutt. から開発されたように，自然界は我々に思いがけない大きな恵みを与えてくれる．キノコを含む菌類は，真核生物の中でも多様性に富むが，その調査，研究は動植物に比べて遅れている．菌類は様々な二次代謝産物を作り出す魅力的な生物群であり，新たな医薬品のリード化合物の創造者となることが期待される．革新的な新技術がもてはやされる中であっても，「温故知新」することで偉大な発見が出来る．新たな方法を積極的に取り入れつつ，医薬品開発のトラディショナルな方法論を受け継ぎ，発展されることは，天然物化学を志す者にとっての使命と考える．

本研究が新たな抗がん剤開発のきっかけとなり，また，天然物化学，菌類学の研究発展の足掛かりとなることを願い，結語とする．

実験の部

本研究には，以下の機器，試薬を使用した．

- 融点（mp）：柳本 MP 微量融点測定装置 MP-J3

融解せず，焦げたものを dec.（decomposition）と表記した．

- 旋光度（ $[\alpha]_D$ ）：HORIBA SEPA-300
- 紫外可視吸収スペクトル：Thermo GENESYS 10S UV-VIS
- 赤外吸収スペクトル：Thermo NICOLET iS5 FT-IR
- 核磁気共鳴スペクトル（NMR）：

JEOL JNM-AL400 MHz（ ^1H -NMR：400 MHz， ^{13}C -NMR：100 MHz）

JEOL JNM-ECS400 MHz（ ^1H -NMR：400 MHz， ^{13}C -NMR：100 MHz）

化学シフト値は δ 値（ppm）で示し， ^1H -NMR において TMS（tetramethyl silane： δ_{H} 0.00）を， ^{13}C -NMR において各測定溶媒（acetone- d_6 ： δ_{C} 29.3， CDCl_3 ： δ_{C} 77.0， CD_3OD ： δ_{C} 49.0）を内部基準として用いた．ただし，acetone- d_6 は ^1H -NMR において，測定溶媒（ δ_{H} ：2.04）を内部標準として用いた．カップリングパターンは s（singlet），d（doublet），t（triplet），q（quartet），m（multiplet），br（broad）で示した．

- 質量分析（MS）：JEOL JMS-700
- X 線結晶解析：Rigaku RAXIS-RAPID
- カラムクロマトグラフィー用シリカゲル：

KANTO CHEMICAL Silica Gel 60 N（63-201 μm ）

センシュウ科学 PEGASIL PREP ODS-7515-12-A

- 薄層クロマトグラフィー（TLC）：Merck Silica Gel 60 F₂₅₄

Merck RP-18 F_{254s}

- 高速液体クロマトグラフィー（HPLC）：

ポンプ：センシュウ科学 SSC-3461

検出器：センサー科学 SSC-5410

インジェクター：RHEODYNE 7125

- プレートリーダー：バイオテック Immuno Mini NJ-2300
- 顕微鏡：Olympus CKX31
- 顕微鏡カメラ：Wraymer, Inc. WRAYCAM G900

HUVEC 増殖阻害試験及び HUAEC 増殖阻害試験

- Lonza Cryo HUVEC
- Lonza Cryo HUAEC
- Lonza EGM-2 BulletKit
- Lonza EBM-2
- SIGMA-ALDRICH Gentamicin liquid
- 新田ゼラチン Cellmatrix Type I-C
- GIBCO Trypsin/EDTA liquid
- GIBCO FBS
- DOJINDO Cell Counting Kit-8
- PEPROTECH Recombinant Human VEGF₁₆₅
- PBS（和光純薬 KCl, KH₂PO₄, NaCl, Na₂HPO₄）
- BECTON DICKINSON FALCON 353072

HeLa 細胞増殖阻害試験

- HeLa 細胞（本学分析化学教室より分与していただいた）
- SIGMA-ALDRICH JAPAN MEM
- SIGMA-ALDRICH JAPAN Iscove's Modified Dulbecco's Medium
- MP biomedical, Inc's L-glutamine

- GIBCO Trypsin 2.5% (10×) liquid
- DOJINDO EDTA-2Na
- Nacalai Tesque MTT
- 10% 1N HCl Isopropanol (和光純薬 HCl, isopropanol)
- GIBCO FBS
- PBS (和光純薬 KCl, KH₂PO₄, NaCl, Na₂HPO₄)
- BECTON DICKINSON FALCON 353072

NHDF 増殖阻害試験

- KURABOU NHDF
- GIBCO α-MEM
- KURABOU 継代セット HK - 3430
- 以下は HeLa 細胞増殖阻害試験に準ずる。

細胞毒性試験

- Promega CytoTox 96 Non-Radioactive Cytotoxicity Assay

HUVEC 遊走阻害試験

- BECTON DICKINSON FALCON 353504
- BECTON DICKINSON FALCON 353097
- sysmex Diff-Quik

HUVEC 管腔形成阻害試験

- KURABO Angiogenesis Kit KZ-1000

- KURABO Tubule Staining Kit for CD31 KZ-1225
- KURABO Angiogenesis Control Reagent Kit KZ-1300
- KURABO VEGF-A 250 μ L KZ-1350

KDR リン酸化阻害試験

- TAKARA Universal Tyrosine Kinase Assay Kit
- Millipore KDR, active
- Millipore Protein Dilution Buffer B+

cDNA マイクロアレイ

- QIAGEN miRNeasy Mini
- Agilent technologies 2100 Bioanalyzer
- Nano Drop Technologies Nano drop
- Ambion Amino Alkyl aRNA kit 1753
- GE Amersham Cy5 Mono-Reactive Dye
- GE Amersham Cy3 Mono-Reactive Dye
- TORAY Human Oligo chip 25k
- TAKARA Hybridization chamber TX711
- TORAY 3D-Gene Scanner 3000

リアルタイム RT-PCR

- Life Technologies SuperScript VILO MasterMix
- Life Technologies TaqMan Universal PCR Master Mix II
- Life Technologies TaqMan Gene Expression Assays
- Life Technologies 7300 system

● Life Technologies TaqMan Gene Expression Assays

cyclin A₂ (Hs00996788_m1)
cyclin B₁ (Hs00259126_m1)
cyclin D₁ (Hs00765553_m1)
cyclin E₂ (Hs00180319_m1)
CDK1 (Hs00938777_m1)
CDK2 (Hs01548894_m1)
CDK4 (Hs01565683_g1)
CDK6 (Hs01026371_m1)
VE-cadherin (Hs00901463_m1)
p120 (Hs00609738_g1)
β-catenin (Hs00355049_m1)
α-catenin (Hs00944794_m1)
γ-actin (Hs03044422_g1)
α-actinin (Hs00245168_m1)
vinculin (Hs00419715_m1)
WASP (Hs00187614_m1)
LAR (Hs00892984_m1)
PTPB1 (Hs00942477_m1)
integrin α₃ (Hs01076873_m1)
integrin β₁ (Hs00559595_m1)
18s ribosomal RNA (Hs03928985_g1)

第一章 クロコブタケ (*H. truncatum*) 子実体からの HUVEC 増殖阻害化合物の探索

第一節 HUVEC 増殖阻害試験

- 1) コラーゲンコートをした 96-well plate に, EGM-2 Bullet Kit を用いて第 4 継代の HUVEC を 3000 cells/well の細胞密度で播種し, 37°C, 5% CO₂ の条件下 3 時間培養した.
- 2) 培養後, 培地を除去し, f. c. 1% FBS-EBM-2 を用いて 37 °C, 5% CO₂ の条件下 21 時間培養した.
- 3) 培養後, 1 nM の VEGF と, f. c. 1% FBS-EBM-2 を用いて各濃度に調整した sample を添加し, 37°C, 5% CO₂ の条件下 72 時間培養した. Sample は予め DMSO に溶解し, 1 mg/100 µL となるように調整した.
- 4) 培養後, Cell Counting Kit-8 を各 well に 10µL ずつ添加し, 37 °C, 5% CO₂ の条件下 2 時間培養した.
- 5) 培養後, 450 nm における吸光度を測定した.

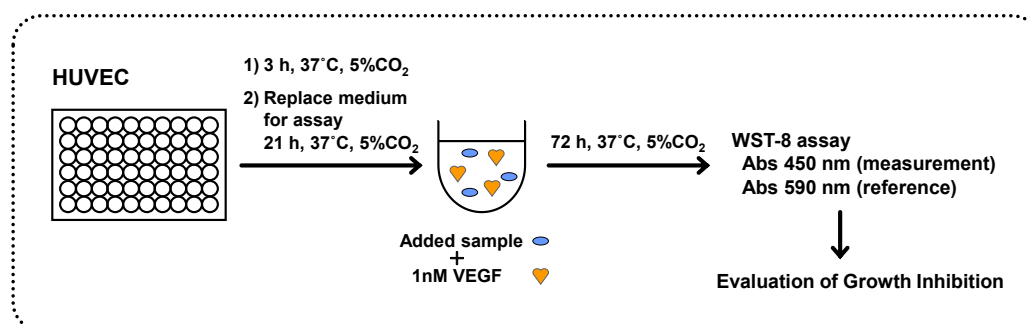


Fig. 69. HUVEC Growth Inhibition Assay Method

Sample の細胞増殖抑制活性は，VEGF のみを添加した場合の細胞生存率を control とし，control に対する sample の IC_{50} ($\mu\text{g/mL}$) として求めた．また，positive control として，doxorubicin を用いた．

なお，本試験は各エキス，画分に対しては sample 濃度を 100, 10, 1 $\mu\text{g/mL}$ の 3 濃度に設定し， $n = 3$ で行った．また，単離化合物に対しては，9 濃度， $n = 6$ で行った．

第二節 クロコブタケ子実体抽出エキスの HUVEC 増殖阻害活性

クロコブタケは、2009 年 9 月に東京都東久留米市にて採集した。クロコブタケ子実体 402 g を CHCl_3 , MeOH で順次抽出し、 CHCl_3 エキス 15.9 g, MeOH エキス 45.6 g を得た。MeOH 抽出後、残渣に色が残っていたため、さらに acetone で抽出し、acetone エキス 14.3 g を得た。

これらのエキスについて HUVEC 増殖阻害試験を行ったところ、 CHCl_3 エキス, MeOH エキス, acetone エキスの IC_{50} はそれぞれ 10, 70, 31 $\mu\text{g/mL}$ であった。

第三節 クロコブタケ子実体 CHCl_3 エキスからの HUVEC 増殖阻害化合物の探索

HUVEC 増殖阻害活性の認められたクロコブタケ子実体 CHCl_3 エキス (15.9 g) を Si. C. C. にて分画し, Fr. A~E の 5 つの画分を得た. これら 5 画分に対して HUVEC 増殖阻害試験を行ったところ, Fr. B と Fr. D に抑制活性が認められた. 各画分の収量と, TLC 上, 分離しやすいと思われるスポットが認められたことから, Fr. D をさらに分画することとした.

Fr. D を Fig. 70 に示すように分離, 精製し, Fr. D-d から HT-1 (703.2 mg) および 2 (77.1 mg) と仮称する化合物をそれぞれ単離した. HT-1 および 2 は新規化合物であったためそれぞれ hypoxylonol C (23) および F (24) と命名した. Fr. D-b からは HT-3 (hypoxylonol B (25)) 31.8 mg, HT-4 (hypoxylonol D (26)) 34.2 mg, HT-5 (hypoxylonol E (27)) 26.9 mg, HT-6 (hypoxylonol A (28)) 36.7 mg を単離した.

さらに, Fr. B を Fig. 71 に示すように分離, 精製し, Fr. B-c から HT-7 と仮称する化合物を 3.5 mg 単離した. HT-7 は新規化合物であったため, hypoxylonol G (29) と命名した. また, Fr. B-b からは HT-8 (truncatone (7)) 31.8 mg を単離した.

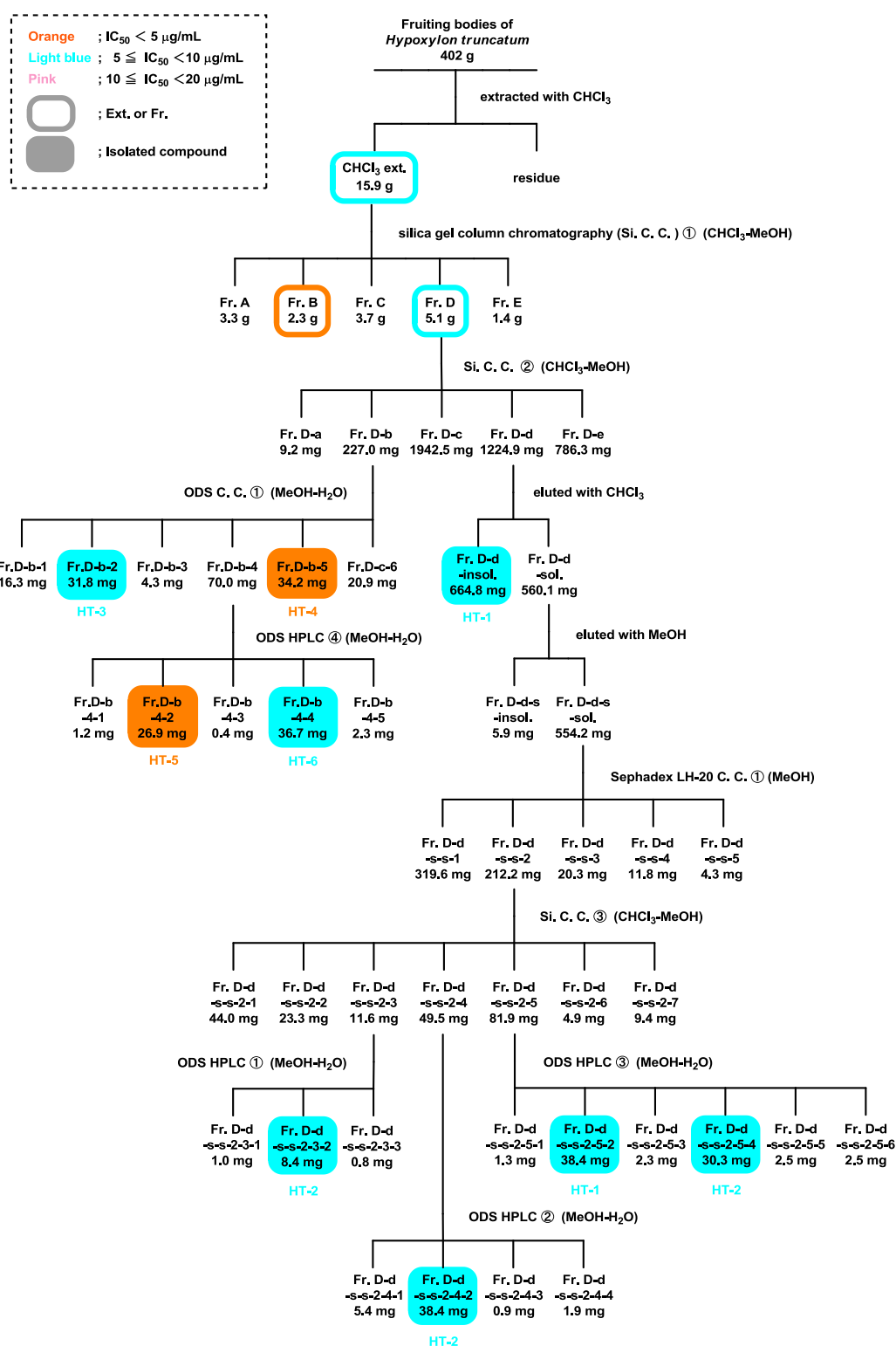


Fig. 70. Isolation Procedure of the Compounds from *H. truncatum*

CHCl_3 ext. Fr. D

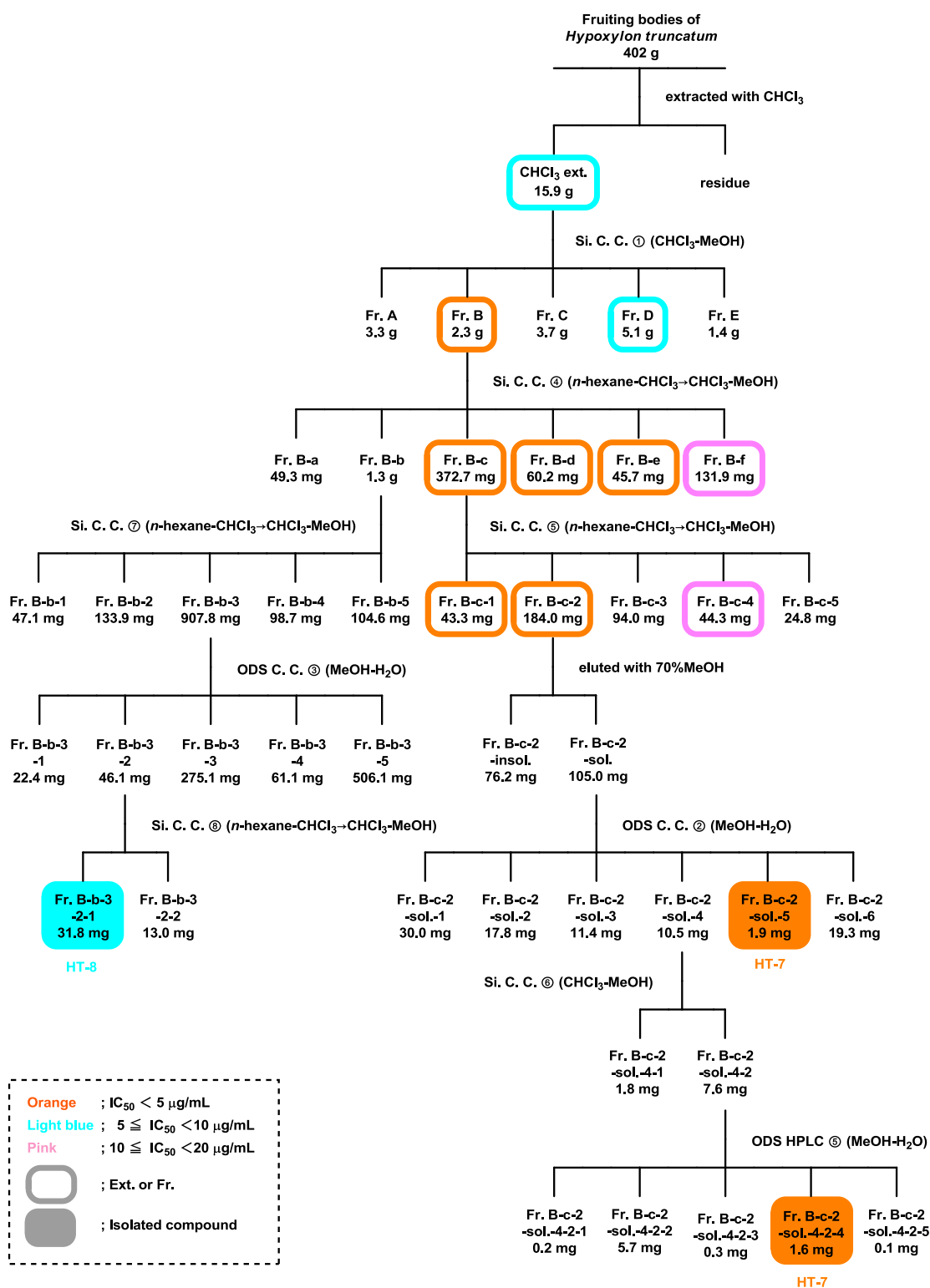


Fig. 71. Isolation Procedure of the Compounds from *H. truncatum*

CHCl₃ ext. Fr. B

[Si. C. C. ①]

Column: silica gel 210 g, $\phi 60 \times 140$ mm

Elute: $\text{CHCl}_3\text{-MeOH} = 100:0 \rightarrow 100:1 \rightarrow 10:1 \rightarrow 5:1 \rightarrow 1:1 \rightarrow 0:100$

[Si. C. C. ②]

Column: silica gel 140 g, $\phi 50 \times 140$ mm

Elute: $\text{CHCl}_3\text{-MeOH} = 100:0 \rightarrow 300:1 \rightarrow 200:1 \rightarrow 100:1 \rightarrow 80:1 \rightarrow 50:1 \rightarrow$
 $10:1 \rightarrow 1:1 \rightarrow 0:100$

[Si. C. C. ③]

Column: silica gel 40 g, $\phi 25 \times 165$ mm

Elute: $\text{CHCl}_3\text{-MeOH} = 300:1 \rightarrow 150:1 \rightarrow 100:1 \rightarrow 80:1 \rightarrow 50:1 \rightarrow 10:1$
 $1:1 \rightarrow 0:100$

[Si. C. C. ④]

Column: silica gel 105 g, $\phi 43 \times 130$ mm

Elute: $n\text{-hexane-CHCl}_3 = 1:1 \rightarrow 1:3 \rightarrow 1:5 \rightarrow 1:7 \rightarrow 1:10 \rightarrow \text{CHCl}_3\text{-MeOH}$
 $= 100:0 \rightarrow 10:1 \rightarrow 1:1 \rightarrow 0:100$

[Si. C. C. ⑤]

Column: silica gel 45 g, $\phi 25 \times 175$ mm

Elute: $n\text{-hexane-CHCl}_3 = 1:1 \rightarrow 1:2 \rightarrow 1:3 \rightarrow 1:4 \rightarrow \text{CHCl}_3\text{-MeOH} = 100:0$
 $\rightarrow 1:1$

[Si. C. C. ⑥]

Column: silica gel 8 g, $\phi 10 \times 200$ mm

Elute: CHCl_3

[Si. C. C. ⑦]

Column: silica gel 60 g, $\phi 30 \times 150$ mm

Elute: *n*-hexane- $\text{CHCl}_3 = 1:1 \rightarrow 1:2 \rightarrow 1:3 \rightarrow 1:4 \rightarrow 1:5 \rightarrow \text{CHCl}_3\text{-MeOH} =$
 $100:0 \rightarrow 10:1 \rightarrow 1:1 \rightarrow 0:100$

[Si. C. C. ⑧]

Column: silica gel 15 g, $\phi 18 \times 135$ mm

Elute: *n*-hexane- $\text{CHCl}_3 = 1:1 \rightarrow 1:2 \rightarrow \text{CHCl}_3\text{-MeOH} = 100:0 \rightarrow 1:1$

[ODS C. C. ①]

Column: $\phi 20 \times 170$ mm

Elute: $\text{MeOH-H}_2\text{O} = 5:5 \rightarrow 6:4 \rightarrow 7:3 \rightarrow 8:2 \rightarrow 10:0$

[ODS C. C. ②]

Column: $\phi 18 \times 150$ mm

Elute: $\text{MeOH-H}_2\text{O} = 5:5 \rightarrow 6:4 \rightarrow 8:2 \rightarrow 10:0$

[ODS C. C. ③]

Column: $\phi 40 \times 150$ mm

吸着用 ODS : 2.5 g

Elute: $\text{MeOH-H}_2\text{O} = 7:3 \rightarrow 8:2 \rightarrow 10:0$

[Sephadex LH-20 C. C. ①]

Column: $\phi 20 \times 800$ mm

Elute: MeOH

[ODS HPLC ①]

Column: PEGASIL ODS ($\phi 10 \times 250$ mm No. 340096)

Elute: 75%MeOH

Detector: UV254 nm

Flow rate: 2.0 mL/min

Result: HT-2 (8.4 mg, $R_t = 15$ min)

[ODS HPLC ②]

Column: PEGASIL ODS ($\phi 10 \times 250$ mm No. 340096)

Elute: 75%MeOH

Detector: UV254 nm

Flow rate: 2.0 mL/min

Result: HT-2 (38.4 mg, $R_t = 15$ min)

[ODS HPLC ③]

Column: PEGASIL ODS ($\phi 10 \times 250$ mm No. 340096)

Elute: 75%MeOH

Detector: UV254 nm

Flow rate: 2.0 mL/min

Result: HT-1 (38.4 mg, $R_t = 12$ min), HT-2 (30.3 mg, $R_t = 15$ min)

[ODS HPLC ④]

Column: PEGASIL ODS ($\phi 10 \times 250$ mm No. 340096)

Elute: 58%MeOH

Detector: UV254 nm

Flow rate: 2.0 mL/min

Result: HT-5 (26.9 mg, $R_t = 69$ min), HT-6 (36.9 mg, $R_t = 74$ min)

[ODS HPLC ⑤]

Column: PEGASIL ODS ($\phi 10 \times 250$ mm No. 340096)

Elute: 75%MeOH

Detector: UV254 nm

Flow rate: 2.0 mL/min

Result: HT-7 (1.6 mg, $R_t = 25$ min)

第四節 クロコブタケ子実体 MeOH エキスからの構造類縁体の探索

クロコブタケ子実体 MeOH エキスは HUVEC 増殖阻害試験において活性は認められなかったが、TLC 上で hypoxylonol 類に特徴的なスポットを検出したため、構造類縁体の単離を目指して分画を行った。すなわち、クロコブタケ子実体 MeOH エキス (45.6 g) を CHCl_3 可溶部と不溶部に分け、可溶部を Si. C. C. にて分画し、Fr. A~F の 6 つの画分を得た。これら 6 画分に対して HUVEC 増殖阻害試験を行ったところ、Fr. A, Fr. B および Fr. D に阻害活性が認められた。

続いて Fr. D を Fig. 72 に示すように分離、精製し、Fr. D-c から HT-9 (13.4 mg) と仮称する化合物を単離した。また、Fr. D-b からは HT-10 (7.3 mg) と仮称する化合物を単離した。HT-9 および 10 は新規化合物であったため、それぞれ hypoxylonol H (30) および I (31) と命名した。

さらに、活性は示さなかったが、hypoxylonol 類に特徴的なスポットが認められたため、Fr. E の分離を行った。Fig. 73 に示すように分離、精製を行い、Fr. E-e から HT-11 (8.3 mg) および 12 (5.5 mg) と仮称する化合物をそれぞれ得た。HT-11 および 12 は新規化合物であったので、それぞれ hypoxylonol J (32) および K (33) と命名した。

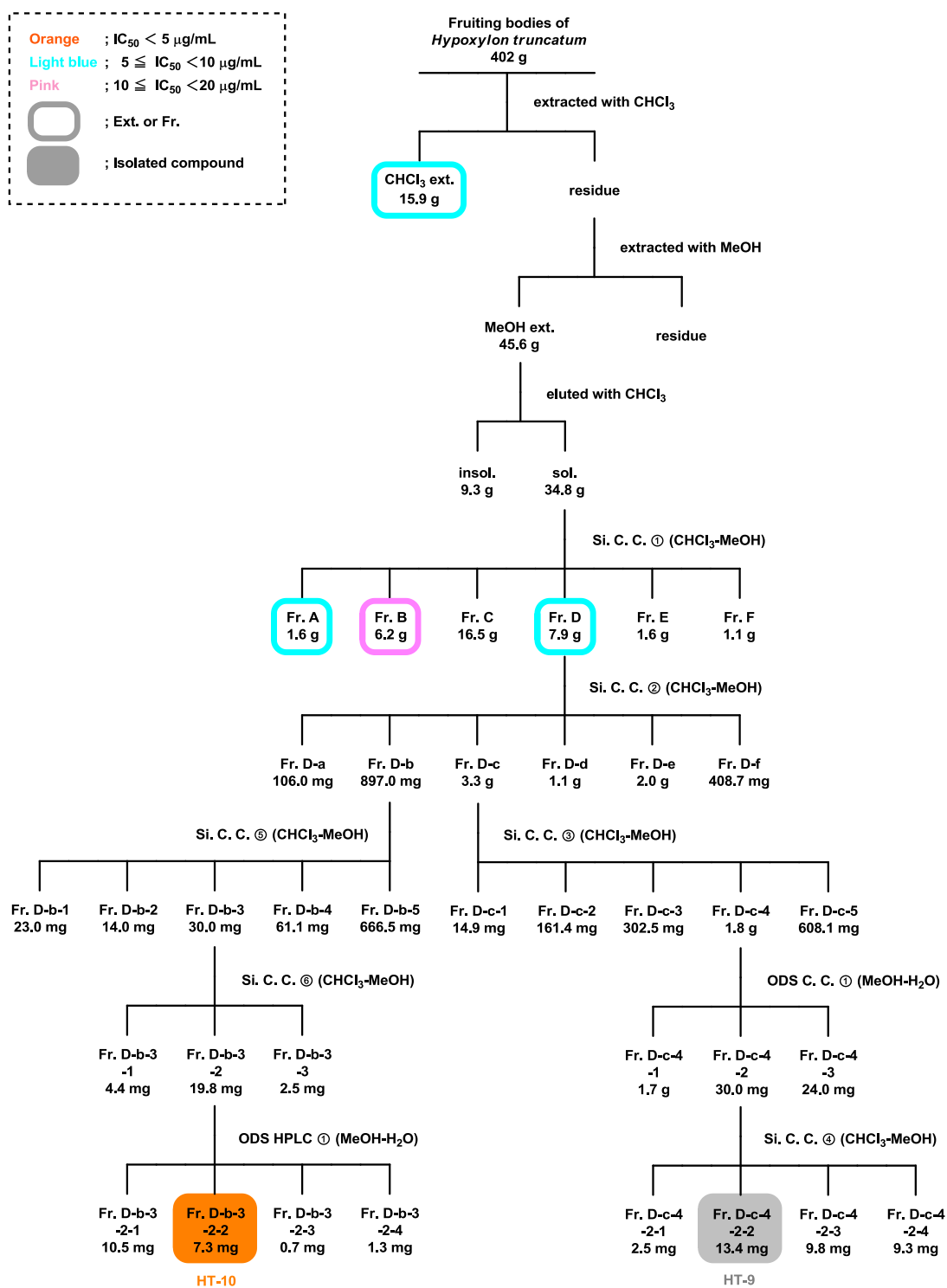


Fig. 72. Isolation Procedure of the Compounds from *H. truncatum*

MeOH ext. Fr. D

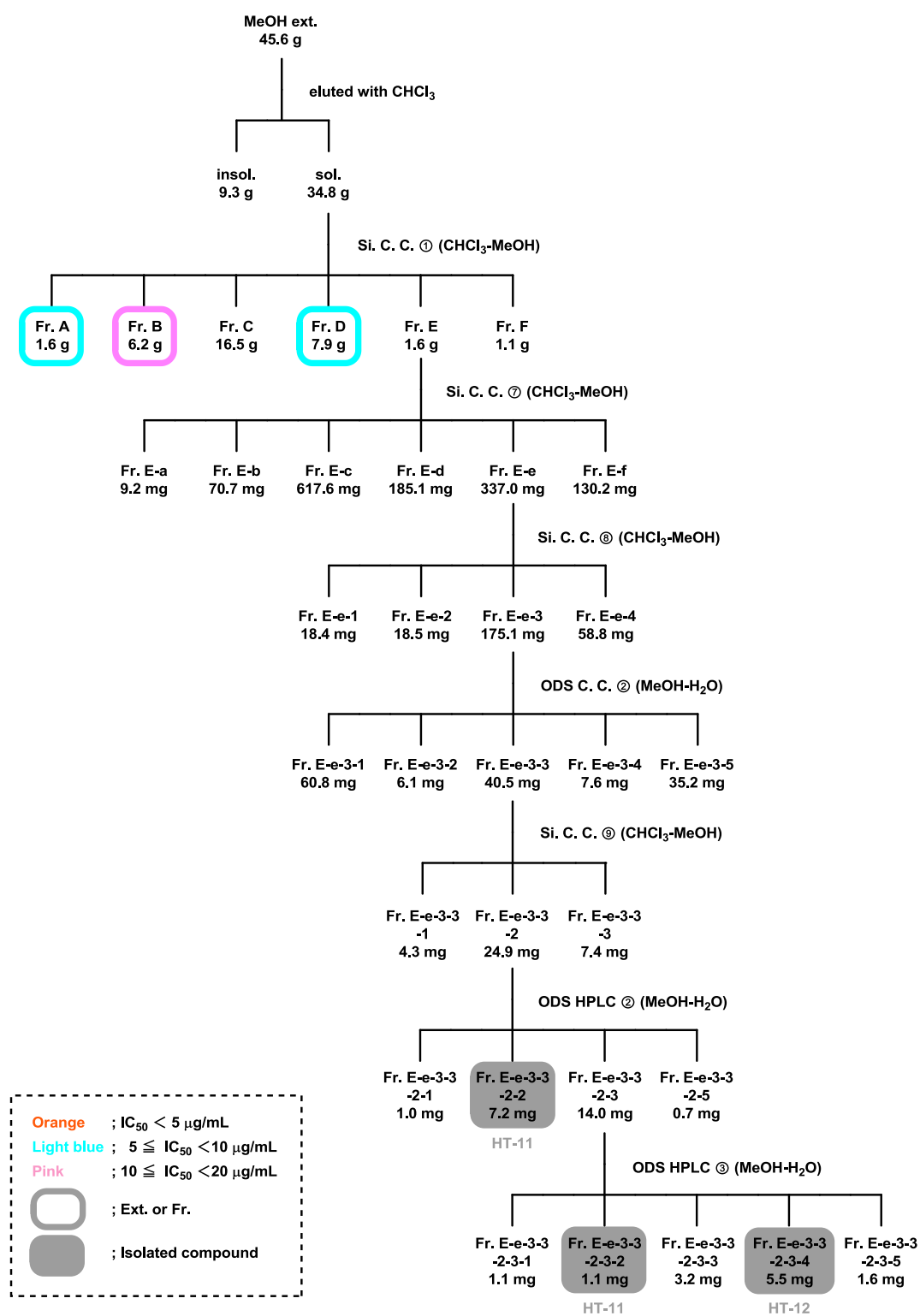


Fig. 73. Isolation Procedure of the Compounds from *H. truncatum*

MeOH ext. Fr. E

[Si. C. C. ①]

Column: silica gel 300 g, $\phi 70 \times 170$ mm

Elute: $\text{CHCl}_3\text{-MeOH} = 100:0 \rightarrow 100:1 \rightarrow 10:1 \rightarrow 1:1 \rightarrow 0:100$

[Si. C. C. ②]

Column: silica gel 140 g, $\phi 50 \times 145$ mm

Elute: $\text{CHCl}_3\text{-MeOH} = 100:0 \rightarrow 80:1 \rightarrow 50:1 \rightarrow 30:1 \rightarrow 10:1 \rightarrow 1:1 \rightarrow 0:100$

[Si. C. C. ③]

Column: silica gel 90 g, $\phi 42 \times 150$ mm

Elute: $\text{CHCl}_3\text{-MeOH} = 200:1 \rightarrow 100:0 \rightarrow 50:1 \rightarrow 0:100$

[Si. C. C. ④]

Column: silica gel 20 g, $\phi 20 \times 110$ mm

Elute: $\text{CHCl}_3\text{-MeOH} = 100:1 \rightarrow 80:0 \rightarrow 50:1 \rightarrow 10:1 \rightarrow 0:100$

[Si. C. C. ⑤]

Column: silica gel 55 g, $\phi 30 \times 145$ mm

Elute: $\text{CHCl}_3\text{-MeOH} = 200:1 \rightarrow 100:0 \rightarrow 50:1 \rightarrow 10:1 \rightarrow 0:100$

[Si. C. C. ⑥]

Column: silica gel 20 g, $\phi 20 \times 110$ mm

Elute: $\text{CHCl}_3\text{-MeOH} = 100:0 \rightarrow 10:1 \rightarrow 0:100$

[Si. C. C. ⑦]

Column: silica gel 60 g, $\phi 32 \times 155$ mm

Elute: $\text{CHCl}_3\text{-MeOH} = 100:0 \rightarrow 50:1 \rightarrow 30:1 \rightarrow 20:1 \rightarrow 10:1 \rightarrow 0:100$

[Si. C. C. ⑧]

Column: silica gel 60 g, $\phi 30 \times 170$ mm

Elute: $\text{CHCl}_3\text{-MeOH} = 50:1 \rightarrow 40:1 \rightarrow 30:1 \rightarrow 25:1 \rightarrow 20:1 \rightarrow 10:1 \rightarrow 0:100$

[Si. C. C. ⑨]

Column: silica gel 18 g, $\phi 20 \times 115$ mm

Elute: $\text{CHCl}_3\text{-MeOH} = 30:1 \rightarrow 25:1 \rightarrow 20:1 \rightarrow 0:100$

[ODS C. C. ①]

Column: $\phi 40 \times 150$ mm

Elute: $\text{MeOH-H}_2\text{O} = 6:4 \rightarrow 10:0$

[ODS C. C. ②]

Column: $\phi 18 \times 150$ mm

Elute: $\text{MeOH-H}_2\text{O} = 4:6 \rightarrow 4.5:5.5 \rightarrow 5:5 \rightarrow 10:0$

[ODS HPLC ①]

Column: PEGASIL ODS ($\phi 10 \times 250$ mm No. 340096)

Elute: 70%MeOH

Detector: UV254 nm

Flow rate: 2.0 mL/min

Result: HT-10 (7.3 mg, $R_t = 22.5$ min)

[ODS HPLC ②]

Column: PEGASIL ODS ($\phi 10 \times 250$ mm No. 340096)

Elute: 55%MeOH

Detector: UV254 nm

Flow rate: 2.0 mL/min

Result: HT-11 (7.2 mg, $R_t = 31$ min)

[ODS HPLC ③]

Column: PEGASIL ODS ($\phi 10 \times 250$ mm No. 340096)

Elute: 50%MeOH

Detector: UV254 nm

Flow rate: 2.0 mL/min

Result: HT-11 (1.1 mg, $R_t = 50$ min), HT-12 (5.5 mg, $R_t = 54$ min)

HT-9: hypoxylonol H (30) のメチル化

Hypoxylonol H (30) 10 mg をナス型フラスコに入れ, 1 mL の CHCl_3 で溶解した. そこにジエチルエーテルに溶解したジアゾメタンを加え, 室温で 3 時間攪拌した. 反応終了後, 減圧濃縮して乾固し, 残留物 (12.3 mg) を得た. これを Si. C. C. にて分離, 精製し, メチル化体を 4.7 mg (収率 45.6%) 得た. また, 39.0% の原料が回収された.

[Si. C. C.]

Silica gel: 5 g

Elute: CHCl_3 -MeOH = 100:0

HT-10: hypoxylonol I (31) のメチル化

Hypoxylonol H (31) 5.1 mg をナス型フラスコに入れ, 1 mL の CHCl_3 で溶解した. そこにジエチルエーテルに溶解したジアゾメタンを加え, 室温で 3 時間攪拌した. 反応終了後, 減圧濃縮して乾固し, 残留物 (5.9 mg) を得た. これを Si. C. C. にて分離, 精製し, メチル化体を 2.5 mg (収率 47.5%) 得た. また, 19.6% の原料が回収された.

[Si. C. C.]

Silica gel: 5 g

Elute: CHCl_3 -MeOH = 100:0

第五節 スペクトルデータ

HT-1: hypoxylonol C (**23**)

Colorless needles from *n*-hexane-acetone, mp: 183°C (dec.), $[\alpha]_{\text{D}^{21}} -13.3^\circ$ ($c = 0.30$, acetone), IR ν_{max} (KBr) cm^{-1} : 3375, 3250, 1630, 1460, 1240, 1035, 810, 750, UV λ_{max} (acetone) nm (log ϵ): 210 (4.15), 316 (3.53), 326 (3.67), 387 (3.94), HR-FABMS (neg.) m/z : 335.0925 ($[\text{M}\cdot\text{H}]^-$, calcd. for $\text{C}_{20}\text{H}_{15}\text{O}_5$: 335.0919), FABMS (pos.) m/z : 337 ($[\text{M}+\text{H}]^+$), 319, 301, FABMS (neg.) m/z : 335 ($[\text{M}\cdot\text{H}]^-$), 318, ^1H - and ^{13}C -NMR: see Table 4 (p. 51), Crystal data: $\text{C}_{23}\text{H}_{22}\text{O}_6$, space group $P2_12_12_1$ (#19), $a = 5.68762$ (10) Å, $b = 13.5860$ (3) Å, $c = 24.1080$ (17) Å, $V = 1862.87$ (14) Å³, $Z = 4$, $D_{\text{calc}} = 1.406$ g/cm³, $R1 = 0.0313$, $wR2 = 0.0792$, Flack parameter = -0.09 (16), CCDC 777234

HT-2: hypoxylonol F (**24**)

Yellow block from *n*-hexane-acetone, mp: 187°C (dec.), $[\alpha]_{\text{D}^{21}} -19.8^\circ$ ($c = 0.25$, acetone), IR ν_{max} (KBr) cm^{-1} : 3375, 1630, 1460, 1215, 1050, UV λ_{max} (acetone) nm (log ϵ): 210 (4.16), 320 (3.58), 326 (3.69), 388 (3.97), HR-FABMS (pos.) m/z : 337.1074 ($[\text{M}+\text{H}]^+$, calcd. for $\text{C}_{20}\text{H}_{17}\text{O}_5$: 337.1076), FABMS (pos.) m/z : 337 ($[\text{M}+\text{H}]^+$), 319, 301, FABMS (neg.) m/z : 335 ($[\text{M}\cdot\text{H}]^-$), 318, ^1H - and ^{13}C -NMR: see Table 5 (p. 55), Crystal data: $\text{C}_{20}\text{H}_{16}\text{O}_5$, space group $P2_1$ (#4), $a = 5.2050$ (3) Å, $b = 18.0275$ (10) Å, $c = 8.0225$ (6) Å, $\beta = 92.299$ (7)°, $V = 752.17$ (8) Å³, $Z = 2$, $D_{\text{calc}} = 1.485$ g/cm³, $R1 = 0.0353$, $wR2 = 0.0897$, Flack parameter = 0.07 (14). CCDC 784646

HT-3: hypoxylonol B (**25**)

Yellow platelet from *n*-hexane-acetone, mp: 163-165°C, $[\alpha]_{\text{D}^{21}} -65.3^\circ$ ($c = 0.31$, acetone), IR ν_{max} (KBr) cm^{-1} : 3400, 2925, 1700, 1620, 1460, 1360, 1320, 230, 1060, 800, UV λ_{max} (acetone) nm (log ϵ): 210 (4.22), 319 (3.80), 326 (3.92), 389 (4.19), HR-EIMS m/z : 350.1152 (M^+ , calcd. for $\text{C}_{21}\text{H}_{18}\text{O}_5$: 350.1154), EIMS m/z (rel. int. %): 350 (M^+ , 38), 318 (100), 300 (64), ^1H - and ^{13}C -NMR: see Table 6 (p. 58), Crystal data: $\text{C}_{21}\text{H}_{18}\text{O}_5$, space group $P2_1$ (#4), $a = 8.90851$ (16) Å, $b = 15.3789$ (3) Å, $c = 12.3961$ (9) Å, $\beta = 102.989$ (7)°, $V = 1654.86$ (12) Å³, $Z = 4$, $D_{\text{calc}} = 1.406$ g/cm³, $R1 = 0.0314$, $wR2 = 0.0810$, Flack parameter = -0.05 (11), CCDC 784644

HT-4: hypoxylonol D (**26**)

Yellow powder, mp: 152-154°C, $[\alpha]_{\text{D}^{21}} -24.5^\circ$ ($c = 0.27$, acetone), IR ν_{max} (KBr) cm^{-1} : 3400, 2925, 1700, 1620, 1460, 1360, 1320, 1070, 810, UV λ_{max} (acetone) nm (log ϵ): 210 (4.19), 319 (3.76), 326 (3.65), 388 (4.00), HR-EIMS m/z : 364.1308 (M^+ , calcd. for $\text{C}_{22}\text{H}_{20}\text{O}_5$: 364.1311), EIMS m/z (rel. int. %): 364 (M^+ , 20), 318 (100), 301 (20), 300 (67), 290 (22), ^1H - and ^{13}C -NMR: see Table 7 (p. 61)

HT-5: hypoxylonol E (**27**)

Yellow block from *n*-hexane- CHCl_3 -MeOH, mp: 160-162°C, $[\alpha]_{\text{D}^{21}} -41.2^\circ$ ($c = 0.29$, acetone), IR ν_{max} (KBr) cm^{-1} : 3375, 2925, 1630, 1460, 1370, 1330, 1230, 1060, 805, UV λ_{max} (acetone) nm (log ϵ): 210 (4.20), 320 (3.77), 326 (3.68), 389 (4.01), HR-EIMS m/z :

350.1156 (M^+ , calcd. for $C_{21}H_{18}O_5$: 350.1154), EIMS m/z (rel. int. %): 350 (M^+ , 38), 318 (100), 300 (64), ^1H - and ^{13}C -NMR: see Table 8 (p. 64), Crystal data: $C_{85}H_{82.78}O_{24.39}$, space group $P2_1$ (#4), $a = 8.4841$ (6) Å, $b = 35.0879$ (6) Å, $c = 12.7693$ (9) Å, $\beta = 109.561$ (8) °, $V = 3581.9$ (4) Å³, $Z = 2$, $D_{calc} = 1.386$ g/cm³, $R1 = 0.0847$, $wR2 = 0.2310$, Flack parameter = 0.0 (2), CCDC 784645

HT-6: hypoxylonol A (**28**)

Yellow powder, mp: 111-113°C, $[\alpha]_D^{21} -43.6^\circ$ ($c = 0.30$, acetone), IR ν_{max} (KBr) cm^{-1} : 3375, 1630, 1460, 1360, 1230, 1060, 810, UV λ_{max} (acetone) nm ($\log \epsilon$): 210 (4.10), 318 (3.80), 326 (3.71), 388 (4.09), HR-EIMS m/z : 364.1307 (M^+ , calcd. for $C_{22}H_{20}O_5$: 364.1311), EIMS m/z (rel. int. %): 364 (M^+ , 30), 318 (100), 300 (53), ^1H - and ^{13}C -NMR: see Table 9 (p. 67)

HT-7: hypoxylonol G (**29**)

Yellow powder, $[\alpha]_D^{27} -129.1^\circ$ ($c = 0.15$, acetone), IR ν_{max} (ATR) cm^{-1} : 3367, 1629, 1456, 1224, 1039, UV λ_{max} (MeOH) nm ($\log \epsilon$): 206 (4.23), 228 (4.19), 249 (4.17), 293 (4.12), 390 (3.94), HR-FABMS (pos.) m/z : 321.1132 ($[M+H]^+$, calcd. for $C_{20}H_{17}O_4$: 321.1127), FABMS (pos.) m/z : 321 ($[M+H]^+$), 303, ^1H - and ^{13}C -NMR: see Table 10 (p. 71)

HT-8: truncatone (**7**)

Yellow platelet from $CHCl_3$, mp: 205-207°C, $[\alpha]_D^{27} -184.4^\circ$ ($c = 0.60$,

CHCl₃), IR $\nu_{\max}$ (ATR) cm⁻¹: 3333, 2972, 1643, 1613, 1452, 1342, 1202, 1165, UV $\lambda_{\max}$ (MeOH) nm (log ϵ): 205 (4.43), 242 (4.33), 269 (4.16), 288 (4.15), 304 (4.15), 402 (4.25), HR-FABMS (pos.) m/z : 319.0965 ([M+H]⁺, calcd. for C₂₀H₁₅O₄: 319.0670), FABMS (pos.) m/z : 319 ([M+H]⁺), ¹H- and ¹³C-NMR: see Table 11 (p. 74), Crystal data: C₂₀H₁₄O₄, space group *P*2₁ (#4), *a* = 8.8552 (2) Å, *b* = 7.0007 (2) Å, *c* = 12.6095 (3) Å, β = 107.0542 (7) °, *V* = 705.12 (3) Å³, *Z* = 2, *D_{calc}* = 1.499 g/cm³, *R*1 = 0.0369, *wR*2 = 0.0896, Flack parameter = 0.0 (2)

HT-9: hypoxylonol H (**30**)

Yellow solid, $[\alpha]_{\text{D}}^{19}$ -95.4° (*c* = 0.30, MeOH), IR $\nu_{\max}$ (ATR) cm⁻¹: 3414, 1710, 1620, 1454, 1366, 1226, 1040, UV $\lambda_{\max}$ (MeOH) nm (log ϵ): 205 (4.28), 244 (4.22), 292 (4.12), 384 (3.96), HR-FABMS (pos.) m/z : 449.1596 ([M+H]⁺, calcd. for C₂₆H₂₅O₇: 449.1600), FABMS (pos.) m/z : 449 ([M+H]⁺), 319, 301, FABMS (neg.) m/z : 447 ([M-H]⁻), 335, 318, ¹H- and ¹³C-NMR: see Table 12 (p. 80)

Me-HT-9: 4-*O*-methly hypoxylonol H

Yellow needle, mp: 182-184°C, $[\alpha]_{\text{D}}^{19}$ -90.9° (*c* = 0.15, MeOH), IR $\nu_{\max}$ (ATR) cm⁻¹: 3419, 2979, 2929, 2898, 1733, 1646, 1466, 1390, 1250, 1046, UV $\lambda_{\max}$ (MeOH) nm (log ϵ): 203 (4.01), 239 (3.96), 248 (3.93), 264 (3.86), 290 (3.84), HR-FABMS (pos.) m/z : 463.1759 ([M+H]⁺, calcd. for C₂₇H₂₇O₇: 463.1757), FABMS (pos.) m/z : 463 ([M+H]⁺), 347, 333, 315, ¹H-NMR (CD₃OD) δ : 5.41 (1H, ddd, *J* =

11.2, 5.3, 3.2 Hz, H-1), 1.78 (1H, dt, $J = 11.2, 2.7$ Hz, H-2), 2.57 (1H, ddd, $J = 13.3, 5.3, 3.4$ Hz, H-2), 5.08 (1H, t, $J = 3.0$ Hz, H-3), 6.85 (1H, d, $J = 8.2$ Hz, H-5), 7.39 (1H, dd, $J = 8.2, 0.7$ Hz, H-6), 4.02 (1H, ddd, $J = 13.7, 5.3, 3.2$ Hz, H-6b), 2.29 (1H, dd, $J = 16.3, 13.7$ Hz, H-7), 3.37 (1H, dd, $J = 16.5, 5.5$ Hz, H-7), 6.83 (1H, dd, $J = 7.8, 1.1$ Hz, H-10), 7.51 (1H, t, $J = 7.8$ Hz, H-11), 7.43 (1H, dd, $J = 7.8, 1.1$ Hz, H-12), 3.87 (3H, s, 4-*O*-CH₃), 2.60 (2H, d, $J = 3.6$ Hz, H-3'), 4.17 (1H, m, H-4'), 1.75 (1H, dt, $J = 11.7, 2.7$ Hz, H-5'), 2.35 (1H, td, $J = 14.4, 3.2$ Hz, H-5'), 4.79 (1H, m, H-6'), 1.39 (3H, d, $J = 6.4$ Hz, 6'-CH₃), ¹³C-NMR (CD₃OD) δ : 64.5 (CH, C-1), 41.3 (CH₂, C-2), 68.3 (CH, C-3), 120.5 (C, C-3a), 157.8 (C, C-4), 109.3 (CH, C-5), 124.8 (CH, C-6), 138.3 (C, C-6a), 50.4 (CH, C-6b), 44.0 (CH₂, C-7), 206.6 (C, C-8), 116.2 (C, C-8a), 163.6 (C, C-9), 117.4 (CH, C-10), 137.1 (CH, C-11), 122.4 (CH, C-12), 139.3 (C, C-12a), 139.4 (C, C-12b), 138.2 (C, C-12c), 146.1 (C, C-12d), 56.2 (CH₃, 4-*O*-CH₃), 173.7 (C, C-2'), 37.0 (CH₂, C-3'), 68.9 (CH, C-4'), 35.4 (CH₂, C-5'), 74.7 (CH, C-6'), 21.8 (CH₃, 6'-CH₃), Crystal data: C₂₇H₂₆O₇, space group *P*2₁2₁2₁ (#19), $a = 7.8349$ (2) Å, $b = 12.2530$ (3) Å, $c = 22.8812$ (5) Å, $V = 2196.62$ (7) Å³, $Z = 4$, $D_{calc} = 1.398$ g/cm³, $R1 = 0.0290$, $wR2 = 0.0752$, Flack parameter = 0.00 (13)

HT-10: hypoxylonol I (**31**)

Yellow powder, $[\alpha]_D^{19} +78.1^\circ$ ($c = 0.32$, MeOH), IR ν_{max} (ATR) cm⁻¹: 3456, 3236, 2968, 1716, 1623, 1456, 1373, 1233, 1044, UV λ_{max} (MeOH) nm (log ϵ): 203 (3.66), 228 (3.53), 249 (3.58), 294 (3.44),

287 (3.34), HR-FABMS (pos.) m/z : 448.1522 (M^+ , calcd. for $C_{26}H_{24}O_7$: 488.1522), FABMS (pos.): 448 ($[M]^+$), 319, 301, FABMS (neg.) m/z : 447 ($[M-H]^-$), ^1H - and ^{13}C -NMR: see Table 13 (p. 85)

Me-HT-10: 4-*O*-methly hypoxylonol H

Yellow needle, IR ν_{max} (ATR) cm^{-1} : 3450, 1739, 1649, 1471, 1397, 1257, 1061, UV λ_{max} (MeOH) nm (log ϵ): 205 (4.02), 239 (3.94), 250 (3.94), 259 (3.87), 287 (3.80), HR-FABMS (pos.) m/z : 462.1677 ($[M]^+$, calcd. for $C_{27}H_{26}O_7$: 462.1679), FABMS (pos.) m/z : 501 ($[M+K]^+$), 462 ($[M]^+$), 347, 333, 315, ^1H -NMR (CD_3OD) δ : 5.56 (1H, t, $J = 2.8$ Hz, H-1), 1.95 (1H, m, H-2), 2.69 (1H, m, H-2), 5.12 (1H, t, $J = 2.8$ Hz, H-3), 6.89 (1H, d, $J = 8.3$ Hz, H-5), 7.43 (1H, d, $J = 8.3$ Hz, H-6), 4.07 (1H, dd, $J = 13.7, 5.6$ Hz, H-6b), 2.42 (1H, dd, $J = 16.3, 13.7$ Hz, H-7), 3.39 (1H, dd, $J = 16.3, 5.6$ Hz, H-7), 6.86 (1H, dd, $J = 7.7, 1.5$ Hz, H-10), 7.56 (1H, t, $J = 7.7$ Hz, H-11), 7.51 (1H, dd, $J = 7.7, 1.5$ Hz, H-12), 3.89 (3H, s, 4-*O*-CH₃), 2.75 (1H, m, H-3'), 2.77 (1H, m, H-3'), 4.34 (1H, m, H-4'), 1.66 (1H, ddd, $J = 14.5, 11.4, 2.8$ Hz, H-5'), 2.28 (1H, br d, $J = 14.5$ Hz, H-5'), 4.85 (1H, m, H-6'), 1.36 (3H, d, $J = 6.4$ Hz, 6'-CH₃), ^{13}C -NMR (CD_3OD) δ : 63.1 (CH, C-1), 40.9 (CH₂, C-2), 67.4 (CH, C-3), 120.3 (C, C-3a), 157.9 (C, C-4), 116.4 (CH, C-5), 120.1 (CH, C-6), 137.2 (C, C-6a), 50.1 (CH, C-6b), 43.7 (CH₂, C-7), 206.5 (C, C-8), 116.3 (C, C-8a), 163.6 (C, C-9), 118.0 (CH, C-10), 138.1 (CH, C-11), 118.6 (CH, C-12), 139.5 (C, C-12a), 139.6 (C, C-12b), 137.0 (C, C-12c), 144.5 (C, C-12d), 56.4 (CH₃, 4-*O*-CH₃), 173.5 (C, C-2'), 36.5 (CH₂, C-3'), 69.4 (CH, C-4'), 35.2 (CH₂, C-5'),

74.8 (CH, C-6'), 21.6 (CH₃, 6'-CH₃), Crystal data: C₂₇H₂₆O₈, space group *P6₃* (#173), *a* = 24.250 (4) Å, *c* = 7.874 (1) Å, *V* = 4010 (1) Å³, *Z* = 6, *D_{calc}* = 1.189 g/cm³, *R*1 = 0.0712, *wR*2 = 0.2424, Flack parameter = 0.1 (4)

HT-11: hypoxylonol J (**32**)

Yellow solid, $[\alpha]_{\text{D}}^{16} +152.5^{\circ}$ (*c* = 0.16, MeOH), IR ν_{max} (ATR) cm⁻¹: 3343, 2931, 1732, 1621, 1455, 1363, 1226, 1060, UV λ_{max} (MeOH) nm (log ϵ): 203 (4.25), 249 (4.20), 292 (4.09), 386 (3.95), HR-FABMS (pos.) *m/z*: 411.1437 ([M+H]⁺, calcd. for C₂₃H₂₃O₇: 411.1444), FABMS (pos.) *m/z*: 411 ([M+H]⁺), 319, FABMS (neg.) *m/z*: 409 ([M-H]⁻), ¹H- and ¹³C-NMR: see Table 14 (p. 89)

HT-12: hypoxylonol K (**33**)

Yellow platelet from *n*-hexane-CHCl₃-MeOH, mp: 170-172°C, $[\alpha]_{\text{D}}^{16} -163.1^{\circ}$ (*c* = 0.16, MeOH), IR ν_{max} (ATR) cm⁻¹: 3335, 2925, 1616, 1457, 1362, 1227, 1060, UV λ_{max} (MeOH) nm (log ϵ): 203 (4.34), 248 (4.28), 292 (4.17), 387 (4.03), 287 (3.34), HR-FABMS (pos.) *m/z*: 411.1450 (M⁺, calcd. for C₂₃H₂₃O₇: 411.1444), FABMS (pos.): 411 ([M+H]⁺), 319, 301, FABMS (neg.) *m/z*: 409 ([M-H]⁻), ¹H- and ¹³C-NMR: see Table 15 (p. 93), Crystal data: C₄₇H₄₄O₁₅, space group *P2₁* (#4), *a* = 8.0388 (2) Å, *b* = 21.7002 (4) Å, *c* = 22.7442 (4) Å, β = 91.1320 (7)°, *V* = 3966.8 (2) Å³, *Z* = 4, *D_{calc}* = 1.421 g/cm³, *R*1 = 0.0616, *wR*2 = 0.1717, Flack parameter = 0.00 (18)

第二章 血管新生阻害作用の検討

第一節 細胞選択性

HUAEC 増殖阻害試験

- 1) コラーゲンコートをした 96-well plate に, 5%FBS-EGM-2 Bullet Kit を用いて第 7 継代の HUAEC を 3000 cells/well の細胞密度で播種し, 37°C, 5% CO₂ の条件下 3 時間培養した.
- 2) 培養後, 培地を除去し, f. c. 1% FBS-EBM-2 を用いて 37°C, 5% CO₂ の条件下 21 時間培養した.
- 3) 培養後, 1 nM の VEGF と, f. c. 1% FBS-EBM-2 を用いて各濃度に調整した sample を添加し, 37°C, 5% CO₂ の条件下 72 時間培養した.
- 4) 培養後, Cell Counting Kit-8 を各 well に 10 μ L ずつ添加し, 37 °C, 5% CO₂ の条件下 2 時間培養した.
- 5) 培養後, 450 nm における吸光度を測定した.

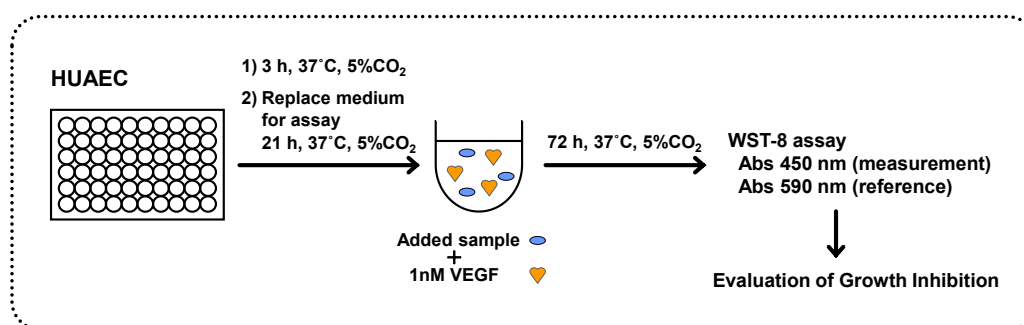


Fig. 74. HUAEC Growth Inhibition Assay Method

Sample の細胞増殖阻害活性は，VEGF のみを添加した場合の細胞生存率を control とし，control に対する sample の IC_{50} ($\mu\text{g/mL}$) として求めた．また，positive control として，doxorubicin を用いた．なお本試験は，単離化合物に対して 9 濃度， $n = 6$ で行った．

HeLa 細胞増殖阻害試験

- 1) 96-well plate に, 10%FBS-MEM を用いて HeLa 細胞を 2000 cells/well の細胞密度で播種し, 37°C, 5% CO₂ の条件下 24 時間培養した.
- 2) 培養後, 10% FBS-MEM を用いて各濃度に調整した sample を添加し, 37°C, 5% CO₂ の条件下 72 時間培養した. Sample は予め DMSO に溶解し, 1 mg/100 µL となるように調整した.
- 3) 培養後, 10%FBS-MEM を吸引除去し, MTT 試薬を添加し, 37°C, 5% CO₂ の条件下 4 時間培養した.
- 4) 培養後, MTT 試薬を吸引除去し, 10% 1N HCl-isopropanol を添加し, 15 分後 570 nm における吸光度を測定した.

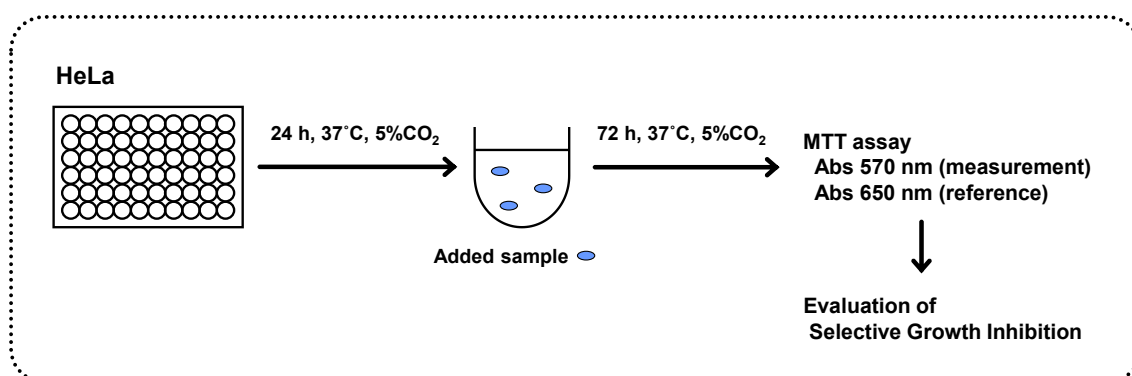


Fig. 75. HeLa Growth Inhibition Assay Method

Sample の細胞増殖阻害活性は, sample を添加していない場合の細胞生存率を control とし, control に対する sample の IC₅₀ (µg/mL) として求めた. また, positive control として, doxorubicin を用いた.

NHDF 細胞増殖阻害試験

- 1) 96-well plate に, 10% FBS- α -MEM を用いて, 第 5 継代の NHDF を 3000 cells/well の細胞密度で播種し, 37°C, 5% CO₂ の条件下 24 時間培養した.
- 2) 培養後, 10% FBS- α -MEM を用いて各濃度に調整した sample を添加し, 37°C, 5% CO₂ の条件下 72 時間培養した. Sample は予め DMSO に溶解し, 1 mg/100 μ L となるように調整した.
- 3) 培養後, 10%FBS- α -MEM を吸引除去し, MTT 試薬を添加して, 37°C, 5% CO₂ の条件下 4 時間培養した.
- 4) 培養後, MTT 試薬を吸引除去し, 10% 1N HCl-isopropanol を添加し, 15 分後 570 nm における吸光度を測定した.

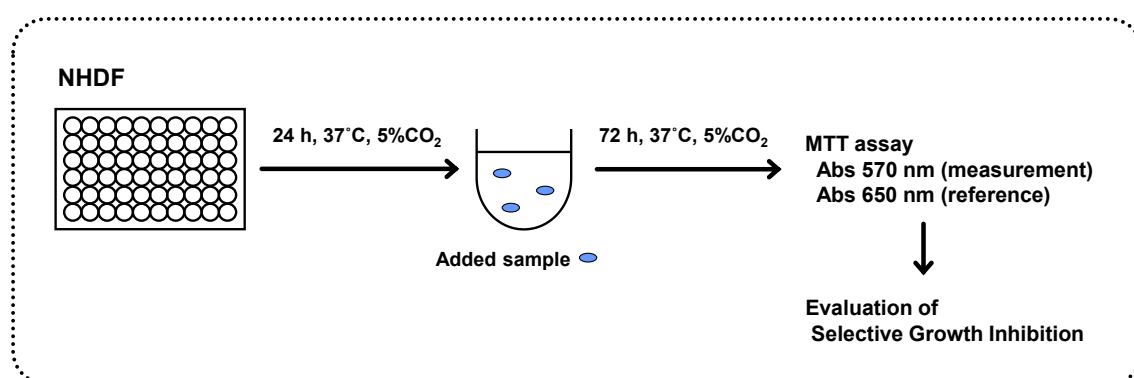


Fig. 76. NHDF Growth Inhibition Assay Method

Sample の細胞増殖阻害活性は, sample を添加していない場合の細胞生存率を control とし, control に対する sample の IC₅₀ (μ g/mL) として求めた. また, positive control として, doxorubicin を用いた.

第二節 細胞毒性試験

試験法

- 1) コラーゲンコートをした 96-well plate に, EGM-2 Bullet Kit を用いて第 4 継代の HUVEC を 3000 cells/well の細胞密度で播種し, 37°C, 5% CO₂ の条件下 3 時間培養した.
- 2) 培養後, 培地を除去し, f. c. 1% FBS-EBM-2 を用いて 37 °C, 5% CO₂ の条件下 21 時間培養した.
- 3) 培養後, 1 nM の VEGF と, f. c. 1% FBS-EBM-2 を用いて各濃度に調整した sample を添加し, 37°C, 5% CO₂ の条件下 72 時間培養した. Sample は予め DMSO に溶解し, 1 mg/100 µL となるように調整した.
- 4) 71 時間培養後, Maximum LDH release のウェルに Lysis Solution を 10 µL ずつ加え, 37°C, 5% CO₂ の条件下 1 時間培養した.
- 5) 培養後, 250×*g* で 4 分間遠心分離し, 上清を 50 µL ずつアッセイ用の 96-well plate に移した.
- 6) Assay Buffer で溶解した Substrate Mix を各ウェルに 50 µL ずつ加え, 遮光下室温で 30 分間静置した.
- 7) 各ウェルに Stop Solution を 50 µL ずつ加え, 490 nm における吸光度を測定した.

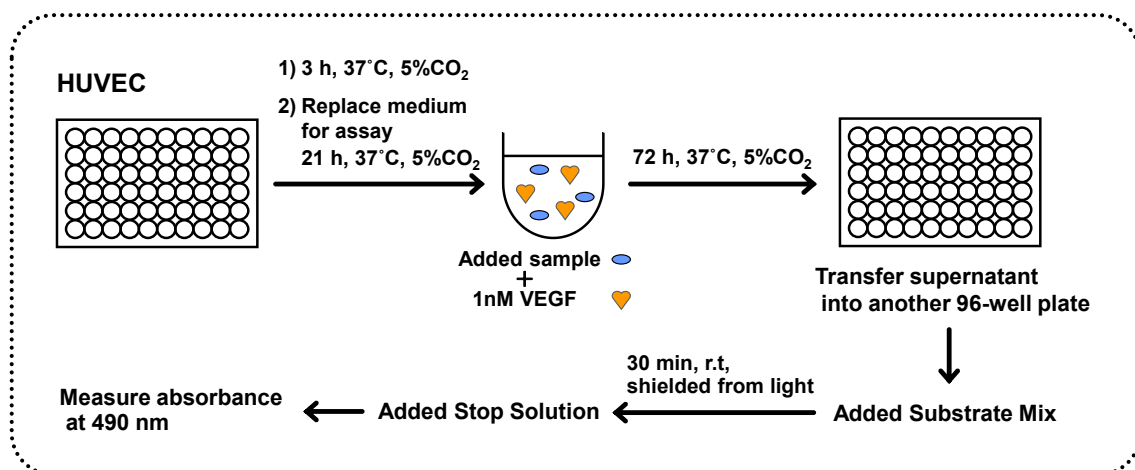


Fig. 77. Cytotoxicity Assay Method

Sample の細胞毒性活性は、Maximum LDH release の LDH 活性を control とし、control に対する sample の活性をパーセントとして求めた。

$$\% \text{細胞毒性} = \frac{\text{Experimental LDH} - \text{VEGF(-) LDH (OD}_{490})}{\text{Maximum LDH} - \text{VEGF (-) LDH (OD}_{490})}$$

第三節 HUVEC 遊走阻害試験

試験法

- 1) 0.2%FBS-EBM を用いて HUVEC を 5×10^4 cells/insert の細胞濃度に調製した。
- 2) 24-well plate の各ウェルに誘導因子として f. c. 20 ng/mL の VEGF を含む 0.2%FBS-EBM を加えた。
- 3) 24-well plate にインサートをセットし，インサートに細胞浮遊液および 0.2%FBS-EBM で各濃度に調製した sample を加えた。
- 4) 37°C，5% CO₂ の条件下 22 時間培養後，インサート内側のメンブレンを綿棒で拭い，非遊走細胞を除去した。
- 5) インサートの外側の遊走細胞を Diff-Quik で固定，染色後，一昼夜風乾した。
- 6) インサートからメンブレンを切り取り，顕微鏡下写真撮影し，遊走細胞数を計数した。

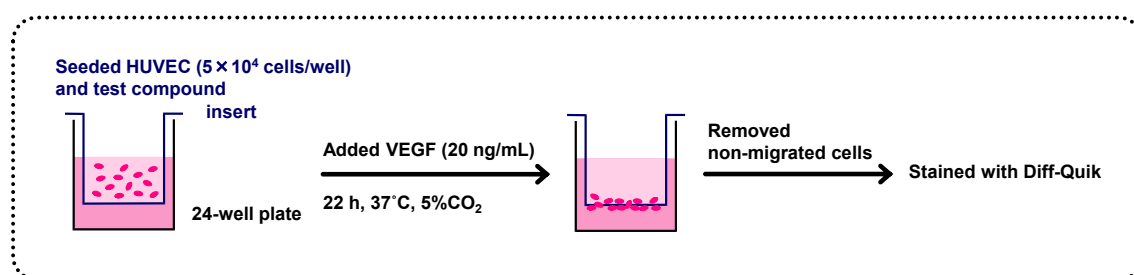


Fig. 78. HUVEC Migration Assay Method

Sample の HUVEC 遊走阻害活性は, DMSO を control として VEGF 存在下遊走した平均細胞数および VEGF 非存在下遊走した平均細胞数を算出し, その値に対する阻害率として求めた.

$$\text{HUVEC 遊走阻害率} = \{1 - (C - A)/(B - A)\} \times 100$$

A : VEGF 非存在下遊走した平均細胞数

B : VEGF 存在下遊走した平均細胞数

C : VEGF および sample 存在下遊走した平均細胞数

第四節 HUVEC 管腔形成阻害試験

本試験は，クラボウ社の血管新生キットを用いて行った．

試験法

- 1) 24-well plate に HUVEC と NHDF を共培養し，10 ng/mL の VEGF と各濃度に調製した sample を加えた．
- 2) 37°C，5% CO₂ の条件下 11 日間培養した．4 日，7 日および 9 日後には各ウェルの培地を交換した．
- 3) 培養後，培地を除去して -20°C の 70% EtOH で細胞層を固定した．
- 4) 1% BSA-PBS で洗浄後，マウス抗ヒト CD31 抗体を添加し，37°C で 60 分間インキュベートした．
- 5) 1% BSA-PBS で洗浄後，Goat anti-mouse IgG AlkP Conjugate を添加し，37°C で 60 分間インキュベートした．
- 6) 1% BSA-PBS で洗浄後，マウス抗ヒト CD31 抗体を添加し，37°C で 60 分間インキュベートした．
- 7) miliQ 水で洗浄後，BCIP/NBT 溶液を添加し，37°C で 10 分間インキュベートした．
- 8) miliQ 水で洗浄後，一昼夜風乾し，顕微鏡下写真撮影した．
- 9) 管腔の分岐点数を計数し，長さを測定した．管腔の長さは VEGF 添加条件に対するパーセントで表した．

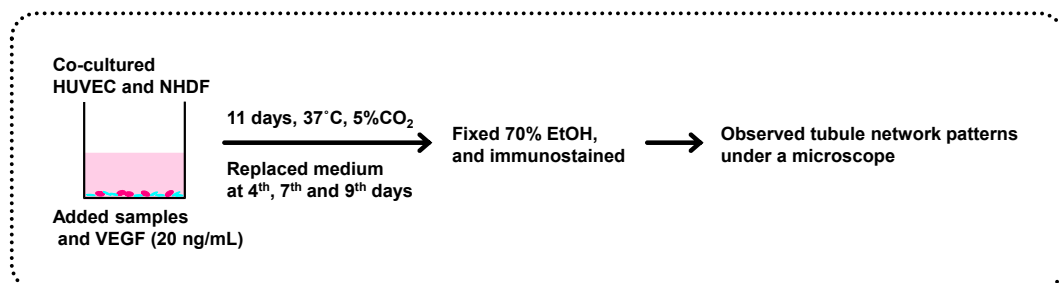


Fig. 79. HUVEC Tubule Formation Assay Method

第三章 標的分子の探索

第一節 KDR リン酸化阻害試験

本試験はタカラ社の Universal Tyrosine Kinase Assay Kit を用いて行った。

試験法

- 1) 底面にチロシンペプチドが固相化された 96-well plate に, Kinase 反応用緩衝液, KDR および sample を加えた。
- 2) 40 mM ATP-2Na を加えて攪拌後, 37°C で 2 時間反応させた。
- 3) 反応後, ウェル内の溶液を除去し, 0.1% Tween-PBS で 4 回洗浄した。
- 4) ブロッキング溶液を添加し, 37°C で 30 分間反応させた。
- 5) 反応後, ウェル内の溶液を除去し, 抗リン酸化 Tyrosine-POD 標識抗体を加え, 37°C で 30 分間反応させた。
- 6) 反応後, ウェル内の溶液を除去し, 0.1% Tween-PBS で 4 回洗浄した。
- 7) 発色基質 (TMBZ) を添加し, 室温で 5 分間反応させた。
- 8) 反応後, 1N H₂SO₄ を加えて反応を停止させ, 450 nm における吸光度を測定した。

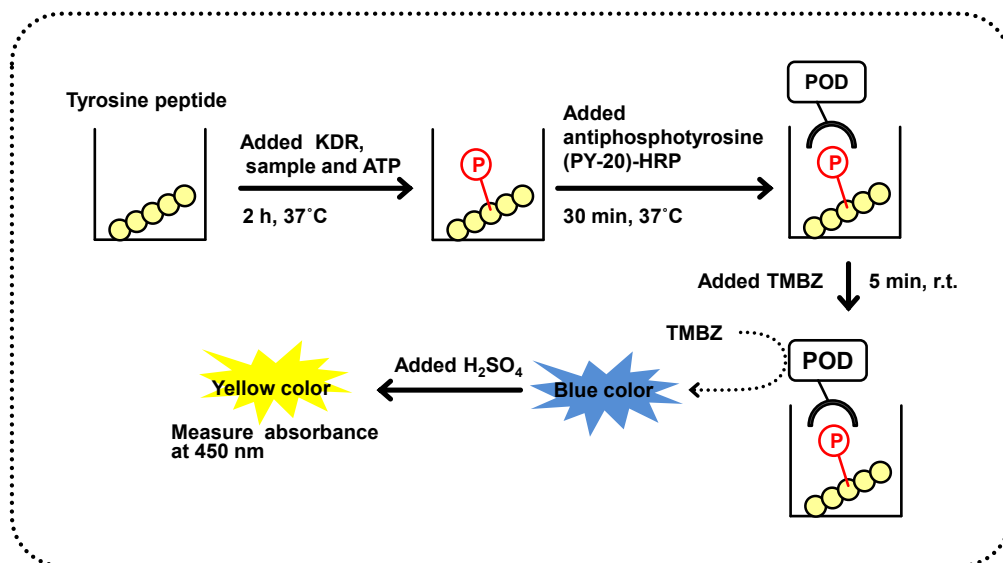


Fig. 80. KDR Kinase Inhibitory Assay Method

Sample の KDR リン酸化阻害活性は，10%DMSO のみで反応させたウェルの吸光度を control とし，control に対する sample を添加したウェルの吸光度の比をパーセントとして求めた．

$$\text{KDR リン酸化阻害率 \%} = \frac{\text{10\% DMSO 添加ウェルの吸光度 (OD}_{450}\text{)}}{\text{sample 添加ウェルの吸光度 (OD}_{450}\text{)}}$$

また，positive control として選択的 KDR チロシンキナーゼ阻害剤である Ki8751 を用いた．

第二節 cDNA マイクロアレイ解析を用いた標的分子の探索

HUVEC からの total RNA の抽出

本操作は miRNeasy Mini を用いて行った．

- 1) コラーゲンコートをした 10 ϕ dish に 3.5×10^4 cells/cm² の細胞密度で HUVEC を播種し, 0.2%FBS-EBM で 24 時間前培養した．
- 2) 1 nM の VEGF と 20 μ M の sample を加え, 24 時間培養した．
- 3) 培養後, 培地を吸引除去し, QIAzol Lysis Reagent 700 μ L を加え, スクレイパーで細胞層を剥がした．
- 4) マイクロピペットでピペッティングして細胞塊を破碎後, QIAshredder に移し室温, 15000 rpm で 2 分間遠心分離してホモジネートした．
- 5) 5 分間静置後, CHCl₃ 140 μ L を加え, 15 秒間振り混ぜた．
- 6) 2 分間静置後, 4°C, 12000 rpm で 15 分間遠心分離した．
- 7) 上層 350 μ L を新たなチューブに移し, 1.5 倍量の 100%EtOH を加えピペッティングで混和した．
- 8) 直ちに RNeasy Mini spin column に移し, 室温, 10000 rpm で 15 秒間遠心分離した．
- 9) 濾液を捨てて RWT バッファー 700 μ L を加え, 室温, 10000 rpm で 15 秒間遠心分離した．
- 10) 濾液を捨てて RPE バッファー 500 μ L を加え, 室温, 10000 rpm で 15 秒間遠心分離した．
- 11) 濾液を捨てて RPE バッファー 700 μ L を加え, 室温, 10000 rpm で 2 分間遠心分離し, カラムを乾燥させた．
- 12) カラムに新たなチューブを取り付け, 室温, 15000 rpm で 1 分間

遠心分離し，カラムを完全に乾燥させた．

- 13) カラムに新たなチューブを取り付け，RNase-free water 30 μ L を加え，室温，10000 rpm で 1 分間遠心分離した．
- 14) さらに RNase-free water 30 μ L を加え，同様に遠心分離し，RNA を溶出させた．

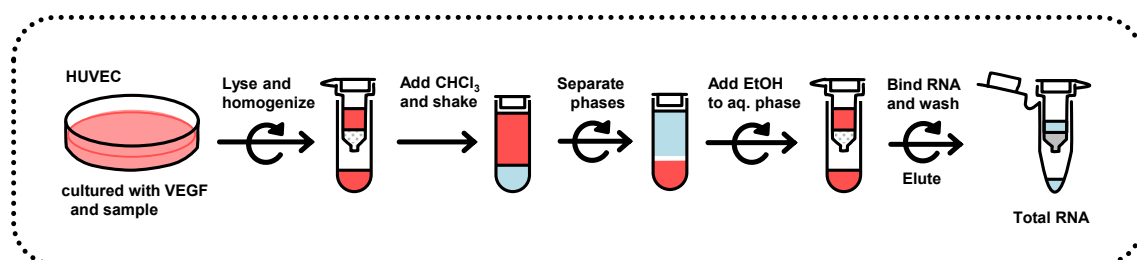


Fig. 81. Method of RNA Extraction

cDNA マイクロアレイ解析

cDNA マイクロアレイは TORAY 社のヒト全遺伝子型 DNA チップ Human Oligo chip 25k を用いて行った．また，本操作は TORAY 社に委託した．

- 1) Sample 添加，非添加条件の total RNA 各 1 μ g を用いて RNA 増幅を行った．
- 2) 増幅 RNA 各 10 μ g をそれぞれ Cy3, Cy5 で標識後，精製した．
- 3) 標識 RNA 各 1 μ g を混和して 37°C で 16 時間ハイブリダイゼーションを行った．
- 4) ハイブリダイゼーションが終了したチップを洗浄後，スキャナーを用いて画像を取得し，数値化した．
- 5) 数値データからバックグラウンド値を減算した後，グローバルノーマライズ（Cy3/Cy5 ratio の中央値を 1 に調整）により正規化した．

Sample 非添加条件に比べ，添加条件において 1.5 倍以上の変化が見られた遺伝子を，発現変動のあった遺伝子と定義した．パスウェイ解析は DAVID (<http://david.abcc.ncifcrf.gov/summary.jsp>) および KEGG (<http://www.genome.jp/kegg/pathway.html>) を使用した．

第三節 リアルタイム RT-PCR

- 1) SuperScript VILO MasterMix 10 μL および 6.25 μg 相当の RNA を氷上で混和し, RNase-free water で合計 50 μL になるようにメスアップした.
- 2) 混和後, 室温で 10 分間静置し, その後 42°C で 60 分間インキュベートした.
- 3) 続いて 85°C で 5 分間インキュベートし, cDNA を合成した.
- 4) cDNA を miliQ 水で 50 ng/ μL に希釈した.
- 5) PCR plate の各ウェル当たり Taqman Universal (PCR) Master Mix 10 μL , Taqman Assay 1 μL および miliQ 水 7 μL を加えて混和し, reaction mix を作製した.
- 6) 各ウェルに 2 μL の cDNA (100 ng 相当量) を加えた.
- 7) 50°C で 2 分間インキュベート後, 95°C で 10 分間インキュベートし, 続いて 95°C で 15 秒間, 60°C で 1 分間のインキュベートを 40 サイクル行い, 反応させた.

ハウスキーピング遺伝子として 18s ribosomal RNA を用いた. 解析は $\Delta\Delta\text{Ct}$ 法で行った.

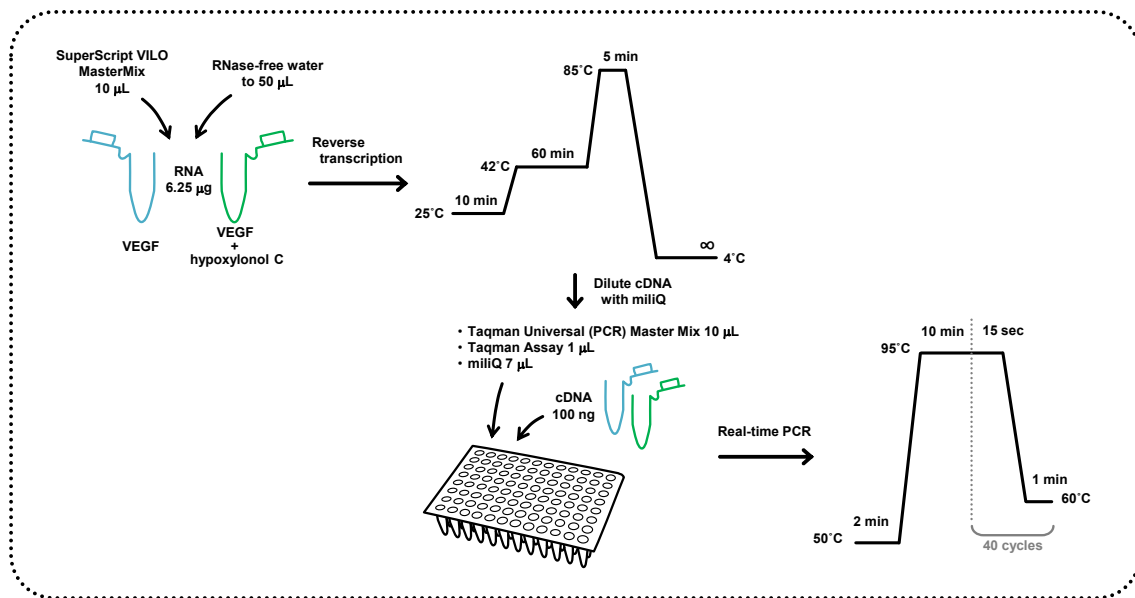


Fig. 82. Method of Real-time RT-PCR

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平成 26 年 3 月

付表

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10628	Thioredoxin-interacting protein	221	39	0.18
9077	GTP-binding protein Di-Ras3	98	19	0.19
3294	Estradiol 17-beta-dehydrogenase 2	141	33	0.23
10365	Krueppel-like factor 2	193	45	0.23
54893	Myotubularin-related protein 10	344	95	0.28
30845	EH domain-containing protein 3	259	73	0.28
71	Actin, cytoplasmic 2 (Gamma-actin)	51494	15244	0.30
652	Bone morphogenetic protein 4 Precursor	722	221	0.31
168544	Zinc finger protein 467	16	5	0.31
56944	Olfactomedin-like protein 3 Precursor	30	10	0.34
1031	Cyclin-dependent kinase 4 inhibitor C (p18-INK4c)	54	18	0.34
100288907	-	14	5	0.34
8470	Sorbin and SH3 domain-containing protein 2	270	92	0.34
4811	Nidogen-1 Precursor (NID-1)(Entactin)	16	6	0.34
139170	WD repeat-containing protein 40B	84	29	0.34
727838	-	94	33	0.35
400360	Putative uncharacterized protein C15orf54	171	60	0.35
57088	Phospholipid scramblase 4	186	67	0.36
-	-	129	47	0.37
144165	Prickle-like protein 1	288	106	0.37
100291998	-	24	9	0.37
51316	Placenta-specific gene 8 protein	13	5	0.37
9358	Integrin beta-like protein 1 Precursor	80	30	0.37
9052	Retinoic acid-induced protein 3	84	32	0.38
3855	Keratin, type II cytoskeletal 7	741	280	0.38
10161	Oleoyl-L-alpha-lysophosphatidic acid receptor	583	224	0.38
55723	Histone chaperone ASF1B	177	69	0.39
-	Tescalcin	16	6	0.39
100131275	Nervous system abundant protein 11	52	21	0.39
3306	Heat shock-related 70 kDa protein 2	97	38	0.39
2034	Endothelial PAS domain-containing protein 1	172	69	0.40
114904	Complement C1q tumor necrosis factor-related protein 6 Precursor	67	27	0.40
253738	Transcription factor COE3	22	9	0.41
7042	Transforming growth factor beta-2 Precursor	39	16	0.41
7052	Protein-glutamine gamma-glutamyltransferase 2	503	210	0.42
124976	Protein spinster homolog 2	36	15	0.42
-	Cartilage acidic protein 1 Precursor	61	26	0.43
3563	Interleukin-3 receptor subunit alpha Precursor	289	124	0.43
284417	Transmembrane protein LOC284417 Precursor	9	4	0.43
3383	Intercellular adhesion molecule 1 Precursor	28	12	0.44
57574	E3 ubiquitin-protein ligase MARCH4 Precursor	124	54	0.44
222223	UPF0577 protein KIAA1324-like Precursor	204	90	0.44
135	Adenosine receptor A2a	54	24	0.44
-	cDNA, FLJ92342, Homo sapiens apelin (APLN), mRNA	1553	687	0.44
284439	Solute carrier family 25 member 42	11	5	0.44
9754	StAR-related lipid transfer protein 8	80	36	0.45
144501	Keratin, type II cytoskeletal 80	35	16	0.45
10129	Protein furry homolog	78	35	0.45
155038	GTPase IMAF family member 8	416	186	0.45
10112	Kinesin-like protein KIF20A (Rabkinesin-6)	234	105	0.45
4208	Myocyte-specific enhancer factor 2C	104	47	0.45
-	Coiled-coil domain-containing protein 131	103	46	0.45
283849	Uncharacterized protein KIAA0895-like	25	11	0.45

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1827	Calciopressin-1	421	190	0.45
11259	Filamin A-interacting protein 1-like	392	177	0.45
2	Alpha-2-macroglobulin Precursor	567	256	0.45
-	Cell division cycle-associated protein 2	41	19	0.45
3140	Major histocompatibility complex class I-related gene protein Precursor	24	11	0.45
23613	Protein kinase C-binding protein 1	813	370	0.46
100133565	E3 ubiquitin-protein ligase UHRF1	165	75	0.46
6558	Solute carrier family 12 member 2	334	154	0.46
157570	N-acetyltransferase ESCO2	72	33	0.46
862	Protein CBFA2T1	48	22	0.46
57477	Protein Shroom4	33	15	0.46
51203	Nucleolar and spindle-associated protein 1	228	105	0.46
-	Cytoplasmic aconitate hydratase	169	78	0.46
5272	Serpin B9	282	131	0.46
55214	Prolyl 3-hydroxylase 2 Precursor	78	36	0.46
115330	Probable G-protein coupled receptor 146	52	24	0.47
91768	CDK5 and ABL1 enzyme substrate 1	132	62	0.47
4128	Amine oxidase [flavin-containing] A	48	23	0.47
3561	Cytokine receptor common gamma chain Precursor	9	4	0.47
6616	Synaptosomal-associated protein 25	14	7	0.47
84709	Ovary-specific acidic protein	165	78	0.47
392255	Growth/differentiation factor 6 Precursor	29	14	0.47
-	Fanconi anemia-associated protein of 100 kDa	31	15	0.47
1295	Collagen alpha-1(VIII) chain Precursor (Endothelial collagen)	512	243	0.47
-	Rap guanine nucleotide exchange factor 4	59	28	0.47
-	Leucine zipper putative tumor suppressor 1	8	4	0.48
100131504	-	9	4	0.48
79843	Protein FAM124B	334	159	0.48
420	Ecto-ADP-ribosyltransferase 4 Precursor	82	39	0.48
5205	Probable phospholipid-transporting ATPase IC	326	155	0.48
57162	Protein pellino homolog 1	140	67	0.48
-	Calpain-11	9	4	0.48
84059	G-protein coupled receptor 98 Precursor	31	15	0.48
890	Cyclin-A2 (Cyclin-A)	327	157	0.48
6483	CMP-N-acetylneuraminate-beta-galactosamide-alpha-2,3-sialyltransferase	31	15	0.48
302	Annexin A2	26947	12985	0.48
4173	DNA replication licensing factor MCM4	219	105	0.48
6790	Serine/threonine-protein kinase 6	106	51	0.48
29128	E3 ubiquitin-protein ligase UHRF1	177	86	0.48
-	Stearoyl-CoA desaturase 5	109	53	0.48
3422	Isopentenyl-diphosphate Delta-isomerase 1	1434	697	0.49
8434	Reversion-inducing cysteine-rich protein with Kazal motifs Precursor	63	31	0.49
-	Fibroblast growth factor 16 Fragment	135	66	0.49
5527	Serine/threonine-protein phosphatase 2A 56 kDa regulatory subunit gamma isoform	30	15	0.49
8309	Peroxisomal acyl-coenzyme A oxidase 2	8	4	0.49
64151	Condensin complex subunit 3	115	56	0.49
79966	Stearoyl-CoA desaturase 5	102	50	0.49
100292867	-	874	433	0.50
26586	Cytoskeleton-associated protein 2	113	56	0.50

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
11080	DnaJ homolog subfamily B member 4	721	359	0.50
8650	Protein numb homolog	153	77	0.50
100292266	-	259	130	0.50
100133405	-	333	168	0.50
9123	Monocarboxylate transporter 4	307	155	0.50
-	Absent in melanoma 1 protein	65	33	0.51
140576	Protein S100-A16	5964	3025	0.51
254228	Protein FAM26E	115	58	0.51
2313	Friend leukemia integration 1 transcription factor	201	102	0.51
3833	Kinesin-like protein KIFC1	138	70	0.51
221395	Probable G-protein coupled receptor 116 Precursor	151	77	0.51
79143	Membrane-bound O-acyltransferase domain-containing protein 7	12	6	0.51
29915	Host cell factor 2	7	4	0.51
151963	Uncharacterized protein C3orf59	71	36	0.51
5581	Protein kinase C epsilon type	347	178	0.51
27075	Tetraspanin-13	220	113	0.51
140609	Serine/threonine-protein kinase Nek7	58	30	0.51
4599	Interferon-induced GTP-binding protein Mx1	35	18	0.52
-	RAD51-associated protein 1	80	41	0.52
2799	N-acetylglucosamine-6-sulfatase Precursor	161	83	0.52
10219	Killer cell lectin-like receptor subfamily G member 1	35	18	0.52
-	Guanine nucleotide-binding protein G(i), alpha-2 subunit	3518	1823	0.52
100288570	-	18	9	0.52
22974	Targeting protein for Xklp2	274	142	0.52
100128186	-	8	4	0.52
3927	LIM and SH3 domain protein 1	107	56	0.52
55872	Lymphokine-activated killer T-cell-originated protein kinase	174	91	0.52
3638	Insulin-induced gene 1 protein	514	268	0.52
100293563	DC48	128	67	0.52
25924	Rab effector MyRIP	37	19	0.52
27063	Ankyrin repeat domain-containing protein 1	2143	1118	0.52
6678	SPARC Precursor	20068	10481	0.52
10266	Receptor activity-modifying protein 2 Precursor	62	32	0.52
56061	Ubiquitin domain-containing protein UBFD1	46	24	0.52
54443	Actin-binding protein anillin	39	21	0.53
80031	Semaphorin-6D Precursor	50	26	0.53
283316	Scavenger receptor cysteine-rich type 1 protein M160 Precursor	31	16	0.53
401944	Low-density lipoprotein receptor class A domain-containing protein 2 Precursor	55	29	0.53
8436	Serum deprivation-response protein	1225	644	0.53
79812	Multimerin-2 Precursor	975	513	0.53
100289082	-	7	4	0.53
990	Cell division control protein 6 homolog	146	77	0.53
27120	Dickkopf-like protein 1 Precursor	1554	819	0.53
100131320	-	11	6	0.53
10733	Serine/threonine-protein kinase PLK4	20	10	0.53
23224	Nesprin-2	11	6	0.53
100130173	Pecanex-like protein C14orf135	33	18	0.53
57730	UPF0634 protein KIAA1641	15	8	0.53
1278	Collagen alpha-2(I) chain Precursor	24	13	0.53
534	V-type proton ATPase subunit G 2	18	10	0.53

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
285601	Probable G-protein coupled receptor 150	8	4	0.53
51780	Lysine-specific demethylase 3B	11	6	0.53
100294393	Interleukin-3 receptor subunit alpha Precursor	180	96	0.53
81544	Glycerophosphodiester phosphodiesterase domain-containing protein 5	97	52	0.53
57101	Anoctamin-2	118	63	0.54
100288750	-	7	4	0.54
100128382	-	12	7	0.54
55143	Borealin	286	153	0.54
55689	YEATS domain-containing protein 2	48	26	0.54
3675	Integrin alpha-3 Precursor	12	7	0.54
55958	Kelch-like protein 9	98	53	0.54
7450	von Willebrand factor Precursor	433	234	0.54
84734	UPF0484 protein FAM167B	57	31	0.54
80256	Uncharacterized protein KIAA1539	65	35	0.54
2987	Guanylate kinase	55	30	0.54
23670	Transmembrane protein 2	51	28	0.54
4232	Mesoderm-specific transcript homolog protein	152	82	0.54
79801	SHC SH2 domain-binding protein 1	106	58	0.54
5608	Dual specificity mitogen-activated protein kinase kinase 6	31	17	0.54
1942	Ephrin-A1 Precursor	2235	1214	0.54
56256	SERTA domain-containing protein 4	61	33	0.54
8698	Sphingosine 1-phosphate receptor 4	8	4	0.54
9906	solute carrier family 35, member E2	35	19	0.54
-	5'-AMP-activated protein kinase catalytic subunit alpha-1	118	64	0.54
94103	ORM1-like protein 3	14	7	0.54
-	Collagen alpha-2(I) chain Precursor	43	23	0.54
11007	Coiled-coil domain-containing protein 85B	745	405	0.54
-	G2 and S phase-expressed protein 1	217	118	0.54
8692	Hyaluronidase-2 Precursor	2003	1091	0.54
6709	Spectrin alpha chain, brain	265	145	0.55
10608	Max-interacting transcriptional repressor MAD4	36	20	0.55
3231	Homeobox protein Hox-D1	289	158	0.55
9055	Protein regulator of cytokinesis 1	528	289	0.55
7114	Thymosin beta-4	47527	25986	0.55
-	cAMP-dependent protein kinase catalytic subunit beta	128	70	0.55
10653	Kunitz-type protease inhibitor 2 Precursor	187	103	0.55
54704	[Pyruvate dehydrogenase [acetyl-transferring]]-phosphatase 1, mitochondrial Precursor1	193	106	0.55
100287119	-	16	9	0.55
7412	Vascular cell adhesion protein 1 Precursor	9	5	0.55
10635	RAD51-associated protein 1	72	40	0.55
7153	DNA topoisomerase 2-alpha	356	196	0.55
-	Catenin alpha-1	1524	840	0.55
-	cDNA FLJ90757 fis, clone SKNMC1000014	80	44	0.55
116441	Transmembrane 4 L6 family member 18	2400	1326	0.55
3949	Low-density lipoprotein receptor Precursor	392	217	0.55
55388	Protein MCM10 homolog	30	17	0.55
83937	Ras association domain-containing protein 4	49	27	0.55
4779	Nuclear factor erythroid 2-related factor 1	97	54	0.55
-	-	41715	23093	0.55
151648	Shugoshin-like 1	6	4	0.55
55313	Uncharacterized metallophosphoesterase CSTP1	421	233	0.55
5583	Protein kinase C eta type	312	173	0.56

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Myb-related protein B	156	87	0.56
7706	Tripartite motif-containing protein 25	124	69	0.56
55118	Cartilage acidic protein 1 Precursor	50	28	0.56
6347	C-C motif chemokine 2 Precursor	1729	962	0.56
1021	Cell division protein kinase 6	136	76	0.56
2200	Fibrillin-1 Precursor	36	20	0.56
4281	Midline-1	146	82	0.56
200172	Schlafen-like protein 1	17	10	0.56
2030	Equilibrative nucleoside transporter 1	307	172	0.56
83463	Max-interacting transcriptional repressor MAD3	74	41	0.56
23753	Stromal cell-derived factor 2-like protein 1 Precursor	369	206	0.56
6241	Ribonucleoside-diphosphate reductase subunit M2	852	477	0.56
390937	-	29	16	0.56
332	Baculoviral IAP repeat-containing protein 5	271	152	0.56
26249	Kelch-like protein 3	34	19	0.56
1058	Histone H3-like centromeric protein A	176	98	0.56
400682	-	355	199	0.56
-	Uncharacterized protein ENSP00000351411	13169	7398	0.56
140738	Voltage-dependent calcium channel gamma-like subunit	20	11	0.56
143	Poly [ADP-ribose] polymerase 4	110	62	0.56
1821	Dystrophin-related protein 2	16	9	0.56
81567	Thioredoxin domain-containing protein 5 Precursor	8656	4873	0.56
29028	ATPase family AAA domain-containing protein 2	124	70	0.56
7057	Thrombospondin-1 Precursor	5733	3232	0.56
121512	FYVE, RhoGEF and PH domain-containing protein 4	17	10	0.56
26035	D-glucuronyl C5-epimerase	470	265	0.56
5166	[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 4, mitochondrial Precursor	22	13	0.56
10916	Melanoma-associated antigen D2	948	535	0.56
30846	EH domain-containing protein 2	18	10	0.56
699	Mitotic checkpoint serine/threonine-protein kinase BUB1	91	51	0.56
1490	Connective tissue growth factor Precursor	15926	9000	0.57
26985	AP-3 complex subunit mu-1	124	70	0.57
-	Heterogeneous nuclear ribonucleoproteins A2/B1	590	334	0.57
27233	Sulfotransferase 1C4	203	115	0.57
85461	Protein TANC1	860	487	0.57
6772	Signal transducer and activator of transcription 1-alpha/beta	239	136	0.57
100294349	Parkinson disease 7 domain-containing protein 1 Precursor	36	21	0.57
2969	General transcription factor II-I	213	121	0.57
23406	Coactosin-like protein	370	210	0.57
3070	Lymphoid-specific helicase	48	27	0.57
4154	Muscleblind-like protein 1	136	77	0.57
55088	Uncharacterized protein C10orf118	9	5	0.57
100293468	-	57	33	0.57
27284	Sulfotransferase family cytosolic 1B member 1	48	28	0.57
6421	Splicing factor, proline- and glutamine-rich	141	80	0.57
5155	Platelet-derived growth factor subunit B Precursor	208	118	0.57
8455	Attractin Precursor	47	27	0.57
100290651	Serine/threonine/tyrosine-interacting protein	293	167	0.57
4223	Homeobox protein MOX-2	60	34	0.57
3211	Homeobox protein Hox-B1	14	8	0.57
-	Transcriptional repressor p66-alpha	68	39	0.57
390059	Olfactory receptor 51M1	17	10	0.57

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
359845	Protein FAM101B	578	330	0.57
9134	G1/S-specific cyclin-E2	99	56	0.57
23193	Neutral alpha-glucosidase AB Precursor	93	53	0.57
23327	E3 ubiquitin-protein ligase NEDD4-like	522	298	0.57
6274	Protein S100-A3	13	7	0.57
3434	Interferon-induced protein with tetratricopeptide repeats 1	24	14	0.57
7083	Thymidine kinase, cytosolic	595	340	0.57
2014	Epithelial membrane protein 3	822	470	0.57
390988	Tetratricopeptide repeat protein 34	16	9	0.57
5999	Regulator of G-protein signaling 4	73	42	0.57
134429	StAR-related lipid transfer protein 4	283	162	0.57
7414	Vinculin	2963	1699	0.57
-	-	7	4	0.57
-	-	10	6	0.57
-	Growth factor receptor-bound protein 7	8	4	0.57
27122	Dickkopf-related protein 3 Precursor	920	529	0.58
4056	Leukotriene C4 synthase	38	22	0.58
3838	Importin subunit alpha-2	3531	2033	0.58
4616	Growth arrest and DNA-damage-inducible protein GADD45 beta	736	424	0.58
55568	Polypeptide N-acetylgalactosaminyltransferase 10	72	42	0.58
149111	Protein cornichon homolog 3	16	9	0.58
8729	Golgi-specific brefeldin A-resistance guanine nucleotide exchange factor 1	123	71	0.58
137835	Transmembrane protein 71	6	3	0.58
56062	Kelch-like protein 4	69	40	0.58
728910	Galectin-7	11	6	0.58
55729	Activating transcription factor 7-interacting protein 1	110	64	0.58
146853	Uncharacterized protein C17orf50	7	4	0.58
55101	ATP synthase subunit s-like protein	45	26	0.58
7431	Vimentin	53831	31235	0.58
-	Myosin-Vb	24	14	0.58
100133563	Olfactory receptor 4C46	108	63	0.58
3832	Kinesin-like protein KIF11	88	51	0.58
983	Cell division control protein 2 homolog	553	321	0.58
84986	Rho GTPase-activating protein 19	14	8	0.58
51512	G2 and S phase-expressed protein 1	81	47	0.58
100290405	-	409	238	0.58
8615	General vesicular transport factor p115	399	232	0.58
27164	Sal-like protein 3	7	4	0.58
4635	Myosin light chain 4	98	57	0.58
-	Muscleblind-like protein 2	138	80	0.58
8862	Apelin Precursor	9890	5773	0.58
5925	Retinoblastoma-associated protein	195	114	0.58
150209	Apoptosis-inducing factor 3	114	67	0.58
80019	Ubiquitin domain-containing protein 1	376	220	0.58
-	Urokinase-type plasminogen activator Precursor	188	110	0.58
317	Apoptotic protease-activating factor 1	83	48	0.58
94121	Synaptotagmin-like protein 4	46	27	0.58
79968	WD repeat-containing protein 76	55	32	0.59
54732	Transmembrane emp24 domain-containing protein 9 Precursor	2679	1568	0.59
27181	Sialic acid-binding Ig-like lectin 8 Precursor	822	481	0.59
89857	Kelch-like protein 6	46	27	0.59

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55300	Phosphatidylinositol 4-kinase type 2-beta	97	57	0.59
23213	Extracellular sulfatase Sulf-1 Precursor	224	131	0.59
9908	Ras GTPase-activating protein-binding protein 2	402	236	0.59
-	Protein WWC3	84	50	0.59
64651	Axin-1 up-regulated gene 1 protein	22	13	0.59
-	Aquaporin-3	76	45	0.59
55159	RING finger and WD repeat domain-containing protein 3	53	31	0.59
10376	Tubulin alpha-1B chain	10278	6052	0.59
11346	Synaptopodin	297	175	0.59
27143	Paladin	78	46	0.59
114907	F-box only protein 32	514	303	0.59
-	Zinc finger protein 185	140	83	0.59
26271	F-box only protein 5	143	85	0.59
26289	Adenylate kinase isoenzyme 5	33	19	0.59
7168	Tropomyosin alpha-1 chain	76	45	0.59
58508	Histone-lysine N-methyltransferase MLL3	6	4	0.59
100290733	-	34	20	0.59
11143	Histone acetyltransferase MYST2	119	70	0.59
1729	Protein diaphanous homolog 1	168	99	0.59
112609	Melanocortin-2 receptor accessory protein 2	20	12	0.59
170371	Putative uncharacterized protein C10orf128 Precursor	68	40	0.59
6307	C-4 methylsterol oxidase	1732	1024	0.59
23507	Leucine-rich repeat-containing protein 8B	130	77	0.59
4053	Latent-transforming growth factor beta-binding protein 2 Precursor	59	35	0.59
-	Protocadherin Fat 4 Precursor	48	28	0.59
54867	Transmembrane protein 214	61	36	0.59
-	Metastasis suppressor protein 1	95	56	0.59
4025	Lactoperoxidase Precursor	29	17	0.59
100130902	-	9	5	0.59
5770	Tyrosine-protein phosphatase non-receptor type 1	396	235	0.59
2491	Centromere protein I	28	17	0.59
2863	Probable G-protein coupled receptor 39	10	6	0.59
23191	Cytoplasmic FMR1-interacting protein 1	84	50	0.59
80818	Zinc finger protein 436	74	44	0.59
221184	Copine-2	399	237	0.59
3156	3-hydroxy-3-methylglutaryl-coenzyme A reductase	442	262	0.59
9905	Small G protein signaling modulator 2	42	25	0.59
84976	Protein dispatched homolog 1	21	12	0.59
-	-	134	80	0.59
2237	Flap endonuclease 1	309	184	0.60
633	Biglycan Precursor	3218	1915	0.60
9771	Rap guanine nucleotide exchange factor 5	20	12	0.60
2004	ETS domain-containing protein Elk-3	41	24	0.60
348654	Flap endonuclease GEN homolog 1	8	4	0.60
80351	Tankyrase-2	128	76	0.60
90139	Tetraspanin-18	129	77	0.60
11130	ZW10 interactor	223	133	0.60
3660	Interferon regulatory factor 2	6	4	0.60
100128156	-	14	8	0.60
-	Integrin alpha-6 Precursor	1392	831	0.60
488	Sarcoplasmic/endoplasmic reticulum calcium ATPase 2	100	60	0.60
397	Rho GDP-dissociation inhibitor 2	5815	3473	0.60
947	Hematopoietic progenitor cell antigen CD34 Precursor	109	65	0.60

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5547	Lysosomal Pro-X carboxypeptidase Precursor	1529	914	0.60
26996	Probable G-protein coupled receptor 160	49	29	0.60
4288	Antigen KI-67	68	40	0.60
149478	hypothetical protein LOC149478	24	14	0.60
100293640	-	9	5	0.60
1718	24-dehydrocholesterol reductase Precursor	978	586	0.60
4238	Microfibril-associated glycoprotein 3 Precursor	95	57	0.60
-	-	15	9	0.60
26058	PERQ amino acid-rich with GYF domain-containing protein 2	566	340	0.60
54874	Formin-binding protein 1-like	261	156	0.60
-	-	73	44	0.60
-	Netrin-4 Precursor	781	469	0.60
51225	ABI gene family member 3	158	95	0.60
4597	Diphosphomevalonate decarboxylase	94	57	0.60
339168	Transmembrane protein 95 Precursor	9	5	0.60
54892	Condensin-2 complex subunit G2	102	61	0.60
100288444	-	32	19	0.60
-	Peptidyl-glycine alpha-amidating monooxygenase Precursor	614	370	0.60
-	USH1C-binding protein 1	16	9	0.60
51514	Denticless protein homolog	24	14	0.60
51804	Homeobox protein SIX4	7	4	0.60
19	ATP-binding cassette sub-family A member 1	39	23	0.60
-	Tumor necrosis factor receptor superfamily member 12A Precursor	921	556	0.60
8925	Probable E3 ubiquitin-protein ligase HERC1	88	53	0.60
100293959	Putative uncharacterized protein KIAA1654	6	4	0.60
9784	Sorting nexin-17	647	391	0.60
81	Alpha-actinin-4	255	154	0.60
79585	Coronin-7	140	84	0.60
151887	Coiled-coil domain-containing protein 80 Precursor	174	105	0.60
51162	EGF-like domain-containing protein 7 Precursor	1408	851	0.60
-	-	523	316	0.60
55752	Septin-11	194	117	0.60
-	Kelch-like protein 13	86	52	0.60
23037	PDZ domain-containing protein 2	9	6	0.61
84722	Proline/serine-rich coiled-coil protein 1	63	38	0.61
4605	Myb-related protein B	49	30	0.61
55742	Alpha-parvin	404	245	0.61
-	EGF-like repeat and discoidin I-like domain-containing protein 3 Precursor	83	50	0.61
100290337	DNA damage-binding protein 1	266	161	0.61
701	Mitotic checkpoint serine/threonine-protein kinase BUB1 beta	105	64	0.61
-	Myocyte-specific enhancer factor 2A	95	58	0.61
55303	GTPase IMAP family member 4	776	471	0.61
23371	Tensin-like C1 domain-containing phosphatase	243	148	0.61
9639	Rho guanine nucleotide exchange factor 10	29	18	0.61
23266	Latrophilin-2 Precursor	160	97	0.61
2260	Basic fibroblast growth factor receptor 1 Precursor	348	211	0.61
3042	Hemoglobin subunit mu	14	9	0.61
80255	Solute carrier family 35 member F5	138	84	0.61
-	Nebulin	11	7	0.61

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
6482	CMP-N-acetylneuraminate-beta-galactosamide-alpha-2,3-sialyltransferase	120	73	0.61
57153	Choline transporter-like protein 2	202	123	0.61
7128	Tumor necrosis factor, alpha-induced protein 3	19	12	0.61
899	G2/mitotic-specific cyclin-F	12	7	0.61
29766	Tropomodulin-3	65	40	0.61
390557	-	70	43	0.61
1063	centromere protein F	28	17	0.61
1154	Cytokine-inducible SH2-containing protein	14	9	0.61
8507	Ectoderm-neural cortex protein 1	641	391	0.61
-	Delta-1-pyrroline-5-carboxylate dehydrogenase, mitochondrial Precursor	192	117	0.61
7389	Uroporphyrinogen decarboxylase	1040	634	0.61
23093	Tubulin polyglutamylase TTLL5	18	11	0.61
6744	Sperm-specific antigen 2	281	171	0.61
2771	Guanine nucleotide-binding protein G(i), alpha-2 subunit	822	502	0.61
51659	DNA replication complex GINS protein PSF2	205	125	0.61
-	MMS19 nucleotide excision repair protein homolog	117	71	0.61
79596	RING finger protein 219	67	41	0.61
8874	Rho guanine nucleotide exchange factor 7	50	31	0.61
10150	Muscleblind-like protein 2	246	150	0.61
100134348	-	41	25	0.61
64005	Myosin-Ig	143	88	0.61
55920	Protein RCC2	91	56	0.61
-	Vitamin K-dependent protein S Precursor	113	69	0.61
-	Uncharacterized protein C9orf61 Precursor	12	7	0.61
6772	Signal transducer and activator of transcription 1-alpha/beta	144	88	0.61
79927	Glycine/arginine-rich protein 1	48	29	0.61
389119	Uncharacterized protein C3orf54	300	184	0.61
83878	USH1C-binding protein 1	43	26	0.61
-	G2/mitotic-specific cyclin-F	61	38	0.61
-	Hypoxia-inducible factor 1 alpha	403	247	0.61
26032	Sushi domain-containing protein 5 Precursor	37	22	0.61
7846	Tubulin alpha-1A chain	2928	1797	0.61
6768	Suppressor of tumorigenicity protein 14	299	184	0.61
100132802	Keratin-associated protein 3-1	13	8	0.61
5033	Prolyl 4-hydroxylase subunit alpha-1 Precursor	553	339	0.61
340359	Kelch-like protein 38	126	77	0.61
23092	Rho GTPase-activating protein 26	14	9	0.61
991	Cell division cycle protein 20 homolog	375	231	0.61
4985	Delta-type opioid receptor	19	12	0.61
83483	Plasmalemma vesicle-associated protein	18	11	0.61
64283	Rho-guanine nucleotide exchange factor	68	42	0.62
196527	Anoctamin-6	785	483	0.62
3688	Integrin beta-1 Precursor	10985	6760	0.62
255877	B-cell CLL/lymphoma 6 member B protein	199	122	0.62
216	Retinal dehydrogenase 1	1500	924	0.62
-	Protein unc-84 homolog A	117	72	0.62
800	Caldesmon	1985	1225	0.62
627	Brain-derived neurotrophic factor Precursor	94	58	0.62
100131938	-	16	10	0.62
83873	Probable G-protein coupled receptor 61	12	8	0.62
100288291	-	49	30	0.62

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
474344	GTPase IMAP family member 6	52	32	0.62
951	Leukocyte antigen CD37	30	18	0.62
3487	Insulin-like growth factor-binding protein 4 Precursor	396	245	0.62
157313	Cell division cycle-associated protein 2	44	27	0.62
4343	Putative helicase MOV-10	78	48	0.62
2245	FYVE, RhoGEF and PH domain-containing protein 1	55	34	0.62
9212	Serine/threonine-protein kinase 12	430	266	0.62
6502	S-phase kinase-associated protein 2	42	26	0.62
7148	Tenascin-X Precursor	249	154	0.62
9159	Proprotein convertase subtilisin/kexin type 7 Precursor	79	49	0.62
81876	Ras-related protein Rab-1B	323	200	0.62
84417	Esophageal cancer-related gene 4 protein Precursor	12	7	0.62
89839	Rho GTPase-activating protein 11A	44	27	0.62
958	Tumor necrosis factor receptor superfamily member 5 Precursor	481	299	0.62
351	Amyloid beta A4 protein Precursor	1324	823	0.62
523	V-type proton ATPase catalytic subunit A	433	269	0.62
2535	Frizzled-2 Precursor	98	61	0.62
4171	DNA replication licensing factor MCM2	396	246	0.62
6296	Acyl-coenzyme A synthetase ACSM3, mitochondrial Precursor	24	15	0.62
51807	Tubulin alpha-8 chain	16	10	0.62
-	Iduronate 2-sulfatase Precursor	104	65	0.62
84823	Lamin-B2	206	129	0.62
22903	BTB/POZ domain-containing protein 3	162	101	0.62
64398	MAGUK p55 subfamily member 5	67	42	0.62
10325	Ras-related GTP-binding protein B	44	27	0.62
83461	Cell division cycle-associated protein 3	79	49	0.62
79784	Myosin-14	32	20	0.62
130132	Raftlin-2	23	14	0.62
26502	Nuclear prelamin A recognition factor	651	406	0.62
375061	Protein FAM89A	410	256	0.62
2934	Gelsolin Precursor	175	109	0.62
161198	C-type lectin domain family 14 member A Precursor	2418	1510	0.62
100290146	-	19	12	0.62
342346	Uncharacterized protein ENSP00000371449	49	30	0.62
-	Serine/threonine-protein kinase N2	166	104	0.62
-	Neurogenic locus notch homolog protein 1 Precursor	44	27	0.63
-	-	1981	1239	0.63
100131830	-	10	6	0.63
412	Steryl-sulfatase Precursor	25	15	0.63
23673	Syntaxin-12	925	579	0.63
652147	U5 small nuclear ribonucleoprotein 200 kDa helicase	10	6	0.63
8022	LIM/homeobox protein Lhx3	24	15	0.63
-	Tripartite motif-containing protein 8	142	89	0.63
9957	Heparan sulfate glucosamine 3-O-sulfotransferase 1 Precursor	18	11	0.63
56892	Uncharacterized protein C8orf4	232	146	0.63
147138	Transmembrane channel-like protein 8	67	42	0.63
221061	Protein FAM171A1 Precursor	253	159	0.63
-	Neighbor of BRCA1 gene 1 Fragment	215	135	0.63
9381	Otoferlin	13	8	0.63
100294450	-	21	13	0.63
7415	Transitional endoplasmic reticulum ATPase	2656	1672	0.63

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9885	Oxysterol-binding protein-related protein 2	117	73	0.63
51232	Cysteine-rich motor neuron 1 protein Precursor	4630	2917	0.63
-	B-cell CLL/lymphoma 9-like protein	213	134	0.63
26119	Low density lipoprotein receptor adapter protein 1	26	16	0.63
6197	Ribosomal protein S6 kinase alpha-3	22	14	0.63
388630	-	71	44	0.63
9780	Protein FAM38A	1210	763	0.63
55227	Leucine-rich repeat-containing protein 1	56	36	0.63
81624	Protein diaphanous homolog 3	43	27	0.63
100294232	-	96	61	0.63
100128997	-	13	8	0.63
4330	Probable tumor suppressor protein MN1	62	39	0.63
5567	cAMP-dependent protein kinase catalytic subunit beta	131	83	0.63
374393	Protein FAM111B	36	23	0.63
347902	Amphoterin-induced protein 2 Precursor	79	50	0.63
96626	LIM and senescent cell antigen-like-containing domain protein 3	243	153	0.63
10904	Bladder cancer-associated protein	443	280	0.63
100132944	-	147	93	0.63
195828	Zinc finger protein 367	13	8	0.63
4938	2'-5'-oligoadenylate synthetase 1	49	31	0.63
57020	UPF0505 protein C16orf62	266	169	0.63
100127891	-	94	59	0.63
1033	Cyclin-dependent kinase inhibitor 3	210	133	0.63
-	Annexin A1	7250	4594	0.63
259266	Abnormal spindle-like microcephaly-associated protein	46	29	0.63
3207	Homeobox protein Hox-A11	61	38	0.63
10383	Tubulin beta-2C chain	2800	1775	0.63
79971	Integral membrane protein GPR177 Precursor	643	408	0.63
6721	Sterol regulatory element-binding protein 2	360	228	0.63
145957	Pro-neuregulin-4, membrane-bound isoform	32	21	0.63
10389	Sex comb on midleg-like protein 2	12	7	0.63
283554	Integral membrane protein GPR137C	8	5	0.63
29126	Programmed cell death 1 ligand 1 Precursor	74	47	0.63
3157	Hydroxymethylglutaryl-CoA synthase, cytoplasmic	440	279	0.63
2615	Leucine-rich repeat-containing protein 32 Precursor	449	285	0.63
79829	N-acetyltransferase 11	116	74	0.63
5328	Urokinasetype plasminogen activator Precursor	1080	686	0.64
29993	Protein kinase C and casein kinase substrate in neurons protein 1	178	113	0.64
-	Zinc finger protein 436	14	9	0.64
1087	Carcinoembryonic antigen-related cell adhesion molecule 7 Precursor	14	9	0.64
54578	UDP-glucuronosyltransferase 1-8 Precursor	21	13	0.64
100291976	-	134	85	0.64
6251	Ras suppressor protein 1	94	60	0.64
10894	Lymphatic vessel endothelial hyaluronic acid receptor 1 Precursor	296	188	0.64
6713	Squalene monooxygenase	1191	758	0.64
9060	Bifunctional 3'-phosphoadenosine 5'-phosphosulfate synthetase 2	504	321	0.64
1785	Dynamin-2	152	97	0.64
-	Thymidylate synthase	1119	713	0.64
124923	Uncharacterized serine/threonine-protein kinase SgK494	12	8	0.64

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55901	Thrombospondin type-1 domain-containing protein 1 Precursor	202	128	0.64
55013	Coiled-coil domain-containing protein 109B	327	208	0.64
5590	Protein kinase C zeta type	10	6	0.64
-	Guanylate-binding protein 3	177	113	0.64
-	Uncharacterized protein C19orf45	106	67	0.64
26150	RIB43A-like with coiled-coils protein 2	8	5	0.64
60312	Actin filament-associated protein 1	774	494	0.64
81606	Protein LBH	110	70	0.64
-	GRB2-related adapter protein	111	71	0.64
-	-	1662	1061	0.64
-	Vesicle-associated membrane protein 8	504	321	0.64
10682	3-beta-hydroxysteroid-Delta(8),Delta(7)-isomerase	477	305	0.64
80301	Pleckstrin homology domain-containing family O member 2	320	204	0.64
84952	Cingulin-like protein 1	246	157	0.64
6892	tapasin isoform 1 precursor	102	65	0.64
4352	Thrombopoietin receptor Precursor	52	33	0.64
10865	AT-rich interactive domain-containing protein 5A	24	16	0.64
50848	Junctional adhesion molecule A Precursor	833	533	0.64
-	F-box/WD repeat-containing protein 1A	160	102	0.64
85363	Tripartite motif-containing protein 5	298	190	0.64
3728	Junction plakoglobin	265	170	0.64
100292648	-	47	30	0.64
1808	Dihydropyrimidinase-related protein 2	69	44	0.64
687	Krueppel-like factor 9	109	70	0.64
-	Voltage-dependent calcium channel gamma-like subunit	70	45	0.64
23554	Tetraspanin-12	171	110	0.64
23221	Rho-related BTB domain-containing protein 2	100	64	0.64
80380	Programmed cell death 1 ligand 2 Precursor	55	35	0.64
56961	SH2 domain-containing adapter protein D	19	12	0.64
6491	SCL-interrupting locus protein	29	18	0.64
100134515	TNC18_HUMAN Isoform 2 of O15417 · Homo sapiens	43	28	0.64
55148	Putative E3 ubiquitin-protein ligase UBR7	168	108	0.64
2050	Ephrin type-B receptor 4 Precursor	621	398	0.64
6385	Syndecan-4 Precursor	143	92	0.64
9573	Growth/differentiation factor 3 Precursor	35	22	0.64
1783	Cytoplasmic dynein 1 light intermediate chain 2	228	146	0.64
567	Beta-2-microglobulin Precursor	20284	13031	0.64
753	Uncharacterized protein C18orf1	17	11	0.64
-	Trophinin	473	304	0.64
83892	BTB/POZ domain-containing protein KCTD10	114	73	0.64
100290806	-	107	69	0.64
116835	Heat shock 70 kDa protein 12B	42	27	0.64
1948	Ephrin-B2 Precursor	776	499	0.64
-	-	34	22	0.64
63901	Protein FAM111A	221	142	0.64
-	Homeobox protein Hox-D1	126	81	0.64
7405	UV radiation resistance-associated gene protein (p63)	217	140	0.64
-	TOP2A_HUMAN Isoform 2 of P11388 · Homo sapiens	133	86	0.64
63922	Chromosome transmission fidelity protein 18 homolog	100	64	0.64
7259	Testis-specific Y-encoded-like protein 1	53	34	0.64
339416	Ankyrin repeat domain-containing protein 45	68	43	0.64
2885	Growth factor receptor-bound protein 2	272	175	0.64
89848	FCH and double SH3 domains protein 1	79	51	0.64

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
140686	WAP four-disulfide core domain protein 3 Precursor	26	17	0.64
5352	Procollagen-lysine,2-oxoglutarate 5-dioxygenase 2 Precursor	670	432	0.64
100291822	-	8	5	0.65
259173	ALS2 C-terminal-like protein	52	34	0.65
-	Kinesin-like protein KIF2C	66	43	0.65
645634	-	38	25	0.65
4018	Apolipoprotein(a) Precursor	10	6	0.65
286410	Probable phospholipid-transporting ATPase IG	42	27	0.65
90861	Hematological and neurological expressed 1-like protein	120	77	0.65
2776	Guanine nucleotide-binding protein G(q) subunit alpha	155	100	0.65
1200	Tripeptidyl-peptidase 1 Precursor	446	288	0.65
3098	Hexokinase-1	172	111	0.65
150	Alpha-2A adrenergic receptor	106	69	0.65
64693	Protein cTAGE-2	150	97	0.65
51279	Complement C1r subcomponent-like protein Precursor	34	22	0.65
4067	Tyrosine-protein kinase Lyn	513	332	0.65
84836	Abhydrolase domain-containing protein 14B	115	75	0.65
23385	Nicastrin Precursor	65	42	0.65
729260	LIM and senescent cell antigen-like-containing domain protein 1	1553	1005	0.65
3213	Homeobox protein Hox-B3	81	52	0.65
5347	Serine/threonine-protein kinase PLK1	12	8	0.65
6237	Ras-related protein R-Ras Precursor (p23)	796	515	0.65
8394	Phosphatidylinositol-4-phosphate 5-kinase type-1 alpha	53	34	0.65
162962	Zinc finger protein 836	181	117	0.65
79661	Endonuclease VIII-like 1	44	28	0.65
5998	Regulator of G-protein signaling 3	3844	2490	0.65
2019	Homeobox protein engrailed-1	333	216	0.65
-	Pyridoxal-dependent decarboxylase domain-containing protein 1	191	124	0.65
-	cDNA FLJ42001 fis, clone SPLEN2029912	57	37	0.65
-	Novel protein similar to ribosomal protein L13a RPL13A	29233	18953	0.65
7075	Tyrosine-protein kinase receptor Tie-1 Precursor	893	579	0.65
29904	Elongation factor 2 kinase	13	8	0.65
83643	Coiled-coil domain-containing protein 3 Precursor	25	16	0.65
57511	Conserved oligomeric Golgi complex subunit 6	130	84	0.65
79658	Rho GTPase-activating protein 10	197	128	0.65
2952	Glutathione S-transferase theta-1	183	119	0.65
9500	Melanoma-associated antigen D1	717	465	0.65
79834	Tyrosine-protein kinase SgK269	245	159	0.65
6764	Suppression of tumorigenicity 5 (HeLa tumor suppression 1)	58	38	0.65
-	Putative UPF0607 protein ENSP00000382826	83	54	0.65
581	Apoptosis regulator BAX	998	648	0.65
51195	Rap guanine nucleotide exchange factor-like 1	11	7	0.65
1124	Beta-chimaerin	21	13	0.65
23062	ADP-ribosylation factor-binding protein GGA2	149	97	0.65
113791	Phosphoinositide-3-kinase-interacting protein 1 Precursor	98	64	0.65
23315	Sodium/hydrogen exchanger 8	120	78	0.65
93663	Rho GTPase-activating protein 18	904	588	0.65
79019	Centromere protein M	149	97	0.65
79652	Transmembrane protein 204	458	298	0.65
55911	Apolipoprotein B-100 receptor	104	68	0.65
79719	Alpha- and gamma-adaptin-binding protein p34	185	121	0.65

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Transmembrane protein 217	52	34	0.65
646962	Histidine-rich carboxyl terminus protein 1	20	13	0.65
-	-	25	16	0.65
10181	RNA-binding protein 5	935	609	0.65
100289528	LOC414126 proteinPutative uncharacterized protein ENSP00000366655	35	23	0.65
9787	Disks large-associated protein 5	183	119	0.65
5894	RAF proto-oncogene serine/threonine-protein kinase	314	205	0.65
-	Protein FAM127A (Mammalian retrotransposon derived protein 8C)	1235	805	0.65
-	Porimin Precursor	1948	1270	0.65
221833	Transcription factor Sp8	21	14	0.65
126567	Nuclear-localized factor 3	477	311	0.65
25897	E3 ubiquitin-protein ligase RNF19A	636	415	0.65
22906	Trafficking kinesin-binding protein 1	299	195	0.65
5122	Neuroendocrine convertase 1 Precursor	22	14	0.65
2590	Polypeptide N-acetylgalactosaminyltransferase 2	496	324	0.65
157378	Transmembrane protein 65	119	77	0.65
4070	Tumor-associated calcium signal transducer 2 Precursor	690	450	0.65
389816	Leucine-rich repeat-containing protein 26 Precursor	79	52	0.65
54982	Ceroid-lipofuscinosis neuronal protein 6	66	43	0.65
-	-	14	9	0.65
388951	Testis-specific Y-encoded-like protein 6	20	13	0.65
271	AMP deaminase 2	84	55	0.65
2022	Endoglin Precursor	1789	1168	0.65
-	Limb region 1 protein homolog	176	115	0.65
3956	Galectin-1	16046	10483	0.65
402381	Spermatogenesis- and oogenesis-specific basic helix-loop-helix-containing protein 1	6	4	0.65
100293773	-	73	47	0.65
100288796	-	25	16	0.65
6910	T-box transcription factor TBX5	161	105	0.65
81855	Sideroflexin-3	371	242	0.65
11156	Protein tyrosine phosphatase type IVA 3	138	90	0.65
28513	Cadherin-19 Precursor	11	7	0.65
100288743	LRP11 protein Fragment	10	6	0.65
8727	Alpha-catulin	585	383	0.65
483	Sodium/potassium-transporting ATPase subunit beta-3	6134	4013	0.65
155400	Rab-like protein 2B	38	25	0.65
5027	P2X purinoceptor 7	36	24	0.65
54932	Probable exonuclease mut-7 homolog	54	35	0.65
9535	Glia maturation factor gamma	555	364	0.65
145864	Hyaluronan and proteoglycan link protein 3 Precursor	261	171	0.65
4329	Methylmalonate-semialdehyde dehydrogenase [acylating], mitochondrial Precursor	32	21	0.65
54914	Uncharacterized protein KIAA1797	124	81	0.65
-	Armadillo repeat protein deleted in velo-cardio-facial syndrome	91	60	0.65
25833	POU domain, class 2, transcription factor 3	110	72	0.66
1378	Complement receptor type 1 Precursor	148	97	0.66
6389	Succinate dehydrogenase [ubiquinone] flavoprotein subunit, mitochondrial Precursor	1038	681	0.66
79979	TRM2 tRNA methyltransferase 2 homolog B	30	19	0.66
5869	Ras-related protein Rab-5B	139	91	0.66

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23344	Extended synaptotagmin-1	188	123	0.66
54922	Ras-interacting protein 1	225	148	0.66
100290683	-	100	66	0.66
-	Olfactory receptor 14K1	36	24	0.66
219738	Uncharacterized protein C10orf35	10	6	0.66
100288617	-	14	9	0.66
-	Putative abhydrolase domain-containing protein FAM108A6 Precursor	458	301	0.66
-	Intelectin-2 Precursor (Endothelial lectin HL-2)	8	5	0.66
8682	Astrocytic phosphoprotein PEA-15	928	610	0.66
26133	Trpc4-associated protein	497	327	0.66
-	Histone deacetylase 1	757	497	0.66
100130562	40S ribosomal protein S2	39033	25662	0.66
8976	Neural Wiskott-Aldrich syndrome protein	426	280	0.66
11057	Abhydrolase domain-containing protein 2	34	22	0.66
10140	Protein Tob1 (Transducer of erbB-2 1)	130	85	0.66
51586	Mediator of RNA polymerase II transcription subunit 15	210	138	0.66
100127984	-	10	6	0.66
64327	Limb region 1 protein homolog	71	47	0.66
157769	Protein FAM91A1	332	219	0.66
339123	JmjC domain-containing protein 8	82	54	0.66
100131851	-	339	224	0.66
-	Amyloid beta A4 precursor protein-binding family B member 1-interacting protein	73	48	0.66
29127	Rac GTPase-activating protein 1	30	20	0.66
5424	DNA polymerase delta catalytic subunit	49	32	0.66
123096	Mitochondrial carnitine/acylcarnitine carrier protein CACL	317	209	0.66
728860	Importin subunit alpha-2	4408	2909	0.66
100127961	-	26	17	0.66
4000	Lamin-A/C	1878	1239	0.66
7048	TGF-beta receptor type-2 Precursor	332	219	0.66
5792	Receptor-type tyrosine-protein phosphatase F Precursor	89	59	0.66
100288583	-	137	90	0.66
375295	-	112	74	0.66
23166	Stabilin-1 Precursor	450	297	0.66
4047	Lanosterol synthase	45	30	0.66
283431	GAS2-like protein 3	118	78	0.66
9057	Y+L amino acid transporter 2	93	61	0.66
100294372	-	9	6	0.66
11167	Follistatin-related protein 1 Precursor	3486	2306	0.66
30814	Group IIE secretory phospholipase A2 Precursor	57	37	0.66
586	Branched-chain-amino-acid aminotransferase, cytosolic	456	301	0.66
57488	Extended synaptotagmin-2	135	89	0.66
124925	Seizure protein 6 homolog Precursor	358	237	0.66
10095	Actin-related protein 2/3 complex subunit 1A	6860	4540	0.66
729086	EGFR-coamplified and overexpressed protein Precursor	628	416	0.66
4947	Ornithine decarboxylase antizyme 2	381	252	0.66
2826	C-C chemokine receptor type 10	35	23	0.66
6515	Solute carrier family 2, facilitated glucose transporter member 3	127	84	0.66
51466	Ena/VASP-like protein (Ena/vasodilator-stimulated phosphoprotein-like)	259	172	0.66
112464	Protein kinase C delta-binding protein	2542	1686	0.66
-	Sperm-specific antigen 2	817	542	0.66

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
7767	Zinc finger protein 224	13	9	0.66
1153	Cold-inducible RNA-binding protein	739	491	0.66
4851	Neurogenic locus notch homolog protein 1 Precursor	409	271	0.66
-	Probable palmitoyltransferase ZDHHC14	177	117	0.66
-	Olfactomedin-like protein 3 Precursor	32	21	0.66
92162	Transmembrane protein 88	50	33	0.66
-	Ubiquitin-protein ligase E3C	55	37	0.66
55040	Epsin-3	134	89	0.66
840	Caspase-7 Precursor	307	204	0.67
5551	Perforin-1 Precursor	10	7	0.67
57211	Probable G-protein coupled receptor 126 Precursor	55	36	0.67
100290068	-	44	30	0.67
-	Myosin-10 (Myosin heavy chain 10)	319	213	0.67
-	Glycophorin HeP2 Fragment	33	22	0.67
7108	Delta(14)-sterol reductase	115	77	0.67
161	AP-2 complex subunit alpha-2	146	97	0.67
643827	Novel protein similar to contactin associated protein-like 3 Fragment	71	47	0.67
4175	DNA replication licensing factor MCM6	378	252	0.67
84190	Uncharacterized protein C12orf26	148	98	0.67
650883	Pyruvate dehydrogenase phosphatase regulatory subunit, mitochondrial Precursor	183	122	0.67
-	MAGUK p55 subfamily member 4	150	100	0.67
50506	Dual oxidase 2 Precursor	12	8	0.67
79794	UPF0454 protein C12orf49 Precursor	52	35	0.67
6430	Splicing factor, arginine/serine-rich 5	1135	757	0.67
54838	Outcome predictor in acute leukemia 1	162	108	0.67
285761	Discoidin, CUB and LCCL domain-containing protein 1 Precursor	170	113	0.67
4641	Myosin-Ic	428	286	0.67
100289147	-	16	11	0.67
6793	Serine/threonine-protein kinase 10	104	69	0.67
6319	Acyl-CoA desaturase	98	65	0.67
55745	Uncharacterized protein C14orf108	117	78	0.67
23143	Leucine-rich repeat and calponin homology domain-containing protein 1	19	12	0.67
1185	Chloride channel protein 6	94	63	0.67
10614	Protein HEXIM1	99	66	0.67
-	Ribosomal protein S6 kinase alpha-3	253	169	0.67
65249	Zinc finger SWIM domain-containing protein 4	19	12	0.67
283571	Prospero homeobox protein 2	14	9	0.67
10660	Transcription factor LBX1 (Ladybird homeobox protein homolog 1)	10	7	0.67
-	Putative uncharacterized protein FLJ44672	306	205	0.67
22901	Arylsulfatase G Precursor	106	71	0.67
11004	Kinesin-like protein KIF2C (Mitotic centromere-associated kinesin)	46	31	0.67
151194	Protein FAM119A (Hepatocellular carcinoma-associated antigen 557b)	117	79	0.67
84705	tRNA modification GTPase GTPBP3, mitochondrial Precursor	50	34	0.67
353134	Late cornified envelope protein 1D	174	117	0.67
8496	Liprin-beta-1	413	277	0.67
79815	NIPA-like protein 2	25	17	0.67

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-	42	28	0.67
51056	Cytosol aminopeptidase	465	312	0.67
54567	Delta-like protein 4 Precursor	147	99	0.67
100293868	-	11	7	0.67
10186	Lipoma HMGIC fusion partner Precursor	70	47	0.67
57664	Pleckstrin homology domain-containing family A member 4	18	12	0.67
260293	Cytochrome P450 4X1	19	13	0.67
642587	-	123	82	0.67
220042	Nitric oxide-inducible gene protein	31	21	0.67
29799	Protein yippee-like 1	47	31	0.67
140706	Uncharacterized protein C20orf160	66	44	0.67
114902	Complement C1q tumor necrosis factor-related protein 5 Precursor	933	625	0.67
54566	Band 4.1-like protein 4B	38	25	0.67
100292408	-	193	130	0.67
-	-	33545	22508	0.67
-	-	578	388	0.67
80005	Dedicator of cytokinesis protein 5	22	15	0.67
100291926	-	82	55	0.67
7328	Ubiquitin-conjugating enzyme E2 H	981	659	0.67
-	Protein YIF1B	423	284	0.67
2209	High affinity immunoglobulin gamma Fc receptor I Precursor	5	4	0.67
131870	U8 snoRNA-decapping enzyme	92	62	0.67
4739	Enhancer of filamentation 1	360	241	0.67
23597	Acyl-coenzyme A thioesterase 9	531	356	0.67
1003	Cadherin-5 Precursor (Vascular endothelial cadherin)	303	203	0.67
55355	Holliday junction recognition protein	112	75	0.67
100134333	Exocyst complex component 3-like protein (Protein Jiangli)	84	56	0.67
10762	Nucleoporin 50 kDa	26	17	0.67
552889	-	195	131	0.67
23015	Golgin subfamily A member 8A	50	34	0.67
9444	Protein quaking	687	461	0.67
-	-	22701	15251	0.67
3916	Lysosome-associated membrane glycoprotein 1 Precursor	187	126	0.67
-	Neural cell adhesion molecule 1 Precursor	10	7	0.67
23380	SLIT-ROBO Rho GTPase-activating protein 2 (Formin-binding protein 2)	50	34	0.67
8578	Endothelial cells scavenger receptor Precursor	68	45	0.67
-	ADP-ribosyl cyclase 2 Precursor	111	75	0.67
100130938	-	36	24	0.67
1774	Deoxyribonuclease-1-like 1 Precursor	507	341	0.67
147906	Dapper homolog 3	17	11	0.67
4846	Nitric oxide synthase, endothelial	159	107	0.67
5358	Plastin-3 (T-plastin)	4974	3351	0.67
3843	Importin-5	205	138	0.67
54790	Protein TET2	115	77	0.67
84790	Tubulin alpha-1C chain (Tubulin alpha-6 chain)	1916	1292	0.67
51523	CXXC-type zinc finger protein 5	31	21	0.67
91445	RING finger protein 185	96	65	0.67
79026	Neuroblast differentiation-associated protein AHNAK (Desmoyokin)	442	298	0.67
-	Cell division cycle 7-related protein kinase	32	22	0.67
4637	Myosin light polypeptide 6	25965	17523	0.67

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
8338	Histone H2A type 2-C	66	45	0.67
9921	RING finger protein 10	777	525	0.67
1793	Dedicator of cytokinesis protein 1	142	96	0.67
60	Actin, cytoplasmic 1 (Beta-actin)	21371	14425	0.68
57512	Probable G-protein coupled receptor 158 Precursor	33	22	0.68
-	C-jun-amino-terminal kinase-interacting protein 3	128	87	0.68
-	Rho-related GTP-binding protein RhoB Precursor	129	87	0.68
25943	Uncharacterized protein C20orf194	209	141	0.68
6196	Ribosomal protein S6 kinase alpha-2	98	66	0.68
23333	Protein dpy-19 homolog 1	181	122	0.68
10403	Kinetochore protein NDC80 homolog	130	88	0.68
7318	Ubiquitin-like modifier-activating enzyme 7	29	20	0.68
6988	T-cell leukemia translocation-altered gene protein	88	59	0.68
-	Tetratricopeptide repeat protein 32	30	20	0.68
1523	Protein CASP	16	11	0.68
768211	RELTL-like protein 1 Precursor	135	91	0.68
4130	Microtubule-associated protein 1A	7	5	0.68
5029	P2Y purinoceptor 2	7	5	0.68
3430	Interferon-induced 35 kDa protein	66	45	0.68
170384	Alpha-(1,3)-fucosyltransferase 11	144	98	0.68
84648	Late cornified envelope protein 3D	59	40	0.68
26118	WD repeat and SOCS box-containing protein 1	3064	2074	0.68
248	Intestinal alkaline phosphatase Precursor	214	145	0.68
219333	Ubiquitin carboxyl-terminal hydrolase 12	44	30	0.68
-	Putative tubulin beta chain-like protein ENSP00000290377	821	557	0.68
-	Glutathione S-transferase C-terminal domain-containing protein	94	63	0.68
6398	Secreted and transmembrane protein 1 Precursor	14	9	0.68
1633	Deoxycytidine kinase	269	183	0.68
3384	Intercellular adhesion molecule 2 Precursor	4529	3070	0.68
399818	Methyltransferase-like protein 10	10	7	0.68
6715	3-oxo-5-alpha-steroid 4-dehydrogenase 1	68	46	0.68
100129434	-	51	35	0.68
399715	cDNA FLJ46311 fis, clone TEST14040197	45	30	0.68
27020	Neuroplastin Precursor	350	237	0.68
-	-	511	347	0.68
-	Tubulin alpha-3C/D chain	233	158	0.68
372	Coatomer subunit delta	641	435	0.68
54810	PDZ domain-containing protein GIPC2	35	24	0.68
3491	Protein CYR61 Precursor	8350	5670	0.68
-	-	61	41	0.68
6272	Sortilin Precursor (Neurotensin receptor 3)	41	28	0.68
284339	Transmembrane protein 145	227	154	0.68
29964	Prickle-like protein 4	50	34	0.68
20	ATP-binding cassette sub-family A member 2	12	8	0.68
-	Serine/threonine-protein kinase Kist	41	28	0.68
7429	Villin-1	67	45	0.68
1806	Dihydropyrimidine dehydrogenase [NADP+] Precursor	46	32	0.68
83475	Deoxyhypusine hydroxylase	178	121	0.68
-	Golgin subfamily A member 8-like protein 1	74	51	0.68
9928	Kinesin-like protein KIF14	13	9	0.68
10152	Abl interactor 2	164	111	0.68
6638	Small nuclear ribonucleoprotein-associated protein N	333	226	0.68
-	Phosphatidylinositol 4-kinase beta	82	56	0.68
79068	Protein fto	34	23	0.68

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
8558	Cell division protein kinase 10	613	417	0.68
10609	Synaptonemal complex protein SC65	293	199	0.68
3993	Lethal(2) giant larvae protein homolog 2	11	7	0.68
4176	DNA replication licensing factor MCM7	273	186	0.68
26020	Low-density lipoprotein receptor-related protein 10 Precursor	138	94	0.68
84061	Magnesium transporter protein 1 Precursor	411	280	0.68
-	N-acetylmuramoyl-L-alanine amidase Precursor	93	63	0.68
100289898	-	12	8	0.68
334	Amyloid-like protein 2 Precursor	2430	1656	0.68
196883	Adenylate cyclase type 4	47	32	0.68
9625	Serine/threonine-protein kinase LMTK1	124	85	0.68
55691	FERM domain-containing protein 4A	227	154	0.68
353333	Keratin-associated protein 10-10	387	264	0.68
23064	Probable helicase senataxin	32	22	0.68
51480	Variable charge X-linked protein 2	23	15	0.68
25921	Probable palmitoyltransferase ZDHHC5	111	76	0.68
642934	-	12	8	0.68
150468	Cytoskeleton-associated protein 2-like	35	24	0.68
4091	Mothers against decapentaplegic homolog 6	108	74	0.68
5763	Parathymosin	306	209	0.68
-	Natural cytotoxicity triggering receptor 3 Precursor	15	10	0.68
4215	Mitogen-activated protein kinase kinase kinase 3	226	154	0.68
51764	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-13 Precursor	272	186	0.68
112	Adenylate cyclase type 6	89	61	0.68
9813	EF-hand domain-containing protein KIAA0494	177	121	0.68
2289	FK506-binding protein 5	165	113	0.68
114908	Porimin Precursor	878	600	0.68
9149	Dual specificity tyrosine-phosphorylation-regulated kinase 1B	253	173	0.68
114780	Polycystic kidney disease protein 1-like 2 Precursor	5	4	0.68
-	Solute carrier family 12 member 4	93	64	0.68
56673	Uncharacterized protein C11orf16	93	64	0.68
2976	General transcription factor 3C polypeptide 2	95	65	0.68
64083	Golgi phosphoprotein 3	506	346	0.68
100294418	-	386	264	0.68
8751	Disintegrin and metalloproteinase domain-containing protein 15 Precursor	321	219	0.68
10964	Interferon-induced protein 44-like	40	27	0.68
-	Membrane-associated guanylate kinase, WW and PDZ domain-containing protein 1	49	33	0.68
100131001	-	10	7	0.68
100291994	-	27	19	0.68
9376	Solute carrier family 22 member 8	35	24	0.68
-	Nuclear factor erythroid 2-related factor 1	643	440	0.68
55615	Protor-1	90	62	0.68
100292810	-	10	7	0.68
1440	Granulocyte colony-stimulating factor Precursor	14	10	0.68
901	Cyclin-G2	311	213	0.68
121214	Orphan short-chain dehydrogenase/reductase	51	35	0.68
10460	Transforming acidic coiled-coil-containing protein 3	345	236	0.68
196441	Coiled-coil domain-containing protein 131	96	66	0.68

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23204	ADP-ribosylation factor-like protein 6-interacting protein 1	2076	1422	0.68
80207	Optic atrophy 3 protein	47	32	0.69
5351	Procollagen-lysine,2-oxoglutarate 5-dioxygenase 1 Precursor	2154	1478	0.69
284119	Polymerase I and transcript release factor	1892	1298	0.69
100290148	-	39	26	0.69
25862	Ubiquitin carboxyl-terminal hydrolase 49	87	59	0.69
84309	Protein syndesmos	361	248	0.69
-	Solute carrier family 22 member 3	88	61	0.69
23511	Nucleoporin NUP188 homolog	187	128	0.69
753	Uncharacterized protein C18orf1	74	51	0.69
653888	Actin-related protein 2/3 complex subunit 1B	3052	2096	0.69
26578	Osteoclast-stimulating factor 1	430	295	0.69
2358	N-formyl peptide receptor 2	26	18	0.69
-	Glycogen synthase kinase-3 alpha	157	108	0.69
-	-	342	235	0.69
100291755	-	27	18	0.69
100130705	-	75	51	0.69
100291104	-	11	8	0.69
-	Protein phosphatase 1 regulatory subunit 3E	76	52	0.69
170575	GTPase IMAP family member 1	676	465	0.69
-	Myotinin-protein kinase	79	54	0.69
55970	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-12 Precursor	1198	824	0.69
128637	TBC1 domain family member 20	90	62	0.69
10395	NKG2-E type II integral membrane protein	44	31	0.69
8732	mRNA-capping enzyme	25	17	0.69
51104	Abhydrolase domain-containing protein FAM108B1 Precursor	89	61	0.69
-	T-cell-specific surface glycoprotein CD28 Precursor	609	419	0.69
100130098	-	29	20	0.69
134353	U7 snRNA-associated Sm-like protein LSm11	31	21	0.69
3859	Keratin, type I cytoskeletal 12	145	100	0.69
9180	Oncostatin-M specific receptor subunit beta Precursor	15	10	0.69
4855	Neurogenic locus notch homolog protein 4 Precursor	338	233	0.69
-	Retinoblastoma-like protein 2	165	114	0.69
-	Polyadenylate-binding protein 1	1139	784	0.69
11051	Cleavage and polyadenylation specificity factor subunit 5	253	174	0.69
2113	Protein C-ets-1 (p54)	587	404	0.69
254439	Uncharacterized protein C11orf86	62	42	0.69
54536	Exocyst complex component 6	969	668	0.69
55501	Carbohydrate sulfotransferase 12	235	162	0.69
59338	Pleckstrin homology domain-containing family A member 1	437	301	0.69
1555	Cytochrome P450 2B6	250	172	0.69
55884	WD repeat and SOCS box-containing protein 2	340	235	0.69
81629	Testis-specific serine/threonine-protein kinase 3	9	6	0.69
59345	Guanine nucleotide-binding protein subunit beta-4	142	98	0.69
-	Rho GTPase-activating protein 27	91	63	0.69
-	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 2, mitochondrial Precursor	896	618	0.69
2149	Proteinase-activated receptor 1 Precursor	2015	1391	0.69
2865	Free fatty acid receptor 3	132	91	0.69
728772	Transmembrane protein 106A	41	29	0.69

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
54762	GRAM domain-containing protein 1C	125	86	0.69
7739	Zinc finger protein 185	55	38	0.69
3065	Histone deacetylase 1	1568	1083	0.69
94115	Choriogonadotropin subunit beta Precursor	75	52	0.69
10521	Probable ATP-dependent RNA helicase DDX17	653	451	0.69
-	Uncharacterized protein LOC728008	156	108	0.69
-	Ubiquitin C Fragment	667	460	0.69
1894	Protein ECT2	60	42	0.69
11187	Plakophilin-3	27	19	0.69
23112	Adenylosuccinate lyase	33	23	0.69
60561	RAD50-interacting protein 1	162	112	0.69
100289210	-	18	13	0.69
11252	ADP-ribosylation factor GTPase-activating protein 3	211	146	0.69
728804	cDNA FLJ44904 fis, clone BRAMY3005656	178	123	0.69
486	Sodium/potassium-transporting ATPase gamma chain	504	348	0.69
285989	Zinc finger protein 789	39	27	0.69
57038	Probable arginyl-tRNA synthetase, mitochondrial Precursor	53	37	0.69
9837	DNA replication complex GINS protein PSF1	38	26	0.69
23325	UPF0681 protein KIAA1033	422	292	0.69
100290731	-	79	54	0.69
4735	Septin-2	3644	2521	0.69
644334	-	155	107	0.69
-	Nck-associated protein 5	9	6	0.69
57804	DNA polymerase delta subunit 4	1281	886	0.69
1605	Dystroglycan Precursor	290	201	0.69
152006	RING finger protein 38	294	204	0.69
83595	Transcription factor SOX-7	212	147	0.69
81693	Protein amnionless Precursor	54	37	0.69
9734	Histone deacetylase 9	78	54	0.69
100289509	-	31	21	0.69
29785	Cytochrome P450 2S1	102	70	0.69
100134304	Serine/threonine-protein kinase Chk2	164	114	0.69
100128526	-	6	4	0.69
26051	Protein phosphatase 1 regulatory inhibitor subunit 16B	610	422	0.69
-	Sideroflexin-3	316	219	0.69
199720	Gametogenetin	63	44	0.69
-	Uncharacterized protein ENSP00000342525 Fragment	61	42	0.69
8291	Dysferlin	583	404	0.69
9091	Phosphatidylinositol N-acetylglucosaminyltransferase subunit Q	76	53	0.69
8515	Integrin alpha-10 Precursor	15	10	0.69
128954	GRB2-associated-binding protein 4	124	86	0.69
8823	-	154	107	0.69
5010	Claudin-11	588	408	0.69
8904	Copine-1	106	73	0.69
284338	Proline-rich protein 19	5	4	0.69
9114	V-type proton ATPase subunit d 1	527	366	0.69
100130604	CDNA FLJ25648 fis, clone SYN01015	58	40	0.69
100289576	-	226	157	0.69
63971	Kinesin-like protein KIF13A	47	33	0.69
22955	Polycomb protein SCMH1	187	130	0.69
-	Interleukin-1 receptor accessory protein Precursor	27	19	0.69
9647	Protein phosphatase 1F	379	264	0.69

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
646262	Putative beta-lactamase-like protein ENSP00000383859	8	6	0.69
83452	Ras-related protein Rab-33B	243	169	0.69
4134	Microtubule-associated protein 4	76	53	0.69
8462	Krueppel-like factor 11	30	21	0.69
-	SAM domain-containing protein SAMSN-1	107	74	0.69
100130116	-	117	81	0.69
2318	Filamin-C	69	48	0.70
23194	F-box/LRR-repeat protein 7	8	5	0.70
9759	Histone deacetylase 4	44	30	0.70
22829	Neuroigin-4, Y-linked Precursor	164	114	0.70
27236	Arfaptin-1	148	103	0.70
152503	SH3 domain-containing protein 19	114	79	0.70
1850	Dual specificity protein phosphatase 8	46	32	0.70
63876	Homeobox protein PKNOX2	399	278	0.70
25788	DNA repair and recombination protein RAD54B	19	13	0.70
9907	Uncharacterized protein KIAA0415	87	60	0.70
-	Choline transporter-like protein 5	10	7	0.70
57493	Protein HEG homolog 1 Precursor	414	289	0.70
646600	Putative uncharacterized protein C3orf65	24	17	0.70
100288957	-	13	9	0.70
8242	Histone demethylase JARID1C	97	68	0.70
7760	Zinc finger protein 213	13	9	0.70
2124	Protein EVI2B Precursor	20	14	0.70
100131831	Putative uncharacterized protein FLJ26174	30	21	0.70
871	Serpin H1 Precursor	2509	1749	0.70
7280	Tubulin beta-2A chain	811	565	0.70
9154	Sodium/nucleoside cotransporter 1	343	239	0.70
-	-	113	78	0.70
1992	Leukocyte elastase inhibitor	352	245	0.70
57590	WD repeat and FYVE domain-containing protein 1	93	65	0.70
-	Cysteine-rich protein 2	1188	829	0.70
100294352	-	25	17	0.70
4439	MutS protein homolog 5	24	17	0.70
100287105	-	34	24	0.70
65084	Transmembrane protein 135	60	42	0.70
9805	Secernin-1	169	118	0.70
-	-	16	11	0.70
-	Probable G-protein coupled receptor 124 Precursor	39	27	0.70
402665	Ig-like domain-containing protein ENSP00000270642 Precursor	18	12	0.70
55359	Tyrosine protein-kinase STYK1	52	36	0.70
-	Band 4.1-like protein 3	89	62	0.70
-	-	150	105	0.70
391722	-	42	29	0.70
114795	Transmembrane protein 132B	58	41	0.70
9208	Leucine-rich repeat flightless-interacting protein 1	566	396	0.70
551	Vasopressin-neurophysin 2-copeptin Precursor	191	133	0.70
26127	FGFR1 oncogene partner 2	255	178	0.70
196500	Uncharacterized protein C12orf53 Precursor	11	8	0.70
-	Sodium/potassium/calcium exchanger 1	20	14	0.70
353133	Late cornified envelope protein 1C	256	179	0.70
10002	Photoreceptor-specific nuclear receptor	11	8	0.70
3868	Keratin, type I cytoskeletal 16	99	69	0.70
4772	Nuclear factor of activated T-cells, cytoplasmic 1	24	17	0.70

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10381	Tubulin beta-3 chain	778	544	0.70
9223	Membrane-associated guanylate kinase, WW and PDZ domain-containing protein 1	33	23	0.70
100134008	-	199	139	0.70
8318	CDC45-related protein	87	61	0.70
23207	Pleckstrin homology domain-containing family M member 2	80	56	0.70
-	-	3037	2125	0.70
10501	Semaphorin-6B Precursor	13	9	0.70
2280	Peptidyl-prolyl cis-trans isomerase FKBP1A	8171	5719	0.70
64129	Tubulointerstitial nephritis antigen-like Precursor	148	103	0.70
100130454	-	38	26	0.70
353131	Late cornified envelope protein 1A	229	160	0.70
8303	Stannin	319	223	0.70
3850	Keratin, type II cytoskeletal 3	157	110	0.70
-	Coiled-coil domain-containing protein 74A	181	127	0.70
204	Adenylate kinase isoenzyme 2, mitochondrial	633	444	0.70
481	Sodium/potassium-transporting ATPase subunit beta-1	143	100	0.70
64855	Niban-like protein 1	859	602	0.70
942	T-lymphocyte activation antigen CD86 Precursor	51	36	0.70
9122	Monocarboxylate transporter 5	48	34	0.70
4665	NGFI-A-binding protein 2	71	50	0.70
28	Histo-blood group ABO system transferase	6	4	0.70
4940	2'-5'-oligoadenylate synthetase 3	99	69	0.70
3626	Inhibin beta C chain Precursor	153	107	0.70
57600	Folliculin-interacting protein 2	9	6	0.70
2078	Transcriptional regulator ERG	415	291	0.70
89872	Aquaporin-10	82	57	0.70
337959	Keratin-associated protein 13-2	9	6	0.70
301	Annexin A1	6790	4763	0.70
-	Kinesin-like protein KIF15	19	13	0.70
-	-	204	143	0.70
57396	Dual specificity protein kinase CLK4	61	43	0.70
7010	Angiopoietin-1 receptor Precursor	162	114	0.70
100288884	Putative uncharacterized protein ENSP00000375442	71	50	0.70
54928	Inositol monophosphatase 3	388	272	0.70
10252	Protein sprouty homolog 1	39	28	0.70
84616	Keratin-associated protein 4-4	245	172	0.70
6002	Regulator of G-protein signaling 12	29	20	0.70
55705	Importin-9	327	230	0.70
4179	Membrane cofactor protein Precursor	970	682	0.70
440498	heat shock factor binding protein 1-like	102	72	0.70
5346	Perilipin	44	31	0.70
4082	Myristoylated alanine-rich C-kinase substrate	1184	832	0.70
-	SUZ12P protein	24	17	0.70
9344	Serine/threonine-protein kinase TAO2	18	13	0.70
353322	Ankyrin repeat domain-containing protein 37	125	88	0.70
51351	Zinc finger protein 117	31	22	0.70
39	Acetyl-CoA acetyltransferase, cytosolic	846	595	0.70
23174	Zinc finger CCHC domain-containing protein 14	52	37	0.70
1432	Mitogen-activated protein kinase 14	129	91	0.70
-	Diphosphomevalonate decarboxylase	258	182	0.70
5604	Dual specificity mitogen-activated protein kinase kinase 1	289	204	0.70
1152	Creatine kinase B-type	29	20	0.70

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-	174	122	0.70
140711	Uncharacterized protein C20orf118	25	17	0.70
100130220	ATP-dependent RNA helicase DDX3Y	327	231	0.70
3479	Insulin-like growth factor IA Precursor	166	117	0.70
348	Apolipoprotein E Precursor	232	164	0.71
-	U6 snRNA-specific terminal uridylyltransferase 1	59	41	0.71
100287403	-	16	12	0.71
8786	Regulator of G-protein signaling 11	21	15	0.71
1305	Collagen alpha-1(XIII) chain	79	56	0.71
641700	Endothelial cell-specific chemotaxis regulator Precursor	1647	1162	0.71
9564	Breast cancer anti-estrogen resistance protein 1	1615	1139	0.71
253980	BTB/POZ domain-containing protein KCTD13	610	430	0.71
100293878	-	21	15	0.71
6774	Signal transducer and activator of transcription 3	274	193	0.71
6102	Protein XRP2	261	185	0.71
-	Ral guanine nucleotide dissociation stimulator	432	305	0.71
128977	UPF0545 protein C22orf39	46	33	0.71
3142	H2.0-like homeobox protein	43	30	0.71
57405	Kinetochore protein Spc25	70	49	0.71
5787	Receptor-type tyrosine-protein phosphatase beta Precursor	41	29	0.71
4046	Lymphocyte-specific protein 1	32	23	0.71
-	ATP-dependent DNA helicase Q1	726	513	0.71
389787	Translationally-controlled tumor protein	29836	21101	0.71
22930	Rab3 GTPase-activating protein catalytic subunit	39	28	0.71
29781	Condensin-2 complex subunit H2	39	28	0.71
8991	Selenium-binding protein 1	166	118	0.71
51194	Importin-11	49	35	0.71
4066	Protein lyl-1	264	187	0.71
2530	Alpha-(1,6)-fucosyltransferase	24	17	0.71
23214	Exportin-6	270	191	0.71
8564	Kynurenine 3-monooxygenase	35	25	0.71
9337	CCR4-NOT transcription complex subunit 8	518	367	0.71
1102	RCC1 and BTB domain-containing protein 2	123	87	0.71
100131330	Protein FAM115C	94	67	0.71
25829	Transmembrane protein 184B	194	137	0.71
4598	Mevalonate kinase	259	184	0.71
723790	Histone H2A type 2-A	138	97	0.71
51006	Solute carrier family 35 member C2	70	50	0.71
8178	RNA polymerase II elongation factor ELL	59	42	0.71
5286	Phosphatidylinositol-4-phosphate 3-kinase C2 domain-containing alpha polypeptide	86	61	0.71
1499	Catenin beta-1	896	635	0.71
-	Uncharacterized protein ENSP00000381059	31	22	0.71
161176	Nesprin-3	30	21	0.71
60436	Homeobox protein TGIF2	145	103	0.71
4286	Microphthalmia-associated transcription factor	23	17	0.71
55229	Pantothenate kinase 4	84	60	0.71
-	-	147	104	0.71
100288649	-	16	12	0.71
57701	Uncharacterized protein KIAA1602	148	105	0.71
3339	Basement membrane-specific heparan sulfate proteoglycan core protein Precursor	203	144	0.71
1786	DNA (cytosine-5)-methyltransferase 1	133	94	0.71

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
6614	Sialoadhesin Precursor	197	140	0.71
340980	Olfactory receptor 52B6	19	14	0.71
7462	Linker for activation of T-cells family member 2	167	118	0.71
26043	UBX domain-containing protein 7	39	28	0.71
10277	Ubiquitin conjugation factor E4 B	25	18	0.71
1579	Cytochrome P450 4A11 Precursor	43	30	0.71
-	Uncharacterized protein C20orf160	92	65	0.71
25853	WD repeat-containing protein 40A	64	45	0.71
84068	Sodium/bile acid cotransporter 7	36	26	0.71
11060	NEDD4-like E3 ubiquitin-protein ligase WWP2	57	41	0.71
57787	MAP/microtubule affinity-regulating kinase 4	28	20	0.71
80833	Apolipoprotein L3	328	233	0.71
8780	Serine/threonine-protein kinase RIO3	331	236	0.71
-	Uncharacterized protein KIAA1602	98	70	0.71
729439	Uncharacterized protein C6orf124	26	18	0.71
728070	Transmembrane protein C16orf54	15	10	0.71
8473	UDP-N-acetylglucosamine-peptide N-acetylglucosaminyltransferase 110 kDa subunit	225	160	0.71
100292819	-	6	5	0.71
4919	Tyrosine-protein kinase transmembrane receptor ROR1 Precursor	44	32	0.71
92591	Ankyrin repeat and SOCS box protein 16	84	59	0.71
-	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-1	1456	1036	0.71
140901	Serine/threonine-protein kinase 35	101	72	0.71
2956	DNA mismatch repair protein Msh6	305	217	0.71
25777	Protein unc-84 homolog B	259	184	0.71
-	Putative neutrophil cytosol factor 1B	78	56	0.71
10965	Acyl-coenzyme A thioesterase 2, mitochondrial Precursor	76	54	0.71
102	ADAM 10 Precursor	259	184	0.71
4490	Metallothionein-1B	2688	1915	0.71
4151	Myoglobin	9	6	0.71
253639	Zinc finger protein 620	369	263	0.71
10497	Protein unc-13 homolog B	238	169	0.71
4640	Myosin-Ia	246	175	0.71
-	UPF0541 protein FAM168B (p20)	376	268	0.71
143098	MAGUK p55 subfamily member 7	40	29	0.71
2687	Gamma-glutamyltransferase 5 Precursor	29	21	0.71
9993	Integral membrane protein DGCR2/IDD Precursor	86	61	0.71
26503	Sialin	350	250	0.71
89953	Kinesin light chain 4	43	30	0.71
100290638	-	72	52	0.71
7942	Transcription factor EB	11	8	0.71
4541	NADH-ubiquinone oxidoreductase chain 6	176	126	0.71
57179	UPF0498 protein KIAA1191	435	311	0.71
5939	RNA-binding motif, single-stranded-interacting protein 2	192	137	0.71
9866	Tripartite motif-containing protein 66	9	7	0.71
-	-	22	16	0.71
163051	Zinc finger protein 709	72	51	0.71
117248	Polypeptide N-acetylgalactosaminyltransferase-like protein 2	3921	2801	0.71
554313	Histone H4	112	80	0.71
64689	Golgi reassembly-stacking protein 1	309	220	0.71

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1266	Calponin-3	4220	3015	0.71
-	Connector enhancer of kinase suppressor of ras 1	64	45	0.71
-	Echinoderm microtubule-associated protein-like 2	8	6	0.71
27289	Rho-related GTP-binding protein Rho6 Precursor	69	49	0.71
201294	Protein unc-13 homolog D	8	6	0.71
10795	Zinc finger protein 268	21	15	0.71
100288608	-	92	66	0.71
-	CUB and sushi domain-containing protein 1 Precursor	24	17	0.71
83877	TM2 domain-containing protein 2 Precursor	1112	795	0.72
55432	Ubiquitin thioesterase OTU1	27	19	0.72
283933	Zinc finger protein 843	75	53	0.72
8828	Neuropilin-2 Precursor	160	114	0.72
23386	NudC domain-containing protein 3	65	46	0.72
-	SLAM family member 7 Precursor	44	32	0.72
-	Cat eye syndrome critical region protein 6	100	72	0.72
79709	Glycosyltransferase 25 family member 1 Precursor	394	282	0.72
100133714	Mucin-12 Precursor	58	42	0.72
60313	Vasculin-like protein 1	151	108	0.72
129804	Fibulin-7 Precursor	15	11	0.72
-	Monocarboxylate transporter 5	48	34	0.72
148479	PHD finger protein 13	142	101	0.72
-	Latrophilin-3 Precursor	11	8	0.72
100292090	-	83	59	0.72
7434	Vasoactive intestinal polypeptide receptor 2 Precursor	69	49	0.72
51252	Protein FAM178B	252	181	0.72
-	Protein disulfide-isomerase A2 Precursor	20	14	0.72
23635	Single-stranded DNA-binding protein 2	83	59	0.72
2982	Guanylate cyclase soluble subunit alpha-3	8	6	0.72
7430	Ezrin	484	346	0.72
148362	BRO1 domain-containing protein BROX	52	37	0.72
83468	Glycosyltransferase 8 domain-containing protein 2	44	32	0.72
-	Ecotropic virus integration site 1 protein homolog	113	81	0.72
57514	Cdc42 GTPase-activating protein	108	77	0.72
5626	Homeobox protein prophet of Pit-1	160	115	0.72
100132913	-	98	70	0.72
399726	Putative uncharacterized protein C10orf114	18	13	0.72
259307	L-aminooxidase Precursor	29	21	0.72
11245	Probable G-protein coupled receptor 176	78	56	0.72
7515	DNA repair protein XRCC1	142	102	0.72
713	Complement C1q subcomponent subunit B Precursor	39	28	0.72
-	cDNA FLJ39198 fis, clone OCBBF2005161	23	17	0.72
-	-	241	173	0.72
10642	Insulin-like growth factor 2 mRNA-binding protein 1	91	65	0.72
8396	Phosphatidylinositol-5-phosphate 4-kinase type-2 beta	43	31	0.72
5798	Receptor-type tyrosine-protein phosphatase-like N Precursor	5	4	0.72
1212	Clathrin light chain B	874	628	0.72
23369	Pumilio homolog 2	101	73	0.72
-	T-cell acute lymphocytic leukemia protein 1	556	399	0.72
100291825	-	20	14	0.72
55565	Zinc finger protein 821	28	20	0.72
100288260	-	82	59	0.72
390940	Uncharacterized protein ENSP00000244321 Precursor	17	12	0.72
10246	Sodium-dependent phosphate transport protein 3	8	6	0.72

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
85012	Transcription elongation factor A protein-like 3	303	218	0.72
54520	Coiled-coil domain-containing protein 93	152	109	0.72
10486	Adenylyl cyclase-associated protein 2	118	85	0.72
3201	Homeobox protein Hox-A4	132	95	0.72
5566	cAMP-dependent protein kinase catalytic subunit alpha	12	9	0.72
-	cAMP-dependent protein kinase type II-alpha regulatory subunit	47	34	0.72
90826	TPR repeat-containing protein LOC90826	43	31	0.72
5768	Sulfhydryl oxidase 1 Precursor	286	206	0.72
-	Ras-related protein Rab-2A	754	542	0.72
54532	Inactive ubiquitin carboxyl-terminal hydrolase 53	95	68	0.72
100289473	-	32	23	0.72
1314	Coatomeer subunit alpha	305	219	0.72
-	Putative uncharacterized protein FLJ37004	765	550	0.72
-	-	17	12	0.72
6324	Sodium channel subunit beta-1 Precursor	43	31	0.72
-	Uncharacterized protein ENSP00000380341	511	368	0.72
283234	Coiled-coil domain-containing protein 88B	139	100	0.72
100131774	-	7	5	0.72
6645	Beta-2-syntrophin	200	144	0.72
84674	Caspase recruitment domain-containing protein 6	33	24	0.72
56246	Melanocortin-2 receptor accessory protein	127	91	0.72
8153	Rho-related GTP-binding protein RhoN Precursor	46	33	0.72
3208	Neuron-specific calcium-binding protein hippocalcin	13	10	0.72
-	Filamin-B	202	145	0.72
64856	von Willebrand factor A domain-containing protein 1 Precursor	88	63	0.72
85409	Protein naked cuticle homolog 2	10	8	0.72
-	Protein FAM101A	291	209	0.72
9074	Claudin-6 (Skullin 2)	80	57	0.72
-	Alpha-1,3-mannosyl-glycoprotein	316	228	0.72
-	2-beta-N-acetylglucosaminyltransferase			
-	Putative uncharacterized protein ENSP00000381977	132	95	0.72
100288297	-	15	11	0.72
9896	Polyphosphoinositide phosphatase	84	61	0.72
4628	Myosin-10	62	45	0.72
7014	Telomeric repeat-binding factor 2	46	33	0.72
678	Butyrate response factor 2	571	411	0.72
57565	Kelch-like protein 14	12	8	0.72
100132235	Proline-rich nuclear receptor coactivator 2	788	568	0.72
4166	Carbohydrate sulfotransferase 6	19	14	0.72
-	Collagen alpha-1(XIII) chain	209	151	0.72
11274	Ubl carboxyl-terminal hydrolase 18	67	48	0.72
51306	Protein FAM13B1	56	40	0.72
9961	Major vault protein	521	376	0.72
85441	Peroxisomal proliferator-activated receptor A-interacting complex 285 kDa protein	44	32	0.72
100294049	-	77	56	0.72
58517	Probable RNA-binding protein 25	436	315	0.72
57523	Integrase catalytic domain-containing protein KIAA1305	64	46	0.72
58190	Carboxy-terminal domain RNA polymerase II polypeptide A small phosphatase 1	66	48	0.72
-	Seven transmembrane helix receptor	14	10	0.72
23180	Raftlin	618	446	0.72

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2526	Alpha-(1,3)-fucosyltransferase 11	48	34	0.72
22908	Phosphatidylinositol phosphatase SAC1	95	69	0.72
57826	Ras-related protein Rap-2c Precursor	97	70	0.72
6240	Ribonucleoside-diphosphate reductase large subunit	679	490	0.72
84671	Zinc finger protein 347	623	450	0.72
255488	E3 ubiquitin-protein ligase RNF144B	142	103	0.72
22846	Vasohibin-1	682	492	0.72
51192	Chemokine-like factor	1439	1039	0.72
22877	MLX-interacting protein	39	28	0.72
7184	Endoplasmic Precursor	5540	4002	0.72
90050	Protein FAM181A	66	48	0.72
54981	Nicotinamide riboside kinase 1	275	199	0.72
5814	Transcriptional activator protein Pur-beta	45	33	0.72
-	ES1 protein homolog, mitochondrial Precursor	455	329	0.72
340061	Transmembrane protein 173	433	313	0.72
1386	Cyclic AMP-dependent transcription factor ATF-2	131	95	0.72
120237	developing brain homeobox 1	34	24	0.72
-	Fibrinogen C domain-containing protein 1	7	5	0.72
79899	Protor-2	17	12	0.72
54997	Tescalcin	10	7	0.72
51008	Activating signal cointegrator 1 complex subunit 1	118	85	0.72
84720	GPI ethanolamine phosphate transferase 3	69	50	0.72
644556	Exocyst complex component 5	265	192	0.72
3080	Complement factor H-related protein 2 Precursor	82	59	0.72
5066	Peptidyl-glycine alpha-amidating monooxygenase Precursor	443	320	0.72
10945	ER lumen protein retaining receptor 1	658	476	0.72
11083	Death-inducer obliterator 1	42	30	0.72
7421	Vitamin D3 receptor	40	29	0.72
390061	Olfactory receptor 51Q1	26	19	0.72
728404	Centaurin-gamma-like family member 5	77	56	0.72
390442	Olfactory receptor 11H4	40	29	0.72
-	Exportin-4	85	61	0.72
4907	5'-nucleotidase Precursor	1125	815	0.72
4293	Mitogen-activated protein kinase kinase kinase 9	10	7	0.72
6357	C-C motif chemokine 13 Precursor	75	54	0.72
-	Uncharacterized protein C21orf58	43	31	0.72
27352	Small G protein signaling modulator 3	131	95	0.72
23604	Death-associated protein kinase 2	81	58	0.72
595	G1/S-specific cyclin-D1	5635	4085	0.72
11067	Protein DEPP	2399	1739	0.73
1717	7-dehydrocholesterol reductase	606	440	0.73
-	-	722	524	0.73
57731	Spectrin beta chain, brain 3	48	35	0.73
79733	Transcription factor E2F8	40	29	0.73
9918	Condensin complex subunit 1	71	52	0.73
27068	Inorganic pyrophosphatase 2, mitochondrial Precursor	470	341	0.73
118	Alpha-adducin	460	334	0.73
-	3'(2'),5'-bisphosphate nucleotidase 1	86	62	0.73
54901	CDK5 regulatory subunit-associated protein 1-like 1	56	40	0.73
79154	Dehydrogenase/reductase SDR family member 11 Precursor	38	27	0.73
-	Putative RNA-binding protein Luc7-like 1	574	417	0.73
-	SS18-like protein 1	27	20	0.73

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
60481	Elongation of very long chain fatty acids protein 5	1019	740	0.73
7813	Ecotropic viral integration site 5 protein homolog	146	106	0.73
84955	NudC domain-containing protein 1	376	273	0.73
51241	Cytochrome c oxidase-assembly factor COX16 homolog, mitochondrial Precursor	1587	1153	0.73
10848	RelA-associated inhibitor	122	88	0.73
65010	Solute carrier family 26 member 6	88	64	0.73
158787	RIB43A-like with coiled-coils protein 1	47	34	0.73
1534	Cytochrome b561	54	39	0.73
11022	Tudor and KH domain-containing protein	24	18	0.73
100129036	-	11	8	0.73
25923	Atlastin-3	125	91	0.73
-	-	24572	17870	0.73
2793	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-T2 Precursor	26	19	0.73
8672	Eukaryotic translation initiation factor 4 gamma 3	125	91	0.73
5993	DNA-binding protein RFX5	147	107	0.73
-	Putative golgin subfamily A member 6-like protein 5	36	26	0.73
6048	E3 ubiquitin-protein ligase RNF5	7	5	0.73
1603	Dolichyl-diphosphooligosaccharide-protein glycosyltransferase subunit DAD1	4972	3617	0.73
53339	BTB/POZ domain-containing protein 1	997	726	0.73
116840	Centrobilin	63	46	0.73
23039	Exportin-7	20	15	0.73
684	Bone marrow stromal antigen 2 Precursor	912	663	0.73
5449	Pituitary-specific positive transcription factor 1	57	41	0.73
100294028	-	15	11	0.73
338675	Olfactory receptor 5AP2	94	69	0.73
64927	Tetratricopeptide repeat protein 23	34	25	0.73
10487	Adenylyl cyclase-associated protein 1	2481	1806	0.73
2624	Endothelial transcription factor GATA-2	83	60	0.73
100291105	-	24	17	0.73
835	Caspase-2 Precursor	143	104	0.73
-	-	141	103	0.73
10776	cAMP-regulated phosphoprotein 19	170	124	0.73
3978	DNA ligase 1	207	151	0.73
10755	PDZ domain-containing protein GIPC1	294	214	0.73
100129917	HCG1982013cDNA FLJ31021 fis, clone HLUNG2000412	28	20	0.73
613	Breakpoint cluster region protein	1445	1053	0.73
9882	TBC1 domain family member 4	286	209	0.73
1134	Acetylcholine receptor subunit alpha Precursor	188	137	0.73
51313	Protein ENED	1332	971	0.73
-	Zinc finger protein AEBP2	137	100	0.73
10157	Alpha-aminoadipic semialdehyde synthase, mitochondrial Precursor	112	82	0.73
58533	Sorting nexin-6	425	310	0.73
27067	Double-stranded RNA-binding protein Staufin homolog 2	193	141	0.73
22847	Zinc finger protein 507	41	30	0.73
1289	Collagen alpha-1(V) chain Precursor	755	551	0.73
100292751	-	189	138	0.73
221937	Forkhead box protein K1	56	41	0.73
10494	Serine/threonine-protein kinase 25	1145	835	0.73
10484	Protein transport protein Sec23A	359	262	0.73
7126	BTB/POZ domain-containing protein TNFAIP1	749	546	0.73

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-	5214	3804	0.73
54682	MANSC domain-containing protein 1 Precursor	697	509	0.73
-	S-phase kinase-associated protein 2	49	36	0.73
10523	Calcium homeostasis endoplasmic reticulum protein	18	13	0.73
4299	AF4/FMR2 family member 1	192	140	0.73
-	Syntaxin-3	450	328	0.73
29957	Calcium-binding mitochondrial carrier protein SCaMC-1	389	284	0.73
8526	Diacylglycerol kinase epsilon	33	24	0.73
-	-	57	42	0.73
-	Coiled-coil domain-containing protein 109A	129	94	0.73
129807	Sialidase-4	327	239	0.73
100133419	Ribosome maturation protein SBDS	1235	902	0.73
9133	G2/mitotic-specific cyclin-B2	288	210	0.73
81603	Tripartite motif-containing protein 8	684	500	0.73
-	Putative uncharacterized protein ENSP00000352575	30	22	0.73
26959	HMG box-containing protein 1	538	393	0.73
7109	Trafficking protein particle complex subunit 10	28	20	0.73
644578	-	118	86	0.73
118611	Uncharacterized protein C10orf90	52	38	0.73
121256	Transmembrane protein 132D Precursor	28	21	0.73
51271	Ubiquitin-associated protein 1	168	123	0.73
3931	Phosphatidylcholine-sterol acyltransferase Precursor	98	72	0.73
731414	-	448	327	0.73
55515	Amiloride-sensitive cation channel 4	14	10	0.73
644794	-	14	10	0.73
84248	Forty-two-three domain-containing protein 1	587	429	0.73
222643	UNC5C-like protein	31	23	0.73
8994	LIM domain-containing protein 1	137	100	0.73
440955	Transmembrane protein 89 Precursor	111	81	0.73
493869	Probable glutathione peroxidase 8	308	225	0.73
116173	CKLF-like MARVEL transmembrane domain-containing protein 5	21	15	0.73
122786	FERM domain-containing protein 6	261	191	0.73
100133280	Putative POM121-like protein 1-like	1728	1264	0.73
1993	ELAV-like protein 2	6	4	0.73
11082	Endothelial cell-specific molecule 1 Precursor	11319	8280	0.73
6451	SH3 domain-binding glutamic acid-rich-like protein	769	563	0.73
3423	Iduronate 2-sulfatase Precursor	225	165	0.73
728449	Putative uncharacterized protein ENSP00000334090	39	28	0.73
150677	Otospiralin Precursor	15	11	0.73
4087	Mothers against decapentaplegic homolog 2	22	16	0.73
665	BCL2/adenovirus E1B 19 kDa protein-interacting protein 3-like	454	332	0.73
6844	Vesicle-associated membrane protein 2	5	4	0.73
408187	Putative serine protease inhibitor Kazal-type 5-like 2 Precursor	45	33	0.73
100287293	-	157	115	0.73
-	Anion exchange protein 2	56	41	0.73
3549	Indian hedgehog protein Precursor	138	101	0.73
4242	Beta-1,3-N-acetylglucosaminyltransferase manic fringe	398	292	0.73
23576	N(G),N(G)-dimethylarginine dimethylaminohydrolase 1	89	65	0.73
732446	Growth arrest-specific protein 6 Precursor	710	520	0.73
-	-	37	27	0.73
537	V-type proton ATPase subunit S1 Precursor	2774	2031	0.73

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Wiskott-Aldrich syndrome protein family member 4	49	36	0.73
23397	Condensin complex subunit 2	65	48	0.73
1012	Cadherin-13 Precursor	287	210	0.73
10870	Hematopoietic cell signal transducer Precursor	43	31	0.73
23171	Glycerol-3-phosphate dehydrogenase 1-like protein	21	15	0.73
154043	Connector enhancer of kinase suppressor of ras 3	24	18	0.73
55125	Centrosomal protein of 192 kDa	32	23	0.73
441140	cDNA FLJ45422 fis, clone BRHIP3036715, moderately similar to HLA class I histocompatibility antigen, alpha chain HFLJ45422 proteinFLJ45422 protein, isoform CRA_a	3023	2214	0.73
8435	Sterol O-acyltransferase 2	63	46	0.73
284021	Probable mast cell antigen 32 homolog Precursor	57	42	0.73
6570	Chromaffin granule amine transporter	6	4	0.73
54622	ADP-ribosylation factor-like 15	18	13	0.73
100287153	-	230	168	0.73
814	Calcium/calmodulin-dependent protein kinase type IV	8	6	0.73
100129906	-	44	32	0.73
100130663	-	6	4	0.73
730109	-	17	12	0.73
124936	Cytochrome b5 domain-containing protein 2	71	52	0.73
4615	Histone H2B type 1-D	109	80	0.73
4061	Lymphocyte antigen 6E Precursor	156	115	0.73
4781	Nuclear factor 1 B-type	332	243	0.73
353137	Late cornified envelope protein 1F	139	102	0.73
100289612	-	30	22	0.73
5916	Retinoic acid receptor gamma	55	40	0.73
100133913	Putative uncharacterized protein CXorf24	25	18	0.73
54461	F-box/WD repeat-containing protein 5	162	119	0.73
2169	Fatty acid-binding protein, intestinal	52	38	0.73
10426	Gamma-tubulin complex component 3	80	59	0.73
391343	hypothetical protein LOC391343	36	27	0.73
25906	Uncharacterized protein C11orf51	206	151	0.73
10363	High mobility group protein 20A	267	196	0.73
757	Transmembrane protein 50B	378	278	0.73
100131337	Putative uncharacterized protein C21orf88	39	28	0.73
2781	Guanine nucleotide-binding protein G(z) subunit alpha	82	60	0.73
23435	TAR DNA-binding protein 43	62	46	0.73
440574	UPF0327 protein C1orf151	2576	1890	0.73
4324	Matrix metalloproteinase-15 Precursor	6	4	0.73
27433	Torsin-2A Precursor	119	87	0.73
390064	Olfactory receptor 51I2	29	21	0.73
23677	SH3 domain-binding protein 4	190	139	0.73
22828	Putative RNA-binding protein 16	113	83	0.73
-	Zinc finger CCCH domain-containing protein 18	437	321	0.73
10736	Homeobox protein SIX2	15	11	0.73
60626	Synembryn-A	472	346	0.73
-	FERM domain-containing protein 1	98	72	0.73
-	Ataxin-7-like protein 2	236	173	0.73
55692	Putative RNA-binding protein Luc7-like 1	24	18	0.73
2239	Glypican-4 Precursor	26	19	0.73
84314	Transmembrane protein 107	229	168	0.73
100288164	-	176	129	0.73
128653	Uncharacterized protein C20orf141	339	249	0.73
64582	Probable G-protein coupled receptor 135	262	192	0.73

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
388610	Uncharacterized protein LOC388610	127	93	0.73
3866	Keratin, type I cytoskeletal 15	12	9	0.73
-	Semaphorin-4A Precursor	70	51	0.73
53916	Ras-related protein Rab-4B	277	204	0.73
252983	Syntaxin-binding protein 4	36	27	0.73
55636	Chromodomain-helicase-DNA-binding protein 7	90	66	0.73
-	Putative UPF0607 protein FLJ37424	1284	943	0.73
55893	Zinc finger protein 395	44	33	0.74
6938	Transcription factor 12	400	294	0.74
51332	Spectrin beta chain, brain 4	107	79	0.74
163050	Zinc finger protein 564	855	629	0.74
-	Transmembrane 6 superfamily member 2	93	68	0.74
23065	Uncharacterized protein KIAA0090 Precursor	247	182	0.74
64114	Transmembrane BAX inhibitor motif-containing protein 1	989	727	0.74
7091	Transducin-like enhancer protein 4	54	40	0.74
8036	Leucine-rich repeat protein SHOC-2	104	76	0.74
7035	Tissue factor pathway inhibitor Precursor (	1182	869	0.74
199731	Cell adhesion molecule 4 Precursor	13	10	0.74
731035	IQ motif and SEC7 domain-containing protein 3	16	12	0.74
3814	Metastasis-suppressor KiSS-1 Precursor	15	11	0.74
541565	PDZ and LIM domain protein 2	185	136	0.74
644265	-	54	39	0.74
84987	Uncharacterized protein C12orf62	1339	985	0.74
140564	Probable DNA dC>dU-editing enzyme APOBEC-3D	417	307	0.74
23542	C-jun-amino-terminal kinase-interacting protein 2	680	500	0.74
4836	Glycylpeptide N-tetradecanoyltransferase 1	138	102	0.74
11170	Protein FAM107A	19	14	0.74
-	Nuclear receptor interaction protein	128	94	0.74
284759	Signal-regulatory protein beta-2 Precursor	84	62	0.74
3757	Potassium voltage-gated channel subfamily H member 2	121	89	0.74
-	Sal-like protein 4	7	5	0.74
-	-	11135	8199	0.74
100287534	-	6	5	0.74
9121	Monocarboxylate transporter 6	25	18	0.74
-	V-type proton ATPase subunit G 2	25	18	0.74
100131308	Poliovirus receptor-related protein 2 Precursor	437	322	0.74
4247	Alpha-1,6-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase	756	557	0.74
54884	All-trans-retinol 13,14-reductase Precursor	189	139	0.74
3857	Keratin, type I cytoskeletal 9	29	22	0.74
128239	Ras GTPase-activating-like protein IQGAP3	41	30	0.74
8718	Tumor necrosis factor receptor superfamily member 25 Precursor	101	75	0.74
51218	Glutaredoxin-related protein 5	580	427	0.74
25925	Zinc finger protein 521	194	143	0.74
6663	Transcription factor SOX-10	140	103	0.74
4054	Latent-transforming growth factor beta-binding protein 3 Precursor	196	144	0.74
348327	Zinc finger protein 530	201	148	0.74
1107	Chromodomain-helicase-DNA-binding protein 3	13	9	0.74
3148	High mobility group protein B2	1485	1095	0.74
51107	Gamma-secretase subunit APH-1A	331	244	0.74
81558	Protein FAM117A (C/EBP-induced protein)	21	15	0.74
6566	Monocarboxylate transporter 1	804	593	0.74

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
91252	Zinc transporter ZIP13	263	194	0.74
57695	Ubiquitin carboxyl-terminal hydrolase 37	57	42	0.74
56262	Leucine-rich repeat-containing protein 8A	493	363	0.74
4591	Tripartite motif-containing protein 37	110	81	0.74
11138	TBC1 domain family member 8	180	133	0.74
9464	Heart- and neural crest derivatives-expressed protein 2	28	20	0.74
100290747	-	14	10	0.74
4690	Cytoplasmic protein NCK1	367	271	0.74
160518	DENN domain-containing protein 5B	16	12	0.74
-	Breast cancer anti-estrogen resistance protein 1	1582	1168	0.74
374654	Kinesin-like protein KIF7	51	38	0.74
10093	Actin-related protein 2/3 complex subunit 4	410	302	0.74
353500	Bone morphogenetic protein 8A Precursor	19	14	0.74
6348	C-C motif chemokine 3 Precursor	960	709	0.74
129138	Ankyrin repeat domain-containing protein 54	46	34	0.74
-	Leucine-rich repeat-containing protein 16B	89	66	0.74
10299	E3 ubiquitin-protein ligase MARCH6	197	146	0.74
-	Olfactory receptor 52R1	49	36	0.74
10695	Protein canopy homolog 3 Precursor	282	209	0.74
-	Uncharacterized protein C6orf105	136	101	0.74
1263	Serine/threonine-protein kinase PLK3	399	295	0.74
339122	Ras-related protein Rab-43	146	108	0.74
153222	UPF0474 protein C5orf41	128	95	0.74
100291891	-	50	37	0.74
23033	Protein dopey-1	10	7	0.74
-	Histone-binding protein RBBP7	1571	1162	0.74
9125	Cell differentiation protein RCD1 homolog	165	122	0.74
131540	Probable palmitoyltransferase ZDHHC19	113	83	0.74
91010	Formin-like protein 3	80	59	0.74
23552	Cell cycle-related kinase	27	20	0.74
51561	Interleukin-23 subunit alpha Precursor	44	32	0.74
116113	Forkhead box protein P4	67	49	0.74
53841	Mucin and cadherin-like protein Precursor	22	16	0.74
221044	Unique cartilage matrix-associated protein Precursor	42	31	0.74
55635	DEP domain-containing protein 1A	32	23	0.74
-	Ammonium transporter Rh type B	34	25	0.74
-	Protein transport protein Sec24A	33	24	0.74
2046	Ephrin type-A receptor 8 Precursor	168	124	0.74
1017	Cell division protein kinase 2	186	138	0.74
143903	Layilin Precursor	29	21	0.74
4676	Nucleosome assembly protein 1-like 4	329	243	0.74
113201	Protein CASC4	204	151	0.74
11329	Serine/threonine-protein kinase 38	80	59	0.74
83543	Allograft inflammatory factor 1-like	59	44	0.74
896	G1/S-specific cyclin-D3	543	402	0.74
283232	Transmembrane protein 80	55	41	0.74
342977	Nanos homolog 3	11	8	0.74
100131435	-	216	160	0.74
84258	Synaptotagmin-3	133	99	0.74
4245	Alpha-1,3-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase	22	16	0.74
23468	Chromobox protein homolog 5	290	214	0.74
222658	BTB/POZ domain-containing protein KCTD20	123	91	0.74
8328	Zinc finger protein Gfi-1b	59	44	0.74

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Transmembrane 6 superfamily member 1	481	356	0.74
7357	Ceramide glucosyltransferase	289	214	0.74
-	-	169	125	0.74
6836	Surfeit locus protein 4	2388	1768	0.74
100134498	-	366	271	0.74
10130	Protein disulfide-isomerase A6 Precursor	4596	3404	0.74
100133655	-	102	75	0.74
7024	Alpha-globin transcription factor CP2	280	207	0.74
7432	VIP peptides Precursor	46	34	0.74
338922	NACHT, LRR and PYD domains-containing protein 10	9	6	0.74
9794	Mastermind-like protein 1	15	11	0.74
64645	Hippocampus abundant transcript 1 protein	272	201	0.74
-	HIV-1 Rev-binding protein-like protein	22	17	0.74
26224	F-box/LRR-repeat protein 3	212	157	0.74
6670	Transcription factor Sp3	82	61	0.74
10906	TRAF-type zinc finger domain-containing protein 1	233	173	0.74
23072	E3 ubiquitin-protein ligase HECW1	108	80	0.74
-	C-jun-amino-terminal kinase-interacting protein 2	571	423	0.74
5873	Ras-related protein Rab-27A	75	56	0.74
9107	Myotubularin-related protein 6	558	414	0.74
56204	Uncharacterized protein KIAA1370	170	126	0.74
51025	Mitochondrial import inner membrane translocase subunit Tim16	1426	1059	0.74
51705	Endomucin Precursor	1236	917	0.74
56265	Probable carboxypeptidase X1 Precursor	122	90	0.74
1814	D(3) dopamine receptor	57	43	0.74
430	Achaete-scute homolog 2	113	84	0.74
375	ADP-ribosylation factor 1	7418	5506	0.74
2597	Glyceraldehyde-3-phosphate dehydrogenase	17379	12902	0.74
28986	Melanoma-associated antigen H1	396	294	0.74
-	Protein Shroom1	73	54	0.74
-	ATP-binding cassette sub-family B member 8, mitochondrial Precursor	41	30	0.74
7403	Histone demethylase UTX	114	85	0.74
51147	Inhibitor of growth protein 4	198	147	0.74
54436	SH3 domain and tetratricopeptide repeats-containing protein 1	153	114	0.74
22856	Chondroitin sulfate synthase 1	265	197	0.74
652797	Pyruvate kinase isozymes M1/M2	281	209	0.74
100291550	-	7	5	0.74
-	Homeobox protein cut-like 2	63	47	0.74
10802	Protein transport protein Sec24A	162	121	0.74
7903	CMP-N-acetylneuraminat-poly-alpha-2,8-sialyltransferase	69	51	0.74
651921	Serine/threonine-protein kinase ATR	33	25	0.74
84651	Serine protease inhibitor Kazal-type 7 Precursor	229	171	0.74
-	Olfactory receptor 1N2	34	25	0.74
5251	Phosphate-regulating neutral endopeptidase	14	11	0.74
30008	EGF-containing fibulin-like extracellular matrix protein 2 Precursor	307	228	0.74
-	-	173	128	0.74
5775	Tyrosine-protein phosphatase non-receptor type 4	58	43	0.74
-	NACHT, LRR and PYD domains-containing protein 12	40	30	0.74
115265	DNA-damage-inducible transcript 4-like protein	89	66	0.74
124491	Transmembrane protein 170A	35	26	0.74

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
6830	Transcription elongation factor SPT6	123	92	0.74
55833	Ubiquitin-associated protein 2	509	379	0.74
-	Eukaryotic initiation factor 4A-I	4234	3150	0.74
-	Zinc finger protein ZFPM2	13	10	0.74
-	Zinc finger protein 75D	42	31	0.74
347734	Adenosine 3'-phospho 5'-phosphosulfate transporter 1	158	117	0.74
100134353	-	30	22	0.74
338662	Olfactory receptor 8D4	17	12	0.74
4638	Myosin light chain kinase, smooth muscle	67	50	0.74
51132	E3 ubiquitin-protein ligase RNF12	135	101	0.74
-	Uncharacterized protein C15orf52	158	118	0.74
552	Vasopressin V1a receptor	28	21	0.74
-	Protein EFR3 homolog A	74	55	0.74
-	WD repeat-containing protein 40A	184	137	0.74
4482	Peptide methionine sulfoxide reductase	180	134	0.74
9792	SERTA domain-containing protein 2	170	127	0.74
64778	Fibronectin type III domain-containing protein 3B	934	695	0.74
6886	T-cell acute lymphocytic leukemia protein 1	196	146	0.74
170825	GS homeobox 2	13	10	0.74
93487	MAPK-interacting and spindle-stabilizing protein-like	443	330	0.74
440957	UPF0640 protein	361	269	0.74
9844	Engulfment and cell motility protein 1	22	16	0.74
83855	Krueppel-like factor 16	39	29	0.74
857	Caveolin-1	7419	5525	0.74
2290	Forkhead box protein G1	21	16	0.74
55033	FK506-binding protein 14 Precursor	3999	2979	0.74
-	Exportin-2	401	299	0.74
55349	Choline dehydrogenase, mitochondrial Precursor	95	71	0.75
5309	Pituitary homeobox 3	94	70	0.75
51447	Inositol hexakisphosphate kinase 2	369	275	0.75
221545	Uncharacterized protein C6orf136	126	94	0.75
100294469	-	1253	934	0.75
4295	Promotilin Precursor	89	66	0.75
100293263	-	40	30	0.75
7033	Trefoil factor 3 Precursor	48	35	0.75
222662	Tetraspan membrane protein of hair cell stereocilia	73	55	0.75
643314	-	36	27	0.75
5562	5'-AMP-activated protein kinase catalytic subunit alpha-1	143	107	0.75
79148	Matrix metalloproteinase-28 Precursor	49	36	0.75
81794	A disintegrin and metalloproteinase with thrombospondin motifs 10 Precursor	56	42	0.75
22890	Zinc finger and BTB domain-containing protein 1	187	140	0.75
-	-	24	18	0.75
2040	Erythrocyte band 7 integral membrane protein	1014	756	0.75
160	AP-2 complex subunit alpha-1	62	46	0.75
55254	Transmembrane protein 39A	60	45	0.75
10791	Vesicle-associated membrane protein 5	3179	2373	0.75
2570	Gamma-aminobutyric acid receptor subunit rho-2 Precursor	9	7	0.75
51478	3-ketosteroid reductase	155	116	0.75
1366	Claudin-7	124	92	0.75
727963	Putative uncharacterized protein ENSP00000368677	14	11	0.75
8702	Beta-1,4-galactosyltransferase 4	18	14	0.75
-	-	20	15	0.75

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55160	Rho guanine nucleotide exchange factor 10-like protein	178	133	0.75
1944	Ephrin-A3 Precursor	329	245	0.75
100133716	-	70	53	0.75
2305	Forkhead box protein M1	83	62	0.75
858	Caveolin-2	2128	1590	0.75
100288313	HSPC088 Fragment	37	27	0.75
51014	Transmembrane emp24 domain-containing protein 7 Precursor	396	296	0.75
6625	U1 small nuclear ribonucleoprotein 70 kDa	1209	903	0.75
-	Tensin-4 Precursor	93	70	0.75
48	Cytoplasmic aconitate hydratase	48	36	0.75
100130431	-	948	708	0.75
-	Uncharacterized protein C19orf41 Precursor	9	7	0.75
11313	Acyl-protein thioesterase 2	729	545	0.75
145781	GRINL1A complex locus protein 1 Precursor	69	51	0.75
-	Histamine H3 receptor	75	56	0.75
23234	DnaJ homolog subfamily C member 9	853	638	0.75
100128025	-	26	20	0.75
84893	F-box only protein 18	263	197	0.75
667	Bullous pemphigoid antigen 1, isoforms 1/2/3/4/5/8 Fragment	16	12	0.75
23270	Testis-specific Y-encoded-like protein 4	419	313	0.75
100129571	-	619	463	0.75
10162	Lysophosphatidylcholine acyltransferase 3	49	37	0.75
201181	Zinc finger protein 385C	33	25	0.75
64399	Hedgehog-interacting protein Precursor	4932	3690	0.75
6097	Nuclear receptor ROR-gamma	72	54	0.75
3047	A-gamma globin	28	21	0.75
-	-	5322	3983	0.75
56034	Platelet-derived growth factor C Precursor	57	42	0.75
100288052	-	58	43	0.75
10982	Microtubule-associated protein RP/EB family member 2	430	322	0.75
6391	Succinate dehydrogenase cytochrome b560 subunit, mitochondrial Precursor	837	626	0.75
8909	Placental protein 11 Precursor	14	11	0.75
100287803	-	16	12	0.75
283417	Protein dpy-19 homolog 2	8	6	0.75
93109	Transmembrane protein 44	102	76	0.75
54328	Probable G-protein coupled receptor 173	63	47	0.75
26524	Serine/threonine-protein kinase LATS2	95	71	0.75
29	Active breakpoint cluster region-related protein	128	96	0.75
-	-	169	127	0.75
56895	1-acyl-sn-glycerol-3-phosphate acyltransferase delta	91	68	0.75
5827	Peroxisomal membrane protein 2	202	151	0.75
9526	Mannose-6-phosphate utilization defect 1 protein	456	342	0.75
4680	Carcinoembryonic antigen-related cell adhesion molecule 6 Precursor	20	15	0.75
-	Pre-B-cell leukemia transcription factor 3	69	52	0.75
94	Serine/threonine-protein kinase receptor R3 Precursor	348	261	0.75
5586	Serine/threonine-protein kinase N2	92	69	0.75
81669	Cyclin-L2	704	528	0.75
729081	-	48	36	0.75
-	-	459	344	0.75
7145	Tensin-1	116	87	0.75

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10479	Sodium/hydrogen exchanger 6	69	52	0.75
2621	Growth arrest-specific protein 6 Precursor	855	642	0.75
9416	Probable ATP-dependent RNA helicase DDX23	521	391	0.75
634	Carcinoembryonic antigen-related cell adhesion molecule 1 Precursor	39	30	0.75
28962	Osteopetrosis-associated transmembrane protein 1 Precursor	376	282	0.75
388419	BTB/POZ domain-containing protein 17 Precursor	113	85	0.75
338773	Transmembrane protein 119 Precursor	186	140	0.75
1407	Cryptochrome-1	180	135	0.75
144423	glycosyltransferase 1 domain containing 1	42	31	0.75
65985	Acetoacetyl-CoA synthetase	155	117	0.75
8459	Protein-tyrosine sulfotransferase 2	281	211	0.75
25894	Puratrophin-1	248	186	0.75
-	Intermediate filament family orphan 1	55	41	0.75
9156	Exonuclease 1	49	37	0.75
338692	Ankyrin repeat domain-containing protein 13D	61	46	0.75
27327	Trinucleotide repeat-containing gene 6A protein	15	11	0.75
126987	-	36	27	0.75
1839	Proheparin-binding EGF-like growth factor Precursor	392	295	0.75
23293	Telomerase-binding protein EST1A	38	29	0.75
55211	Developmental pluripotency-associated protein 4	262	197	0.75
54784	Alkylated DNA repair protein alkB homolog 4	167	126	0.75
51422	5'-AMP-activated protein kinase subunit gamma-2	469	352	0.75
51257	E3 ubiquitin-protein ligase MARCH2	219	165	0.75
57191	Vomeroneasal type-1 receptor 1	263	198	0.75
-	-	20136	15141	0.75
-	Putative uncharacterized protein ENSP00000381961	149	112	0.75
1301	Collagen alpha-1(XI) chain Precursor	17	13	0.75
729424	-	14	11	0.75
644366	-	60	45	0.75
6609	Sphingomyelin phosphodiesterase Precursor	297	223	0.75
-	Protein delta homolog 2 Precursor	17	13	0.75
6948	Transcobalamin-2 Precursor	149	112	0.75
2997	Glycogen [starch] synthase, muscle	20	15	0.75
55715	Docking protein 4	147	111	0.75
652968	GATS-like protein 3	136	102	0.75
90427	Bcl-2-modifying factor	159	120	0.75
9735	Kinetochore-associated protein 1	86	65	0.75
728846	-	93	70	0.75
100292387	-	469	353	0.75
100129203	-	24	18	0.75
100290129	-	793	597	0.75
100287063	-	13	10	0.75
-	Golgin subfamily A member 6-like protein 2	144	108	0.75
6711	Spectrin beta chain, brain 1	511	385	0.75
11317	Recombining binding protein suppressor of hairless-like protein	12	9	0.75
27129	Heat shock protein beta-7	78	59	0.75
9256	Peripheral-type benzodiazepine receptor-associated protein 1	107	80	0.75
-	Choriogonadotropin subunit beta variant 2 Precursor	95	71	0.75
23556	GPI ethanolamine phosphate transferase 1	49	37	0.75
117579	Relaxin-3 Precursor	40	30	0.75
253512	Kidney mitochondrial carrier protein 1	20	15	0.75

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100289273	-	107	81	0.75
113130	Sororin	56	42	0.75
-	cDNA FLJ37163 fis, clone BRACE2026971	142	107	0.75
-	Endophilin-B1	1263	952	0.75
146223	CKLF-like MARVEL transmembrane domain-containing protein 4	14	11	0.75
54947	Lysophosphatidylcholine acyltransferase 2	239	180	0.75
100293916	ADP-ribosylation factor-binding protein GGA2	178	134	0.75
-	Villin-like protein	29	22	0.75
221749	PX domain-containing protein C6orf145	514	387	0.75
-	CD166 antigen Precursor	1191	898	0.75
100132345	-	191	144	0.75
8936	Wiskott-Aldrich syndrome protein family member 1	64	48	0.75
145173	Beta-1,3-glucosyltransferase	76	58	0.75
9871	Protein transport protein Sec24D	717	541	0.75
58476	Tumor protein p53-inducible nuclear protein 2	35	26	0.75
55333	Synaptojanin-2-binding protein	278	210	0.75
1287	Collagen alpha-5(IV) chain Precursor	71	53	0.75
51362	Pre-mRNA-processing factor 17	157	119	0.75
79932	Uncharacterized protein KIAA0319-like	118	89	0.75
4296	Mitogen-activated protein kinase kinase kinase 11	239	181	0.75
3061	Orexin receptor type 1	209	158	0.75
-	-	629	475	0.75
343068	PRAME family member 5	94	71	0.76
126282	Tumor necrosis factor, alpha-induced protein 8-like protein 1	151	114	0.76
-	CUG-BP- and ETR-3-like factor 2	75	56	0.76
5162	Pyruvate dehydrogenase E1 component subunit beta, mitochondrial Precursor	918	693	0.76
4825	Homeobox protein Nkx-6.1	34	26	0.76
3998	Protein ERGIC-53 Precursor	106	80	0.76
8493	Protein phosphatase 1D	161	121	0.76
27338	Ubiquitin-conjugating enzyme E2 S	396	299	0.76
131583	Protein FAM43A	382	288	0.76
100292909	-	435	329	0.76
-	Uncharacterized protein C17orf84. Fragment	21	16	0.76
-	cDNA FLJ42133 fis, clone TESTI2035107	26	20	0.76
51090	Plasmolipin	54	40	0.76
100289289	-	46	35	0.76
100289902	cDNA FLJ52611	110	83	0.76
51763	Inositol polyphosphate 5-phosphatase K	228	172	0.76
4928	Nuclear pore complex protein Nup98-Nup96 Precursor	158	119	0.76
23568	ADP-ribosylation factor-like protein 2-binding protein	1575	1190	0.76
126669	SH2 domain-containing adapter protein E	256	194	0.76
100292757	-	765	578	0.76
801	Calmodulin	1751	1324	0.76
339403	Relaxin-3 receptor 2	33	25	0.76
4678	Nuclear autoantigenic sperm protein	645	487	0.76
54441	STAG3-like protein	47	35	0.76
441518	Protein FAM127C	227	171	0.76
9710	Uncharacterized protein KIAA0355	172	130	0.76
6293	Vacuolar protein sorting-associated protein 52 homolog	102	77	0.76
6728	Signal recognition particle 19 kDa protein	503	380	0.76
7841	Mannosyl-oligosaccharide glucosidase	125	95	0.76

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
6821	Sulfite oxidase, mitochondrial Precursor	35	26	0.76
167465	Zinc finger protein 366	55	42	0.76
79720	Vacuolar protein sorting-associated protein 37B	319	241	0.76
7123	Tetranectin Precursor	32	24	0.76
5879	Ras-related C3 botulinum toxin substrate 1 Precursor	5631	4259	0.76
384	Arginase2, mitochondrial Precursor	61	46	0.76
7783	Zona pellucida sperm-binding protein 2 Precursor	226	171	0.76
3619	Inner centromere protein	26	19	0.76
100292008	-	93	70	0.76
118460	Exosome complex exonuclease MTR3	69	52	0.76
-	Septin-9	214	162	0.76
-	Centrosomal protein of 97 kDa	41	31	0.76
728836	-	35	26	0.76
84693	Methylmalonyl-CoA epimerase, mitochondrial Precursor	40	30	0.76
340371	Nuclear receptor-binding protein 2	98	74	0.76
5828	Peroxisome assembly factor 1	173	131	0.76
116412	Zinc finger protein 837	86	65	0.76
-	NADH dehydrogenase [ubiquinone] 1 subunit C2	2464	1865	0.76
-	Natural resistance-associated macrophage protein 2	124	93	0.76
23409	NAD-dependent deacetylase sirtuin-4	20	15	0.76
147841	Kinetochore protein Spc24	57	43	0.76
100130155	-	47	36	0.76
6035	Ribonuclease pancreatic Precursor	2243	1699	0.76
154150	Hepatoma-derived growth factor-like protein 1	39	30	0.76
5138	cGMP-dependent 3',5'-cyclic phosphodiesterase	72	55	0.76
100128392	-	53	40	0.76
9022	Chloride intracellular channel protein 3	31	24	0.76
23394	Activity-dependent neuroprotector homeobox protein	158	120	0.76
23042	Pyridoxal-dependent decarboxylase domain-containing protein 1	220	167	0.76
256472	Transmembrane protein 151A	29	22	0.76
54878	Dipeptidyl peptidase 8	232	176	0.76
-	RNA-binding protein FUS	737	558	0.76
5054	Plasminogen activator inhibitor 1 Precursor	16985	12873	0.76
440515	Zinc finger protein 737	339	257	0.76
54552	Guanine nucleotide-binding protein-like 3-like protein	38	29	0.76
-	Apoptotic chromatin condensation inducer in the nucleus	147	111	0.76
5002	Solute carrier family 22 member 18	11	8	0.76
80341	Bactericidal/permeability-increasing protein-like 1 Precursor	240	182	0.76
51094	Adiponectin receptor protein 1	414	314	0.76
445	Argininosuccinate synthase	65	49	0.76
55625	Palmitoyltransferase ZDHHC7	95	72	0.76
6726	Signal recognition particle 9 kDa protein	197	150	0.76
221955	Sn1-specific diacylglycerol lipase beta	63	48	0.76
10068	interleukin 18 binding protein precursor	84	63	0.76
492311	IgA-inducing protein homolog Precursor	76	57	0.76
5431	DNA-directed RNA polymerase II subunit RPB2	258	196	0.76
100131721	-	168	128	0.76
283219	BTB/POZ domain-containing protein KCTD21	154	117	0.76
1601	Disabled homolog 2	2809	2132	0.76
23164	Myosin phosphatase Rho-interacting protein	145	110	0.76
7461	CAP-Gly domain-containing linker protein 2	33	25	0.76
492	Plasma membrane calcium-transporting ATPase 3	261	198	0.76

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3426	Complement factor I Precursor	178	135	0.76
57560	Intraflagellar transport protein 80 homolog	40	30	0.76
23473	Calpain-7	135	103	0.76
5745	Parathyroid hormone/parathyroid hormone-related peptide receptor Precursor	13	10	0.76
122665	Ribonuclease 8 Precursor	94	72	0.76
3309	78 kDa glucose-regulated protein Precursor	198	150	0.76
57171	Dolichyldiphosphatase 1	39	29	0.76
8425	Latent-transforming growth factor beta-binding protein 4 Precursor	69	53	0.76
1398	Proto-oncogene C-crk (p38)	699	531	0.76
100132994	Uncharacterized protein ENSP00000382514	11	9	0.76
490	Plasma membrane calcium-transporting ATPase 1	211	160	0.76
79755	Protein ZNF750	9	7	0.76
2000	ETS-related transcription factor Elf-4	6	5	0.76
100129118	Transmembrane protein 167A Precursor	790	600	0.76
-	Core histone macro-H2A.2	28	22	0.76
9643	Mortality factor 4-like protein 2	2482	1885	0.76
55009	hypothetical protein LOC55009	223	169	0.76
79176	F-box only protein 37	11	9	0.76
23149	FCH domain only protein 1	249	189	0.76
1111	Serine/threonine-protein kinase Chk1	81	62	0.76
100292476	-	526	400	0.76
10411	Rap guanine nucleotide exchange factor 3	17	13	0.76
5652	Prostasin Precursor	24	18	0.76
728847	-	125	95	0.76
22926	Cyclic AMP-dependent transcription factor ATF-6 alpha	465	354	0.76
966	CD59 glycoprotein Precursor	7762	5901	0.76
10253	Protein sprouty homolog 2	287	218	0.76
120775	Olfactory receptor 2D3	85	65	0.76
-	Putative uncharacterized protein C3orf53	17	13	0.76
6668	Transcription factor Sp2	25	19	0.76
2132	Exostosin-2	250	190	0.76
100291552	DALR anticodon-binding domain-containing protein 3	59	45	0.76
-	Semaphorin-3F Precursor	80	61	0.76
387921	NHL repeat-containing protein 3 Precursor	90	69	0.76
8836	Gamma-glutamyl hydrolase Precursor	893	679	0.76
-	-	24	19	0.76
199990	Uncharacterized protein C1orf86	471	358	0.76
-	Uncharacterized protein ENSP00000343802	46	35	0.76
744	Metallophosphoesterase domain-containing protein 2	50	38	0.76
197342	essential meiotic endonuclease 1 homolog 2	145	111	0.76
100294337	cDNA FLJ37627 fis, clone BRCOC2014833	8	6	0.76
7150	DNA topoisomerase 1	247	188	0.76
392	Rho GTPase-activating protein 1	491	374	0.76
10188	Activated CDC42 kinase 1	37	28	0.76
5208	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2	9	7	0.76
9603	Nuclear factor erythroid 2-related factor 3	47	36	0.76
-	Transcription factor 24. Fragment	45	34	0.76
64397	Zinc finger protein 106 homolog	209	159	0.76
2103	Steroid hormone receptor ERR2	289	220	0.76
255057	Protein Dos	31	23	0.76
94241	Tumor protein p53-inducible nuclear protein 1	41	31	0.76
342918	-	9	7	0.76

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
127077	Olfactory receptor 2T11	121	92	0.76
-	Gamma-glutamyltransferase 7 Precursor	41	31	0.76
10513	Amyloid protein-binding protein 2	39	30	0.76
100294386	-	283	216	0.76
84886	Uncharacterized protein C1orf198	189	144	0.76
5577	cAMP-dependent protein kinase type II-beta regulatory subunit	131	100	0.76
55135	WD repeat-containing protein 79	62	47	0.76
10276	Neuroepithelial cell-transforming gene 1 protein	79	60	0.76
29995	LIM and cysteine-rich domains protein 1 (Dyxin)	147	112	0.76
11160	Erlin-2	48	36	0.76
100133864	Nodal modulator 1 Precursor	1987	1515	0.76
100131091	-	54	41	0.76
55972	Solute carrier family 25 member 40	54	42	0.76
5476	Lysosomal protective protein Precursor	1184	903	0.76
2319	Flotillin-2	237	180	0.76
5287	Phosphatidylinositol-4-phosphate 3-kinase C2 domain-containing beta polypeptide	156	119	0.76
1829	Desmoglein-2 Precursor	34	26	0.76
-	Myelodysplastic syndrome 2 translocation-associated protein	81	62	0.76
650157	-	137	104	0.76
-	Phospholipid transfer protein Precursor	179	137	0.76
9922	IQ motif and SEC7 domain-containing protein 1	16	12	0.76
54474	Keratin, type I cytoskeletal 20	17	13	0.76
50651	Proton-associated sugar transporter A	152	116	0.76
400451	Membrane protein FAM174B Precursor	164	125	0.76
57337	Sentrin-specific protease 7	41	31	0.76
285203	Uncharacterized glycosyltransferase AER61 Precursor	132	101	0.76
-	F-actin-capping protein subunit alpha-2	942	719	0.76
2899	Glutamate receptor, ionotropic kainate 3 Precursor	23	18	0.76
5082	Phosducin-like protein	189	144	0.76
651820	Succinate dehydrogenase [ubiquinone] cytochrome b small subunit, mitochondrial Precursor	580	443	0.76
3672	Integrin alpha-1 Precursor	15	11	0.76
54478	Protein FAM64A	78	59	0.76
56898	3-hydroxybutyrate dehydrogenase type 2	107	81	0.76
221938	Monocyte to macrophage differentiation factor 2	64	49	0.76
146894	CMRF35-like molecule 9 Precursor	25	19	0.76
-	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 2	181	139	0.76
83540	Kinetochore protein Nuf2	72	55	0.76
84859	Leucine-rich repeat and calponin homology domain-containing protein 3 Precursor	37	28	0.76
2634	Interferon-induced guanylate-binding protein 2	688	526	0.76
100293449	-	457	349	0.76
9722	Carboxyl-terminal PDZ ligand of neuronal nitric oxide synthase protein	108	83	0.76
221092	Heterogeneous nuclear ribonucleoprotein U-like protein 2	177	136	0.76
200132	Tctex1 domain-containing protein 1	15	11	0.76
8642	Protocadherin-16 Precursor	153	117	0.76
79586	Chondroitin sulfate synthase 2	35	27	0.76
5915	Retinoic acid receptor beta	56	43	0.76
-	Coiled-coil domain-containing protein 150	12	9	0.76

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10106	Carboxy-terminal domain RNA polymerase II polypeptide A small phosphatase 2	1408	1077	0.76
91860	Calmodulin-like protein 4	29	22	0.76
9414	Tight junction protein ZO-2	41	31	0.76
-	Interferon-induced GTP-binding protein Mx2	16	12	0.76
168507	Polycystic kidney disease protein 1-like 1	24	19	0.76
-	-	2893	2213	0.77
57478	Ubiquitin carboxyl-terminal hydrolase 31	239	183	0.77
147746	Homeodomain-interacting protein kinase 4	421	322	0.77
5047	Glycodelin Precursor	14	11	0.77
24141	Uncharacterized protein C20orf103 Precursor	24	18	0.77
26953	Ran-binding protein 6	94	72	0.77
54542	Ring finger and CCHC-type zinc finger domain-containing protein 2	278	213	0.77
92799	SH3KBP1-binding protein 1	73	56	0.77
5500	Serine/threonine-protein phosphatase PP1-beta catalytic subunit	1387	1062	0.77
-	-	218	167	0.77
256949	KN motif and ankyrin repeat domain-containing protein 3	188	144	0.77
84656	Nuclear protein NP60	32	24	0.77
-	Large proline-rich protein BAT3	925	708	0.77
9867	E3 ubiquitin-protein ligase Praja2	650	497	0.77
4504	Metallothionein-3	261	200	0.77
100294181	-	79	61	0.77
84708	E3 ubiquitin-protein ligase LNX	8	6	0.77
89970	RING finger and SPRY domain-containing protein 1 Precursor	523	400	0.77
100292415	-	31	23	0.77
284366	Kallikrein-9 Precursor	161	123	0.77
100289318	-	15	12	0.77
329	Baculoviral IAP repeat-containing protein 2	1148	879	0.77
9788	Metastasis suppressor protein 1	97	74	0.77
-	Killer cell immunoglobulin-like receptor 2DL4 Precursor	53	41	0.77
57106	N-acetyltransferase 14	302	231	0.77
100289976	-	62	48	0.77
-	Uncharacterized protein ENSP00000344336	64	49	0.77
23053	Zinc finger SWIM domain-containing protein KIAA0913	89	68	0.77
114049	Uncharacterized methyltransferase WBSCR22	28	21	0.77
219771	Cyclin-Y	430	330	0.77
7472	Protein Wnt-2 Precursor	283	217	0.77
1290	Collagen alpha-2(V) chain Precursor	618	474	0.77
100286995	-	104	79	0.77
-	Niban-like protein 2	82	63	0.77
26277	TERF1-interacting nuclear factor 2	213	163	0.77
-	Leucine-rich repeat-containing protein 16C	75	58	0.77
100290813	-	71	54	0.77
795	Protein S100-G	65	50	0.77
6539	Sodium- and chloride-dependent betaine transporter	34	26	0.77
9701	Serine/threonine-protein phosphatase 6 regulatory subunit 2	136	104	0.77
57148	K1219_HUMAN Isoform 2 of Q86X10 - Homo sapiens	12	9	0.77
100290195	-	202	155	0.77
84255	Sugar phosphate exchanger 3	108	83	0.77
53336	CPX chromosomal region candidate gene 1 protein	14	10	0.77

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
148170	Cdc42 effector protein 5	947	726	0.77
80332	ADAM 33 Precursor	89	68	0.77
100287051	-	22	17	0.77
124540	RNA-binding protein Musashi homolog 2	37	28	0.77
-	Spermatid-associated protein	104	79	0.77
10766	Protein Tob2	13	10	0.77
79683	Probable palmitoyltransferase ZDHHC14	220	169	0.77
30851	Tax1-binding protein 3	4696	3600	0.77
7532	14-3-3 protein gamma	326	250	0.77
84133	Zinc/RING finger protein 3 Precursor	13	10	0.77
441161	Oocyte-expressed protein homolog	442	339	0.77
1604	Complement decay-accelerating factor Precursor	4992	3829	0.77
129303	Transmembrane protein 150 Precursor	62	47	0.77
4898	Nardilysin Precursor	357	274	0.77
100132738	-	41	31	0.77
-	-	245	188	0.77
100292392	-	55	42	0.77
8826	Ras GTPase-activating-like protein IQGAP1	1346	1033	0.77
442434	-	28	22	0.77
100289886	-	38	29	0.77
3257	Hermansky-Pudlak syndrome 1 protein	660	507	0.77
6277	Protein S100-A6	28177	21629	0.77
57082	Protein CASC5	12	9	0.77
25941	Tubulin polyglutamylase complex subunit 2	506	388	0.77
392465	Glyoxalase domain-containing protein 5	16	12	0.77
-	Rhombotin-1	16	12	0.77
256374	Peptidyl-prolyl cis-trans isomerase Fragment	4197	3223	0.77
140688	Uncharacterized protein C20orf112	61	46	0.77
1032	Cyclin-dependent kinase 4 inhibitor D (p19-INK4d)	28	21	0.77
100291996	-	17	13	0.77
727778	Transmembrane protein 167B Precursor	170	131	0.77
-	-	1675	1287	0.77
100291385	-	44	34	0.77
280	Alpha-amylase 2B Precursor	12	9	0.77
117196	Mas-related G-protein coupled receptor member X4	19	15	0.77
54883	Coiled-coil domain-containing protein 49	132	102	0.77
128077	LIX1-like protein	117	90	0.77
9891	NUAK family SNF1-like kinase 1	81	62	0.77
11078	TRIO and F-actin-binding protein	498	383	0.77
124222	Progesterin and adipoQ receptor family member 4	162	125	0.77
-	Nuclear mitotic apparatus protein 1	179	138	0.77
286451	Protein YIPF6	414	318	0.77
53632	5'-AMP-activated protein kinase subunit gamma-3	15	12	0.77
196264	Myelin protein zero-like protein 3 Precursor	40	31	0.77
8398	85 kDa calcium-independent phospholipase A2	60	46	0.77
3508	DNA-binding protein SMUBP-2	78	60	0.77
51177	Pleckstrin homology domain-containing family O member 1	1127	867	0.77
728127	Centaurin-gamma-like family member 7	126	97	0.77
8864	Period circadian protein homolog 2	94	72	0.77
100288540	Nuclear envelope pore membrane protein POM 121C	328	253	0.77
100291441	-	134	103	0.77
100288478	-	18	14	0.77
25782	Rab3 GTPase-activating protein non-catalytic subunit	133	102	0.77
11169	WD repeat and HMG-box DNA-binding protein 1	37	29	0.77

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100288538	-	121	93	0.77
64745	Protein RSM22 homolog, mitochondrial Precursor	186	143	0.77
51540	Selenocysteine lyase	533	410	0.77
9513	Fragile X mental retardation syndrome-related protein 2	24	19	0.77
1769	Dynein heavy chain 8, axonemal	9	7	0.77
149685	Adipogenin	42	32	0.77
51375	Sorting nexin-7	395	304	0.77
100293408	-	82	63	0.77
390261	Olfactory receptor 6M1	44	34	0.77
93	Activin receptor type-2B Precursor	39	30	0.77
353145	Late cornified envelope protein 3E	184	142	0.77
51582	Antizyme inhibitor 1	223	172	0.77
-	Uncharacterized protein C10orf085	25	19	0.77
54890	Alkylated DNA repair protein alkB homolog 5	137	106	0.77
100128304	-	15	11	0.77
10085	EGF-like repeat and discoidin I-like domain-containing protein 3 Precursor	61	47	0.77
9392	Transforming growth factor-beta receptor-associated protein 1	107	82	0.77
100131138	Putative uncharacterized protein	53	41	0.77
51564	Histone deacetylase 7	64	49	0.77
2038	Erythrocyte membrane protein band 4.2	90	69	0.77
-	Uncharacterized protein KIAA0819	109	84	0.77
-	Podocan-like protein 1 Precursor	46	35	0.77
-	RAG1-activating protein 1	268	207	0.77
255783	hypothetical protein LOC255783	50	38	0.77
56940	Dual specificity protein phosphatase 22	175	135	0.77
54332	Ganglioside-induced differentiation-associated protein 1	33	26	0.77
686	Biotinidase Precursor	216	167	0.77
51429	Sorting nexin-9	406	313	0.77
23007	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase eta-1	70	54	0.77
80772	Glycolipid transfer protein domain-containing protein 1	42	32	0.77
388533	Keratinocyte differentiation-associated protein Precursor	286	221	0.77
7409	Proto-oncogene vav	48	37	0.77
9894	Telomere length regulation protein TEL2 homolog	59	45	0.77
10767	HBS1-like protein	193	149	0.77
23339	Vam6/Vps39-like protein	131	101	0.77
51341	Zinc finger and BTB domain-containing protein 7A	351	271	0.77
2828	Probable G-protein coupled receptor 4	52	40	0.77
2595	Neutral alpha-glucosidase C	12	9	0.77
514	ATP synthase subunit epsilon, mitochondrial	1071	827	0.77
5962	Radixin	576	445	0.77
9412	Mediator of RNA polymerase II transcription subunit 21	275	212	0.77
2222	Squalene synthetase	2775	2143	0.77
2664	Rab GDP dissociation inhibitor alpha	175	135	0.77
146325	Uncharacterized NHL-repeat-containing protein C16orf11	33	25	0.77
100291367	-	38	29	0.77
2869	G protein-coupled receptor kinase 5	721	557	0.77
-	Forkhead box protein H1	125	97	0.77
151903	Coiled-coil domain-containing protein 12	362	280	0.77
1509	Cathepsin D Precursor	241	186	0.77
1654	ATP-dependent RNA helicase DDX3X	641	495	0.77
-	Keratin, type I cytoskeletal 15	352	272	0.77

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
57611	Immunoglobulin superfamily containing leucine-rich repeat protein 2 Precursor	94	73	0.77
5003	-	6	5	0.77
55336	F-box/LRR-repeat protein 8	60	47	0.77
4804	Tumor necrosis factor receptor superfamily member 16 Precursor	29	22	0.77
-	Uncharacterized protein C8orf16	32	24	0.77
196541	UPF0567 protein C13orf39	363	280	0.77
476	-	1450	1121	0.77
84717	Hepatoma-derived growth factor-related protein 2	260	201	0.77
23034	Sterile alpha motif domain-containing protein 4A	79	61	0.77
-	RING finger protein 157	43	33	0.77
254295	Phytanoyl-CoA dioxygenase domain-containing protein 1	59	46	0.77
3233	Homeobox protein Hox-D4	52	40	0.77
9988	Cyclin-D-binding Myb-like transcription factor 1	32	25	0.77
132720	Uncharacterized protein C4orf32	391	302	0.77
91431	Uncharacterized protein FLJ44066	27	21	0.77
-	MGC45922 protein	6	4	0.77
27010	Thiamin pyrophosphokinase 1	39	30	0.77
64420	Sushi domain-containing protein 1 Precursor	145	112	0.77
54921	Chromosome transmission fidelity protein 8 homolog	253	195	0.77
1889	Endothelin-converting enzyme 1	868	672	0.77
23310	Condensin-2 complex subunit D3	69	53	0.77
283450	Transmembrane protein C12orf51	57	44	0.77
8125	Acidic leucine-rich nuclear phosphoprotein 32 family member A	713	552	0.77
1513	Cathepsin K Precursor	127	98	0.77
3861	Keratin, type I cytoskeletal 14	266	206	0.77
5683	Proteasome subunit alpha type-2	5170	4001	0.77
3134	major histocompatibility complex, class I, F isoform 3 precursor	3678	2846	0.77
-	Heterogeneous nuclear ribonucleoprotein U-like protein 1	439	340	0.77
9289	G-protein coupled receptor 56 Precursor	464	359	0.77
25822	DnaJ homolog subfamily B member 5	310	240	0.77
23516	Zinc transporter ZIP14	34	26	0.77
-	Uncharacterized protein ENSP00000375199	595	461	0.77
529	V-type proton ATPase subunit E 1	1642	1271	0.77
-	TBC1 domain family member 20	183	142	0.77
100130000	-	472	365	0.77
81610	Protein FAM83D	101	78	0.77
-	EF-hand domain-containing protein D2	81	63	0.77
54856	GON-4-like protein	86	67	0.77
-	Coiled-coil domain-containing protein 142	64	50	0.77
728931	-	58	45	0.77
-	G-protein-signaling modulator 2	43	33	0.77
3191	Heterogeneous nuclear ribonucleoprotein L	226	175	0.77
9878	TOX high mobility group box family member 4	98	76	0.77
311	Annexin A11	1009	782	0.77
996	Cell division cycle protein 27 homolog	129	100	0.77
147111	Protein notum homolog Precursor	89	69	0.78
6425	Secreted frizzled-related protein 5 Precursor	74	57	0.78
-	-	235	182	0.78
79065	Autophagy-related protein 9A	34	26	0.78
57140	Arginyl aminopeptidase-like 1	59	46	0.78

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100130733	Synleurin Precursor	277	215	0.78
1521	Cathepsin W Precursor	202	156	0.78
214	CD166 antigen Precursor	155	120	0.78
84502	Junctophilin-4	6	5	0.78
83546	Retbindin Precursor	12	9	0.78
138429	Phosphatidylinositol-4-phosphate 5-kinase-like protein 1	6	5	0.78
9537	p53-induced protein	247	191	0.78
57464	Protein FAM40B	396	307	0.78
201595	Dolichyl-diphosphooligosaccharide-protein glycosyltransferase subunit STT3B	189	147	0.78
9070	Set1/Ash2 histone methyltransferase complex subunit ASH2	354	274	0.78
9315	Neuronal protein 3.1	411	319	0.78
53981	Cleavage and polyadenylation specificity factor subunit 2	99	77	0.78
283229	EF-hand calcium-binding domain-containing protein 4A	224	174	0.78
10044	SH2 domain-containing protein 3C	41	32	0.78
79728	Partner and localizer of BRCA2	188	146	0.78
129563	DIS3-like exonuclease 2	21	16	0.78
100290566	-	21	16	0.78
23787	Mitochondrial carrier homolog 1	1633	1267	0.78
8705	Beta-1,3-galactosyltransferase 4	32	25	0.78
7538	Tristetraproline	228	177	0.78
-	Protein WWC1	9	7	0.78
219952	Olfactory receptor 6Q1	16	13	0.78
51382	V-type proton ATPase subunit D	1111	862	0.78
401	Paired mesoderm homeobox protein 2A	190	147	0.78
389376	Surfactant-associated protein 2 Precursor	192	149	0.78
5525	Serine/threonine-protein phosphatase 2A 56 kDa regulatory subunit alpha isoform	285	222	0.78
9802	DAZ-associated protein 2	584	454	0.78
7056	Thrombomodulin Precursor	91	71	0.78
388552	Biogenesis of lysosome-related organelles complex 1 subunit 3	50	38	0.78
84812	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase delta-4	17	13	0.78
5781	Tyrosine-protein phosphatase non-receptor type 11	1008	783	0.78
57185	NIPA-like protein 3	133	103	0.78
8785	Matrilin-4 Precursor	15	12	0.78
203068	Tubulin beta chain	2846	2211	0.78
203190	Leucine-rich repeat LGI family member 3 Precursor	152	118	0.78
51465	Ubiquitin-conjugating enzyme E2 J1	529	411	0.78
4849	CCR4-NOT transcription complex subunit 3	30	23	0.78
9409	Peroxisomal membrane protein PEX16	176	137	0.78
23627	Prion-like protein doppel Precursor	137	107	0.78
7185	TNF receptor-associated factor 1	15	12	0.78
10654	Phosphomevalonate kinase	141	109	0.78
6623	Gamma-synuclein	21	16	0.78
9655	Suppressor of cytokine signaling 5	128	100	0.78
9583	Ectonucleoside triphosphate diphosphohydrolase 4	117	91	0.78
55707	Adaptin ear-binding coat-associated protein 2	997	775	0.78
340481	Probable palmitoyltransferase ZDHHC21	107	83	0.78
-	-	21	16	0.78
100293523	-	13	10	0.78
-	Deoxyguanosine kinase, mitochondrial Precursor	499	388	0.78

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3060	Orexin Precursor (Hypocretin)	99	77	0.78
285971	Zinc finger protein 775	86	67	0.78
23043	TRAF2 and NCK-interacting protein kinase	48	38	0.78
1073	Cofilin-2	598	465	0.78
9927	Mitofusin-2	38	30	0.78
7499	Glycoprotein Xg Precursor	58	45	0.78
390113	Olfactory receptor 4X1	23	18	0.78
23210	Histone arginine demethylase JMJD6	282	219	0.78
348378	UPF0514 membrane protein FAM159A	7	6	0.78
7448	Vitronectin Precursor	34	26	0.78
84666	Resistin-like beta Precursor	47	36	0.78
4539	NADH-ubiquinone oxidoreductase chain 4L	19487	15166	0.78
-	CCR4-NOT transcription complex subunit 4	33	26	0.78
23294	Ankyrin repeat and SAM domain-containing protein 1A	11	9	0.78
154386	Uncharacterized protein C6orf195	32	25	0.78
79038	Zinc finger FYVE domain-containing protein 21	460	358	0.78
5663	Presenilin-1	57	44	0.78
-	-	15124	11775	0.78
5980	DNA polymerase zeta catalytic subunit	72	56	0.78
55334	Zinc transporter ZIP9	114	88	0.78
375743	Protein prenyltransferase alpha subunit repeat-containing protein 1	29	23	0.78
-	Cullin-2	504	393	0.78
168455	-	44	34	0.78
100293780	-	19	14	0.78
125988	Protein QIL1	899	701	0.78
-	Transmembrane protein 97	278	217	0.78
-	Putative uncharacterized protein Fragment	126	98	0.78
133874	hypothetical protein LOC133874	66	51	0.78
131408	Protein FAM131A Precursor	12	9	0.78
400027	-	28	22	0.78
-	-	94	73	0.78
3190	Heterogeneous nuclear ribonucleoprotein K	1820	1419	0.78
124446	Transmembrane protein 219	576	449	0.78
79607	Protein FAM118B	480	374	0.78
653743	-	109	85	0.78
8710	Serpin B7 (Megsin)	207	161	0.78
9046	Docking protein 2	239	186	0.78
5797	Receptor-type tyrosine-protein phosphatase mu Precursor	601	469	0.78
2079	Enhancer of rudimentary homolog	2738	2136	0.78
401934	cDNA FLJ60018	25	20	0.78
56957	OTU domain-containing protein 7B	5	4	0.78
649	Bone morphogenetic protein 1 Precursor	79	61	0.78
-	Translin	480	375	0.78
54619	Cyclin-J	24	19	0.78
57473	Zinc finger protein 512B	100	78	0.78
119772	Olfactory receptor 52M1	7	5	0.78
440073	IQ motif and SEC7 domain-containing protein 3	57	44	0.78
-	LIM domain kinase 2	91	71	0.78
100290062	Protein ZNF783	15	12	0.78
-	NUAK family SNF1-like kinase 1	39	30	0.78
8754	ADAM 9 Precursor	613	479	0.78
100293124	-	52	40	0.78
254427	Uncharacterized protein C10orf47	48	37	0.78

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
144110	Transmembrane protein 86A	255	199	0.78
283579	Uncharacterized protein C14orf178	40	31	0.78
100287244	-	95	74	0.78
1351	Cytochrome c oxidase polypeptide 8A, mitochondrial Precursor	3101	2421	0.78
374872	Putative uncharacterized protein C19orf35	14	11	0.78
-	Zinc finger protein 207	1420	1108	0.78
10250	Serine/arginine repetitive matrix protein 1	201	157	0.78
-	LSM domain-containing protein 1	502	392	0.78
100289953	-	10	8	0.78
58478	Enolase-phosphatase E1	170	133	0.78
100292002	-	42	33	0.78
100289515	-	69	54	0.78
8898	Myotubularin-related protein 2	306	239	0.78
10652	Synaptobrevin homolog YKT6	508	397	0.78
23258	DENN domain-containing protein 5A	468	365	0.78
23637	Rab GTPase-activating protein 1	255	200	0.78
146547	Polyserase-2 Precursor	126	99	0.78
91978	Tubulin polyglutamylase complex subunit 1	243	190	0.78
1173	AP-2 complex subunit mu-1 (Adaptin-mu2)	3110	2430	0.78
-	Interleukin-1 receptor-like 1 Precursor	161	126	0.78
653117	Butyrophilin-like protein 8 Precursor	61	47	0.78
9828	Rho guanine nucleotide exchange factor 17	94	74	0.78
728955	-	52	40	0.78
8331	Histone H2A type 1-J	359	281	0.78
-	-	519	405	0.78
51087	Y-box-binding protein 2	140	110	0.78
441932	Putative olfactory receptor 2W5	135	105	0.78
-	-	732	572	0.78
9877	Zinc finger CCCH domain-containing protein 11A	671	524	0.78
83933	Histone deacetylase 10	12	9	0.78
388	Rho-related GTP-binding protein RhoB Precursor	2040	1595	0.78
139793	Putative G antigen family D member 1	32	25	0.78
9823	Armadillo repeat-containing X-linked protein 2	487	381	0.78
10519	Calcium and integrin-binding protein 1	1147	897	0.78
-	HLA class II histocompatibility antigen, DM alpha chain Precursor	16	13	0.78
4647	Myosin-VIIa	5	4	0.78
56920	Semaphorin-3G Precursor	94	74	0.78
160760	Protein phosphatase PTC7 homolog	20	15	0.78
-	NOBOX_HUMAN Isoform 2 of O60393 - Homo sapiens	57	44	0.78
7482	Protein Wnt-2b Precursor	15	12	0.78
7374	Uracil-DNA glycosylase	294	230	0.78
5298	Phosphatidylinositol 4-kinase beta	164	129	0.78
100289126	-	14	11	0.78
10160	FERM, RhoGEF and pleckstrin domain-containing protein 1	104	81	0.78
100290606	-	12	9	0.78
5708	26S proteasome non-ATPase regulatory subunit 2	1487	1163	0.78
27044	Staphylococcal nuclease domain-containing protein 1	611	478	0.78
221468	Transmembrane protein 217	39	31	0.78
9158	Acidic fibroblast growth factor intracellular-binding protein	1298	1016	0.78
6242	Rhotekin	260	203	0.78
7059	Thrombospondin-3 Precursor	149	117	0.78

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
51458	Ammonium transporter Rh type C	7	6	0.78
147015	Dehydrogenase/reductase SDR family member 13 Precursor	21	17	0.78
-	Glycosylphosphatidylinositol anchor attachment 1 protein	181	142	0.78
4345	OX-2 membrane glycoprotein Precursor	93	73	0.78
-	Protein FAM171A2 Precursor	49	38	0.78
386680	Keratin-associated protein 10-5	142	111	0.78
5335	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase gamma-1	136	107	0.78
100290902	-	27	21	0.78
10163	Wiskott-Aldrich syndrome protein family member 2	74	58	0.78
23768	Leucine-rich repeat transmembrane protein FLRT2 Precursor	78	61	0.78
-	Mitofusin-1	163	127	0.78
56935	UPF0443 protein C11orf75	164	129	0.78
5211	6-phosphofructokinase, liver type	185	145	0.78
1756	Dystrophin	34	27	0.78
128368	Olfactory receptor 10Z1	19	15	0.78
100294061	-	22	17	0.78
26262	Tetraspanin-17	93	73	0.78
-	Rho guanine nucleotide exchange factor 11	26	21	0.78
93627	TBC domain-containing protein kinase-like protein	118	93	0.78
79751	Mitochondrial glutamate carrier 1	12	9	0.78
116985	Centaurin-delta-2	155	121	0.78
404734	Eukaryotic translation initiation factor 4E-binding protein 3	134	105	0.78
10806	Serologically defined colon cancer antigen 8	68	53	0.78
26254	Opticin Precursor	22	17	0.78
56005	UPF0556 protein C19orf10 Precursor	2686	2107	0.78
79991	Oligonucleotide/oligosaccharide-binding fold-containing protein 1	132	103	0.78
154807	Vitamin K epoxide reductase complex subunit 1-like protein 1	333	261	0.78
100129979	FLJ00287 protein Fragment	207	163	0.78
285643	Chromosome-associated kinesin KIF4B	46	36	0.78
100132636	Putative uncharacterized protein UNQ9165/PRO28630 Precursor	25	19	0.78
91749	Sodium-dependent glucose transporter 1	9	7	0.78
26093	Coiled-coil domain-containing protein 9	56	44	0.78
140807	Keratin, type II cytoskeletal 72 (Cytokeratin-72)	18	14	0.78
30835	CD209 antigen	63	49	0.78
23659	1-O-acylceramide synthase Precursor	217	170	0.78
23423	Transmembrane emp24 domain-containing protein 3 Precursor	1788	1403	0.78
115294	Protein-L-isoaspartate O-methyltransferase domain-containing protein 1	138	108	0.78
9935	Transcription factor MafB	33	26	0.78
5499	Serine/threonine-protein phosphatase PP1-alpha catalytic subunit	1481	1162	0.78
122509	Protein FAM14B	190	149	0.79
100288616	-	56	44	0.79
9685	Clathrin interactor 1	682	536	0.79
-	Protein FAM69B	928	729	0.79
650293	seven transmembrane helix receptor	66	52	0.79

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9779	TBC1 domain family member 5	61	48	0.79
4850	CCR4-NOT transcription complex subunit 4	36	28	0.79
6327	Sodium channel subunit beta-2 Precursor	24	19	0.79
100288751	-	9	7	0.79
10313	Reticulon-3	1237	972	0.79
51727	UMP-CMP kinase	688	540	0.79
25793	F-box only protein 7	729	573	0.79
-	Dresden prostate carcinoma protein 2	136	107	0.79
80864	EGF-like domain-containing protein 8 Precursor	693	545	0.79
100130667	-	31	25	0.79
7786	Mitogen-activated protein kinase kinase kinase 12	36	29	0.79
29999	Fascin-3	29	23	0.79
387856	Uncharacterized protein C12orf68	38	30	0.79
80017	UPF0317 protein C14orf159, mitochondrial Precursor	108	85	0.79
-	Zinc finger protein 236	85	67	0.79
10194	Teashirt homolog 1	105	82	0.79
56975	Dentin matrix protein 4 Precursor	68	54	0.79
1848	Dual specificity protein phosphatase 6	2450	1927	0.79
59277	Netrin-4 Precursor	2261	1779	0.79
81789	Tigger transposable element-derived protein 6	61	48	0.79
100127944	-	61	48	0.79
4863	Protein NPAT	131	103	0.79
57182	Ankyrin repeat domain-containing protein 50	85	67	0.79
100129531	-	44	35	0.79
6415	Selenoprotein W	2482	1954	0.79
-	-	9345	7356	0.79
23731	Transmembrane protein C9orf5	202	159	0.79
50861	Stathmin-3	1279	1007	0.79
5926	AT-rich interactive domain-containing protein 4A	72	56	0.79
-	Mucin Fragment	54	42	0.79
85464	Protein phosphatase Slingshot homolog 2	123	97	0.79
-	-	44	35	0.79
245806	Transcription cofactor vestigial-like protein 2	42	33	0.79
25977	Adaptin ear-binding coat-associated protein 1	119	94	0.79
-	Uncharacterized protein C22orf9	274	215	0.79
54210	Triggering receptor expressed on myeloid cells 1 Precursor	15	12	0.79
652614	-	571	450	0.79
79339	Olfactory receptor 51B4	45	35	0.79
23313	Uncharacterized protein C22orf9	159	126	0.79
100128731	-	6580	5183	0.79
10561	Interferon-induced protein 44 (p44)	70	55	0.79
94239	Histone H2A.V	1180	930	0.79
9986	CAAX prenyl protease 2	12	10	0.79
158358	Uncharacterized protein KIAA2026	76	60	0.79
55503	Transient receptor potential cation channel subfamily V member 6	19	15	0.79
64764	Cyclic AMP-responsive element-binding protein 3-like protein 2	52	41	0.79
729130	-	11	8	0.79
140462	Ankyrin repeat and SOCS box protein 9	87	68	0.79
80213	TM2 domain-containing protein 3 Precursor	419	330	0.79
30815	Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 6	101	80	0.79
924	T-cell antigen CD7 Precursor	150	119	0.79
5081	Paired box protein Pax-7	54	43	0.79

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
30849	Phosphoinositide 3-kinase regulatory subunit 4	90	71	0.79
-	Serine/threonine-protein phosphatase 6 regulatory subunit 3	85	67	0.79
51226	Coatomer subunit zeta-2	183	144	0.79
1594	25-hydroxyvitamin D-1 alpha hydroxylase, mitochondrial Precursor	35	28	0.79
100289514	-	150	118	0.79
7317	Ubiquitin-like modifier-activating enzyme 1	394	311	0.79
6359	C-C motif chemokine 15 Precursor	222	175	0.79
29109	FH1/FH2 domain-containing protein 1	189	149	0.79
8854	Retinal dehydrogenase 2	80	63	0.79
-	Phosphatidate cytidyltransferase 2	84	66	0.79
10893	Matrix metalloproteinase-24 Precursor	37	29	0.79
10565	Brefeldin A-inhibited guanine nucleotide-exchange protein 1	210	166	0.79
11099	Tyrosine-protein phosphatase non-receptor type 21	26	21	0.79
84078	Kelch repeat and BTB domain-containing protein 7	27	21	0.79
4085	Mitotic spindle assembly checkpoint protein MAD2A	206	163	0.79
346653	Protein FAM71F2	11	9	0.79
7570	Zinc finger protein 22	416	328	0.79
7805	Lysosomal-associated transmembrane protein 5	2051	1619	0.79
730405	-	28	22	0.79
11131	Calpain-11	42	33	0.79
1109	Aldo-keto reductase family 1 member C4	56	44	0.79
56996	Solute carrier family 12 member 9	130	102	0.79
1815	dopamine receptor D4	67	53	0.79
7940	Leukocyte-specific transcript 1 protein	43	34	0.79
643905	Putative uncharacterized protein LOC643905	26	21	0.79
3892	Keratin, type II cuticular Hb6	11	9	0.79
-	Decorin Precursor	127	100	0.79
-	-	12	9	0.79
375519	Gap junction beta-7 protein	44	35	0.79
23197	FAS-associated factor 2	240	189	0.79
57526	Protocadherin-19 Precursor	52	41	0.79
23415	Potassium voltage-gated channel subfamily H member 4	33	26	0.79
200765	Tigger transposable element-derived protein 1	10	8	0.79
377	ADP-ribosylation factor 3	408	322	0.79
11345	Gamma-aminobutyric acid receptor-associated protein-like 2	1107	874	0.79
5502	Protein phosphatase 1 regulatory subunit 1A	84	66	0.79
1843	Dual specificity protein phosphatase 1	459	363	0.79
5739	Prostacyclin receptor	33	26	0.79
84342	Conserved oligomeric Golgi complex subunit 8	150	118	0.79
100129630	-	13	10	0.79
441509	Glycine receptor subunit alpha-4 Precursor	31	25	0.79
-	-	1149	908	0.79
55082	Arginine and glutamate-rich protein 1	1020	806	0.79
3024	Histone H1.1	8	7	0.79
100130856	cDNA FLJ38408 fis, clone FEBRA2009029	388	307	0.79
2901	Glutamate receptor, ionotropic kainate 5 Precursor	20	16	0.79
6789	Serine/threonine-protein kinase 4	40	31	0.79
80267	ER degradation-enhancing alpha-mannosidase-like 3 Precursor	89	70	0.79
440434	Puromycin-sensitive aminopeptidase	307	242	0.79
6370	C-C motif chemokine 25 Precursor	19	15	0.79

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1727	NADH-cytochrome b5 reductase 3	420	332	0.79
-	E3 ubiquitin-protein ligase RNF144B	222	176	0.79
91319	Derlin-3	42	33	0.79
3017	Tripartite motif-containing protein 7	30	24	0.79
5883	Cell cycle checkpoint control protein RAD9A	42	33	0.79
-	T-box transcription factor TBX15	34	27	0.79
9988	Cyclin-D-binding Myb-like transcription factor 1	243	193	0.79
56971	Carcinoembryonic antigen-related cell adhesion molecule 19 Precursor	112	89	0.79
57409	MIF4G domain containing	139	110	0.79
5662	PH and SEC7 domain-containing protein 1	31	25	0.79
100293066	-	47	37	0.79
9931	Probable helicase with zinc finger domain	75	60	0.79
2056	Erythropoietin Precursor	61	48	0.79
830	F-actin-capping protein subunit alpha-2	1485	1175	0.79
100128370	-	9	7	0.79
100134663	cDNA FLJ38910 fis, clone NT2NE2006813, weakly similar to CELL SURFACE GLYCOPROTEIN 1	54	43	0.79
10063	Cytochrome c oxidase copper chaperone	744	589	0.79
51054	Protein PLEKHA9	133	106	0.79
-	Uncharacterized protein KIAA0586	57	45	0.79
55902	Acetyl-coenzyme A synthetase, cytoplasmic	75	59	0.79
10133	Optineurin	751	595	0.79
546	Transcriptional regulator ATRX	135	107	0.79
1071	Cholesteryl ester transfer protein Precursor	22	18	0.79
9919	Protein transport protein Sec16A	583	462	0.79
25	Proto-oncogene tyrosine-protein kinase ABL1	71	56	0.79
8405	Speckle-type POZ protein	595	471	0.79
646754	Putative tripartite motif-containing protein 64C	28	22	0.79
-	Gamma-synuclein (Persyn)	48	38	0.79
400728	Protein FAM87B	66	53	0.79
1874	Transcription factor E2F4	233	184	0.79
389898	Putative ubiquitin-conjugating enzyme E2 N-like	353	280	0.79
64499	Tryptase alpha-1 Precursor	112	89	0.79
26499	Pleckstrin-2	36	29	0.79
9554	Vesicle-trafficking protein SEC22b	469	371	0.79
257	Homeobox protein aristaless-like 3	331	262	0.79
-	Immunoglobulin Kappa light chain V gene segment	38	30	0.79
-	Isocitrate dehydrogenase [NAD] subunit beta, mitochondrial Precursor	384	305	0.79
-	DNA replication licensing factor MCM3	113	90	0.79
-	Integrin beta-1-binding protein 1	1160	919	0.79
100128975	-	83	66	0.79
116028	OB DNA-binding domain-containing protein C16orf175	51	40	0.79
60681	FK506-binding protein 10 Precursor	205	163	0.79
92736	Otopetrin-2	170	135	0.79
120114	Protocadherin Fat 3 Precursor	16	12	0.79
5279	Phosphatidylinositol N-acetylglucosaminyltransferase subunit C	165	131	0.79
5585	Serine/threonine-protein kinase N1	131	104	0.79
369	A-Raf proto-oncogene serine/threonine-protein kinase	37	29	0.79
51430	Protein C1orf9 Precursor	69	55	0.79
55361	Phosphatidylinositol 4-kinase type 2-alpha	21	17	0.79
114783	Serine/threonine-protein kinase LMTK3 Precursor	81	64	0.79

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5045	Furin Precursor	16	13	0.79
9501	Rab effector Noc2	59	47	0.79
100128602	-	14	11	0.79
-	Protor-2	108	85	0.79
1901	Sphingosine 1-phosphate receptor 1	616	488	0.79
3050	Hemoglobin subunit zeta	76	61	0.79
23303	Kinesin-like protein KIF13B	171	136	0.79
285590	SH3 and PX domain-containing protein 2B	44	35	0.79
388759	Putative uncharacterized protein FLJ45717	337	267	0.79
8720	Membrane-bound transcription factor site-1 protease Precursor	166	132	0.79
8992	V-type proton ATPase subunit E 1	5309	4212	0.79
5409	Phenylethanolamine N-methyltransferase	6	5	0.79
63931	28S ribosomal protein S14, mitochondrial	401	318	0.79
7468	Probable histone-lysine N-methyltransferase NSD2	40	32	0.79
-	Endothelin-converting enzyme 1	660	524	0.79
54438	Glucose-fructose oxidoreductase domain-containing protein 1 Precursor	204	162	0.79
100290280	cDNA FLJ43791 fis, clone TEST12053526	46	36	0.79
2847	Melanin-concentrating hormone receptor 1	21	16	0.79
841	Caspase-8 Precursor	18	14	0.79
7170	Tropomyosin alpha-3 chain	8415	6678	0.79
358	Aquaporin-1	37	30	0.79
3779	Calcium-activated potassium channel subunit beta-1	23	18	0.79
11339	Opa-interacting protein 5	112	89	0.79
283440	-	65	51	0.79
83659	Tektin-1	51	41	0.79
100290084	-	12	9	0.79
-	MHC class I polypeptide-related sequence B	298	237	0.79
3557	Interleukin-1 receptor antagonist protein Precursor	207	164	0.79
-	GPI transamidase component PIG-T Precursor	260	207	0.79
132158	Glycerate kinase	51	40	0.79
-	Acetylcholine receptor subunit gamma Precursor	101	80	0.79
-	Transmembrane protein 196	90	71	0.79
-	cDNA FLJ25874 fis, clone CBR02446 Fragment	49	39	0.79
9807	Inositol hexaphosphate kinase 1	35	28	0.79
29927	Protein transport protein Sec61 subunit alpha isoform 1	1203	956	0.79
2766	GMP reductase 1	356	283	0.79
56970	Ataxin-7-like protein 3	312	248	0.79
-	Protein disulfide-isomerase A6 Precursor	6393	5079	0.79
-	Uncharacterized protein C2orf52	25	20	0.79
57613	Uncharacterized protein KIAA1467	80	63	0.79
55829	Selenoprotein S	1107	880	0.79
2029	Alpha-endosulfine	227	180	0.79
6188	40S ribosomal protein S3	18496	14700	0.79
27250	Programmed cell death protein 4	224	178	0.79
57650	Protein CIP2A	50	40	0.79
5832	Delta-1-pyrroline-5-carboxylate synthetase	319	254	0.79
-	Seven transmembrane helix receptor	12	10	0.79
5830	Peroxisomal targeting signal 1 receptor	119	94	0.79
-	Synaptogyrin-3	17	13	0.79
4174	DNA replication licensing factor MCM5	504	401	0.79
5446	Serum paraoxonase/lactonase 3	10	8	0.79
-	Ankyrin repeat domain-containing protein 10	47	37	0.79

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9235	Interleukin-32 Precursor	222	176	0.79
57165	Gap junction gamma-2 protein	30	24	0.80
10725	Nuclear factor of activated T-cells 5	186	148	0.80
100287024	-	57	46	0.80
5451	POU domain, class 2, transcription factor 1	88	70	0.80
51742	AT-rich interactive domain-containing protein 4B	201	160	0.80
-	p130Cas-associated protein	23	19	0.80
26211	Olfactory receptor 2F1	31	25	0.80
83985	Protein spinster homolog 1	180	143	0.80
10956	Protein OS-9 Precursor	789	627	0.80
90313	Tumor protein p53-inducible protein 13 Precursor	173	137	0.80
731049	Ubiquitin-conjugating enzyme E2 S	673	535	0.80
-	Major histocompatibility complex, class II, DQ beta 2	51	41	0.80
5696	Proteasome subunit beta type-8 Precursor	250	199	0.80
55846	Integrin-alpha FG-GAP repeat-containing protein 2	19	15	0.80
7205	Thyroid receptor-interacting protein 6	249	198	0.80
-	Large neutral amino acids transporter small subunit 4	67	53	0.80
-	Nuclear transcription factor Y subunit gamma	102	81	0.80
7849	Paired box protein Pax-8	39	31	0.80
3799	Kinesin-1 heavy chain	435	346	0.80
100288054	-	139	111	0.80
-	Endoplasmic reticulum aminopeptidase 2	367	292	0.80
100294403	-	65	51	0.80
8775	Alpha-soluble NSF attachment protein	281	224	0.80
2672	Zinc finger protein Gfi-1	31	25	0.80
2791	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-11 Precursor	10991	8748	0.80
89884	LIM/homeobox protein Lhx4	36	28	0.80
100287585	-	135	107	0.80
2195	Protocadherin Fat 1 Precursor	31	25	0.80
100288928	-	42	33	0.80
85360	Rho GTPase-activating protein SYDE1	114	90	0.80
9051	Proline-serine-threonine phosphatase-interacting protein 1	6	5	0.80
3485	Insulin-like growth factor-binding protein 2 Precursor	446	355	0.80
23471	Translocation-associated membrane protein 1	2662	2120	0.80
-	-	98	78	0.80
23647	Arfaptin-2	109	87	0.80
730134	-	36	28	0.80
51533	PHD finger protein 7	78	62	0.80
-	-	18	14	0.80
30061	Solute carrier family 40 member 1 (Ferroportin-1)	116	92	0.80
57555	Neuroigin-2 Precursor	108	86	0.80
4627	Myosin-9	5470	4357	0.80
4709	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 3	113	90	0.80
100292440	-	46	36	0.80
100288490	-	8	6	0.80
-	Multiple epidermal growth factor-like domains 8 Precursor	135	108	0.80
9139	Protein CBFA2T2 (MTG8-related protein 1)	35	27	0.80
157567	Ankyrin repeat domain-containing protein 46	54	43	0.80
153562	MARVEL domain-containing protein 2 (Tricellulin)	22	17	0.80
57520	E3 ubiquitin-protein ligase HECW2	72	58	0.80
9401	ATP-dependent DNA helicase Q4	40	32	0.80
100292427	cDNA FLJ46459 fis, clone THYMU3020970	83	66	0.80

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
79651	Rhomboid family member 2	15	12	0.80
84464	BTB/POZ domain-containing protein 12	39	31	0.80
-	Polycystic kidney disease 2-like 1 protein	66	52	0.80
1388	Cyclic AMP-dependent transcription factor ATF-6 beta	75	59	0.80
121227	Leucine-rich repeats and immunoglobulin-like domains protein 3 Precursor	28	23	0.80
100291671	SH3 domain-binding glutamic acid-rich protein	28	22	0.80
4205	Myocyte-specific enhancer factor 2A	62	50	0.80
285852	Trem-like transcript 4 protein Precursor	15	12	0.80
285598	ADP-ribosylation factor-like protein 10	13	10	0.80
25938	HEAT repeat-containing protein 5A	36	29	0.80
-	Alpha-N-acetylglucosaminidase Precursor	336	268	0.80
23167	Protein EFR3 homolog A	76	60	0.80
8673	Vesicle-associated membrane protein 8	592	472	0.80
-	Uncharacterized protein ENSP00000381660 Fragment	15	12	0.80
55681	SCY1-like protein 2	144	115	0.80
10882	C1q-related factor Precursor	226	180	0.80
-	Securin-3	947	755	0.80
26099	UPF0485 protein C1orf144	451	360	0.80
79415	Uncharacterized protein C17orf62	138	110	0.80
5600	Mitogen-activated protein kinase 11	49	39	0.80
124565	Putative sodium-coupled neutral amino acid transporter 10	73	58	0.80
10101	Nucleotide-binding protein 2	185	147	0.80
5976	Regulator of nonsense transcripts 1	133	106	0.80
100292088	-	66	53	0.80
9436	Natural cytotoxicity triggering receptor 2 Precursor	73	59	0.80
84286	Transmembrane protein 175	45	36	0.80
144195	Solute carrier family 2, facilitated glucose transporter member 14	421	336	0.80
6602	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1	13	10	0.80
100288916	-	47	38	0.80
10472	Zinc finger protein 238	31	25	0.80
23432	Probable G-protein coupled receptor 161	169	135	0.80
5523	Serine/threonine-protein phosphatase 2A regulatory subunit B' subunit alpha	125	100	0.80
646658	Capucin	31	24	0.80
-	UPF0470 protein C19orf51	265	211	0.80
100288852	-	35	28	0.80
6223	40S ribosomal protein S19	7	5	0.80
9088	Membrane-associated tyrosine- and threonine-specific cdc2-inhibitory kinase	61	49	0.80
51728	DNA-directed RNA polymerase III subunit RPC10	338	270	0.80
100131573	-	27	21	0.80
10319	Laminin subunit gamma-3 Precursor	12	10	0.80
83607	AMMECR1-like protein	188	150	0.80
-	Putative uncharacterized protein ENSP00000383394	80	64	0.80
64711	Heparan sulfate glucosamine 3-O-sulfotransferase 6	7	6	0.80
-	Putative uncharacterized protein FLJ40606	66	53	0.80
56100	-	97	77	0.80
4062	Lymphocyte antigen 6H Precursor	64	51	0.80
-	Tudor domain-containing protein 10	23	18	0.80
100133042	-	64	51	0.80
28983	Transmembrane protease, serine 11E Precursor	80	64	0.80

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3716	Tyrosine-protein kinase JAK1	720	575	0.80
51754	Protein NGX6	62	50	0.80
341378	-	76	61	0.80
6576	Tricarboxylate transport protein, mitochondrial Precursor	577	461	0.80
5250	Phosphate carrier protein, mitochondrial Precursor	11709	9354	0.80
55666	Nuclear protein localization protein 4 homolog	306	244	0.80
340578	WD repeat-containing protein 40C	152	122	0.80
729350	-	17	14	0.80
100131455	-	14	12	0.80
100133829	-	6	5	0.80
-	RNA polymerase-associated protein RTF1 homolog	175	140	0.80
6273	Protein S100-A2	38	31	0.80
79577	Parafibromin	108	86	0.80
-	-	45	36	0.80
64844	E3 ubiquitin-protein ligase MARCH7	257	205	0.80
79153	Glycerophosphodiester phosphodiesterase domain-containing protein 3	39	31	0.80
8334	Histone H2A type 1-C	34	27	0.80
11184	Mitogen-activated protein kinase kinase kinase kinase 1	66	52	0.80
666	Bcl-2-related ovarian killer protein	299	239	0.80
23181	Disco-interacting protein 2 homolog A	692	554	0.80
5322	Calcium-dependent phospholipase A2 Precursor	79	63	0.80
9968	Mediator of RNA polymerase II transcription subunit 12	190	152	0.80
100293074	-	37	30	0.80
-	Protein FAM113B	80	64	0.80
282808	Ras-related protein Rab-40A-like	54	43	0.80
-	Carcinoembryonic antigen-related cell adhesion molecule 3 Precursor	18	14	0.80
474343	Spindlin-2B	112	90	0.80
55288	Mitochondrial Rho GTPase 1	299	239	0.80
114879	Oxysterol-binding protein-related protein 5	21	17	0.80
9510	A disintegrin and metalloproteinase with thrombospondin motifs 1 Precursor	28	23	0.80
728590	40S ribosomal protein S27a	23758	19007	0.80
56647	BRCA2 and CDKN1A-interacting protein	45	36	0.80
-	CXD3_HUMAN Isoform 2 of QSN144 - Homo sapiens	25	20	0.80
9182	Ras association domain-containing protein 9	11	9	0.80
4350	DNA-3-methyladenine glycosylase	534	427	0.80
-	Uncharacterized protein C20orf72	129	103	0.80
7782	Zinc transporter 4	61	49	0.80
-	E3 SUMO-protein ligase PIAS3	175	140	0.80
2217	IgG receptor FcRn large subunit p51 Precursor	964	771	0.80
-	-	1717	1374	0.80
3958	Galectin-3	222	178	0.80
2167	Fatty acid-binding protein, adipocyte	2542	2034	0.80
6405	Semaphorin-3F Precursor	211	169	0.80
8451	Cullin-4A	388	311	0.80
9860	Leucine-rich repeats and immunoglobulin-like domains protein 2 Precursor	18	15	0.80
126259	Transmembrane and immunoglobulin domain-containing protein 2 Precursor	27	21	0.80
100133888	Histone-lysine N-methyltransferase SETD8	213	171	0.80
57659	Zinc finger and BTB domain-containing protein 4	134	107	0.80
83986	Protein ITFG3	230	184	0.80

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1384	Carnitine O-acetyltransferase	216	173	0.80
-	Uncharacterized protein C14orf167	91	73	0.80
81928	CDK5 and ABL1 enzyme substrate 2	45	36	0.80
659	Bone morphogenetic protein receptor type-2 Precursor	414	331	0.80
9749	Phosphatase and actin regulator 2	1474	1181	0.80
54491	Protein FAM105A	32	25	0.80
5315	Pyruvate kinase isozymes M1/M2	189	152	0.80
-	Putative golgin subfamily A member 2-like protein 5	32	26	0.80
4729	NADH dehydrogenase [ubiquinone] flavoprotein 2, mitochondrial Precursor	1665	1334	0.80
8975	Ubiquitin carboxyl-terminal hydrolase 13	51	41	0.80
1869	Transcription factor E2F1	81	65	0.80
133619	Protein PPRC1	415	332	0.80
53615	Methyl-CpG-binding domain protein 3	225	180	0.80
100294156	Complement C4-A Precursor	8	7	0.80
8611	Lipid phosphate phosphohydrolase 1	249	200	0.80
64393	Zinc finger matrin-type protein 3	1689	1354	0.80
51125	Golgin subfamily A member 7	479	384	0.80
79042	tRNA-splicing endonuclease subunit Sen34	380	304	0.80
8301	Phosphatidylinositol-binding clathrin assembly protein	568	455	0.80
92292	Glycine N-acyltransferase-like protein 1	24	19	0.80
-	Seven transmembrane helix receptor	19	15	0.80
389289	Annexin-2 receptor	75	60	0.80
79643	Charged multivesicular body protein 6	83	67	0.80
4049	Lymphotoxin-alpha Precursor	52	41	0.80
8536	Calcium/calmodulin-dependent protein kinase type 1	636	510	0.80
10955	Serine incorporator 3	959	769	0.80
6624	Fascin (p55)	223	179	0.80
8861	LIM domain-binding protein 1	246	197	0.80
100132941	-	27	22	0.80
648822	Non-histone chromosomal protein HMG-17	21	17	0.80
5175	-	2975	2386	0.80
9757	Histone-lysine N-methyltransferase MLL4	95	76	0.80
4089	Mothers against decapentaplegic homolog 4	328	263	0.80
55631	Leucine-rich repeat-containing protein 40	195	156	0.80
100292934	-	59	48	0.80
58513	Epidermal growth factor receptor substrate 15-like 1	47	37	0.80
732	Complement component C8 beta chain Precursor	92	74	0.80
381	ADP-ribosylation factor 5	2263	1815	0.80
100287253	-	11	9	0.80
100130613	Uncharacterized protein CXorf64	103	83	0.80
1994	ELAV-like protein 1	1077	864	0.80
442366	-	10	8	0.80
805	Uncharacterized protein C2orf61	13876	11134	0.80
2017	Src substrate cortactin	349	280	0.80
26229	Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase 3	257	206	0.80
79145	Coiled-coil-helix-coiled-coil-helix domain-containing protein 7	235	189	0.80
5224	Phosphoglycerate mutase 2	66	53	0.80
283464	Glycosyltransferase 8 domain-containing protein 3	36	29	0.80
56990	CDC42 small effector protein 2	131	105	0.80
10934	Mortality factor 4-like protein 1	3743	3005	0.80
5348	Phospholemman Precursor	22	18	0.80

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
4606	Myosin-binding protein C, fast-type	23	19	0.80
3566	Interleukin-4 receptor alpha chain Precursor	417	335	0.80
-	Lipopolysaccharide-induced tumor necrosis factor-alpha factor	177	142	0.80
11322	Transmembrane channel-like protein 6	130	104	0.80
79025	Uncharacterized protein C20orf195	35	28	0.80
84934	Uncharacterized protein C12orf52	98	79	0.80
90952	Endothelial cell-selective adhesion molecule Precursor	1232	989	0.80
79627	Opioid growth factor receptor-like protein 1	239	192	0.80
27241	Protein PTHB1	43	35	0.80
113115	Protein FAM54A	49	39	0.80
-	-	1204	967	0.80
6941	Transcription factor 19	42	34	0.80
54882	Ankyrin repeat and KH domain-containing protein 1	55	45	0.80
23641	Protein LDOC1	244	196	0.80
27033	Zinc finger and BTB domain-containing protein 32	24	19	0.80
649458	-	110	89	0.80
-	Sterile alpha motif domain-containing protein 4A	87	70	0.80
83989	UPF0528 protein FAM172A Precursor	109	88	0.80
5020	Oxytocin-neurophysin 1 Precursor	54	44	0.80
156	Beta-adrenergic receptor kinase 1	26	21	0.80
114791	Gamma-tubulin complex component 5	489	393	0.80
56475	Protein reprimo	6	5	0.80
400673	Vimentin-type intermediate filament-associated coiled-coil protein	77	62	0.80
100287073	-	16	13	0.80
-	Myosin-Va	52	41	0.80
10954	Protein disulfide-isomerase A5 Precursor	731	588	0.80
1282	Collagen alpha-1(IV) chain Precursor	6577	5287	0.80
55633	TBC1 domain family member 22B	53	42	0.80
64236	PDZ and LIM domain protein 2	33	26	0.80
-	-	11428	9186	0.80
10482	Nuclear RNA export factor 1	562	452	0.80
3223	Homeobox protein Hox-C6	158	127	0.80
55011	PIH1 domain-containing protein 1	565	454	0.80
-	Type II inositol-3,4-bisphosphate 4-phosphatase	38	31	0.80
641765	-	12	9	0.80
650621	-	19	15	0.80
-	Septin-7	1932	1554	0.80
79718	F-box-like/WD repeat-containing protein TBL1XR1	148	119	0.80
1365	Claudin-3	313	252	0.80
100293110	-	625	503	0.80
55205	Zinc finger protein 532	279	224	0.80
9853	Iporin	128	103	0.80
6494	Signal-induced proliferation-associated protein 1	509	409	0.80
9451	Eukaryotic translation initiation factor 2-alpha kinase 3 Precursor	90	73	0.80
100287668	-	15	12	0.80
54620	F-box/LRR-repeat protein 19	41	33	0.80
2767	Guanine nucleotide-binding protein subunit alpha-11	1197	962	0.80
-	Latent-transforming growth factor beta-binding protein 4 Precursor	21	17	0.80
5096	Propionyl-CoA carboxylase beta chain, mitochondrial Precursor	291	234	0.80

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10223	Cell surface A33 antigen Precursor	93	74	0.80
7879	Ras-related protein Rab-7a	867	698	0.80
-	Membrane-associated guanylate kinase, WW and PDZ domain-containing protein 3	29	23	0.80
3203	Homeobox protein Hox-A6	52	42	0.80
100288552	-	53	42	0.80
5222	pepsinogen 5, group I	17	14	0.80
100292017	-	37	29	0.80
646057	-	106	85	0.80
55700	MAP7 domain-containing protein 1	1355	1090	0.80
2182	Long-chain-fatty-acid-CoA ligase 4	568	457	0.80
-	Solute carrier family 15 member 1	16	13	0.80
25839	Conserved oligomeric Golgi complex subunit 4	162	131	0.80
64105	Centromere protein K	307	247	0.80
8498	Ran-binding protein 3	100	80	0.80
91304	Membralin	132	106	0.80
-	Putative coiled-coil domain-containing protein 29-like	13	10	0.80
50846	Desert hedgehog protein Precursor	49	39	0.80
100131261	Proline-rich nuclear receptor coactivator 2	574	462	0.80
308	Annexin A5	8369	6738	0.81
163688	Calmodulin-like protein 6 (Calglandulin-like protein)	117	94	0.81
55571	Uncharacterized protein C2orf29	173	139	0.81
2932	Glycogen synthase kinase-3 beta	120	97	0.81
56853	CUG-BP- and ETR-3-like factor 4	75	60	0.81
5780	Tyrosine-protein phosphatase non-receptor type 9	305	246	0.81
112840	WD repeat-containing protein 89	75	60	0.81
894	G1/S-specific cyclin-D2	43	34	0.81
-	-	54	43	0.81
55365	Transmembrane protein 176A	20	16	0.81
29058	UPF0414 transmembrane protein C20orf30	104	84	0.81
-	Vacuolar fusion protein MON1 homolog B	185	149	0.81
152002	Uncharacterized protein C3orf21	222	179	0.81
58157	Neuroglobin	36	29	0.81
3680	Integrin alpha-9 Precursor	36	29	0.81
56180	Motile sperm domain-containing protein 1	353	284	0.81
374887	YjeF N-terminal domain-containing protein 3	134	108	0.81
130733	Transmembrane protein 178 Precursor	10	8	0.81
8772	Protein FADD	150	120	0.81
-	Uncharacterized protein ENSP00000346567	546	440	0.81
22809	Cyclic AMP-dependent transcription factor ATF-5	110	89	0.81
55930	Myosin-Vc	134	108	0.81
196383	RILP-like protein 2	283	228	0.81
-	Moesin	179	145	0.81
55743	E3 ubiquitin-protein ligase CHFR	76	61	0.81
3481	Insulin-like growth factor II Precursor	74	59	0.81
-	-	4393	3541	0.81
-	PDZ domain-containing protein 4	42	34	0.81
100292381	-	27	22	0.81
100133811	-	30	24	0.81
3887	Keratin, type II cuticular Hb1	117	95	0.81
220972	E3 ubiquitin-protein ligase MARCH8	168	136	0.81
4921	Discoidin domain-containing receptor 2 Precursor	45	36	0.81
5127	Serine/threonine-protein kinase PCTAIRE-1	129	104	0.81
9806	Testican-2 Precursor	134	108	0.81

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	General receptor for phosphoinositides 1-associated scaffold protein	92	74	0.81
64781	Ceramide kinase	260	210	0.81
100287547	Putative uncharacterized protein C20orf66	92	75	0.81
92714	Arrestin domain-containing protein 1	117	95	0.81
56270	WD repeat domain phosphoinositide-interacting protein 3	132	106	0.81
2582	UDP-glucose 4-epimerase	193	156	0.81
-	Calpastatin	520	420	0.81
51179	Hydroxyacid oxidase 2	16	13	0.81
10009	Transcriptional regulator Kaiso	32	26	0.81
7163	Tumor protein D52	72	58	0.81
22838	RING finger protein 44	30	25	0.81
55626	Activating molecule in BECN1-regulated autophagy protein 1	33	27	0.81
-	cDNA FLJ40807 fis, clone TRACH2009268	148	120	0.81
83714	Nuclear receptor-interacting protein 2	86	70	0.81
374291	NADH dehydrogenase [ubiquinone] iron-sulfur protein 7, mitochondrial Precursor	405	327	0.81
-	Fatty-acid amide hydrolase 1	41	33	0.81
100288598	-	21	17	0.81
100287742	-	64	52	0.81
157574	F-box only protein 16	37	30	0.81
100130423	SGT1, suppressor of G2 allele of SKP1 like 1	45	36	0.81
3687	Integrin alpha-X Precursor	57	46	0.81
56834	Integral membrane protein GPR137	112	90	0.81
9263	Serine/threonine-protein kinase 17A	306	247	0.81
100291807	-	18	14	0.81
220002	Cytochrome b ascorbate-dependent protein 3	618	499	0.81
89910	Ubiquitin-protein ligase E3B	39	32	0.81
3489	Insulin-like growth factor-binding protein 6 Precursor	135	109	0.81
-	RPE-spondin Precursor	47	38	0.81
5638	Transmembrane gamma-carboxyglutamic acid protein 1 Precursor	113	91	0.81
55284	Probable ubiquitin-conjugating enzyme E2 W	181	147	0.81
6665	SOX-15 protein	41	33	0.81
-	Ral guanine nucleotide dissociation stimulator-like 2	319	258	0.81
55210	ATPase family AAA domain-containing protein 3A	272	220	0.81
92912	Ubiquitin-conjugating enzyme E2 Q2	264	214	0.81
100290235	-	6	5	0.81
5359	Phospholipid scramblase 1	532	430	0.81
5223	Phosphoglycerate mutase 1	1610	1300	0.81
-	Complement factor H Precursor	72	58	0.81
100292538	-	6	5	0.81
-	HCLS1-binding protein 3	72	59	0.81
-	Spermatogenesis-associated protein 5-like protein 1	49	39	0.81
-	CD40 ligand	73	59	0.81
-	F-box only protein 21	153	123	0.81
100130065	-	84	68	0.81
10613	Erlin-1	365	295	0.81
527	V-type proton ATPase 16 kDa proteolipid subunit	1442	1165	0.81
100130825	cDNA FLJ44051 fis, clone TEST14033433	28	23	0.81
51629	Solute carrier family 25 member 39	775	626	0.81
5090	Pre-B-cell leukemia transcription factor 3	253	204	0.81
-	Protein O-mannosyl-transferase 1	122	98	0.81
26090	Abhydrolase domain-containing protein 12	208	168	0.81

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100288941	-	171	138	0.81
7101	Nuclear receptor subfamily 2 group E member 1	96	77	0.81
10392	Nucleotide-binding oligomerization domain-containing protein 1	230	186	0.81
421	Armadillo repeat protein deleted in velo-cardio-facial syndrome	46	37	0.81
100287746	-	19	15	0.81
25840	Methyltransferase-like protein 7A Precursor	15	12	0.81
411	Arylsulfatase B Precursor	27	22	0.81
100294096	-	30	24	0.81
8372	Hyaluronidase-3 Precursor	46	37	0.81
283130	Solute carrier family 25 member 45	17	14	0.81
85378	Gamma-tubulin complex component 6	102	83	0.81
80896	N-acetylneuraminase lyase	31	25	0.81
1060	Centromere protein C 1	77	62	0.81
27072	Vacuolar protein sorting-associated protein 41 homolog	222	179	0.81
6259	Tyrosine-protein kinase RYK Precursor	225	182	0.81
27316	Heterogeneous nuclear ribonucleoprotein G]	1559	1261	0.81
-	Uncharacterized protein C17orf54	92	74	0.81
24147	Four-jointed box protein 1 Precursor	148	120	0.81
8605	Cytosolic phospholipase A2 gamma Precursor	163	132	0.81
2037	Band 4.1-like protein 2	115	93	0.81
134829	Retinaldehyde-binding protein 1-like protein 2	105	85	0.81
23514	Uncharacterized protein KIAA0146	71	57	0.81
-	Uncharacterized protein ENSP00000332379	294	238	0.81
2187	Fanconi anemia group B protein	14	11	0.81
154743	UPF0532 protein C7orf60	41	34	0.81
442444	Putative protein FAM47C	35	28	0.81
10658	CUG-BP- and ETR-3-like factor 1	73	59	0.81
4502	Metallothionein-2	13802	11175	0.81
79915	ATPase family AAA domain-containing protein 5	23	19	0.81
10768	Putative adenosylhomocysteinase 2	1246	1009	0.81
6667	Transcription factor Sp1	53	43	0.81
9321	Thyroid receptor-interacting protein 11	89	72	0.81
9399	Stomatin-like protein 1	70	56	0.81
158521	Fragile X mental retardation 1 neighbor protein	38	31	0.81
148014	Tetratricopeptide repeat protein 9B	49	39	0.81
23185	La-related protein 5	224	182	0.81
1439	Cytokine receptor common subunit beta Precursor	35	29	0.81
2643	GTP cyclohydrolase 1	19	16	0.81
10226	Mannose-6-phosphate receptor-binding protein 1	1226	993	0.81
115572	Protein FAM46B	22	18	0.81
10943	Male-specific lethal-3 protein-like 1	626	507	0.81
80349	WD repeat-containing protein 61	530	429	0.81
653383	Transmembrane protein 203	213	173	0.81
155051	Gamma-crystallin N	48	39	0.81
100290265	-	72	59	0.81
91662	NACHT, LRR and PYD domains-containing protein 12	31	26	0.81
682	Basigin Precursor	533	432	0.81
3249	Serine protease hepsin	6	5	0.81
4209	Myocyte-specific enhancer factor 2D	65	53	0.81
1308	Collagen alpha-1(XVII) chain	26	21	0.81
9445	Integral membrane protein 2B	4041	3275	0.81

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2783	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-2	1816	1472	0.81
53354	Pantothenate kinase 1	13	10	0.81
-	Glucosamine-fructose-6-phosphate aminotransferase [isomerizing] 1	309	250	0.81
-	Histone deacetylase 5	184	149	0.81
100128843	DNA polymerase epsilon catalytic subunit isoform aHCG2007366 Fragment	92	75	0.81
9034	C-C chemokine receptor-like 2	129	104	0.81
100288678	-	50	40	0.81
6002	Regulator of G-protein signaling 12	44	35	0.81
94032	Calcium/calmodulin-dependent protein kinase II inhibitor 2	40	32	0.81
706	Translocator protein	5691	4614	0.81
100288603	-	18	14	0.81
84935	Uncharacterized protein C13orf33	129	105	0.81
55654	Transmembrane protein 127	191	155	0.81
6927	Hepatocyte nuclear factor 1-alpha	17	14	0.81
26151	N-acetyltransferase 9	234	190	0.81
-	IQ and AAA domain-containing protein ENSP00000340148	41	34	0.81
64926	Probable Ras GTPase-activating protein FLJ21438	334	271	0.81
6703	Small proline-rich protein 2D	229	186	0.81
3480	Insulin-like growth factor 1 receptor Precursor	231	188	0.81
8971	Histone H1x	266	216	0.81
6594	Probable global transcription activator SNF2L1	166	134	0.81
-	Solute carrier family 12 member 9	43	35	0.81
100101467	Zinc finger protein 397OS	6	5	0.81
4026	Lipoma-preferred partner	224	181	0.81
-	Putative uncharacterized protein MGC10955	9	7	0.81
1409	Alpha-crystallin A chain	8	6	0.81
-	-	43	35	0.81
9168	Thymosin beta-10	22517	18272	0.81
25915	Uncharacterized protein C3orf60	1458	1183	0.81
9616	RING-box protein 2	1635	1327	0.81
2055	Protein CLN8	79	64	0.81
750	Uncharacterized protein C16orf3	81	65	0.81
-	Heterogeneous nuclear ribonucleoproteins C1/C2	4005	3250	0.81
5573	cAMP-dependent protein kinase type I-alpha regulatory subunit	2219	1801	0.81
54935	Dual specificity protein phosphatase 23	368	299	0.81
246330	Protein pellino homolog 3	30	24	0.81
283398	Succinyl-CoA ligase [GDP-forming] subunit beta, mitochondrial Precursor	80	65	0.81
729950	-	85	69	0.81
9379	Neurexin-2-beta Precursor	19	16	0.81
60529	Homeobox protein aristaless-like 4	36	29	0.81
57630	Putative E3 ubiquitin-protein ligase SH3RF1	93	75	0.81
575	Brain-specific angiogenesis inhibitor 1 Precursor	44	36	0.81
9949	AMME syndrome candidate gene 1 protein	91	74	0.81
89958	Protein C9orf140	84	68	0.81
5089	Pre-B-cell leukemia transcription factor 2	249	202	0.81
5216	Profilin-1	2078	1689	0.81
56829	Zinc finger CCCH-type antiviral protein 1	14	12	0.81
-	Vesicle-associated membrane protein-associated protein A	626	508	0.81

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
7293	Tumor necrosis factor receptor superfamily member 4 Precursor	17	14	0.81
89870	Tripartite motif-containing protein 15	46	38	0.81
4123	Alpha-mannosidase 2C1	194	158	0.81
100292402	-	6	4	0.81
116534	Mas-related G-protein coupled receptor member E	35	29	0.81
7453	Tryptophanyl-tRNA synthetase, cytoplasmic	1315	1069	0.81
-	Protein notum homolog Precursor	110	90	0.81
-	-	22	18	0.81
2487	Secreted frizzled-related protein 3 Precursor	13	10	0.81
343035	Protein RD3	45	37	0.81
53630	Beta,beta-carotene 15,15'-monooxygenase	68	56	0.81
-	Protein CROC-4	19	16	0.81
-	Nucleolar protein 14	177	144	0.81
4043	Alpha-2-macroglobulin receptor-associated protein Precursor	1878	1528	0.81
4734	E3 ubiquitin-protein ligase NEDD4	127	103	0.81
6280	Protein S100-A9	21	17	0.81
6443	Beta-sarcoglycan	667	543	0.81
-	Tachykinin-3 Precursor	18	15	0.81
6611	Spermine synthase	1066	867	0.81
6601	SWI/SNF complex subunit SMARCC2	364	296	0.81
100293513	-	30	24	0.81
100291224	-	266	216	0.81
5737	Prostaglandin F2-alpha receptor	10	8	0.81
79935	Cyclin N-terminal domain-containing protein 2	13	10	0.81
56033	Homeobox protein BarH-like 1	42	34	0.81
387758	Fin bud initiation factor homolog Precursor	45	36	0.81
79665	Probable ATP-dependent RNA helicase DHX40	416	338	0.81
27031	Nephrocystin-3	33	27	0.81
5320	Phospholipase A2, membrane associated Precursor	42	34	0.81
100293956	-	21	17	0.81
-	Chromodomain-helicase-DNA-binding protein 8	114	93	0.81
4218	Ras-related protein Rab-8A	327	266	0.81
84002	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 5	143	117	0.81
24139	Echinoderm microtubule-associated protein-like 2	66	53	0.81
100293530	-	74	60	0.81
-	DNA mismatch repair protein Msh2	311	253	0.81
64061	Testis-specific Y-encoded-like protein 2	199	162	0.81
374879	Zinc finger protein 699	34	28	0.81
390664	Complement C1q tumor necrosis factor-related protein 8 Precursor	211	172	0.81
867	E3 ubiquitin-protein ligase CBL	241	196	0.81
55876	Gasdermin-B	60	48	0.81
1643	DNA damage-binding protein 2	1176	958	0.81
5119	Charged multivesicular body protein 1a	291	237	0.81
64763	Zinc finger protein 574	63	51	0.81
6695	Testican-1 Precursor	1746	1422	0.81
1933	Elongation factor 1-beta	244	199	0.81
57617	Vacuolar protein sorting-associated protein 18 homolog	170	138	0.81
23199	Genetic suppressor element 1	61	49	0.81
64319	Probable fibrosin-1 long transcript protein	63	52	0.81
1465	Cysteine and glycine-rich protein 1	1431	1166	0.81

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
91	Activin receptor type-1B Precursor	38	31	0.81
55198	DCC-interacting protein 13-beta	66	54	0.81
-	-	13	10	0.81
1964	Eukaryotic translation initiation factor 1A, X-chromosomal	427	348	0.81
29855	Ubinuclein	107	87	0.81
3418	Isocitrate dehydrogenase [NADP], mitochondrial Precursor	1499	1222	0.82
79820	Cation channel sperm-associated protein subunit beta	35	29	0.82
79109	Target of rapamycin complex 2 subunit MAPKAP1	236	193	0.82
65990	Protein FAM173A	237	193	0.82
135458	Checkpoint protein HUS1B	32	26	0.82
-	Far upstream element-binding protein 1	281	229	0.82
-	Kelch domain-containing protein 3	96	78	0.82
-	Centaurin-gamma-3	63	52	0.82
8604	Calcium-binding mitochondrial carrier protein Aralar1	45	36	0.82
123879	DCN1-like protein 3	155	126	0.82
10311	Down syndrome critical region protein 3	100	81	0.82
80724	Acyl-CoA dehydrogenase family member 10	13	11	0.82
2027	Beta-enolase	33	27	0.82
8906	AP-1 complex subunit gamma-like 2	27	22	0.82
92255	LMBR1 domain-containing protein 2	14	11	0.82
51596	Protein CutA Precursor	1281	1045	0.82
3836	Importin subunit alpha-1	168	137	0.82
144402	Copine-8	322	262	0.82
8802	Succinyl-CoA ligase	850	694	0.82
100287578	-	391	319	0.82
4534	Myotubularin	17	14	0.82
5530	Serine/threonine-protein phosphatase 2B catalytic subunit alpha isoform	67	55	0.82
2039	Dematin	91	74	0.82
80778	Zinc finger protein 34	75	61	0.82
11163	Diphosphoinositol polyphosphate phosphohydrolase 2	983	802	0.82
9406	Zinc finger Ran-binding domain-containing protein 2	757	617	0.82
219436	Olfactory receptor 5D14	29	24	0.82
5983	Replication factor C subunit 3	53	44	0.82
322	Amyloid beta A4 precursor protein-binding family B member 1	419	342	0.82
650832	Dual specificity mitogen-activated protein kinase kinase 3	74	60	0.82
256471	Major facilitator superfamily domain-containing protein 8	90	73	0.82
100130599	-	15	12	0.82
6815	Serine/threonine/tyrosine-interacting protein	30	25	0.82
4670	Heterogeneous nuclear ribonucleoprotein M	1755	1433	0.82
730132	-	22	18	0.82
89858	Sialic acid-binding Ig-like lectin 12 Precursor	19	15	0.82
9375	Transmembrane 9 superfamily member 2 Precursor (p76)	1684	1374	0.82
84230	Leucine-rich repeat-containing protein 8C	35	28	0.82
23450	Splicing factor 3B subunit 3	761	621	0.82
56655	DNA polymerase epsilon subunit 4	339	276	0.82
388595	Transmembrane protein 82	121	99	0.82
283953	-	25	21	0.82
2744	Glutaminase kidney isoform, mitochondrial Precursor	150	122	0.82
339221	Ectonucleotide pyrophosphatase/phosphodiesterase family member 7 Precursor	152	124	0.82
8907	AP-1 complex subunit mu-1	197	161	0.82
493753	Uncharacterized protein C2orf64	55	45	0.82

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
153396	Transmembrane protein 161B	55	45	0.82
100129101	-	60	49	0.82
100131864	-	478	390	0.82
4086	Mothers against decapentaplegic homolog 1	1936	1581	0.82
10567	Prenylated Rab acceptor protein 1	1961	1603	0.82
8520	Histone acetyltransferase type B catalytic subunit	283	231	0.82
55832	Cullin-associated NEDD8-dissociated protein 1	220	180	0.82
-	Zinc finger protein 41	63	52	0.82
1840	Protein deltex-1	159	130	0.82
-	Vesicle transport protein SFT2B	86	70	0.82
29959	Nuclear receptor-binding protein	294	240	0.82
29803	Replication initiator 1	435	356	0.82
100130883	-	145	119	0.82
57147	Protein-associating with the carboxyl-terminal domain of ezrin	85	69	0.82
57683	DBF4-type zinc finger-containing protein 2	116	95	0.82
414236	Uncharacterized protein C10orf55	40	33	0.82
27445	piccolo isoform 1	22	18	0.82
1358	Carboxypeptidase A2 Precursor	10	8	0.82
-	-	2027	1658	0.82
8501	Large neutral amino acids transporter small subunit 3	127	104	0.82
4207	Myocyte-specific enhancer factor 2B	19	15	0.82
57045	Twisted gastrulation protein homolog 1 Precursor	213	174	0.82
25858	Uncharacterized protein DKFZp566E164	61	50	0.82
-	-	1670	1367	0.82
950	Lysosome membrane protein 2	717	586	0.82
53349	Zinc finger FYVE domain-containing protein 1	186	152	0.82
54583	Egl nine homolog 1 (Hypoxia-inducible factor prolyl hydroxylase 2)	84	69	0.82
80774	LIM domain-containing protein 2	70	57	0.82
6555	Ileal sodium/bile acid cotransporter	25	20	0.82
100291054	-	22	18	0.82
168537	GTPase IMAP family member 7	1147	939	0.82
475	Copper transport protein ATOX1	1848	1513	0.82
-	-	20069	16428	0.82
55974	RAG1-activating protein 1	194	159	0.82
91300	R3H domain-containing protein C19orf22	108	88	0.82
642018	-	27	22	0.82
100292157	-	17	14	0.82
-	BNIP2 motif-containing molecule at the C-terminal region 1	14	11	0.82
7077	Metalloproteinase inhibitor 2 Precursor	1780	1457	0.82
9439	Mediator of RNA polymerase II transcription subunit 23	28	23	0.82
5170	3-phosphoinositide-dependent protein kinase 1	51	42	0.82
26286	ADP-ribosylation factor GTPase-activating protein 3	335	275	0.82
55697	Protein VAC14 homolog	60	49	0.82
2054	Syntaxin-2 (Epimorphin)	173	142	0.82
10927	Spindlin-1	52	43	0.82
4071	Transmembrane 4 L6 family member 1	9960	8160	0.82
199746	U2 small nuclear RNA auxiliary factor 1-like 4 isoform 1	52	42	0.82
100134291	Dual specificity protein phosphatase 22	138	113	0.82
55340	GTPase IMAP family member 5	196	161	0.82
55592	Golgin subfamily A member 2-like protein 1	112	92	0.82
55270	Probable 7,8-dihydro-8-oxoguanine triphosphatase NUDT15	354	290	0.82

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100134303	Patatin-like phospholipase domain-containing protein 2	296	243	0.82
6354	C-C motif chemokine 7 Precursor	12	10	0.82
7781	Zinc transporter 3	89	73	0.82
5878	Ras-related protein Rab-5C	849	696	0.82
5218	Serine/threonine-protein kinase PPTAIRE-1	16	13	0.82
100293243	-	284	233	0.82
4952	Inositol polyphosphate 5-phosphatase OCRL-1	31	25	0.82
5375	Myelin P2 protein	45	37	0.82
4125	Lysosomal alpha-mannosidase Precursor	65	53	0.82
11186	Ras association domain-containing protein 1	133	109	0.82
2275	Four and a half LIM domains protein 3	173	142	0.82
-	Nicastrin Precursor	72	59	0.82
151	Alpha-2B adrenergic receptor	28	23	0.82
10844	Gamma-tubulin complex component 2	169	139	0.82
80335	WD repeat-containing protein 82	61	50	0.82
283870	CP079_HUMAN Isoform 2 of Q6PL45 · Homo sapiens	36	29	0.82
55041	Pleckstrin homology domain-containing family B member 2	600	492	0.82
84279	Protease-associated domain-containing protein of 21 kDa Precursor	348	285	0.82
254394	DNA replication licensing factor MCM9	63	52	0.82
-	Membrane-bound O-acetyltransferase domain-containing protein 7	434	356	0.82
27248	XTP3-transactivated gene B protein Precursor	326	267	0.82
100288807	-	111	91	0.82
337973	Keratin-associated protein 19-6	73	60	0.82
100133315	-	21	18	0.82
9881	Lupus brain antigen 1 homolog	14	11	0.82
3046	Hemoglobin subunit epsilon	69	56	0.82
10234	Leucine-rich repeat-containing protein 17 Precursor (p37NB)	56	46	0.82
-	DnaJ homolog subfamily C member 11	115	94	0.82
80010	Protein RMI1 homolog	78	64	0.82
-	Mannosyl-oligosaccharide glucosidase	106	87	0.82
728800	FLJ00402 protein Fragment	293	240	0.82
100288254	cDNA FLJ40453 fis, clone TEST12041330	90	73	0.82
-	RING finger protein 121	140	115	0.82
5069	Pappalysin-1 Precursor	20	17	0.82
6882	Transcription initiation factor TFIID subunit 11	284	233	0.82
28972	Signal peptidase complex subunit 1	1604	1317	0.82
25827	F-box/LRR-repeat protein 2	151	124	0.82
64761	Poly [ADP-ribose] polymerase 12	264	216	0.82
100130992	-	42	34	0.82
821	Calnexin Precursor	2908	2388	0.82
57622	Leucine-rich repeat and fibronectin type III domain-containing protein 1 Precursor	67	55	0.82
91442	Fanconi anemia-associated protein of 24 kDa	80	65	0.82
57158	Junctophilin-2	21	17	0.82
55106	Schlafen family member 12	151	124	0.82
51005	Putative N-acetylglucosamine-6-phosphate deacetylase	88	72	0.82
-	-	3688	3028	0.82
128853	Dual specificity protein phosphatase 15	62	51	0.82
64145	Rabenosyn-5	99	82	0.82
23331	Tetratricopeptide repeat protein 28	38	31	0.82
-	AP-1 complex subunit beta-1	38	31	0.82

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3166	Homeobox protein HMX1	138	114	0.82
9641	Inhibitor of nuclear factor kappa-B kinase subunit epsilon	220	181	0.82
100133402	-	33	27	0.82
-	-	41	33	0.82
-	-	219	180	0.82
1080	Cystic fibrosis transmembrane conductance regulator	19	15	0.82
-	B lymphocyte activation-related protein BC-1514	52	43	0.82
340485	Alkaline ceramidase 2	18	15	0.82
5686	Proteasome subunit alpha type-5	1044	858	0.82
-	Protein CXorf40A	75	62	0.82
51130	Ankyrin repeat and SOCS box protein 3	273	224	0.82
55690	Phosphofurin acidic cluster sorting protein 1	40	33	0.82
147808	Zinc finger protein 784	55	45	0.82
2286	FK506-binding protein 2 Precursor	361	296	0.82
-	Tumor necrosis factor receptor superfamily member 4 Precursor	28	23	0.82
-	Rho GTPase-activating protein 12	177	146	0.82
22820	Coatamer subunit gamma	617	507	0.82
79844	Probable palmitoyltransferase ZDHHC11	23	19	0.82
6929	Transcription factor E2-alpha	59	48	0.82
-	Uncharacterized protein ENSP00000343301 Fragment	60	49	0.82
2585	N-acetylgalactosamine kinase	51	42	0.82
9724	U3 small nucleolar RNA-associated protein 14 homolog C	95	78	0.82
731419	-	17	14	0.82
7922	Zinc transporter SLC39A7	107	88	0.82
51138	COP9 signalosome complex subunit 4	613	504	0.82
2013	Epithelial membrane protein 2	173	142	0.82
92154	MTSS1-like protein	23	19	0.82
55030	F-box only protein 34	152	125	0.82
5631	Ribose-phosphate pyrophosphokinase 1	286	235	0.82
79161	Transmembrane protein C7orf23	287	236	0.82
989	Septin-7	2373	1951	0.82
9218	Vesicle-associated membrane protein-associated protein A	14	12	0.82
8904	Copine-1	490	403	0.82
10078	Protein TSSC4	143	118	0.82
56243	Sickle tail protein homolog	10	8	0.82
10398	Myosin regulatory light polypeptide 9	230	189	0.82
-	NEDD8 Precursor	2846	2340	0.82
126308	Mps one binder kinase activator-like 2A	68	56	0.82
3482	Cation-independent mannose-6-phosphate receptor Precursor	366	301	0.82
5032	P2Y purinoceptor 11	77	64	0.82
-	-	1383	1137	0.82
-	Ran-binding protein 9	73	60	0.82
126402	Coiled-coil domain-containing protein 105	421	346	0.82
100289565	-	8	6	0.82
79172	Centromere protein O	19	15	0.82
729175	-	16	13	0.82
-	Bromodomain and PHD finger-containing protein 3	66	55	0.82
26267	F-box only protein 10	29	24	0.82
-	Probable phospholipid-transporting ATPase IIB	22	18	0.82
-	Seven transmembrane helix receptor	130	107	0.82
-	Probable palmitoyltransferase ZDHHC12	100	83	0.82
100133772	Monocarboxylate transporter 6	26	22	0.82

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
57104	Patatin-like phospholipase domain-containing protein 2	24	20	0.82
10728	Prostaglandin E synthase 3	1134	934	0.82
100287372	-	15	13	0.82
54458	Proline-rich protein 13	392	323	0.82
-	Protocadherin-19 Precursor	91	75	0.82
57519	StAR-related lipid transfer protein 9	31	26	0.82
730058	-	23	19	0.82
159091	Protein FAM122C	211	173	0.82
1959	Early growth response protein 2	8	7	0.82
100128095	-	127	105	0.82
54888	tRNA (cytosine-5'-methyltransferase NSUN2	283	233	0.82
-	Zinc finger protein 470	74	61	0.82
-	-	15427	12704	0.82
3170	Hepatocyte nuclear factor 3-beta	17	14	0.82
100294438	-	20	16	0.82
100287558	-	15	12	0.82
6653	Sortilin-related receptor Precursor	30	25	0.82
2137	Exostosin-like 3	882	726	0.82
100289134	Uncharacterized protein KIAA1671	50	41	0.82
100287121	-	82	68	0.82
100287694	-	95	78	0.82
8761	Polyadenylate-binding protein 4	255	210	0.82
251	Alkaline phosphatase, placental-like Precursor	46	38	0.82
51278	Immediate early response gene 5 protein	451	371	0.82
9019	Myelin protein zero-like protein 1 Precursor	366	302	0.82
10189	THO complex subunit 4	945	779	0.82
29095	ORM1-like protein 2	649	535	0.82
8324	Frizzled-7 Precursor	19	16	0.82
347168	Olfactory receptor 1J1	810	667	0.82
653375	Williams-Beuren syndrome chromosomal region 16 protein	206	170	0.82
121274	Zinc finger protein 641	7	6	0.82
645822	Ubiquitin carboxyl-terminal hydrolase 32	20	16	0.82
54815	Transcriptional repressor p66-alpha	154	127	0.82
59285	Voltage-dependent calcium channel gamma-6 subunit	44	36	0.82
10734	Cohesin subunit SA-3	105	87	0.82
55766	Histone H2A.J	40	33	0.82
2923	Protein disulfide-isomerase A3 Precursor	5008	4130	0.82
5341	Pleckstrin	12	10	0.82
55116	Transmembrane protein 39B	78	64	0.82
3064	Huntingtin	38	31	0.82
11278	Kruessel-like factor 12	61	50	0.82
64854	Ubiquitin carboxyl-terminal hydrolase 46	82	67	0.82
8859	Serine/threonine-protein kinase 19	196	161	0.82
5611	DnaJ homolog subfamily C member 3 Precursor	347	287	0.82
4034	Leucine-rich repeat and calponin homology domain-containing protein 4	21	17	0.82
100130297	-	28	23	0.82
10618	Trans-Golgi network integral membrane protein 2 Precursor	65	53	0.82
-	Macrophage erythroblast attacher	1092	901	0.82
113026	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase delta-3	60	49	0.82
100291076	-	84	69	0.82
100293411	Novel protein Fragment	8	7	0.82

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
4741	Neurofilament medium polypeptide	57	47	0.82
9527	Golgi SNAP receptor complex member 1	89	74	0.82
-	Putative uncharacterized protein ENSP00000346256	71	59	0.82
399474	Transmembrane protein 200B	5	4	0.82
6473	Short stature homeobox protein	124	102	0.83
88455	Ankyrin repeat domain-containing protein 13A	176	145	0.83
285671	RING finger protein 180	36	29	0.83
100289942	-	223	184	0.83
3557	Interleukin-1 receptor antagonist protein Precursor	30	25	0.83
728198	Transcription initiation factor TFIIID subunit 9B	177	146	0.83
200424	Protein TET3	160	132	0.83
5936	RNA-binding protein 14	1306	1077	0.83
100292576	-	11	9	0.83
2702	Gap junction alpha-5 protein	13	10	0.83
2801	Golgin subfamily A member 2	41	34	0.83
374378	Putative polypeptide N-acetylgalactosaminyltransferase-like protein 4	46	38	0.83
55311	Zinc finger protein 444	50	41	0.83
286827	Tripartite motif-containing protein 59	54	44	0.83
-	-	200	165	0.83
8078	Ubiquitin carboxyl-terminal hydrolase 5	144	119	0.83
64409	Putative polypeptide N-acetylgalactosaminyltransferase-like protein 3	59	49	0.83
-	Nuclear receptor coactivator 5	75	62	0.83
1453	Casein kinase I isoform delta	60	50	0.83
4040	Low-density lipoprotein receptor-related protein 6 Precursor	396	327	0.83
6675	UDP-N-acetylhexosamine pyrophosphorylase	525	434	0.83
-	Ficolin-1 Precursor	51	42	0.83
8985	Procollagen-lysine,2-oxoglutarate 5-dioxygenase 3 Precursor	506	418	0.83
5439	DNA-directed RNA polymerase II subunit RPB11-a	45	37	0.83
5305	Phosphatidylinositol-5-phosphate 4-kinase type-2 alpha	110	91	0.83
1362	Carboxypeptidase D Precursor	297	245	0.83
6386	Syntenin-1	3086	2549	0.83
1059	Major centromere autoantigen B	170	140	0.83
10492	Heterogeneous nuclear ribonucleoprotein Q	414	342	0.83
113612	Cytochrome P450 2U1	112	92	0.83
7444	Serine/threonine-protein kinase VRK2	230	190	0.83
113189	Carbohydrate sulfotransferase 14	88	73	0.83
100133953	Adenylate cyclase type 2	38	32	0.83
11079	Protein RER1	1048	866	0.83
57048	Phospholipid scramblase 3	794	656	0.83
-	Prolyl 3-hydroxylase 3 Precursor	143	118	0.83
1816	D(1B) dopamine receptor	95	78	0.83
6271	Protein S100-A1	29	24	0.83
-	-	47	39	0.83
22954	Tripartite motif-containing protein 32	51	42	0.83
8567	MAP kinase-activating death domain protein	60	49	0.83
1382	Cellular retinoic acid-binding protein 2	67	56	0.83
142	Poly [ADP-ribose] polymerase 1	328	271	0.83
100289625	-	46	38	0.83
8490	Regulator of G-protein signaling 5	2929	2422	0.83
2015	EGF-like module-containing mucin-like hormone receptor-like 1 Precursor	57	47	0.83
5294	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit gamma isoform	17	14	0.83

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100132503	RING finger protein 208	61	51	0.83
-	Torsin-1A-interacting protein 1	96	79	0.83
55075	Uveal autoantigen with coiled-coil domains and ankyrin repeats	1163	962	0.83
-	Roundabout homolog 4 Precursor (Magic roundabout)	44	36	0.83
337876	Chondroitin sulfate synthase 3	24	20	0.83
146712	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase-like protein 1	58	48	0.83
92283	Zinc finger protein 461 (Gonadotropin-inducible transcription repressor 1)	138	114	0.83
6050	Ribonuclease inhibitor	504	417	0.83
4826	Neuronatin	38	31	0.83
-	G2/mitotic-specific cyclin-B1	516	427	0.83
9252	Ribosomal protein S6 kinase alpha-5	71	59	0.83
10312	V-type proton ATPase 116 kDa subunit a isoform 3	157	130	0.83
100288426	cDNA FLJ45512 fis, clone BRTHA2021440	10	8	0.83
2588	N-acetylgalactosamine-6-sulfatase Precursor	75	62	0.83
4976	Dynamin-like 120 kDa protein, mitochondrial Precursor	260	215	0.83
57502	Neurologin-4, X-linked Precursor	24	20	0.83
26071	Ataxin-7-like protein 1	721	596	0.83
-	Histone deacetylase complex subunit SAP25	42	35	0.83
8818	Dolichol phosphate-mannose biosynthesis regulatory protein	275	228	0.83
401152	Hepatitis C virus F protein-transactivated protein 1	2265	1874	0.83
-	UPF0532 protein C7orf60	17	14	0.83
-	Thymidine phosphorylase Precursor	17	14	0.83
2660	Growth/differentiation factor 8 Precursor	7	6	0.83
28951	Tribbles homolog 2	10	8	0.83
4796	NF-kappa-B inhibitor-like protein 2	19	16	0.83
3036	Hyaluronan synthase 1	27	22	0.83
57575	Protocadherin-10 Precursor	544	450	0.83
-	Homer protein homolog 3	1138	942	0.83
148109	Transmembrane protein 162 Precursor	11	9	0.83
2896	Granulins Precursor (Proepithelin)	2516	2083	0.83
51024	Mitochondrial fission 1 protein	474	392	0.83
619189	Serine incorporator 4	43	35	0.83
-	-	1049	869	0.83
100287115	-	48	40	0.83
50855	Partitioning defective 6 homolog alpha	46	38	0.83
23414	Zinc finger protein ZFPFM2	19	16	0.83
100131909	-	49	41	0.83
103	Double-stranded RNA-specific adenosine deaminase	520	431	0.83
8974	Prolyl 4-hydroxylase subunit alpha-2 Precursor	275	228	0.83
-	-	3414	2828	0.83
100289949	-	9	7	0.83
57680	Chromodomain-helicase-DNA-binding protein 8	7	6	0.83
57060	Poly(rC)-binding protein 4	73	61	0.83
1674	Desmin	80	66	0.83
117583	Partitioning defective 3 homolog B	32	27	0.83
10783	Serine/threonine-protein kinase Nek6	445	369	0.83
100128569	Uncharacterized protein ENSP00000327950	55	46	0.83
646000	Protein AMAC1L2	33	27	0.83
84254	Calcium/calmodulin-dependent protein kinase kinase 1	57	47	0.83
8778	Sialic acid-binding Ig-like lectin 5 Precursor	77	64	0.83
8379	Mitotic spindle assembly checkpoint protein MAD1	153	127	0.83
-	Proline-rich nuclear receptor coactivator 1	958	794	0.83

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23252	OTU domain-containing protein 3	31	26	0.83
1606	Diacylglycerol kinase alpha	176	146	0.83
100289979	-	135	112	0.83
57134	Mannosyl-oligosaccharide 1,2-alpha-mannosidase IC	19	15	0.83
-	-	1171	971	0.83
-	Putative transcript Y 14 protein	67	56	0.83
5899	Ras-related protein Ral-B Precursor	1156	958	0.83
535	V-type proton ATPase 116 kDa subunit a isoform 1	213	176	0.83
79957	Progesterone and adiponectin receptor family member 6	8	7	0.83
79085	Calcium-binding mitochondrial carrier protein SCaMC-3	88	73	0.83
5777	Tyrosine-protein phosphatase non-receptor type 6	23	19	0.83
2191	Seprase	21	17	0.83
50807	130 kDa phosphatidylinositol 4,5-bisphosphate-dependent ARF1 GTPase-activating protein	523	434	0.83
5420	Podocalyxin-like protein 1 Precursor	214	177	0.83
5326	Zinc finger protein PLAGL2	79	65	0.83
51400	Protein phosphatase methyltransferase 1	167	138	0.83
22884	WD repeat-containing protein 37	49	41	0.83
-	Intersectin-1	408	338	0.83
-	Condensin-2 complex subunit H2	501	416	0.83
100130325	-	39	32	0.83
100289496	Putative uncharacterized protein C16orf47	199	165	0.83
9531	BAG family molecular chaperone regulator 3	976	810	0.83
79602	Adiponectin receptor protein 2	371	308	0.83
54629	Protein FAM63B	45	37	0.83
10949	Heterogeneous nuclear ribonucleoprotein A0	112	93	0.83
-	Uncharacterized protein C21orf89	47	39	0.83
-	CMT1A duplicated region transcript 15 protein-like protein	38	32	0.83
8349	Histone H2B type 2-E	29	24	0.83
730429	E3 ubiquitin-protein ligase UBR5	100	83	0.83
57190	Selenoprotein N Precursor	512	425	0.83
9096	T-box transcription factor TBX18	79	65	0.83
55657	Zinc finger protein 692	93	77	0.83
115653	killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail, 3	53	44	0.83
3416	Insulin-degrading enzyme	92	77	0.83
10753	Calpain-9	136	113	0.83
142891	Sphingomyelin synthase-related protein 1	51	42	0.83
729461	Uncharacterized protein ENSP00000302107	55	45	0.83
1299	Collagen alpha-3(X) chain Precursor	173	144	0.83
-	Aconitate hydratase, mitochondrial Precursor	497	412	0.83
100294358	-	62	52	0.83
2309	Forkhead box protein O3	108	90	0.83
10957	Proline-rich nuclear receptor coactivator 1	43	36	0.83
4681	Neuroblastoma suppressor of tumorigenicity 1 Precursor	676	561	0.83
339760	-	27	23	0.83
100287098	-	18	15	0.83
-	Pregnancy zone protein Precursor	17	14	0.83
26091	Probable E3 ubiquitin-protein ligase HERC4	337	280	0.83
11168	PC4 and SFRS1-interacting protein	391	325	0.83
4012	Leucyl-cystinyl aminopeptidase	31	26	0.83
6654	Son of sevenless homolog 1	48	40	0.83
79184	BRCA1/BRCA2-containing complex subunit 3	343	285	0.83
-	Calsynenin-1 Precursor	426	354	0.83

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Dual specificity protein kinase TTK	74	61	0.83
727847	-	69	58	0.83
22980	Transcription factor 25	661	549	0.83
23230	Vacuolar protein sorting-associated protein 13A (Chorein)	139	115	0.83
-	TBC1 domain family member 2A	54	45	0.83
-	Uncharacterized protein ENSP00000368252	1606	1335	0.83
2760	Ganglioside GM2 activator Precursor	136	113	0.83
189	Serine-pyruvate aminotransferase	18	15	0.83
9547	C-X-C motif chemokine 14 Precursor	12	10	0.83
885	Cholecystokinin Precursor	29	24	0.83
3720	Protein Jumonji	58	48	0.83
8549	Leucine-rich repeat-containing G-protein coupled receptor 5 Precursor	20	17	0.83
140893	Uncharacterized protein C20orf151	38	31	0.83
100293198	cDNA FLJ60648	9	7	0.83
-	Heat shock 70 kDa protein 1	575	478	0.83
100287677	-	70	59	0.83
-	Mediator of RNA polymerase II transcription subunit 4	400	333	0.83
4634	Myosin light chain 3	25	21	0.83
518	ATP synthase lipid-binding protein, mitochondrial Precursor	3695	3073	0.83
-	Glutamate receptor-interacting protein 2	85	71	0.83
6305	Myotubularin-related protein 5	8	7	0.83
11065	Ubiquitin-conjugating enzyme E2 C	214	178	0.83
37	Very long-chain specific acyl-CoA dehydrogenase, mitochondrial Precursor	1196	995	0.83
-	Eukaryotic translation initiation factor 5A-1	426	355	0.83
729800	Putative ZP domain-containing protein LOC729800	111	93	0.83
51317	PHD finger protein 21A	442	368	0.83
100292796	-	22	19	0.83
79823	Uncharacterized protein C2orf34	19	16	0.83
284058	Uncharacterized protein KIAA1267	59	49	0.83
5905	Ran GTPase-activating protein 1	299	249	0.83
6446	Serine/threonine-protein kinase Sgk1	161	134	0.83
56006	Uncharacterized protein C19orf61	67	56	0.83
9632	Protein transport protein Sec24C	499	416	0.83
-	Arylsulfatase K Precursor	122	102	0.83
-	Ubiquitin carboxyl-terminal hydrolase 34	51	43	0.83
5747	Focal adhesion kinase 1	114	95	0.83
3636	Phosphatidylinositol-3,4,5-trisphosphate 5-phosphatase 2	87	73	0.83
2794	Guanine nucleotide-binding protein-like 1	145	121	0.83
396	Rho GDP-dissociation inhibitor 1	97	81	0.83
339512	Coiled-coil domain-containing protein C1orf110	7	6	0.83
55038	Cell division cycle-associated protein 4	119	99	0.83
116150	Nogo-B receptor Precursor	620	516	0.83
8697	Cell division cycle protein 23 homolog	134	111	0.83
-	-	21309	17746	0.83
200634	Keratinocytes-associated protein 3	28	24	0.83
-	Vacuolar protein sorting-associated protein 45	270	225	0.83
64848	YTH domain-containing protein 2	40	34	0.83
55839	Centromere protein N	324	270	0.83
79680	Uncharacterized protein C22orf29	176	146	0.83
6701	Small proline-rich protein 2B	106	88	0.83
644168	Dorsal root ganglia homeobox protein	9	7	0.83

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Cas scaffolding protein family member 4	50	42	0.83
100134235	-	1173	978	0.83
22872	Protein transport protein Sec31A	3519	2931	0.83
399687	Myosin-XVIIIa	35	30	0.83
1457	Casein kinase II subunit alpha	792	660	0.83
-	CCR4-NOT transcription complex subunit 1	254	211	0.83
11344	Twinfilin-2	913	761	0.83
138311	Protein FAM69B	1386	1155	0.83
79762	Uncharacterized protein C1orf115	207	172	0.83
-	Tripartite motif-containing protein 17	108	90	0.83
100132293	-	91	76	0.83
10072	Dipeptidyl-peptidase 3	172	143	0.83
5447	NADPH--cytochrome P450 reductase	217	181	0.83
4494	Metallothionein-1F	157	131	0.83
-	-	216	180	0.83
89796	Neuron navigator 1 (Steerin-1)	66	55	0.83
-	Glutamate receptor delta-2 subunit Precursor	34	29	0.83
9956	Heparan sulfate glucosamine 3-O-sulfotransferase 2	18	15	0.83
100130712	Kinesin light chain 2	114	95	0.83
408	Beta-arrestin-1	68	57	0.83
100287030	HCG1987623LOC651900 protein Fragment	56	47	0.83
-	Putative uncharacterized protein ATAD3C	62	51	0.83
100129085	Selenoprotein K	674	562	0.83
3110	Motor neuron and pancreas homeobox protein 1	31	26	0.83
100293282	-	26	22	0.83
25890	Target of Nesh-SH3 Precursor	19	16	0.83
2029	Alpha-endosulfine	1396	1165	0.83
727900	-	21	17	0.83
10368	Voltage-dependent calcium channel gamma-3 subunit	158	132	0.83
100134163	RNA polymerase I-specific transcription initiation factor RRN3	140	116	0.83
8449	Putative pre-mRNA-splicing factor ATP-dependent RNA helicase DHX16	545	455	0.83
162989	DNA-binding death effector domain-containing protein 2	130	108	0.83
55157	Aspartyl-tRNA synthetase, mitochondrial Precursor	109	91	0.83
-	Retinoic acid receptor alpha	241	201	0.83
90288	EF-hand domain-containing protein C3orf25	6	5	0.83
164	AP-1 complex subunit gamma-1	156	130	0.83
90390	Mediator of RNA polymerase II transcription subunit 30	181	151	0.83
7979	26S proteasome complex subunit DSS1	2387	1992	0.83
83666	Poly [ADP-ribose] polymerase 9	76	63	0.83
-	-	41	34	0.83
84937	E3 ubiquitin-protein ligase ZNRF1	42	35	0.83
10159	Renin receptor Precursor	1342	1120	0.83
55740	Protein enabled homolog	254	212	0.83
100292519	-	311	260	0.83
222171	Protein PRR15	60	50	0.83
4211	Homeobox protein Meis1	41	34	0.83
9886	Rho-related BTB domain-containing protein 1	267	223	0.83
993	M-phase inducer phosphatase 1	55	46	0.83
6603	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 2	147	123	0.83
340385	Zinc finger protein 517	17	14	0.83
113746	Outer dense fiber protein 3	29	24	0.83

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
11311	Vacuolar protein sorting-associated protein 45	135	113	0.83
23352	E3 ubiquitin-protein ligase UBR4 (p600)	7	6	0.83
10121	Alpha-centractin	603	504	0.83
55717	Bromodomain and WD repeat-containing protein 2	294	245	0.83
94239	Histone H2A.V	2324	1940	0.83
4994	Olfactory receptor 3A1	40	33	0.83
55317	Uncharacterized protein C20orf29	77	64	0.84
6924	Transcription elongation factor B polypeptide 3	92	77	0.84
58986	Transmembrane protein 8 Precursor	571	477	0.84
8683	Splicing factor, arginine/serine-rich 9	2821	2356	0.84
6253	Reticulon-2	22	18	0.84
81309	Olfactory receptor 4C15	54	45	0.84
10174	Vinexin	45	38	0.84
3171	Hepatocyte nuclear factor 3-gamma	6	5	0.84
53635	Prostate tumor overexpressed gene 1 protein	438	366	0.84
2115	ETS translocation variant 1	30	25	0.84
4008	LIM domain only protein 7	20	17	0.84
100131530	-	87	73	0.84
162968	Zinc finger protein 497	9	8	0.84
11328	FK506-binding protein 9 Precursor	135	113	0.84
642968	UPF0417 protein FAM163B	39	33	0.84
-	Spermatogenesis-associated serine-rich protein 2	140	117	0.84
3417	Isocitrate dehydrogenase [NADP] cytoplasmic	399	333	0.84
-	Cordon-bleu protein-like 1	26	21	0.84
645685	-	163	136	0.84
255252	Leucine-rich repeat-containing protein 57	87	72	0.84
-	Forkhead box protein O4	115	96	0.84
220074	WD repeat and SOF domain-containing protein 1	14	12	0.84
23400	Probable cation-transporting ATPase 13A2	47	39	0.84
9873	FCH and double SH3 domains protein 2	105	88	0.84
-	RNA-binding protein EWS	421	352	0.84
7040	Transforming growth factor beta-1 Precursor	176	147	0.84
9529	BAG family molecular chaperone regulator 5	73	61	0.84
3906	Alpha-lactalbumin Precursor	309	258	0.84
-	Geminin	229	191	0.84
81573	Ankyrin repeat domain-containing protein 13C	50	42	0.84
63940	G-protein-signaling modulator 3	1129	944	0.84
163732	Cbp/p300-interacting transactivator 4	28	23	0.84
104	Double-stranded RNA-specific editase 1	30	25	0.84
7325	Ubiquitin-conjugating enzyme E2 E2	107	89	0.84
5495	Protein phosphatase 1B	129	108	0.84
-	4-trimethylaminobutyraldehyde dehydrogenase	327	273	0.84
-	Uncharacterized protein KIAA1683	43	36	0.84
4144	S-adenosylmethionine synthetase isoform type-2	764	639	0.84
-	-	286	239	0.84
23446	Choline transporter-like protein 1	202	169	0.84
3800	Kinesin heavy chain isoform 5C	89	74	0.84
140465	Myosin light chain 6B	571	478	0.84
-	-	11676	9765	0.84
55770	Exocyst complex component 2	159	133	0.84
4496	Metallothionein-1H	1729	1446	0.84
594	2-oxoisovalerate dehydrogenase subunit beta, mitochondrial Precursor	92	77	0.84
9394	Heparan-sulfate 6-O-sulfotransferase 1	26	22	0.84

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Uncharacterized protein ENSP00000375474	21	18	0.84
7204	Triple functional domain protein	26	22	0.84
729708	Triosephosphate isomerase	5122	4286	0.84
-	Multiple epidermal growth factor-like domains 11 Precursor	21	17	0.84
8427	Zinc finger protein 282	21	17	0.84
402682	Inactive Ufm1-specific protease 1	29	24	0.84
728269	Melanoma-associated antigen 9	9	7	0.84
100130932	Small nuclear ribonucleoprotein G	249	209	0.84
400935	Putative interleukin-17 receptor E-like	80	67	0.84
1982	Eukaryotic translation initiation factor 4 gamma 2	4375	3661	0.84
3175	Hepatocyte nuclear factor 6	66	55	0.84
-	Histone-lysine N-methyltransferase, H3 lysine-9 specific 5	41	34	0.84
100287180	-	63	53	0.84
6829	Transcription elongation factor SPT5	219	184	0.84
100293571	-	341	285	0.84
100288262	-	30	25	0.84
1871	Transcription factor E2F3	41	35	0.84
999	Epithelial cadherin Precursor	102	86	0.84
7082	Tight junction protein ZO-1	418	350	0.84
2843	Probable G-protein coupled receptor 20	382	320	0.84
57728	WD repeat-containing protein 19	15	12	0.84
162966	Zinc finger protein 600	53	45	0.84
26147	PHD finger protein 19	222	186	0.84
10318	TNFAIP3-interacting protein 1	30	25	0.84
10367	Calcium-binding atopy-related autoantigen 1	84	71	0.84
84376	Protein Hook homolog 3	40	34	0.84
642954	Histone-binding protein RBBP4	691	578	0.84
221477	Uncharacterized protein C6orf89	52	43	0.84
55308	ATP-dependent RNA helicase DDX19A	133	111	0.84
4803	Beta-nerve growth factor Precursor	54	45	0.84
85014	Transmembrane protein 141	357	299	0.84
-	SH3 domain-binding glutamic acid-rich-like protein	418	350	0.84
-	-	25	21	0.84
441151	Transmembrane protein 151B	31	26	0.84
135656	diffuse panbronchiolitis critical region 1 protein	33	28	0.84
-	Male-specific lethal 1-like 1	138	116	0.84
7133	Tumor necrosis factor receptor superfamily member 1B Precursor	105	88	0.84
55904	Histone-lysine N-methyltransferase MLL5	788	660	0.84
162333	Probable E3 ubiquitin-protein ligase MARCH10	31	26	0.84
2983	Guanylate cyclase soluble subunit beta-1	14	11	0.84
6646	Sterol O-acyltransferase 1	110	92	0.84
-	MSTP160	36	30	0.84
5349	FXYD domain-containing ion transport regulator 3 Precursor	36	30	0.84
2565	Gamma-aminobutyric acid receptor subunit gamma-1 Precursor	64	54	0.84
2243	Fibrinogen alpha chain Precursor	45	37	0.84
90231	Uncharacterized protein KIAA2013 Precursor	205	172	0.84
4440	RNA-binding protein Musashi homolog 1	25	21	0.84
55247	Endonuclease VIII-like 3	25	21	0.84
51633	OTU domain-containing protein 6B	113	95	0.84

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3433	Interferon-induced protein with tetratricopeptide repeats 2 (IFIT-2)(Interferon-induced 54 kDa protein)(IFI-54K)(ISG-54 K) [Source:UniProtKB/Swiss-Prot;Acc:P09913]	12	10	0.84
6402	L-selectin Precursor	18	15	0.84
2304	Forkhead box protein E1	16	14	0.84
8831	Ras GTPase-activating protein SynGAP	21	18	0.84
3880	Keratin, type I cytoskeletal 19	104	87	0.84
3209	Homeobox protein Hox-A13	115	96	0.84
-	cDNA FLJ41343 fis, clone BRAWH2001973	29	24	0.84
3597	Interleukin-13 receptor alpha-1 chain Precursor	544	456	0.84
100289630	-	37	31	0.84
415116	Serine/threonine-protein kinase Pim-3	399	335	0.84
55120	E3 ubiquitin-protein ligase FANCL	140	118	0.84
728046	-	56	47	0.84
124801	Protein LSM12 homolog	285	239	0.84
27346	Transmembrane protein 97	271	227	0.84
100292841	-	90	76	0.84
-	Rho GTPase-activating protein 18	670	561	0.84
3658	Iron-responsive element-binding protein 2	96	81	0.84
124857	WAP, kazal, immunoglobulin, kunitz and NTR domain-containing protein 2 Precursor	143	120	0.84
3897	Neural cell adhesion molecule L1 Precursor	50	42	0.84
7334	Ubiquitin-conjugating enzyme E2 N	1219	1022	0.84
10155	Transcription intermediary factor 1-beta	402	337	0.84
100289699	-	10	9	0.84
23587	Dermal papilla-derived protein 6	283	237	0.84
1837	Dystrobrevin alpha	31	26	0.84
23526	Minor histocompatibility protein HA-1	14	12	0.84
10745	Putative homeodomain transcription factor 1	156	131	0.84
-	Zinc finger protein 772	11	9	0.84
4188	MyoD family inhibitor	121	101	0.84
84060	Uncharacterized protein C7orf64	150	126	0.84
10992	Splicing factor 3B subunit 2	1238	1039	0.84
100292286	-	22	18	0.84
5725	Polypyrimidine tract-binding protein 1	2036	1709	0.84
51222	Zinc finger protein 219	45	38	0.84
2589	Polypeptide N-acetylgalactosaminyltransferase 1	1573	1321	0.84
9261	MAP kinase-activated protein kinase 2	35	29	0.84
27156	Rhabdoid tumor deletion region protein 1	31	26	0.84
2962	General transcription factor IIF subunit 1	239	201	0.84
9117	Vesicle-trafficking protein SEC22c	278	234	0.84
6553	Sodium/hydrogen exchanger 5	27	23	0.84
-	Proline-rich transmembrane protein 2	113	95	0.84
25847	Anaphase-promoting complex subunit 13	976	820	0.84
55332	Damage-regulated autophagy modulator	262	220	0.84
126074	Uncharacterized protein C19orf39	288	242	0.84
8260	N-terminal acetyltransferase complex ARD1 subunit homolog A	894	751	0.84
100286910	-	19	16	0.84
-	Cyclin-G1	1210	1017	0.84
90121	Pre-rRNA-processing protein TSR2 homolog	117	99	0.84
83636	Uncharacterized protein C19orf12	130	109	0.84
6487	CMP-N-acetylneuraminate-beta-1,4-galactoside alpha-2,3-sialyltransferase	43	36	0.84

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23070	PtsJ methyltransferase domain-containing protein 2	90	75	0.84
54938	Seryl-tRNA synthetase, mitochondrial Precursor	101	85	0.84
51384	Protein Wnt-16 Precursor	29	25	0.84
-	BTB/POZ domain-containing protein KCTD20	121	102	0.84
84321	THO complex subunit 3	364	306	0.84
100292822	-	17	14	0.84
55165	Centrosomal protein of 55 kDa	149	125	0.84
283635	Protein FAM177A1	32	27	0.84
-	C-jun-amino-terminal kinase-interacting protein 4	149	126	0.84
123720	WASP homolog associated-protein with actin, membranes and microtubules	181	152	0.84
28971	UPF0366 protein C11orf67	270	227	0.84
7529	14-3-3 protein beta/alpha	1581	1329	0.84
3960	Galectin-4	12	10	0.84
55906	Hepatocellular carcinoma-associated antigen 127	50	42	0.84
100287488	-	147	124	0.84
-	Immunoglobulin heavy chain C gene segment	532	447	0.84
285362	Sulfatase-modifying factor 1 Precursor	375	316	0.84
55830	Glycosyltransferase 8 domain-containing protein 1	215	181	0.84
100288690	-	45	37	0.84
-	Sterile alpha motif domain-containing protein 11	74	62	0.84
-	Transgelin	46	38	0.84
51686	Ornithine decarboxylase antizyme 3	26	22	0.84
728591	UPF0594 protein C13orf38	64	54	0.84
100292073	-	6	5	0.84
100128936	60S ribosomal protein L10a	11705	9847	0.84
-	Immunoglobulin Lambda light chain V gene segment	257	217	0.84
256281	Uridine diphosphate glucose pyrophosphatase	517	435	0.84
100290769	-	54	45	0.84
100294380	-	15	12	0.84
10525	Hypoxia up-regulated protein 1 Precursor	172	144	0.84
-	-	21	17	0.84
100289996	-	34	28	0.84
414919	UPF0598 protein C8orf82	29	24	0.84
100287782	-	40	33	0.84
55576	Stabilin-2 Precursor	26	22	0.84
3241	Hippocalcin-like protein 1	539	454	0.84
57408	Leucine-rich repeat and transmembrane domain-containing protein 1 Precursor	5	5	0.84
6166	60S ribosomal protein L36a-like	2256	1900	0.84
54936	Poly(ADP-ribose) glycohydrolase ARH3	273	230	0.84
123855	-	13	11	0.84
6416	Dual specificity mitogen-activated protein kinase kinase 4	95	80	0.84
55764	Intraflagellar transport protein 122 homolog	52	44	0.84
8226	Haloacid dehalogenase-like hydrolase domain-containing protein 1A	364	307	0.84
57658	Calcium-binding and coiled-coil domain-containing protein 1	104	88	0.84
56896	Dihydropyrimidinase-related protein 5	17	14	0.84
10203	Calcitonin gene-related peptide type 1 receptor Precursor	465	392	0.84
25814	Ataxin-10	73	61	0.84
2850	Probable G-protein coupled receptor 27	10	8	0.84
6396	Protein SEC13 homolog	1870	1575	0.84
55002	Transmembrane and coiled-coil domain-containing protein 3 Precursor	561	473	0.84

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5469	Mediator of RNA polymerase II transcription subunit 1	158	133	0.84
80739	Protein G6b Precursor	23	19	0.84
57407	NmrA-like family domain-containing protein 1	354	299	0.84
-	-	54	46	0.84
5336	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase gamma-2	44	37	0.84
7727	Zinc finger protein 174	32	27	0.84
4893	GTPase NRas Precursor	281	237	0.84
100131646	-	57	48	0.84
100288650	-	27	23	0.84
-	Ubiquitin carboxyl-terminal hydrolase 15	93	79	0.84
339047	NPIP-like protein 1	33	28	0.84
100293547	-	33	28	0.84
3321	Immunoglobulin superfamily member 3 Precursor	26	22	0.84
137872	Hydroxyacid-oxoacid transhydrogenase, mitochondrial Precursor	9	8	0.84
60493	FAST kinase domain-containing protein 5	152	128	0.84
-	CS025_HUMAN Isoform 2 of Q9UFG5 · Homo sapiens	150	126	0.84
-	mRNA-decapping enzyme 1A	150	126	0.84
8554	E3 SUMO-protein ligase PIAS1	234	198	0.84
10970	Cytoskeleton-associated protein 4	4080	3440	0.84
118429	Anthrax toxin receptor 2 Precursor	266	224	0.84
51114	Palmitoyltransferase ZDHHC9	255	215	0.84
100291581	-	69	59	0.84
170487	Putative uncharacterized actin family protein C20orf134 Precursor	41	34	0.84
89777	Serpin B12	5	5	0.84
22861	NACHT, LRR and PYD domains-containing protein 1	117	98	0.84
9601	Protein disulfide-isomerase A4 Precursor	1435	1210	0.84
25780	Ras guanyl-releasing protein 3	341	287	0.84
-	Transmembrane protein 63B	31	26	0.84
834	Caspase-1 Precursor	65	55	0.84
100294271	-	77	65	0.84
10959	Transmembrane emp24 domain-containing protein 2 Precursor	2603	2196	0.84
3212	Homeobox protein Hox-B2	356	300	0.84
7980	Tissue factor pathway inhibitor 2 Precursor	5547	4680	0.84
5885	Double-strand-break repair protein rad21 homolog	509	429	0.84
349149	Gap junction gamma-3 protein	6	5	0.84
6533	Sodium- and chloride-dependent taurine transporter	76	64	0.84
55150	Putative uncharacterized protein FLJ10490	63	53	0.84
7392	Upstream stimulatory factor 2	365	308	0.84
92170	Mitochondrial GTPase 1 Precursor	281	237	0.84
84277	DnaJ homolog subfamily C member 30	63	53	0.84
57120	Golgi-associated PDZ and coiled-coil motif-containing protein	57	48	0.84
10024	Trophinin-associated protein	74	62	0.84
-	Chloride intracellular channel protein 1	5260	4440	0.84
154467	Transmembrane and coiled-coil domain-containing protein C6orf129	629	531	0.84
7174	Tripeptidyl-peptidase 2	164	139	0.84
93107	Potassium voltage-gated channel subfamily G member 4	9	8	0.84
-	DNA topoisomerase 3-beta-1	85	72	0.84
171169	Sperm acrosome membrane-associated protein 4 Precursor	29	24	0.84

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9374	EGF-like domain-containing protein 8 Precursor	91	76	0.84
23762	Oxysterol-binding protein 2	56	47	0.84
55643	BTB/POZ domain-containing protein 2	59	50	0.84
5524	Serine/threonine-protein phosphatase 2A regulatory subunit B'	40	34	0.84
-	Uncharacterized protein ENSP00000331294	69	58	0.84
80218	N-acetyltransferase 13	390	329	0.84
-	Ras guanyl-releasing protein 3	140	118	0.84
1029	Cyclin-dependent kinase inhibitor 2A, isoform 4 (p14ARF)(p19ARF)	42	35	0.84
6676	Sperm-associated antigen 4 protein	15	13	0.84
85411	Uncharacterized protein C6orf114	6	5	0.84
1540	Probable ubiquitin carboxyl-terminal hydrolase CYLD	88	74	0.84
266812	Nucleosome assembly protein 1-like 5	25	21	0.84
56928	Signal peptide peptidase-like 2B	60	51	0.84
3710	Inositol 1,4,5-trisphosphate receptor type 3	285	241	0.84
81839	Vang-like protein 1	65	55	0.84
11219	Three prime repair exonuclease 2	17	14	0.84
255967	PAB-dependent poly(A)-specific ribonuclease subunit 3	52	44	0.84
-	Myosin-VI	425	359	0.84
126119	Josephin-2	62	53	0.84
808	Calmodulin	6093	5149	0.85
-	Zinc finger protein Pegasus	46	39	0.85
-	-	50	42	0.85
56941	UPF0361 protein DC12	374	316	0.85
-	-	149	126	0.85
-	Cyclic AMP-dependent transcription factor ATF-7	36	31	0.85
100133567	Rap guanine nucleotide exchange factor 2	98	83	0.85
-	UPF0605 protein FAM166B	43	36	0.85
23304	E3 ubiquitin-protein ligase UBR2	41	34	0.85
-	Interleukin-17F Precursor	11	9	0.85
-	Leucine-rich repeat-containing protein 41	82	69	0.85
23239	PH domain leucine-rich repeat-containing protein phosphatase	57	48	0.85
116843	Uncharacterized MFS-type transporter C6orf192	173	146	0.85
994	M-phase inducer phosphatase 2	44	37	0.85
28991	COMM domain-containing protein 5	406	344	0.85
5277	Phosphatidylinositol N-acetylglucosaminyltransferase subunit A	87	73	0.85
79905	Transmembrane channel-like protein 7	84	71	0.85
-	Syntaxin-16	151	128	0.85
23332	CLIP-associating protein 1	169	143	0.85
80199	Protein fuzzy homolog	37	32	0.85
137797	Ly6/PLAUR domain-containing protein 2 Precursor	78	66	0.85
2009	Echinoderm microtubule-associated protein-like 1	64	54	0.85
-	Zinc finger protein 1 homolog	35	29	0.85
9936	CD302 antigen Precursor	21	18	0.85
654188	Peptidyl-prolyl cis-trans isomerase A	16395	13873	0.85
10811	NADPH oxidase activator 1	49	42	0.85
-	UPF0563 protein C17orf95	289	244	0.85
79647	Akirin-1	366	309	0.85
100291779	-	108	91	0.85
-	Palmitoyl-protein thioesterase 2 Fragment	93	79	0.85
64746	Golgi resident protein GCP60	310	262	0.85

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
401827	mesothelin-like	15	13	0.85
51552	Ras-related protein Rab-14	508	430	0.85
140597	Transcription elongation factor A protein-like 2	54	46	0.85
-	Tyrosine-protein phosphatase non-receptor type 5	22	19	0.85
1960	Early growth response protein 3	123	105	0.85
-	Alkyldihydroxyacetonephosphate synthase, peroxisomal Precursor	342	290	0.85
5434	DNA-directed RNA polymerases I, II, and III subunit RPABC1	2762	2339	0.85
1870	Transcription factor E2F2	21	18	0.85
27132	Copine-7	257	218	0.85
-	Putative RNA exonuclease NEF-sp	32	27	0.85
-	LEM domain-containing protein 2	138	117	0.85
-	YV019_HUMAN Isoform 2 of Q6P575 - Homo sapiens	28	23	0.85
100293889	-	17	14	0.85
784	Voltage-dependent L-type calcium channel subunit beta-3	28	23	0.85
100294185	-	83	70	0.85
-	-	159	134	0.85
196335	Olfactory receptor 56B4	24	21	0.85
151871	Developmental pluripotency-associated protein 2	24	20	0.85
2208	Low affinity immunoglobulin epsilon Fc receptor	93	79	0.85
-	Uncharacterized protein C2orf55	15	12	0.85
-	Chloride channel protein 7	134	114	0.85
131149	Otolin-1 Precursor	90	76	0.85
50717	WD repeat-containing protein 42A	40	34	0.85
55656	Integrator complex subunit 8	293	248	0.85
7534	14-3-3 protein zeta/delta	5861	4967	0.85
79664	NMDA receptor-regulated protein 2	203	172	0.85
222642	Peripheral-type benzodiazepine receptor-like protein 1	14	12	0.85
4706	Acyl carrier protein, mitochondrial Precursor	1621	1374	0.85
-	-	1023	867	0.85
92689	Protein NOXP20	328	278	0.85
26063	Peroxisomal 2,4-dienoyl-CoA reductase	152	129	0.85
-	Putative 40S ribosomal protein S10-like protein	4958	4203	0.85
54738	Protein FEV	21	18	0.85
390892	Olfactory receptor 7A10	17	14	0.85
-	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta isoform	48	40	0.85
115	Adenylate cyclase type 9	33	28	0.85
90332	Exocyst complex component 3-like protein 2	40	33	0.85
10214	Protein SSX3	13	11	0.85
23345	Nesprin-1	35	30	0.85
-	Uncharacterized protein ENSP00000352132	15149	12847	0.85
100130311	Uncharacterized protein FLJ46558	14	12	0.85
80823	Protein BHLHB9	33	28	0.85
339976	Tripartite motif family-like protein 1	43	36	0.85
80228	Protein orai-2	165	140	0.85
8340	Histone H2B type 1-L	208	176	0.85
8886	ATP-dependent RNA helicase DDX18	262	222	0.85
91351	Probable ATP-dependent RNA helicase DDX60-like	24	20	0.85
8407	Transgelin-2	1183	1004	0.85
4001	Lamin-B1	44	38	0.85
2625	Trans-acting T-cell-specific transcription factor GATA-3	198	168	0.85
122553	Trafficking protein particle complex subunit 6B	164	139	0.85

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100128695	-	7	6	0.85
130507	E3 ubiquitin-protein ligase UBR3	84	72	0.85
100293107	-	11	9	0.85
6642	Sorting nexin-1	486	412	0.85
8562	Density-regulated protein	712	605	0.85
23649	DNA polymerase subunit alpha B	91	77	0.85
10217	CTD small phosphatase-like protein	123	105	0.85
727957	HEAT repeat-containing protein KIAA1833	55	47	0.85
7087	Intercellular adhesion molecule 5 Precursor	139	118	0.85
-	Protein FAM128B	4573	3883	0.85
23650	Tripartite motif-containing protein 29	18	15	0.85
9653	Heparan sulfate 2-O-sulfotransferase 1	69	59	0.85
57786	RB-associated KRAB zinc finger protein	43	37	0.85
116159	Cysteine and tyrosine-rich protein 1 Precursor	169	143	0.85
8538	Homeobox protein BarH-like 2	135	114	0.85
5052	Peroxiredoxin-1	3913	3323	0.85
55161	Transmembrane protein 33	56	48	0.85
7514	Exportin-1	361	307	0.85
23129	Plexin-D1 Precursor	950	807	0.85
140838	N-acetylneuraminate-9-phosphatase	45	39	0.85
54934	Uncharacterized protein C12orf41	167	142	0.85
80344	WD repeat-containing protein 23	71	60	0.85
5864	Ras-related protein Rab-3A	37	31	0.85
254048	Uncharacterized protein KIAA2030	46	39	0.85
100130744	Putative uncharacterized protein	12	10	0.85
100289043	-	15	13	0.85
3996	Lethal(2) giant larvae protein homolog 1	32	27	0.85
23219	F-box only protein 28	99	84	0.85
55062	WD repeat domain phosphoinositide-interacting protein 1	328	279	0.85
56907	Protein spire homolog 1	78	67	0.85
729991	UPF0402 protein	138	117	0.85
3985	LIM domain kinase 2	65	55	0.85
348013	Protein FAM70B	332	282	0.85
-	Abl interactor 2	206	175	0.85
-	Single-stranded DNA-binding protein 2	90	76	0.85
91607	Schlafen family member 11	16	14	0.85
100287081	-	79	67	0.85
6734	Signal recognition particle receptor subunit alpha	94	80	0.85
140689	Cerebellin-4 Precursor	101	86	0.85
100293351	Keratin, type II cuticular Hb6	29	25	0.85
-	AP20 region protein 1	35	30	0.85
9767	Protein Jade-3	146	124	0.85
11270	Nurim	113	96	0.85
6477	E3 ubiquitin-protein ligase SIAH1	255	217	0.85
286075	Zinc finger protein 707	33	28	0.85
-	StAR-related lipid transfer protein 3	155	132	0.85
54505	Putative ATP-dependent RNA helicase DHX29	89	76	0.85
100289864	-	92	78	0.85
85329	Galectin-12	22	19	0.85
5034	Protein disulfide-isomerase Precursor	6659	5663	0.85
81533	T-cell immunomodulatory protein Precursor	787	670	0.85
80232	WD repeat-containing protein 26	173	147	0.85
646603	hypothetical LOC646603	12	11	0.85
5199	Properdin Precursor	42	36	0.85

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
85019	Transmembrane protein C18orf45	16	13	0.85
338761	Complement C1q-like protein 4 Precursor	11	9	0.85
64418	Transmembrane protein 168	101	86	0.85
80723	Transmembrane protein 22	217	184	0.85
10049	DnaJ homolog subfamily B member 6	649	552	0.85
55353	Lysosomal-associated transmembrane protein 4B	925	787	0.85
28984	Response gene to complement 32 protein	7446	6335	0.85
100288997	-	133	113	0.85
10316	Neuromedin-U receptor 1	6	5	0.85
6899	T-box transcription factor TBX1	44	37	0.85
-	NADPH-dependent diflavin oxidoreductase 1	70	59	0.85
-	CCR4-NOT transcription complex subunit 10	127	108	0.85
219995	Membrane-spanning 4-domains subfamily A member 15	7	6	0.85
7473	Proto-oncogene protein Wnt-3 Precursor	91	77	0.85
2043	Ephrin type-A receptor 4 Precursor	38	32	0.85
340547	V-set and immunoglobulin domain-containing protein 1 Precursor	23	20	0.85
55114	Rho GTPase-activating protein 17	248	211	0.85
91373	UDP-N-acetylhexosamine pyrophosphorylase-like protein 1	42	36	0.85
51402	Heat shock transcription factor, X-linked	75	64	0.85
23032	Ubiquitin carboxyl-terminal hydrolase 33	126	107	0.85
728503	-	51	43	0.85
51063	Calcium homeostasis modulator protein 2	136	115	0.85
51560	Ras-related protein Rab-6B	25	21	0.85
29089	Ubiquitin-conjugating enzyme E2 T	441	375	0.85
57577	Coiled-coil domain-containing protein KIAA1407	20	17	0.85
57646	Ubiquitin carboxyl-terminal hydrolase 28	53	45	0.85
2591	Polypeptide N-acetylgalactosaminyltransferase 3	15	13	0.85
-	Gamma-tubulin complex component 3	53	45	0.85
-	DNA repair endonuclease XPF	66	56	0.85
127829	ADP-ribosylation factor-like protein 8A	352	299	0.85
79747	Uncharacterized protein C6orf103	94	80	0.85
389541	UPF0539 protein C7orf59	1017	866	0.85
4926	Nuclear mitotic apparatus protein 1	26	22	0.85
7189	TNF receptor-associated factor 6	110	94	0.85
-	UPF0366 protein C11orf67	741	631	0.85
23390	Palmitoyltransferase ZDHHC17	23	20	0.85
-	Zinc finger CCCH domain-containing protein 12B	37	32	0.85
91734	Isopentenyl-diphosphate Delta-isomerase 2	43	37	0.85
29989	Odorant-binding protein 2b Precursor	433	369	0.85
253827	Methionine-R-sulfoxide reductase B3, mitochondrial Precursor	360	306	0.85
27087	Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase 1	29	25	0.85
-	Uncharacterized protein ENSP00000346654	96	82	0.85
10370	Cbp/p300-interacting transactivator 2	209	178	0.85
54778	E3 ubiquitin-protein ligase Arkadia	251	213	0.85
100291458	-	87	74	0.85
2542	Glucose-6-phosphate translocase	82	70	0.85
5948	Retinol-binding protein 2	10	9	0.85
64282	PAP associated domain containing 5 isoform a	149	127	0.85
55193	Protein polybromo-1	259	220	0.85
100290470	-	127	108	0.85

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
128859	Bactericidal/permeability-increasing protein-like 3 Precursor	18	15	0.85
2692	Growth hormone-releasing hormone receptor Precursor	203	173	0.85
100292786	-	19	16	0.85
400223	Putative uncharacterized protein C14orf181	158	135	0.85
8938	BAI1-associated protein 3	17	15	0.85
28511	NF-kappa-B inhibitor-interacting Ras-like protein 2	221	189	0.85
10461	Proto-oncogene tyrosine-protein kinase MER Precursor	79	67	0.85
56992	Kinesin-like protein KIF15	16	14	0.85
4942	Ornithine aminotransferase, mitochondrial Precursor	648	552	0.85
5793	Receptor-type tyrosine-protein phosphatase gamma Precursor	98	84	0.85
51393	Transient receptor potential cation channel subfamily V member 2	24	20	0.85
4900	Neurogranin	126	107	0.85
256356	glycerol kinase 5 (putative) (GK5), mRNA	15	13	0.85
114757	Cytoglobin	23	19	0.85
84215	Zinc finger protein 541	18	15	0.85
100289263	-	14	12	0.85
5257	Phosphorylase b kinase regulatory subunit beta	338	288	0.85
100294015	Destrin	843	719	0.85
9138	Rho guanine nucleotide exchange factor 1	355	302	0.85
64137	ATP-binding cassette sub-family G member 4	7	6	0.85
-	Deformed epidermal autoregulatory factor 1 homolog	418	357	0.85
5430	DNA-directed RNA polymerase II subunit RPB1	663	565	0.85
100288630	-	17	14	0.85
27257	U6 snRNA-associated Sm-like protein LSm1	481	410	0.85
100294404	-	22	18	0.85
3704	Inosine triphosphate pyrophosphatase	422	360	0.85
51031	Glyoxalase domain-containing protein 4	839	715	0.85
53840	Tripartite motif-containing protein 34	49	41	0.85
414	Arylsulfatase D Precursor	79	68	0.85
100292721	-	38	32	0.85
267004	PiggyBac transposable element-derived protein 3	35	30	0.85
27252	Kelch-like protein 20	184	157	0.85
100129083	-	62	53	0.85
-	DNA-directed RNA polymerase II subunit RPB2	895	764	0.85
-	NF-kappa-B inhibitor zeta	136	116	0.85
34	Medium-chain specific acyl-CoA dehydrogenase, mitochondrial Precursor	399	340	0.85
100294257	-	18	15	0.85
4212	Homeobox protein Meis2	235	200	0.85
23384	Cytospin-A	33	28	0.85
81628	TSC22 domain family protein 4	167	143	0.85
60625	Probable ATP-dependent RNA helicase DHX35	66	56	0.85
1471	Cystatin-C Precursor	1174	1003	0.85
6788	Serine/threonine-protein kinase 3	61	52	0.85
100131098	-	61	52	0.85
-	Zinc finger protein 672	100	86	0.85
-	Selenoprotein N Precursor	39	34	0.85
5394	Exosome component 10	297	253	0.85
9470	Eukaryotic translation initiation factor 4E type 2	1493	1275	0.85
100291371	-	19	16	0.85
6049	RING finger protein 6	276	236	0.85

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55140	Elongator complex protein 3	181	154	0.85
100289122	-	23	20	0.85
-	Seven transmembrane helix receptor	28	24	0.85
100132969	Transmembrane protein 185A	282	241	0.85
-	Integrator complex subunit 9	97	83	0.85
-	PCI domain-containing protein 2	352	301	0.85
25948	Kelch repeat and BTB domain-containing protein 2	197	169	0.85
4759	Sialidase-2	47	41	0.85
28964	ARF GTPase-activating protein GIT1	16	14	0.85
-	-	764	653	0.85
26258	Pallidin	244	209	0.85
26137	Zinc finger and BTB domain-containing protein 20	118	101	0.85
126299	Zinc finger protein 428	549	469	0.85
27301	DNA-(apurinic or apyrimidinic site) lyase 2	62	53	0.85
4791	Nuclear factor NF-kappa-B p100 subunit	272	233	0.86
8609	Krueppel-like factor 7	145	124	0.86
643043	-	64	55	0.86
6302	Tetraspanin-31	434	371	0.86
5518	Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform	620	530	0.86
9545	Ras-related protein Rab-3D	34	29	0.86
220001	von Willebrand factor C and EGF domain-containing protein Precursor	149	127	0.86
-	Receptor-type tyrosine-protein phosphatase H Precursor	32	27	0.86
8545	CGG triplet repeat-binding protein 1	238	204	0.86
491	Plasma membrane calcium-transporting ATPase 2	94	80	0.86
-	Ribosomal protein S6 modification-like protein B	77	66	0.86
55074	Oxidation resistance protein 1	90	77	0.86
375287	RNA-binding protein 43	39	34	0.86
63943	FK506-binding protein-like	114	98	0.86
132014	Interleukin-17 receptor E Precursor	20	17	0.86
2176	Fanconi anemia group C protein	28	24	0.86
23741	-	1945	1665	0.86
7476	Protein Wnt-7a Precursor	214	183	0.86
100289316	-	104	89	0.86
7089	Transducin-like enhancer protein 2	39	33	0.86
54069	Uncharacterized protein C21orf45	357	306	0.86
6294	Scaffold attachment factor B1	86	74	0.86
-	Death-associated protein 1	842	721	0.86
57213	Chronic lymphocytic leukemia deletion region gene 6 protein	56	48	0.86
343052	-	93	79	0.86
6700	Small proline-rich protein 2A	39	34	0.86
-	Probable ATP-dependent RNA helicase DDX58	114	98	0.86
11133	Kaptein	56	48	0.86
25825	Beta-secretase 2 Precursor	536	459	0.86
728816	-	7	6	0.86
64743	WD repeat-containing protein 13	526	451	0.86
354	Prostate-specific antigen Precursor	32	28	0.86
26260	F-box only protein 25	174	149	0.86
644450	-	60	51	0.86
54908	Coiled-coil domain-containing protein 99	122	105	0.86
516	ATP synthase lipid-binding protein, mitochondrial Precursor	993	850	0.86

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
865	Core-binding factor subunit beta	660	565	0.86
100290067	-	47	40	0.86
-	-	14718	12604	0.86
115727	RAS guanyl-releasing protein 4	158	136	0.86
100290537	-	17	15	0.86
5653	Kallikrein-6 Precursor	18	16	0.86
-	Pleckstrin homology domain-containing family O member 1	876	751	0.86
1140	Acetylcholine receptor subunit beta Precursor	36	31	0.86
8539	Apoptosis inhibitor 5	194	167	0.86
100130342	SLC30A10 protein	43	37	0.86
9132	Potassium voltage-gated channel subfamily KQT member 4	16	13	0.86
10447	Protein FAM3C Precursor	651	557	0.86
-	-	673	576	0.86
128497	Uncharacterized protein C20orf165	61	53	0.86
1725	Deoxyhypusine synthase	523	448	0.86
374395	Transmembrane protein 179B	405	347	0.86
155368	Williams-Beuren syndrome chromosomal region 27 protein	172	147	0.86
79573	Tetratricopeptide repeat protein 13	159	137	0.86
140606	Selenoprotein M Precursor	488	418	0.86
91522	Collagen alpha-1(XIII) chain	20	17	0.86
8440	Cytoplasmic protein NCK2	290	248	0.86
390199	Olfactory receptor 4D9	75	64	0.86
5049	Platelet-activating factor acetylhydrolase IB subunit beta	121	103	0.86
-	Interferon-induced protein with tetratricopeptide repeats 2	18	15	0.86
8505	Poly(ADP-ribose) glycohydrolase	88	75	0.86
-	UPF0183 protein C16orf70	97	83	0.86
5074	PRKC apoptosis WT1 regulator protein	281	241	0.86
286128	Zinc finger protein 41 homolog	21	18	0.86
83752	Peroxisomal Lon protease homolog 2	83	71	0.86
219479	Olfactory receptor 5R1	22	19	0.86
126129	Carnitine O-palmitoyltransferase 1, brain isoform	189	162	0.86
57037	Ankyrin repeat and MYND domain-containing protein 2	71	61	0.86
343	Aquaporin-8	29	25	0.86
1349	Cytochrome c oxidase polypeptide 7B, mitochondrial Precursor	2831	2428	0.86
-	WD repeat-containing protein 37	23	19	0.86
60506	Nyctalopin Precursor	9	8	0.86
2580	Cyclin G-associated kinase	90	77	0.86
-	Laminin subunit gamma-3 Precursor	30	26	0.86
-	Tafazzin	145	124	0.86
10236	Heterogeneous nuclear ribonucleoprotein R	551	473	0.86
-	Zinc finger RAD18 domain-containing protein C1orf124	89	77	0.86
23474	Protein ETHE1, mitochondrial Precursor	441	378	0.86
6199	Ribosomal protein S6 kinase beta-2	295	253	0.86
139728	Calcium/calmodulin-dependent protein kinase type 1B	112	96	0.86
151613	Tetratricopeptide repeat protein 14	196	168	0.86
-	Serum paraoxonase/arylesterase 2	2441	2094	0.86
4707	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 1	2124	1822	0.86
5019	Succinyl-CoA:3-ketoacid-coenzyme A transferase 1, mitochondrial Precursor	166	143	0.86
162972	Zinc finger protein 550	52	45	0.86
861	Runt-related transcription factor 1	473	406	0.86
54534	39S ribosomal protein L50, mitochondrial	382	328	0.86

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
284346	Zinc finger protein 575	57	49	0.86
3075	Complement factor H Precursor	113	97	0.86
55620	signal transducing adaptor family member 2 isoform 1	116	100	0.86
84324	Nuclear protein Hec-1	1621	1392	0.86
100133673	Tubulin gamma-1 chain	826	709	0.86
29074	39S ribosomal protein L18, mitochondrial Precursor	779	669	0.86
100293012	-	29	25	0.86
-	Tumor protein D54	769	660	0.86
5824	Peroxisomal biogenesis factor 19	510	438	0.86
55818	JmjC domain-containing histone demethylation protein 2A	255	219	0.86
9811	Uncharacterized protein KIAA0427	60	51	0.86
196792	Protein FAM24B Precursor	23	20	0.86
-	Mitogen-activated protein kinase kinase kinase 2	203	175	0.86
199777	Zinc finger protein 626	27	23	0.86
93436	Armadillo repeat-containing protein 6	182	156	0.86
254225	RING finger protein 169	132	113	0.86
391	Rho-related GTP-binding protein RhoG Precursor	1016	872	0.86
8314	Ubiquitin carboxyl-terminal hydrolase BAP1	273	235	0.86
26148	Uncharacterized protein C10orf12	40	35	0.86
26010	SPATS2-like protein	281	241	0.86
55122	Akirin-2	178	153	0.86
81848	Protein sprouty homolog 4	237	203	0.86
4104	-	21	18	0.86
-	-	87	74	0.86
2743	Glycine receptor subunit beta Precursor	41	36	0.86
-	-	4603	3954	0.86
57152	Secreted Ly-6/uPAR-related protein 1 Precursor	34	29	0.86
-	Coiled-coil domain-containing protein 110	39	34	0.86
653889	Pre-mRNA-processing factor 6	217	186	0.86
23247	Uncharacterized protein KIAA0556	54	46	0.86
51399	Trafficking protein particle complex subunit 4 (Synbindin)	1090	937	0.86
11234	Hermansky-Pudlak syndrome 5 protein	98	84	0.86
389812	Uncharacterized lipocalin UNQ2541/PRO6093 Precursor	28	24	0.86
7078	Metalloproteinase inhibitor 3 Precursor	57	49	0.86
83464	Gamma-secretase subunit APH-1B	9	7	0.86
10200	M-phase phosphoprotein 6	206	177	0.86
55218	Exonuclease 3'-5' domain-like-containing protein 2 [Source:UniProtKB/Swiss-Prot;Acc:Q9NVH0]	125	107	0.86
253943	YTH domain family protein 3	166	143	0.86
891	G2/mitotic-specific cyclin-B1	402	346	0.86
29911	Protein Hook homolog 2	114	98	0.86
2650	Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,6-N-acetylglucosaminyltransferase	27	23	0.86
1979	Eukaryotic translation initiation factor 4E-binding protein 2	405	348	0.86
-	-	8636	7422	0.86
3925	Stathmin (pp19)	664	571	0.86
-	Fibrocytin Precursor	116	100	0.86
410	Arylsulfatase A Precursor	80	69	0.86
10971	14-3-3 protein theta	5266	4526	0.86
-	-	450	387	0.86
9911	Transmembrane and coiled-coil domains protein 2	69	60	0.86
5563	5'-AMP-activated protein kinase catalytic subunit alpha-2	10	9	0.86
5048	Platelet-activating factor acetylhydrolase IB subunit alpha	182	157	0.86

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
56731	SLC2A4 regulator	365	313	0.86
11140	Hsp90 co-chaperone Cdc37	1703	1464	0.86
4478	Moesin	1654	1423	0.86
3551	Inhibitor of nuclear factor kappa-B kinase subunit beta	151	130	0.86
51734	Methionine-R-sulfoxide reductase B1	197	169	0.86
644006	RING finger protein 4	322	277	0.86
6452	SH3 domain-binding protein 2	50	43	0.86
8500	Liprin-alpha-1	114	98	0.86
-	Ganglioside-induced differentiation-associated protein 1-like 1	17	15	0.86
255043	Transmembrane protein 86B	54	47	0.86
50999	Transmembrane emp24 domain-containing protein 5 Precursor	376	324	0.86
7812	Cold shock domain-containing protein E1	3798	3268	0.86
135293	Peptidase M20 domain-containing protein 2	30	25	0.86
29035	UPF0472 protein C16orf72	146	126	0.86
23548	Tetratricopeptide repeat protein 33	78	67	0.86
375686	Speriolin	44	38	0.86
4170	Induced myeloid leukemia cell differentiation protein Mcl-1	586	504	0.86
23559	WW domain-binding protein 1	153	132	0.86
3759	Inward rectifier potassium channel 2	9	7	0.86
1346	Cytochrome c oxidase polypeptide 7A1, mitochondrial Precursor	840	723	0.86
64064	Succinyl-CoA:3-ketoacid-coenzyme A transferase 2, mitochondrial Precursor	21	18	0.86
57482	Uncharacterized protein KIAA1211	12	11	0.86
6284	Protein S100-A13	2432	2093	0.86
10270	A-kinase anchor protein 8	180	155	0.86
5025	P2X purinoceptor 4	515	443	0.86
579	Homeobox protein Nkx-3.2	36	31	0.86
51389	RWD domain-containing protein 1	272	234	0.86
3913	Laminin subunit beta-2 Precursor	33	28	0.86
79690	Galactose-3-O-sulfotransferase 4	238	204	0.86
84964	Alkylated DNA repair protein alkB homolog 6	101	87	0.86
794	Calretinin	11	9	0.86
57186	250 kDa substrate of Akt	47	40	0.86
3005	Histone H1.0	14	12	0.86
337967	Keratin-associated protein 6-2	12	10	0.86
6455	Endophilin-A2	1145	986	0.86
25920	Negative elongation factor B	473	407	0.86
-	Zinc finger protein 512	130	112	0.86
10550	PRA1 family protein 3	1370	1180	0.86
-	Uncharacterized protein KIAA2013 Precursor	344	296	0.86
652346	-	56	48	0.86
-	Ubiquinone biosynthesis methyltransferase COQ5, mitochondrial Precursor	335	288	0.86
79673	Zinc finger protein 329	20	18	0.86
-	Transmembrane protein 42	215	185	0.86
2538	Glucose-6-phosphatase	36	31	0.86
153830	RING finger protein 145	223	192	0.86
54852	Membrane progesterin receptor gamma	16	14	0.86
6758	Protein SSX5	210	181	0.86
78994	Proline-rich protein 14	14	12	0.86

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2879	Phospholipid hydroperoxide glutathione peroxidase, mitochondrial Precursor	4231	3645	0.86
379	ADP-ribosylation factor-like protein 4D	118	102	0.86
80790	C-Maf-inducing protein	28	24	0.86
6738	60 kDa SS-A/Ro ribonucleoprotein	802	691	0.86
2890	Glutamate receptor 1 Precursor	20	17	0.86
653659	Transmembrane protein 183A	622	536	0.86
143888	KDEL motif-containing protein 2 Precursor	119	102	0.86
2782	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-1	1103	951	0.86
-	UPF0527 transmembrane protein	1831	1578	0.86
84525	Homeodomain-only protein	101	87	0.86
4185	ADAM 11 Precursor	15	13	0.86
9991	Regulator of differentiation 1	51	44	0.86
220988	Heterogeneous nuclear ribonucleoprotein A3	475	410	0.86
4192	Midkine Precursor	1231	1061	0.86
54918	CKLF-like MARVEL transmembrane domain-containing protein 6	1425	1228	0.86
100133691	Keratinocyte growth factor Precursor	21	18	0.86
23558	WW domain-binding protein 2	386	333	0.86
1187	Chloride channel protein ClC-Ka	18	16	0.86
55111	Pleckstrin homology domain-containing family J member 1	185	160	0.86
1660	ATP-dependent RNA helicase A	649	560	0.86
11216	A kinase anchor protein 10, mitochondrial Precursor	59	51	0.86
64147	Kinesin-like protein KIP9	16	14	0.86
4241	Melanotransferrin Precursor	48	42	0.86
3216	Homeobox protein Hox-B6	57	49	0.86
-	Claudin-15	55	47	0.86
-	Ras-related protein Rab-4B	277	239	0.86
286077	Protein FAM83H	165	142	0.86
64224	Homocysteine-responsive endoplasmic reticulum-resident ubiquitin-like domain member 2 protein	174	150	0.86
84816	Reticulon-4-interacting protein 1 Precursor	50	43	0.86
81858	Sharpin	136	118	0.86
4858	RNA-binding protein Nova-2	59	51	0.86
100293266	-	84	72	0.86
892	Cyclin-C	429	370	0.86
65986	Zinc finger and BTB domain-containing protein 10	27	24	0.86
197350	-	76	65	0.86
4103	Melanoma-associated antigen 4	46	40	0.86
22859	Latrophilin-1 Precursor	10	9	0.86
2026	Gamma-enolase	182	157	0.86
1009	Cadherin-11 Precursor	148	128	0.86
-	TSC22 domain family protein 2	210	182	0.86
23623	RUN and SH3 domain-containing protein 1	227	196	0.86
2145	Enhancer of zeste homolog 1	45	39	0.86
81856	Zinc finger protein 611	82	71	0.86
728969	Heparan-sulfate 6-O-sulfotransferase 1	67	58	0.86
51200	Carboxypeptidase A4 Precursor	39	34	0.86
2686	Gamma-glutamyltransferase 7	34	29	0.86
-	Dolichyl-diphosphooligosaccharide-protein glycosyltransferase subunit 2 Precursor	3418	2953	0.86
9328	General transcription factor 3C polypeptide 5	134	116	0.86
55750	Acylglycerol kinase, mitochondrial Precursor	155	134	0.86

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	SON protein	127	110	0.86
51274	Krueppel-like factor 3	104	90	0.86
-	Putative tubulin-like protein alpha-4B	56	49	0.86
-	Lipoxygenase homology domain-containing protein 1	51	44	0.86
4313	72 kDa type IV collagenase Precursor	3187	2753	0.86
8706	UDP-GalNAc:beta-1,3-N-acetylgalactosaminyltransferase 1	68	59	0.86
54545	Myotubularin-related protein 12	29	25	0.86
388581	Protein FAM132A Precursor	38	33	0.86
54584	Guanine nucleotide-binding protein subunit beta-like protein	16	14	0.86
23168	RNA polymerase-associated protein RTF1 homolog	86	74	0.86
2549	GRB2-associated-binding protein 1	36	31	0.86
100287141	-	36	31	0.86
55218	Exonuclease 3'-5' domain-like-containing protein 2	60	52	0.86
114984	FLYWCH family member 2	201	174	0.86
4837	Nicotinamide N-methyltransferase	2628	2271	0.86
203547	Vacuolar ATPase assembly integral membrane protein VMA21	111	96	0.86
100290696	Putative ubiquitin-like protein FUBI-like protein ENSP00000310146	17	15	0.86
10205	Myelin protein zero-like protein 2 Precursor	213	185	0.86
24142	N-acetyltransferase 6	23	20	0.86
100289609	-	132	114	0.86
-	-	1051	909	0.86
1650	Dolichyl-diphosphooligosaccharide--protein glycosyltransferase 48 kDa subunit Precursor	4304	3722	0.86
25758	UPF0606 protein C11orf41	47	40	0.86
51667	NEDD8 ultimate buster 1	201	174	0.86
1144	Acetylcholine receptor subunit delta Precursor	23	20	0.86
-	Zinc finger protein 496	100	87	0.86
100288987	-	106	92	0.87
5412	Ubiquitin-like protein 3 Precursor	116	101	0.87
56606	Solute carrier family 2, facilitated glucose transporter member 9	53	46	0.87
1182	Chloride channel protein 3	204	177	0.87
-	La-related protein 4	273	236	0.87
2553	GA-binding protein subunit beta-1	372	322	0.87
122961	Iron-sulfur cluster assembly 2 homolog, mitochondrial Precursor	305	264	0.87
113419	Protein TEX261	137	119	0.87
1147	Inhibitor of nuclear factor kappa-B kinase subunit alpha	126	109	0.87
5296	Phosphatidylinositol 3-kinase regulatory subunit beta	43	37	0.87
126006	Purkinje cell protein 2 homolog	18	15	0.87
5859	Glutaminyl-tRNA synthetase	723	626	0.87
9063	E3 SUMO-protein ligase PIAS2	109	94	0.87
64342	HCLS1-binding protein 3	169	146	0.87
1653	ATP-dependent RNA helicase DDX1	926	802	0.87
285877	POM121-like protein DKFZp564N2472	46	40	0.87
-	Alpha-1,3-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase-like protein LOC641515	42	36	0.87
5426	DNA polymerase epsilon catalytic subunit A	24	20	0.87
7286	Tuftelin	62	54	0.87
4763	Neurofibromin	158	137	0.87
-	Uncharacterized protein KIAA1522	97	84	0.87

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Putative uncharacterized protein C1orf200	32	28	0.87
100291332	-	74	64	0.87
-	Uncharacterized protein ENSP00000329229	21	18	0.87
222068	Transmembrane emp24 domain-containing protein 4 Precursor	303	262	0.87
841	Caspase-8 Precursor	7	6	0.87
6275	Protein S100-A4	218	188	0.87
3727	Transcription factor jun-D	25	22	0.87
126133	Aldehyde dehydrogenase family 16 member A1	181	157	0.87
-	Replication factor C subunit 1	243	210	0.87
3655	Integrin alpha-6 Precursor	554	480	0.87
283208	Prolyl 4-hydroxylase subunit alpha-3 Precursor	278	240	0.87
100291533	-	56	48	0.87
10867	Tetraspanin-9	19	16	0.87
9692	Uncharacterized protein KIAA0391	100	87	0.87
100129436	-	22	19	0.87
23321	Tripartite motif-containing protein 2	48	42	0.87
-	-	201	174	0.87
220929	Zinc finger protein 438	60	52	0.87
54916	UPF0679 protein C14orf101	33	29	0.87
80339	Patatin-like phospholipase domain-containing protein 3	31	27	0.87
-	Protein diaphanous homolog 3	105	91	0.87
64121	Ras-related GTP-binding protein C	1075	931	0.87
-	-	5529	4789	0.87
7327	Ubiquitin-conjugating enzyme E2 G2	695	602	0.87
646567	Oligosaccharyltransferase complex subunit OSTC	1214	1052	0.87
8668	Eukaryotic translation initiation factor 3 subunit I	1724	1494	0.87
963	Leukocyte surface antigen CD53	16	14	0.87
9712	USP6 N-terminal-like protein	66	57	0.87
79832	Glutamine and serine-rich protein 1	38	33	0.87
57648	Uncharacterized protein KIAA1522	163	141	0.87
-	Odorant-binding protein 2a Precursor	389	337	0.87
8939	Far upstream element-binding protein 3	78	68	0.87
8793	Tumor necrosis factor receptor superfamily member 10D Precursor	394	341	0.87
26511	Cysteine-rich hydrophobic domain 2 protein	427	370	0.87
-	Protein dpy-19 homolog 4	68	59	0.87
11033	Centaurin-alpha-1	22	19	0.87
219928	Mas-related G-protein coupled receptor member F	7	6	0.87
-	Putative short transient receptor potential channel 2-like protein	43	38	0.87
645870	Barrier-to-autointegration factor	149	129	0.87
11343	Monoglyceride lipase	572	496	0.87
79973	Zinc finger protein 442	70	60	0.87
2683	Beta-1,4-galactosyltransferase 1	64	55	0.87
11332	Cytosolic acyl coenzyme A thioester hydrolase	282	245	0.87
161145	Transmembrane protein C14orf83	6	6	0.87
22919	Microtubule-associated protein RP/EB family member 1	998	865	0.87
6300	Mitogen-activated protein kinase 12	204	177	0.87
100294407	-	56	49	0.87
285343	Uncharacterized protein C3orf23	120	104	0.87
254531	1-acyl-sn-glycerol-3-phosphate acyltransferase eta	126	109	0.87
4068	SH2 domain-containing protein 1A	30	26	0.87
10869	Ubiquitin carboxyl-terminal hydrolase 19	28	24	0.87

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
64748	Lipid phosphate phosphatase-related protein type 2	38	33	0.87
3685	Integrin alpha-V Precursor	934	810	0.87
9924	PAB-dependent poly(A)-specific ribonuclease subunit 2	54	46	0.87
79369	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 4	30	26	0.87
-	-	719	624	0.87
-	Uncharacterized protein ENSP00000365934	57	50	0.87
55754	Cell cycle control protein 50A	1380	1197	0.87
54961	Protein phosphatase Slingshot homolog 3	7	6	0.87
256586	LysM and putative peptidoglycan-binding domain-containing protein 2	9	8	0.87
64772	Cytosolic endo-beta-N-acetylglucosaminidase	44	38	0.87
100293606	-	20	17	0.87
9663	Lipin-2	127	110	0.87
-	-	159	138	0.87
51646	Protein yippee-like 5	1198	1040	0.87
-	Autophagy-related protein 7	177	153	0.87
22992	JmjC domain-containing histone demethylation protein 1A	90	78	0.87
81611	Acidic leucine-rich nuclear phosphoprotein 32 family member E	90	78	0.87
2203	Fructose-1,6-bisphosphatase 1	25	22	0.87
6754	Somatostatin receptor type 4	82	71	0.87
54985	Host cell factor C1 regulator 1	324	281	0.87
652022	-	10	8	0.87
-	Pleckstrin homology domain-containing family B member 2 (Evectin-2)	832	722	0.87
23348	Dedicator of cytokinesis protein 9	603	524	0.87
10505	Semaphorin-4F Precursor	131	114	0.87
83638	UPF0696 protein C1orf68	156	136	0.87
-	Mediator of RNA polymerase II transcription subunit 16	79	68	0.87
-	Caspase-10 Precursor	42	36	0.87
65062	Amyotrophic lateral sclerosis 2 chromosomal region candidate gene 4 protein	15	13	0.87
-	-	87	76	0.87
55236	Ubiquitin-like modifier-activating enzyme 6	168	146	0.87
813	Calumenin Precursor (Crocabin)	2544	2210	0.87
64175	Prolyl 3-hydroxylase 1 Precursor	569	494	0.87
2737	Zinc finger protein GLL3	74	64	0.87
5437	DNA-directed RNA polymerases I, II, and III subunit RPABC3	662	576	0.87
47	ATP-citrate synthase	828	719	0.87
4794	NF-kappa-B inhibitor epsilon	201	174	0.87
54531	Mesoderm induction early response protein 2	146	127	0.87
-	Leucine-rich repeat and calponin homology domain-containing protein 1	135	117	0.87
399512	Solute carrier family 25 member 35	29	26	0.87
8416	Annexin A9	8	7	0.87
4800	Nuclear transcription factor Y subunit alpha	72	63	0.87
63935	Phosphorylated CTD-interacting factor 1	34	30	0.87
-	Protein phosphatase 1 regulatory subunit 12A	212	185	0.87
3185	Heterogeneous nuclear ribonucleoprotein F	56	49	0.87
100134192	Rho guanine nucleotide exchange factor 18	103	89	0.87
-	Ninein-like protein	56	49	0.87
51421	Angiomotin-like protein 2	24	21	0.87
80331	DnaJ homolog subfamily C member 5	26	22	0.87

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
7157	Cellular tumor antigen p53	77	67	0.87
26112	Coiled-coil domain-containing protein 69	97	84	0.87
23353	Protein unc-84 homolog A	359	313	0.87
10467	Zinc finger HIT domain-containing protein 1 (Cyclin-G1-binding protein 1)	1309	1138	0.87
1997	ETS-related transcription factor Elf1	498	433	0.87
-	Cytoplasmic polyadenylation element-binding protein 3	33	29	0.87
79682	Centromere protein U	134	117	0.87
-	Integral membrane protein DGCR2/IDD Precursor	232	202	0.87
-	Nuclear protein NP60	128	111	0.87
9488	GPI mannosyltransferase 3	77	67	0.87
5786	Receptor-type tyrosine-protein phosphatase alpha Precursor	216	188	0.87
283092	Olfactory receptor 4C13	16	14	0.87
5144	cAMP-specific 3',5'-cyclic phosphodiesterase 4D	124	107	0.87
57827	G4 protein	18	15	0.87
100131165	-	48	42	0.87
147040	BTB/POZ domain-containing protein KCTD11	38	33	0.87
-	Syntaxin-4	808	703	0.87
-	Ectonucleoside triphosphate diphosphohydrolase 4	143	125	0.87
-	-	265	230	0.87
619279	Zinc finger protein 704	22	19	0.87
54929	Transmembrane protein 161A Precursor	319	277	0.87
-	-	15	13	0.87
25874	Brain protein 44	311	271	0.87
100292080	-	9	8	0.87
6755	Somatostatin receptor type 5	22	19	0.87
1981	Eukaryotic translation initiation factor 4 gamma 1	1234	1074	0.87
57608	Uncharacterized protein KIAA1462	31	27	0.87
100292443	-	39	34	0.87
-	-	1824	1587	0.87
10875	Fibrobleukin Precursor	104	91	0.87
9859	Centrosomal protein of 170 kDa	256	223	0.87
440270	Golgin subfamily A member 8B	90	78	0.87
-	Serine/threonine-protein phosphatase 6 catalytic subunit	185	161	0.87
100128090	-	37	32	0.87
100294005	-	36	31	0.87
-	Uncharacterized protein C1orf46	18	15	0.87
64410	Ectoderm-neural cortex protein 2	58	50	0.87
84641	Hippocampus abundant transcript-like protein 1	575	501	0.87
8506	Contactin-associated protein 1 Precursor	49	43	0.87
79157	UNC93-like protein MFSD11	104	90	0.87
7475	Protein Wnt-6 Precursor	175	152	0.87
-	cDNA FLJ20618 fis, clone KAT05049cDNA FLJ31918 fis, clone NT2RP7004946HCG41307, isoform CRA_a	1459	1271	0.87
-	Exostosin-2	221	193	0.87
100131778	-	24	21	0.87
84335	Proline-rich AKT1 substrate 1	121	105	0.87
-	CUG-BP- and ETR-3-like factor 3	245	213	0.87
2734	Golgi apparatus protein 1 Precursor	1026	894	0.87
4927	Nuclear pore complex protein Nup88	382	333	0.87
-	Cytoskeleton-associated protein 5	255	222	0.87
23760	Phosphatidylinositol transfer protein beta isoform	1026	894	0.87
285053	60S ribosomal protein L18a	13101	11416	0.87
594855	Complexin-3 Precursor	10	8	0.87

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
56140	Protocadherin alpha-8 Precursor	44	38	0.87
63827	Brevican core protein Precursor	20	17	0.87
-	E3 ubiquitin-protein ligase RNF5	514	448	0.87
440093	Histone H3-like	2685	2341	0.87
6470	Serine hydroxymethyltransferase, cytosolic	67	59	0.87
221	Aldehyde dehydrogenase family 3 member B1	44	38	0.87
9989	Serine/threonine-protein phosphatase 4 regulatory subunit 1	458	399	0.87
4643	Myosin-Ie	245	213	0.87
374907	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 8	79	69	0.87
9056	Y+L amino acid transporter 1	444	387	0.87
51496	CTD small phosphatase-like protein 2	70	61	0.87
-	-	498	434	0.87
3784	Potassium voltage-gated channel subfamily KQT member 1	519	453	0.87
50649	Rho guanine nucleotide exchange factor 4	6	5	0.87
134265	Actin filament-associated protein 1-like 1	242	211	0.87
115286	S-adenosylmethionine mitochondrial carrier protein	160	140	0.87
4131	Microtubule-associated protein 1B	978	853	0.87
100128071	-	29	25	0.87
197131	E3 ubiquitin-protein ligase UBR1	104	90	0.87
-	-	23	20	0.87
8773	Synaptosomal-associated protein 23	1184	1033	0.87
23543	RNA-binding protein 9	482	421	0.87
100132731	Uncharacterized protein FLJ43738	15	13	0.87
55898	Protein unc-45 homolog A	404	352	0.87
-	EP300-interacting inhibitor of differentiation 2	235	205	0.87
6801	Striatin	17	15	0.87
10928	RalA-binding protein 1	563	492	0.87
1201	Battenin	165	144	0.87
10066	Secretory carrier-associated membrane protein 2	295	257	0.87
-	UPF0663 transmembrane protein C17orf28	31	27	0.87
7027	Transcription factor Dp-1	590	515	0.87
-	Trafficking kinesin-binding protein 1	45	40	0.87
256483	-	38	34	0.87
23232	TBC1 domain family member 12	22	19	0.87
2636	Homeobox protein GBX-1	59	52	0.87
-	SCY1-like protein 2	145	127	0.87
92359	Crumbs protein homolog 3 Precursor	118	103	0.87
10899	Protein JTB Precursor	2096	1830	0.87
-	ATP synthase subunit s-like protein	509	444	0.87
55130	Armadillo repeat-containing protein 4	73	63	0.87
-	40S ribosomal protein S9	11041	9639	0.87
130106	Calcium and integrin-binding family member 4	16	14	0.87
9947	Melanoma-associated antigen C1	24	21	0.87
56164	Serine/threonine-protein kinase 31	13	11	0.87
-	Nuclear pore complex protein Nup160	56	49	0.87
84290	-	18	16	0.87
1743	Dihydrolipoyllysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial Precursor	181	158	0.87
-	Intermediate filament family orphan 2	261	228	0.87
-	Uncharacterized protein C6orf142	23	20	0.87
22911	WD repeat-containing protein 47	160	140	0.87

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9741	Lysosomal-associated transmembrane protein 4A	5006	4372	0.87
29066	Zinc finger CCH domain-containing protein 7A	274	240	0.87
-	R-spondin-2 Precursor	7	6	0.87
2170	Fatty acid-binding protein, heart	20	18	0.87
5005	Alpha-1-acid glycoprotein 2 Precursor	147	128	0.87
9776	UPF0630 protein KIAA0652	207	181	0.87
132989	Uncharacterized protein C4orf36	12	11	0.87
54820	Nuclear distribution protein nudE homolog 1	199	174	0.87
-	T-box brain protein 1	30	26	0.87
7408	Vasodilator-stimulated phosphoprotein	471	411	0.87
2739	Lactoylglutathione lyase	1617	1413	0.87
84948	Tigger transposable element-derived protein 5	78	68	0.87
5316	Homeobox protein PKNOX1	116	101	0.87
5204	Prefoldin subunit 5	3654	3193	0.87
8915	B-cell lymphoma/leukemia 10	661	578	0.87
347853	T-box transcription factor TBX10	11	10	0.87
-	HLA-B associated transcript-2	59	52	0.87
6881	Transcription initiation factor TFIID subunit 10	667	583	0.87
6926	T-box transcription factor TBX3	9	8	0.87
728857	-	19	17	0.87
64924	Zinc transporter 5	54	48	0.87
5531	Serine/threonine-protein phosphatase 4 catalytic subunit	993	868	0.87
30848	Lar-related protein 6	57	50	0.87
10990	Leukocyte immunoglobulin-like receptor subfamily B member 5 Precursor	38	33	0.87
100132605	-	11	10	0.87
58512	Disks large-associated protein 3	356	311	0.87
9686	Transcription cofactor vestigial-like protein 4	257	224	0.87
10297	Adenomatous polyposis coli protein 2	57	50	0.87
401563	Uncharacterized protein C9orf139	27	23	0.87
100292046	Complement component C4B	73	64	0.87
283422	Putative uncharacterized protein C12orf36	11	9	0.87
9422	Zinc finger protein 264	46	40	0.87
10585	Protein O-mannosyl-transferase 1	59	51	0.87
284083	Uncharacterized protein C17orf47	9	8	0.87
823	Calpain-1 catalytic subunit	262	229	0.87
3101	Hexokinase-3	9	8	0.87
9129	U4/U6 small nuclear ribonucleoprotein Prp3	249	218	0.87
55037	Pentatricopeptide repeat-containing protein 3, mitochondrial Precursor	39	34	0.87
480	Sodium/potassium-transporting ATPase subunit alpha-4	16	14	0.87
-	Probable carboxypeptidase PM20D1 Precursor	16	14	0.87
55601	Probable ATP-dependent RNA helicase DDX60	43	38	0.87
9493	Kinesin-like protein KIF23	98	86	0.87
325	Serum amyloid P-component Precursor	104	91	0.87
8742	Tumor necrosis factor ligand superfamily member 13 Precursor	84	74	0.87
100133167	-	60	53	0.87
115817	Dehydrogenase/reductase SDR family member 1	209	183	0.87
23592	Inner nuclear membrane protein Man1	188	165	0.87
11066	U11/U12 small nuclear ribonucleoprotein 35 kDa protein	682	597	0.87
2796	Progonadoliberin-1 Precursor	38	33	0.87
100129218	-	32	28	0.88
-	Olfactory receptor 10G6	8	7	0.88

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2947	Glutathione S-transferase Mu 3	425	372	0.88
-	C-X-C chemokine receptor type 3	16	14	0.88
79180	EF-hand domain-containing protein D2 (Swiprosin-1)	314	275	0.88
6235	40S ribosomal protein S29	22059	19308	0.88
-	N-chimaerin	125	109	0.88
390010	-	8	7	0.88
-	Hyaluronidase-3 Precursor	57	50	0.88
-	TBC1 domain family member 2B	278	243	0.88
29072	Histone-lysine N-methyltransferase SETD2	46	40	0.88
-	E3 ubiquitin-protein ligase HECTD 1	422	370	0.88
7073	Nucleolysin TIAR	233	204	0.88
290	Aminopeptidase N	1686	1476	0.88
100293045	-	49	43	0.88
58487	CREB/ATF bZIP transcription factor	73	64	0.88
123099	Sphingolipid delta(4)-desaturase/C4-hydroxylase DES2	20	18	0.88
51510	Charged multivesicular body protein 5	1400	1226	0.88
9172	Myomesin-2	370	324	0.88
22929	Selenide, water dikinase 1	145	127	0.88
-	Dual specificity testis-specific protein kinase 2	23	20	0.88
80178	Uncharacterized protein C16orf59	98	86	0.88
580	BRCA1-associated RING domain protein 1	87	77	0.88
2147	Prothrombin Precursor	43	38	0.88
51704	G-protein coupled receptor family C group 5 member B Precursor	467	409	0.88
1677	DNA fragmentation factor subunit beta	42	37	0.88
55716	Protein LMBR1L	171	150	0.88
2063	Nuclear receptor subfamily 2 group F member 6	335	294	0.88
599	Apoptosis regulator Bcl-W	207	181	0.88
285220	Ephrin type-A receptor 6 Precursor	17	15	0.88
-	-	42	36	0.88
-	Afadin	691	606	0.88
6281	Protein S100-A10	7388	6473	0.88
79654	Probable E3 ubiquitin-protein ligase HECTD3	288	252	0.88
284001	Coiled-coil domain-containing protein 57	18	16	0.88
9842	Pleckstrin homology domain-containing family M member 1	648	568	0.88
4289	Muskelin	99	87	0.88
58490	Regulation of nuclear pre-mRNA domain-containing protein 1B	161	141	0.88
3006	Histone H1.2	61	53	0.88
9698	Pumilio homolog 1	118	104	0.88
6524	Sodium/glucose cotransporter 2	41	36	0.88
100132353	Rab GDP dissociation inhibitor beta	3196	2801	0.88
51059	Protein FAM135B	30	26	0.88
113622	[Protein ADP-ribosylarginine] hydrolase-like protein 1	9	8	0.88
9852	EPMA2A-interacting protein 1 (Laforin-interacting protein)	101	89	0.88
100291945	-	43	37	0.88
1018	Cell division protein kinase 3	21	19	0.88
3303	Heat shock 70 kDa protein 1	827	725	0.88
113246	Protein C10	1614	1415	0.88
100129633	-	29	25	0.88
100289168	-	13	11	0.88
54965	Phosphatidylinositol-glycan biosynthesis class X protein Precursor	66	58	0.88

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
267012	D-amino acid oxidase activator	6	5	0.88
29850	Transient receptor potential cation channel subfamily M member 5	21	18	0.88
10204	Nuclear transport factor 2	4184	3670	0.88
-	Putative SH2 domain-containing protein LOC646892	25	22	0.88
8237	Ubiquitin carboxyl-terminal hydrolase 11	201	176	0.88
120	Gamma-adducin	1104	969	0.88
-	Multiple C2 and transmembrane domain-containing protein 1	105	92	0.88
54498	Spermine oxidase	148	130	0.88
3841	Importin subunit alpha-6 (Karyopherin subunit alpha-5)	18	16	0.88
58486	Zinc finger BED domain-containing protein 5	133	117	0.88
100132013	-	46	40	0.88
-	K0284_HUMAN Isoform 3 of Q9Y4F5 - Homo sapiens (Human)	124	109	0.88
9388	Endothelial lipase Precursor	62	55	0.88
400668	Serine protease 1-like protein 1 Precursor	9	8	0.88
57657	Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 3	165	145	0.88
3562	Interleukin-3 Precursor	49	43	0.88
85451	RING finger protein unkempt homolog	17	15	0.88
57169	NFX1-type zinc finger-containing protein 1	282	248	0.88
967	CD63 antigen (Granulophysin) (Tetraspanin-30)	15894	13947	0.88
7095	Translocation protein SEC62	63	55	0.88
57522	SLIT-ROBO Rho GTPase-activating protein 1	28	25	0.88
100169851	Prostate and testis expressed protein 3 Precursor	31	27	0.88
10920	COP9 signalosome complex subunit 8	948	832	0.88
100287740	-	27	23	0.88
5105	Phosphoenolpyruvate carboxykinase, cytosolic [GTP]	34	30	0.88
775	Voltage-dependent L-type calcium channel subunit alpha-1C	12	10	0.88
51320	RNA-binding protein MEX3C	285	250	0.88
6041	2-5A-dependent ribonuclease	24	21	0.88
29902	Uncharacterized protein C12orf24	197	173	0.88
10062	Oxysterols receptor LXR-alpha	12	11	0.88
5230	Phosphoglycerate kinase 1	212	186	0.88
79726	WD repeat-containing protein 59	53	47	0.88
201626	2',5'-phosphodiesterase 12	66	58	0.88
84364	ADP-ribosylation factor GTPase-activating protein 2	90	79	0.88
51479	Ankyrin repeat and FYVE domain-containing protein 1	54	48	0.88
79712	Glycosyltransferase-like domain-containing protein 1	82	72	0.88
-	Methionine-R-sulfoxide reductase B2, mitochondrial Precursor	804	706	0.88
83886	Serine protease 27 Precursor (Marapsin) (Pancreasin)	39	34	0.88
6428	Splicing factor, arginine/serine-rich 3	1770	1554	0.88
348262	hypothetical protein LOC348262	317	279	0.88
22839	Disks large-associated protein 4	90	79	0.88
6575	Sodium-dependent phosphate transporter 2	49	43	0.88
6780	Double-stranded RNA-binding protein Staufin homolog 1	256	224	0.88
2475	FKBP12-rapamycin complex-associated protein	104	92	0.88
11006	Leukocyte immunoglobulin-like receptor subfamily B member 4 Precursor	33	29	0.88
57115	Peptidoglycan recognition protein I-beta Precursor	229	201	0.88
100293222	-	35	31	0.88

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
22985	Apoptotic chromatin condensation inducer in the nucleus	17	15	0.88
57107	Decaprenyl-diphosphate synthase subunit 2	24	21	0.88
343990	Uncharacterized protein C2orf55	23	20	0.88
63891	E3 ubiquitin-protein ligase RNF123	5	5	0.88
100289377	-	33	29	0.88
4338	Molybdenum cofactor synthesis protein 2 large subunit	233	205	0.88
57463	Amphoterin-induced protein 1 Precursor	47	42	0.88
284273	Zinc-binding alcohol dehydrogenase domain-containing protein 2	46	41	0.88
-	N-acetylserotonin O-methyltransferase-like protein	188	165	0.88
51167	Cytochrome b5 reductase 4	116	102	0.88
27339	Pre-mRNA-processing factor 19	589	518	0.88
143458	Low-density lipoprotein receptor class A domain-containing protein 3 Precursor	101	88	0.88
22844	FERM and PDZ domain-containing protein 1	14	12	0.88
83700	Junctional adhesion molecule C Precursor	417	367	0.88
9140	Autophagy-related protein 12	436	383	0.88
2673	Glucosamine-fructose-6-phosphate aminotransferase [isomerizing] 1	457	401	0.88
9781	Probable E3 ubiquitin-protein ligase RNF144A	139	122	0.88
51534	Vacuolar protein sorting-associated protein VTA1 homolog	462	406	0.88
65265	UPF0488 protein C8orf33	75	66	0.88
55825	Peroxisomal trans-2-enoyl-CoA reductase	98	86	0.88
3029	Hydroxyacylglutathione hydrolase	534	470	0.88
1740	Disks large homolog 2	21	18	0.88
-	Mps one binder kinase activator-like 2	306	269	0.88
100132880	Putative transmembrane protein FLJ36131	126	111	0.88
389677	RNA-binding protein 12B	10	9	0.88
100287002	-	6	5	0.88
2036	Band 4.1-like protein 1	9	8	0.88
-	Anthrax toxin receptor 1 Precursor	92	81	0.88
256329	Uncharacterized protein C11orf35	9	8	0.88
3663	Interferon regulatory factor 5	9	8	0.88
54480	Chondroitin sulfate glucuronyltransferase	45	40	0.88
647000	Tubulin beta chain	2137	1879	0.88
100293983	-	40	35	0.88
100293962	-	5	5	0.88
152559	Progesterone and adiponectin receptor family member 3	105	92	0.88
144717	Protein FAM109A	52	45	0.88
100288631	-	33	29	0.88
-	Endophilin-B2	40	35	0.88
-	-	34	30	0.88
84193	SET domain-containing protein 3	193	170	0.88
9627	Synphilin-1	47	41	0.88
54345	Transcription factor SOX-18	701	617	0.88
-	Ankyrin repeat and death domain-containing protein 1A Precursor	31	27	0.88
23152	Protein capicua homolog	38	33	0.88
79980	Kinetochore-associated protein DSN1 homolog	151	133	0.88
51135	Interleukin-1 receptor-associated kinase 4	20	17	0.88
152485	Zinc finger protein 827	85	75	0.88
-	ATP-dependent DNA helicase 2 subunit 1	2618	2304	0.88
283209	Glucose 1,6-bisphosphate synthase	372	327	0.88
-	Serine/threonine-protein kinase MRCK alpha	22	19	0.88

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
728716	-	6	5	0.88
124401	Ankyrin repeat and SAM domain-containing protein 3	20	18	0.88
8805	Transcription intermediary factor 1-alpha	91	80	0.88
57653	Uncharacterized protein KIAA1529	13	12	0.88
-	Complement decay-accelerating factor Precursor	1821	1604	0.88
25885	DNA-directed RNA polymerase I subunit RPA1	55	49	0.88
8086	Aladin (Adracalin)	69	60	0.88
-	-	17395	15318	0.88
100289786	-	6	5	0.88
26225	ADP-ribosylation factor-like protein 5A	1011	890	0.88
-	Dual specificity protein phosphatase 16	16	14	0.88
1445	Tyrosine-protein kinase CSK	202	178	0.88
92610	TRAF-interacting protein with FHA domain-containing protein A	119	105	0.88
29099	COMM domain-containing protein 9	373	329	0.88
127845	Vesicle transport protein GOT1A	87	77	0.88
8448	Double C2-like domain-containing protein alpha	34	30	0.88
51366	E3 ubiquitin-protein ligase UBR5	85	75	0.88
755	Uncharacterized protein C21orf2	137	121	0.88
8322	Frizzled-4 Precursor	695	612	0.88
8790	Fucose-1-phosphate guanylyltransferase	63	56	0.88
10156	Ras GTPase-activating protein 4	66	58	0.88
-	Phospholipase DDHD2	134	118	0.88
259	Protein AMBP Precursor (Bikunin)	11	10	0.88
51084	Lambda-crystallin homolog	235	207	0.88
29984	Rho-related GTP-binding protein RhoD Precursor	362	319	0.88
1399	Crk-like protein	87	77	0.88
348932	Sodium- and chloride-dependent transporter XTRP2	8	7	0.88
56904	Endophilin-B2	76	67	0.88
347735	Serine incorporator 2	177	156	0.88
8438	DNA repair and recombination protein RAD54-like	15	14	0.88
6727	Signal recognition particle 14 kDa protein	10492	9249	0.88
51386	Eukaryotic translation initiation factor 3 subunit L	1433	1263	0.88
100128909	-	10	9	0.88
55634	Protein ZNF673	87	76	0.88
8463	Transcriptional enhancer factor TEF-4	100	88	0.88
9424	Potassium channel subfamily K member 6	111	98	0.88
55809	Transcriptional-regulating factor 1	44	39	0.88
10801	Septin-9	931	820	0.88
55331	Alkaline phosphatase	86	76	0.88
266743	Neuronal PAS domain-containing protein 4	38	34	0.88
-	Transmembrane channel-like protein 4	49	43	0.88
57724	UPF0493 protein KIAA1632	14	12	0.88
100292016	-	57	51	0.88
210	Delta-aminolevulinic acid dehydratase	100	88	0.88
91754	Serine/threonine-protein kinase Nek9	143	126	0.88
-	Heat shock 70 kDa protein 14	158	140	0.88
150223	UPF0249 protein ydJC homolog	125	111	0.88
100291811	-	33	29	0.88
55658	RING finger protein 126	362	319	0.88
-	cDNA FLJ43276 fis, clone KIDNE2011532, moderately similar to Homo sapiens melanoma-associated chondroitin sulfate proteoglycan 4	35	31	0.88

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
80319	CXXC-type zinc finger protein 4	45	40	0.88
54798	Testis-specific chromodomain protein Y 1	24	21	0.88
84445	Leucine zipper putative tumor suppressor 2	128	113	0.88
80789	Integrator complex subunit 5	97	86	0.88
25937	WW domain-containing transcription regulator protein 1	947	836	0.88
-	Echinoderm microtubule-associated protein-like 3	257	227	0.88
100130358	Putative uncharacterized protein DKF/Zp686I15217	59	52	0.88
2005	ETS domain-containing protein Elk-4	11	10	0.88
65108	MARCKS-related protein	1870	1651	0.88
66005	Chitinase domain-containing protein 1 Precursor	175	154	0.88
10168	Zinc finger protein 197	66	59	0.88
65998	hypothetical protein LOC65998	150	133	0.88
160335	Transmembrane and TPR repeat-containing protein 2	10	9	0.88
598	Apoptosis regulator Bcl-X	218	193	0.88
26060	DCC-interacting protein 13-alpha	113	100	0.88
6595	Probable global transcription activator SNF2L2	630	556	0.88
3344	Forkhead box protein N2	9	8	0.88
9076	Claudin-1	6	5	0.88
55748	Cytosolic non-specific dipeptidase	247	218	0.88
-	-	272	240	0.88
79171	RNA-binding protein 42	42	37	0.88
130355	UPF0538 protein C2orf76	233	206	0.88
50640	Calcium-independent phospholipase A2-gamma	145	128	0.88
5571	5'-AMP-activated protein kinase subunit gamma-1	193	171	0.88
-	NAD-dependent deacetylase sirtuin-3, mitochondrial Precursor	133	118	0.88
57830	Keratin-associated protein 5-8	21	18	0.88
128869	Phosphatidylinositol glycan anchor biosynthesis class U protein	197	174	0.88
-	-	56	49	0.88
100287143	Heparin-binding growth factor 2 Precursor	34	30	0.88
2247	PPPDE peptidase domain-containing protein 1	380	336	0.88
51029	-	48	42	0.88
100292044	-	75	67	0.88
55076	Transmembrane protein 45A	26	23	0.88
-	Mitogen-activated protein kinase 8	147	130	0.88
51267	C-type lectin domain family 1 member A	36	32	0.88
-	Zinc finger protein 507	408	361	0.88
9040	NEDD8-conjugating enzyme Ubc12	66	58	0.88
4901	Neural retina-specific leucine zipper protein	83	73	0.88
54896	PQ-loop repeat-containing protein 2	22	19	0.88
100289492	-	407	360	0.88
-	C1 segment protein	46	41	0.88
8325	Frizzled-8 Precursor	36	32	0.88
-	Ankyrin repeat domain-containing protein 29	28	24	0.88
651581	-	19	16	0.88
9496	T-box transcription factor TBX4	925	817	0.88
7533	14-3-3 protein eta	525	464	0.88
112770	Uncharacterized protein C1orf85 Precursor	351	311	0.88
10558	Serine palmitoyltransferase 1	13	11	0.88
416	Arylsulfatase F Precursor	34	30	0.88
100133939	UPF0634 protein B	1281	1132	0.88
8968	Histone H3.1	253	223	0.88
5595	Mitogen-activated protein kinase 3	1976	1746	0.88
-	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9372	Zinc finger FYVE domain-containing protein 9	51	45	0.88
-	Constitutive coactivator of PPAR-gamma-like protein 2	19	17	0.88
100129165	Phosphatidylinositol phosphatase PTPRQ Precursor	9	8	0.88
11068	Cytochrome b561 domain-containing protein 2	123	109	0.88
-	-	45	40	0.88
23095	Kinesin-like protein KIF1B	301	266	0.88
1800	Dipeptidase 1 Precursor	25	22	0.88
51061	Thioredoxin domain-containing protein 11	68	60	0.88
-	-	5514	4875	0.88
5324	Zinc finger protein PLAG1	53	47	0.88
-	HLA class I histocompatibility antigen, alpha chain G Precursor	370	328	0.88
222484	Ligand of Numb protein X 2	112	99	0.88
10785	tRNA (guanine-N(7)-)methyltransferase subunit WDR4	54	48	0.88
811	Calreticulin Precursor	70	62	0.88
80270	3 beta-hydroxysteroid dehydrogenase type 7	76	67	0.88
221756	-	38	34	0.88
382	ADP-ribosylation factor 6	938	829	0.88
1595	Cytochrome P450 51A1	357	315	0.88
83590	Transmembrane and ubiquitin-like domain-containing protein 1	68	60	0.88
83604	Transmembrane protein 47	508	449	0.88
374986	Protein FAM73A	36	32	0.88
100292020	-	167	147	0.88
283927	Peroxisomal coenzyme A diphosphatase NUDT7	53	47	0.88
3920	Lysosome-associated membrane glycoprotein 2 Precursor	1272	1125	0.88
7301	Tyrosine-protein kinase receptor TYRO3 Precursor	18	16	0.88
23061	TBC1 domain family member 9B	466	413	0.88
916	T-cell surface glycoprotein CD3 epsilon chain Precursor	9	8	0.88
9275	B-cell CLL/lymphoma 7 protein family member B	314	278	0.88
8643	Protein patched homolog 2	24	21	0.88
-	DNA replication licensing factor MCM8	53	47	0.88
391356	Uncharacterized protein C2orf79	353	313	0.89
1408	Cryptochrome-2	39	35	0.89
386683	Keratin-associated protein 12-3	237	209	0.89
100288431	-	24	22	0.89
5829	Paxillin	174	154	0.89
374655	Zinc finger protein 710	23	21	0.89
11261	Calcium-binding protein p22	119	105	0.89
57157	Putative homeodomain transcription factor 2	21	19	0.89
6532	Sodium-dependent serotonin transporter	6	5	0.89
-	CREB-regulated transcription coactivator 2	117	104	0.89
254359	Probable palmitoyltransferase ZDHHC24	487	431	0.89
100293185	-	9	8	0.89
79624	UPF0364 protein C6orf211	249	221	0.89
219988	Protein PAT1 homolog 1	77	68	0.89
10113	Prolactin regulatory element-binding protein	129	114	0.89
25852	Armadillo repeat-containing protein 8	263	233	0.89
7112	Lamina-associated polypeptide 2, isoforms beta/gamma	44	39	0.89
54462	Protein GCAP14 homolog	213	189	0.89
513	ATP synthase subunit delta, mitochondrial Precursor	827	733	0.89
80829	Zinc finger protein 91 homolog	61	54	0.89
55285	RNA-binding protein 41	50	44	0.89
3281	Heat shock factor-binding protein 1	968	857	0.89

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
56998	Beta-catenin-interacting protein 1	43	38	0.89
4017	Lysyl oxidase homolog 2 Precursor	523	463	0.89
10488	Cyclic AMP-responsive element-binding protein 3 (Luman protein)	307	272	0.89
285193	Dual specificity phosphatase 28	30	27	0.89
26512	Integrator complex subunit 6	162	143	0.89
-	Uncharacterized protein ENSP00000305613 Fragment	9	8	0.89
9205	Zinc finger MYM-type protein 5	138	122	0.89
100287343	-	6	6	0.89
8899	Serine/threonine-protein kinase PRP4 homolog	151	134	0.89
79901	Cytochrome b reductase 1	53	47	0.89
649137	Zinc finger and SCAN domain-containing protein 5C	542	480	0.89
50626	cysteine/histidine-rich 1 isoform 2	93	83	0.89
80381	CD276 antigen Precursor	117	104	0.89
150290	Dual specificity protein phosphatase 18	24	21	0.89
80235	GPI mannosyltransferase 4	45	40	0.89
-	-	200	177	0.89
100294203	-	71	63	0.89
1389	cAMP-responsive element-binding protein-like 2	451	400	0.89
5558	DNA primase large subunit	68	60	0.89
321	Amyloid beta A4 precursor protein-binding family A member 2	63	56	0.89
338707	N-acetyl-beta-glucosaminyl-glycoprotein 4-beta-N-acetylgalactosaminyltransferase 1	119	105	0.89
8402	Mitochondrial 2-oxoglutarate/malate carrier protein	441	391	0.89
9559	Vacuolar protein sorting-associated protein 26A	1288	1142	0.89
2746	Glutamate dehydrogenase 1, mitochondrial Precursor	349	309	0.89
51343	Fizzy-related protein homolog	82	72	0.89
100132476	Putative keratin-associated protein 4-X	225	200	0.89
6827	Transcription elongation factor SPT4	285	252	0.89
8323	Frizzled-6 Precursor	355	314	0.89
1431	Citrate synthase, mitochondrial Precursor	86	76	0.89
-	EGF-containing fibulin-like extracellular matrix protein 1 Precursor	18292	16217	0.89
-	Lymphocyte antigen 6 complex, locus G6E	22	19	0.89
54733	Solute carrier family 35 member F2	126	112	0.89
732419	-	56	50	0.89
100128511	-	9	8	0.89
100133017	-	28	24	0.89
1642	DNA damage-binding protein 1	1208	1071	0.89
23200	Probable phospholipid-transporting ATPase IF	11	10	0.89
10385	Butyrophilin subfamily 2 member A2 Precursor	69	61	0.89
754	Pituitary tumor-transforming gene 1 protein-interacting protein Precursor	4677	4148	0.89
6320	C-type lectin domain family 11 member A Precursor	62	55	0.89
84065	Transmembrane protein 222	229	203	0.89
-	Uncharacterized protein KIAA1688	38	34	0.89
80034	Cysteine/serine-rich nuclear protein 3	190	168	0.89
114825	PWWP domain-containing protein 2A	80	71	0.89
7596	Zinc finger protein 45	11	10	0.89
55738	ADP-ribosylation factor GTPase-activating protein 1	115	102	0.89
80304	WD repeat-containing protein C2orf44	63	56	0.89
2662	Bone morphogenetic protein 3b Precursor	24	21	0.89
2146	Polycomb protein EZH2	187	166	0.89

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
57333	Reticulocalbin-3 Precursor	285	253	0.89
-	Protein phosphatase 1 regulatory subunit 14A	899	797	0.89
8777	Multiple PDZ domain protein	350	311	0.89
-	-	74	66	0.89
57476	GRAM domain-containing protein 1B	6	5	0.89
83741	Transcription factor AP-2 delta	22	19	0.89
54516	Peptide chain release factor 1-like, mitochondrial Precursor	397	353	0.89
201191	Sterile alpha motif domain-containing protein 14	87	77	0.89
4905	Vesicle-fusing ATPase	422	375	0.89
57794	Splicing factor 4	96	85	0.89
58516	Protein FAM60A	262	232	0.89
1468	Mitochondrial dicarboxylate carrier	34	30	0.89
27235	Para-hydroxybenzoate-polyprenyltransferase, mitochondrial Precursor	105	93	0.89
3004	Granzyme M Precursor	12	10	0.89
883	Kynurenine-oxoglutarate transaminase 1	61	54	0.89
-	Beta-galactoside alpha-2,6-sialyltransferase 1	117	104	0.89
100129214	-	47	41	0.89
10007	Glucosamine-6-phosphate isomerase 1	497	441	0.89
-	Centaurin-alpha-2	22	20	0.89
8525	Diacylglycerol kinase zeta	486	431	0.89
-	Olfactory receptor 2AJ1	24	21	0.89
2081	Serine/threonine-protein kinase/endoribonuclease IRE1 Precursor	19	17	0.89
-	Trans-Golgi network integral membrane protein 2 Precursor	69	61	0.89
-	-	118	105	0.89
5307	Pituitary homeobox 1	33	29	0.89
79735	TBC1 domain family member 17	20	18	0.89
23246	Ribosome biogenesis protein BOP1	201	178	0.89
100049587	Sialic acid-binding Ig-like lectin 14 Precursor	7	6	0.89
4204	Methyl-CpG-binding protein 2	89	79	0.89
100292268	-	17	15	0.89
5935	Putative RNA-binding protein 3	3143	2790	0.89
23085	ELKS/RAB6-interacting/CAST family member 1	58	51	0.89
5754	Tyrosine-protein kinase-like 7 Precursor	18	16	0.89
22807	Zinc finger protein Helios	13	12	0.89
496	Potassium-transporting ATPase subunit beta	583	517	0.89
8289	AT-rich interactive domain-containing protein 1A	9	8	0.89
1473	Cystatin-D Precursor	15	13	0.89
84969	TOX high mobility group box family member 2	63	56	0.89
57636	Rho GTPase-activating protein 23	16	14	0.89
326625	Cob(D)yrinic acid a,c-diamide adenosyltransferase, mitochondrial Precursor	11	10	0.89
51224	RNA polymerase II transcription factor SIII subunit A2	55	49	0.89
221914	Glypican-2 Precursor	292	260	0.89
4717	NADH dehydrogenase [ubiquinone] 1 subunit C1, mitochondrial Precursor	938	833	0.89
-	-	286	254	0.89
133584	Pikachurin Precursor	16	14	0.89
100288508	-	13	12	0.89
4593	Muscle, skeletal receptor tyrosine protein kinase Precursor	33	30	0.89
-	Protein FAM98A	254	226	0.89
55577	N-acetyl-D-glucosamine kinase	1066	947	0.89

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
349075	Zinc finger protein 713	65	58	0.89
60684	UPF0636 protein C4orf41	104	93	0.89
-	Nurim	130	115	0.89
23509	GDP-fucose protein O-fucosyltransferase 1 Precursor	47	42	0.89
5716	26S proteasome non-ATPase regulatory subunit 10	1628	1446	0.89
23132	Helicase ARIP4	45	40	0.89
56882	CDC42 small effector protein 1	141	126	0.89
-	Crooked neck-like protein 1	279	248	0.89
23220	Protein deltex-4	126	112	0.89
11158	Ataxin-7-like protein 1	10	9	0.89
10592	Structural maintenance of chromosomes protein 2	55	49	0.89
100290989	-	15	13	0.89
4891	Natural resistance-associated macrophage protein 2	83	73	0.89
2178	Fanconi anemia group E protein	37	33	0.89
100289041	-	46	41	0.89
-	-	53	47	0.89
100288675	Putative uncharacterized protein Fragment	25	22	0.89
23082	Peroxisome proliferator-activated receptor gamma coactivator-related protein 1	46	41	0.89
-	Putative deoxyuridine 5'-triphosphate nucleotidohydrolase-like protein FLJ16323	24	22	0.89
5997	Regulator of G-protein signaling 2	213	190	0.89
283987	UPF0663 transmembrane protein C17orf28	32	28	0.89
653319	Uncharacterized protein KIAA0895-like [Source:UniProtKB/Swiss-Prot;Acc:Q68EN5]	50	44	0.89
-	PX domain-containing protein kinase-like protein (Modulator of Na,K-ATPase)(MONaKA) [Source:UniProtKB/Swiss-Prot;Acc:Q7Z7A4]	96	85	0.89
651856	-	6	5	0.89
7917	Large proline-rich protein BAT3	40	36	0.89
84066	Uncharacterized protein C1orf49	23	21	0.89
388333	Putative WBSCR19-like protein 10	20	18	0.89
59343	Sentrin-specific protease 2	104	93	0.89
54788	DnaJ homolog subfamily B member 12	194	173	0.89
2155	Coagulation factor VII Precursor	86	76	0.89
64221	Roundabout homolog 3 Precursor	79	70	0.89
-	Proteolipid protein 2	659	586	0.89
100291956	-	79	70	0.89
79674	Ventricular zone-expressed PH domain-containing protein homolog 1	786	699	0.89
129049	Small G protein signaling modulator 1	15	13	0.89
647013	BTB/POZ domain-containing protein KCTD9	116	104	0.89
7581	Zinc finger protein 33A	69	61	0.89
3693	Integrin beta-5 Precursor	742	660	0.89
54407	Sodium-coupled neutral amino acid transporter 2	472	420	0.89
-	Ecotropic viral integration site 5 protein homolog	55	49	0.89
26100	WD repeat domain phosphoinositide-interacting protein 2	777	691	0.89
-	Ribosomal protein S6 kinase alpha-4	84	75	0.89
-	Uncharacterized protein C20orf196	27	24	0.89
51669	Transmembrane protein 66 Precursor	1702	1515	0.89
10544	Endothelial protein C receptor Precursor	1217	1083	0.89
84811	BUD13 homolog	61	54	0.89
728269	Melanoma-associated antigen 9	23	20	0.89

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
126328	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 11	3008	2677	0.89
4841	Non-POU domain-containing octamer-binding protein	1078	960	0.89
56999	A disintegrin and metalloproteinase with thrombospondin motifs 9 Precursor	66	59	0.89
-	Growth hormone-releasing hormone receptor Precursor	13	12	0.89
57706	DENN domain-containing protein 1A	39	34	0.89
171023	Putative Polycomb group protein ASXL1	146	130	0.89
-	Disheveled-associated activator of morphogenesis 2	27	24	0.89
55591	Vezatin	462	411	0.89
9804	Mitochondrial import receptor subunit TOM20 homolog	2552	2272	0.89
3791	Vascular endothelial growth factor receptor 2 Precursor	440	391	0.89
54554	WD repeat-containing protein 5B	49	43	0.89
80012	Polyhomeotic-like protein 3	33	30	0.89
402382	-	36	32	0.89
8034	Graves disease carrier protein	82	73	0.89
53373	Two pore calcium channel protein 1	65	58	0.89
9463	PRKCA-binding protein	64	57	0.89
114991	Zinc finger protein 618	369	329	0.89
9633	Tesmin	51	46	0.89
134549	Protein Shroom1	19	17	0.89
9183	Centromere/kinetochore protein zw10 homolog	198	176	0.89
100287799	REEP3 protein	52	46	0.89
5459	POU domain, class 4, transcription factor 3	13	11	0.89
961	Leukocyte surface antigen CD47 Precursor	132	117	0.89
-	mRNA-decapping enzyme 2	200	178	0.89
6776	Signal transducer and activator of transcription 5A	176	157	0.89
-	Tetratricopeptide repeat protein 28	63	56	0.89
653303	Proprotein convertase subtilisin/kexin type 7 Precursor	72	64	0.89
9530	BAG family molecular chaperone regulator 4	45	40	0.89
975	CD81 antigen	3289	2931	0.89
112495	General transcription factor 3C polypeptide 6	31	27	0.89
26470	Seizure 6-like protein 2 Precursor	44	39	0.89
388569	Zinc finger protein 324B	33	29	0.89
54665	Round spermatid basic protein 1	34	30	0.89
100292214	-	85	75	0.89
-	Transcription factor LBX2	24	21	0.89
-	Protein ECT2	34	30	0.89
11282	Alpha-1,3-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase B	641	571	0.89
995	M-phase inducer phosphatase 3	18	16	0.89
1998	ETS-related transcription factor Elf-2	67	59	0.89
100288534	-	14	13	0.89
55323	Myomegalin	326	290	0.89
-	WD repeat-containing protein 44 (Rabphilin-11)	88	79	0.89
10923	Activated RNA polymerase II transcriptional coactivator p15	249	222	0.89
100130736	-	16	14	0.89
6839	Histone-lysine N-methyltransferase SUV39H1	22	20	0.89
29924	Epsin-1	38	34	0.89
100128816	ACA3104	25	23	0.89
58155	Polypyrimidine tract-binding protein 2	50	45	0.89
23654	Plexin-B2 Precursor	24	21	0.89
-	-	60	54	0.89

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
406875	FXYD domain-containing ion transport regulator 8 Precursor	32	28	0.89
-	Solute carrier family 22 member 11	10	9	0.89
25819	Nocturnin	16	14	0.89
10092	Actin-related protein 2/3 complex subunit 5	6609	5893	0.89
10678	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 2	187	167	0.89
55578	Protein FAM48A (p38IP)	206	184	0.89
493829	Tripartite motif-containing protein 72	10	9	0.89
1442	Chorionic somatomammotropin hormone Precursor	33	29	0.89
-	Syntaxin-5	88	78	0.89
100286986	-	306	273	0.89
7574	Zinc finger protein 26	20	18	0.89
285613	REL-1-like protein 2	45	40	0.89
10053	AP-1 complex subunit mu-2	24	21	0.89
8968	Histone H3.1	53	47	0.89
342865	V-set and transmembrane domain-containing protein 2B Precursor	10	9	0.89
100289340	-	20	18	0.89
-	-	44	39	0.89
9039	NEDD8-activating enzyme E1 catalytic subunit	577	515	0.89
64101	Leucine-rich repeat-containing protein 4 Precursor	63	56	0.89
51363	N-acetylgalactosamine 4-sulfate 6-O-sulfotransferase	18	16	0.89
1844	Dual specificity protein phosphatase 2	36	33	0.89
29916	Sorting nexin-11	138	123	0.89
90550	Coiled-coil domain-containing protein 109A	58	52	0.89
3074	Beta-hexosaminidase subunit beta Precursor	1398	1248	0.89
647546	-	37	33	0.89
4519	Cytochrome b	22124	19748	0.89
84975	Major facilitator superfamily domain-containing protein 5	198	177	0.89
100291299	-	61	54	0.89
9491	Proteasome inhibitor PI31 subunit	24	22	0.89
6094	Rod outer segment membrane protein 1	62	55	0.89
9631	Nuclear pore complex protein Nup155	76	68	0.89
9620	Cadherin EGF LAG seven-pass G-type receptor 1 Precursor	57	51	0.89
339145	Protein FAM92B	86	77	0.89
79763	Isochorismatase domain-containing protein 2, mitochondrial Precursor	342	305	0.89
645312	Glycolipid transfer protein	452	403	0.89
26007	Dihydroxyacetone kinase	67	60	0.89
56675	Nuclear receptor-interacting protein 3	59	53	0.89
-	Protein sel-1 homolog 1 Precursor	88	78	0.89
90488	UPF0444 transmembrane protein C12orf23	548	489	0.89
57805	p30 DBC protein	61	55	0.89
51752	Endoplasmic reticulum aminopeptidase 1	49	44	0.89
51616	Transcription initiation factor TFIIID subunit 9B	242	216	0.89
1535	Cytochrome b-245 light chain	1079	964	0.89
29928	Mitochondrial import inner membrane translocase subunit Tim22	139	125	0.89
11190	Centrosome-associated protein CEP250	122	109	0.89
9798	Uncharacterized protein KIAA0174	608	543	0.89
26059	ERC protein 2	83	74	0.89
10481	Homeobox protein Hox-B13	32	28	0.89

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2647	Biogenesis of lysosome-related organelles complex 1 subunit 1	621	555	0.89
26873	5-oxoprolinase	28	25	0.89
147179	WAS/WASL-interacting protein family member 2	61	55	0.89
5151	High affinity cAMP-specific and IBMX-insensitive 3',5'-cyclic phosphodiesterase 8A	290	259	0.89
7223	Short transient receptor potential channel 4	85	76	0.89
55680	RUN and FYVE domain-containing protein 2	51	46	0.89
55915	LanC-like protein 2	64	57	0.89
55810	Forkhead box protein J2	83	74	0.89
-	Laminin subunit beta-2 Precursor	177	158	0.89
54776	Protein phosphatase 1 regulatory subunit 12C	214	192	0.89
283869	Neuropeptide W Precursor	828	740	0.89
2787	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-5 Precursor	6643	5940	0.89
9240	Paraneoplastic antigen Ma1	722	645	0.89
80737	G7c protein	18	16	0.89
94274	Protein phosphatase 1 regulatory subunit 14A	45	40	0.89
283152	Coiled-coil domain-containing protein 153	30	26	0.89
376497	Long-chain fatty acid transport protein 1	12	11	0.89
1072	Cofilin-1	7767	6945	0.89
3195	T-cell leukemia homeobox protein 1	31	28	0.89
-	Cleft lip and palate transmembrane protein 1	124	111	0.89
64321	Transcription factor SOX-17	657	588	0.89
51199	Ninein	108	97	0.89
9294	Sphingosine 1-phosphate receptor 2	14	12	0.89
113146	Protein AHNK2	177	158	0.89
4758	Sialidase-1 Precursor	671	600	0.89
-	UPF0105 protein C14orf124	403	360	0.89
56157	Testis-expressed sequence 13A protein	44	39	0.89
6135	60S ribosomal protein L11	20201	18069	0.89
55683	K1310_HUMAN Isoform 4 of Q9P2N6 - Homo sapiens	41	36	0.89
-	6-phosphofructokinase, liver type	104	93	0.89
9278	Zinc finger and BTB domain-containing protein 22	107	96	0.89
152273	FYVE, RhoGEF and PH domain-containing protein 5	46	41	0.89
84292	Mitogen-activated protein kinase organizer 1	50	45	0.89
123606	Non-imprinted in Prader-Willi/Angelman syndrome region protein 1	26	23	0.89
11132	60S ribosomal protein L41	174	156	0.89
-	AP-3 complex subunit delta-1	302	270	0.89
27333	Golgi integral membrane protein 4	157	140	0.89
203054	Uncharacterized aarF domain-containing protein kinase 5	41	36	0.89
-	Uncharacterized protein ENSP00000325519 Fragment	35	31	0.89
5933	Retinoblastoma-like protein 1	9	8	0.89
-	Serine/threonine kinase NLK	114	102	0.89
-	ring finger protein 212 isoform b	68	60	0.90
2834	Prolactin-releasing peptide receptor	18	16	0.90
10397	Protein NDRG1	621	556	0.90
-	Uncharacterized protein C6orf106	167	150	0.90
1265	Calponin-2	456	408	0.90
388969	UPF0561 protein C2orf68	39	35	0.90
80150	L-asparaginase	134	120	0.90
138050	Heparan-alpha-glucosaminide N-acetyltransferase	50	45	0.90
10227	Major facilitator superfamily domain-containing protein 10	616	552	0.90

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
57035	UPF0471 protein C1orf63	958	857	0.90
552891	DnaJ homolog subfamily C member 25	252	226	0.90
4063	T-lymphocyte surface antigen Ly-9 Precursor	31	28	0.90
10533	Autophagy-related protein 7	95	85	0.90
610	Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 2	761	681	0.90
10342	Protein TFG	1106	990	0.90
1801	Diphthamide biosynthesis protein 1	105	94	0.90
-	Zinc finger protein 544	85	76	0.90
1041	corneodesmosin precursor	35	31	0.90
-	-	176	158	0.90
-	Keratin, type II cytoskeletal 74	28	25	0.90
27175	Tubulin gamma-2 chain	63	57	0.90
1967	Translation initiation factor eIF-2B subunit alpha	258	231	0.90
100131630	-	12	10	0.90
-	Uncharacterized protein C20orf24	1188	1064	0.90
3714	Protein jagged-2 Precursor	170	152	0.90
10616	RanBP-type and C3HC4-type zinc finger-containing protein 1	184	165	0.90
-	Iduronate-2-sulphatase Fragment	62	56	0.90
100294350	-	12	11	0.90
84221	Uncharacterized protein C21orf56	132	118	0.90
-	V-type proton ATPase subunit S1 Precursor	1295	1160	0.90
6399	Trafficking protein particle complex subunit 2 (Sedlin)	161	144	0.90
-	Importin subunit alpha-7 (Karyopherin subunit alpha-6)	37	33	0.90
9217	Vesicle-associated membrane protein-associated protein B/C	318	285	0.90
-	Leptin receptor overlapping transcript-like 1	487	437	0.90
92960	Peroxisomal membrane protein 11C	12	11	0.90
8794	Tumor necrosis factor receptor superfamily member 10C Precursor (Decoy receptor 1)	455	408	0.90
119016	Centaurin-gamma-like family member 1	221	198	0.90
340260	Homeobox protein unc-4 homolog	40	36	0.90
3767	ATP-sensitive inward rectifier potassium channel 11	30	27	0.90
7466	Wolframin	164	147	0.90
170679	SEEK1 protein	63	56	0.90
3206	Homeobox protein Hox-A10	223	200	0.90
-	-	55	49	0.90
83442	SH3 domain-binding glutamic acid-rich-like protein 3	3583	3212	0.90
375035	Vesicle transport protein SFT2B	107	96	0.90
5550	Prolyl endopeptidase	297	267	0.90
55321	Transmembrane protein C20orf46	41	37	0.90
1208	Colipase Precursor	165	148	0.90
4237	Microfibrillar-associated protein 2 Precursor	1251	1122	0.90
-	Lysine-specific histone demethylase 1	642	576	0.90
10905	Mannosyl-oligosaccharide 1,2-alpha-mannosidase IB	29	26	0.90
140679	Vesicular inhibitory amino acid transporter	153	138	0.90
4351	Mannose-6-phosphate isomerase	93	83	0.90
100129271	Skin-specific protein 32	13	11	0.90
55257	MRG-binding protein	152	136	0.90
100292388	-	36	33	0.90
4277	MHC class I polypeptide-related sequence B	431	387	0.90
100294280	-	33	29	0.90
10296	Macrophage erythroblast attacher	203	182	0.90

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
54927	Coiled-coil-helix-coiled-coil-helix domain-containing protein 3, mitochondrial Precursor	418	375	0.90
128408	Class B basic helix-loop-helix protein 4	26	23	0.90
388662	Orphan sodium- and chloride-dependent neurotransmitter transporter NTT4	906	813	0.90
441150	Uncharacterized protein C6orf226	139	124	0.90
23643	Lymphocyte antigen 96 Precursor	487	437	0.90
9363	Ras-related protein Rab-33A	63	56	0.90
1291	Collagen alpha-1(VI) chain Precursor	15	14	0.90
-	Coiled-coil domain-containing protein 28B	113	102	0.90
401612	Mitochondrial carrier triple repeat protein 6	11	10	0.90
5130	Choline-phosphate cytidylyltransferase A	133	119	0.90
26173	Integrator complex subunit 1	38	34	0.90
-	-	190	171	0.90
100292604	-	15	14	0.90
9371	Kinesin-like protein KIF3B	117	105	0.90
167153	Poly(A) RNA polymerase GLD2	177	159	0.90
7542	Zinc finger protein-like 1	202	181	0.90
79567	Protein FAM65A	31	28	0.90
5982	Replication factor C subunit 2	168	151	0.90
11176	Bromodomain adjacent to zinc finger domain protein 2A	21	19	0.90
25797	GlutaminyI-peptide cyclotransferase Precursor	424	381	0.90
9727	Rab11 family-interacting protein 3	29	26	0.90
6128	60S ribosomal protein L6	26158	23484	0.90
5473	Platelet basic protein Precursor	10	9	0.90
5362	Plexin-A2 Precursor (Semaphorin receptor OCT)	1915	1719	0.90
5636	Phosphoribosyl pyrophosphate synthetase-associated protein 2	323	290	0.90
282969	Protein fucU homolog	238	213	0.90
4594	Methylmalonyl-CoA mutase, mitochondrial Precursor	341	307	0.90
100289589	-	19	17	0.90
79177	Zinc finger protein 576	105	94	0.90
-	Multiple PDZ domain protein	211	190	0.90
10452	Mitochondrial import receptor subunit TOM40 homolog	229	206	0.90
-	Protein KRI1 homolog	135	121	0.90
25798	Brain protein I3	1983	1781	0.90
728642	PITSLRE serine/threonine-protein kinase CDC2L2	278	249	0.90
5157	Platelet-derived growth factor receptor-like protein Precursor	134	121	0.90
728671	-	34	30	0.90
23163	ADP-ribosylation factor-binding protein GGA3	159	143	0.90
-	Cell division cycle 2-like protein kinase 6	96	86	0.90
11182	Solute carrier family 2, facilitated glucose transporter member 6	351	315	0.90
653247	Basic salivary proline-rich protein 1 Precursor	99	89	0.90
1613	Death-associated protein kinase 3	291	261	0.90
-	Uncharacterized protein C3orf38	92	83	0.90
80740	Lymphocyte antigen 6 complex locus protein G6c Precursor	20	18	0.90
-	28S ribosomal protein S34, mitochondrial	697	626	0.90
5128	Serine/threonine-protein kinase PCTAIRE-2	618	555	0.90
54431	DnaJ homolog subfamily C member 10 Precursor	614	552	0.90
23317	DnaJ homolog subfamily C member 13	156	141	0.90
10664	Transcriptional repressor CTCF	152	137	0.90
-	Serine/threonine/tyrosine-interacting-like protein 1	235	211	0.90

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
4791	Nuclear factor NF-kappa-B p100 subunit	53	48	0.90
114785	Methyl-CpG-binding domain protein 6	55	49	0.90
-	CDNA FLJ25625 fis, clone STM02974	83	74	0.90
65012	Guanine nucleotide exchange factor GEFT	17	15	0.90
149840	Uncharacterized protein C20orf196	15	14	0.90
10922	Fas-activated serine/threonine kinase	111	100	0.90
79672	Ketosamine-3-kinase	242	217	0.90
54949	Protein EMI5 homolog, mitochondrial Precursor	836	751	0.90
22821	Ras GTPase-activating protein 3	42	38	0.90
-	Amyotrophic lateral sclerosis 2 chromosomal region candidate gene 4 protein	275	247	0.90
6560	Solute carrier family 12 member 4	328	295	0.90
945	Myeloid cell surface antigen CD33 Precursor	14	12	0.90
7456	WAS/WASL-interacting protein family member 1	80	72	0.90
-	LIM/homeobox protein Lhx6.1	56	50	0.90
100128346	-	9	8	0.90
11230	PRA1 family protein 2	773	695	0.90
100130195	Protein FAM115A	256	230	0.90
1062	Centromere-associated protein E	103	93	0.90
170589	Glycoprotein hormone alpha-2 Precursor (Thyrostimulin subunit alpha)	23	21	0.90
54503	Probable palmitoyltransferase ZDHHC13	236	212	0.90
3399	DNA-binding protein inhibitor ID-3	3637	3270	0.90
26292	C-Myc-binding protein	119	107	0.90
23	ATP-binding cassette sub-family F member 1	111	99	0.90
1820	AT-rich interactive domain-containing protein 3A	72	64	0.90
2108	Electron transfer flavoprotein subunit alpha, mitochondrial Precursor	1968	1770	0.90
8763	Putative mucin core protein 24 Precursor	1832	1648	0.90
55280	CWF19-like protein 1	117	105	0.90
340348	Tetraspanin-33	16	14	0.90
1039	Cerebellar degeneration-related protein 2	262	236	0.90
57136	Adipocyte plasma membrane-associated protein	609	548	0.90
-	Immunoglobulin heavy chain V gene segment	43	38	0.90
51360	Membrane-bound transcription factor site-2 protease	54	49	0.90
7728	Zinc finger protein 175	120	108	0.90
-	Uncharacterized protein C17orf56	114	102	0.90
7551	Zinc finger protein 3	157	141	0.90
57448	Baculoviral IAP repeat-containing protein 6	117	105	0.90
3939	L-lactate dehydrogenase A chain	4645	4179	0.90
-	Histone acetyltransferase MYST3	240	216	0.90
57572	Dedicator of cytokinesis protein 6	22	20	0.90
9619	ATP-binding cassette sub-family G member 1	81	73	0.90
63875	39S ribosomal protein L17, mitochondrial Precursor	1317	1185	0.90
79642	Arylsulfatase J Precursor	474	426	0.90
-	Heterogeneous nuclear ribonucleoprotein Q	1442	1298	0.90
-	Phosphoacetylglucosamine mutase	588	529	0.90
90102	Pleckstrin homology-like domain family B member 2	89	80	0.90
-	-	18	17	0.90
91748	Uncharacterized protein C14orf43	78	70	0.90
5533	Serine/threonine-protein phosphatase 2B catalytic subunit gamma isoform	136	123	0.90
998	Cell division control protein 42 homolog Precursor	2500	2250	0.90
7862	Peregrin	78	70	0.90

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
64065	p53 apoptosis effector related to PMP-22	309	278	0.90
404636	Protein FAM45A	567	510	0.90
954	Ectonucleoside triphosphate diphosphohydrolase 2	51	46	0.90
-	DNA-binding protein A (Cold shock domain-containing protein A)	3771	3395	0.90
100291378	-	18	16	0.90
7122	Claudin-5	761	685	0.90
376267	RAB15, member RAS oncogene family	73	66	0.90
-	YG026_HUMAN Isoform 2 of Q8N2E2 - Homo sapiens	8	7	0.90
100289448	Putative exonuclease GOR-like protein	41	37	0.90
6397	SEC14-like protein 1	1485	1337	0.90
-	Serine/threonine-protein kinase WNK1	203	182	0.90
4651	Myosin-X	115	104	0.90
6627	U2 small nuclear ribonucleoprotein A'	444	400	0.90
100292920	Mediator of RNA polymerase II transcription subunit 18	112	101	0.90
22827	Poly(U)-binding-splicing factor PUF60	739	666	0.90
10735	Cohesin subunit SA-2	250	226	0.90
91107	Tripartite motif-containing protein 47	200	180	0.90
6777	Signal transducer and activator of transcription 5B	88	79	0.90
-	-	774	697	0.90
80306	Mediator of RNA polymerase II transcription subunit 28	556	501	0.90
80762	NEDD4 family-interacting protein 1	310	279	0.90
57708	Mesoderm induction early response protein 1	154	138	0.90
9026	Huntingtin-interacting protein 1-related protein	54	48	0.90
126208	Zinc finger protein 787 (TTF-I-interacting peptide 20)	36	32	0.90
3192	Heterogeneous nuclear ribonucleoprotein U	3105	2798	0.90
10890	Ras-related protein Rab-10	485	437	0.90
3187	Heterogeneous nuclear ribonucleoprotein H	1169	1053	0.90
51282	SCAN domain-containing protein 1	503	453	0.90
1748	Homeobox protein DLX-4	63	57	0.90
5245	Prohibitin	318	287	0.90
554313	Histone H4	99	89	0.90
9489	CDP-diacylglycerol-glycerol-3-phosphate 3-phosphatidyltransferase, mitochondrial Precursor	149	134	0.90
84266	Alkylated DNA repair protein alkB homolog 7 Precursor	366	330	0.90
-	Transcription factor 25	601	541	0.90
6787	Serine/threonine-protein kinase Nek4	59	53	0.90
-	Stromal interaction molecule 2 Precursor	41	37	0.90
3188	60S ribosomal protein L36a	825	743	0.90
10630	Podoplanin Precursor	84	76	0.90
4862	Neuronal PAS domain-containing protein 2	269	243	0.90
11316	Coatomer subunit epsilon (Epsilon-coat protein)	423	382	0.90
387	Transforming protein RhoA Precursor	7798	7030	0.90
5538	Palmitoyl-protein thioesterase 1 Precursor	865	780	0.90
9946	Quinone oxidoreductase-like protein 1	391	353	0.90
3707	Inositol-trisphosphate 3-kinase B	6	5	0.90
80854	Histone-lysine N-methyltransferase SETD7	55	49	0.90
10538	Basic leucine zipper transcriptional factor ATF-like	41	37	0.90
100133222	60S ribosomal protein L39	9744	8786	0.90
10084	Polyglutamine-binding protein 1	569	513	0.90
100291900	-	10	9	0.90
148066	Zinc/RING finger protein 4 Precursor	118	107	0.90
-	TATA element modulatory factor	159	143	0.90
10606	Multifunctional protein ADE2	376	339	0.90

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1731	Septin-1 (LARP)	7	6	0.90
92922	Coiled-coil domain-containing protein 102A	48	43	0.90
2864	Free fatty acid receptor 1	12	11	0.90
51522	Transmembrane protein 14C	2105	1898	0.90
57381	Rho-related GTP-binding protein RhoJ Precursor	1187	1071	0.90
526	V-type proton ATPase subunit B, brain isoform	772	697	0.90
100	Adenosine deaminase	486	439	0.90
5977	Zinc finger protein ubi:d4 (Requiem)	177	160	0.90
35	Short-chain specific acyl-CoA dehydrogenase, mitochondrial Precursor	141	127	0.90
57561	Arrestin domain-containing protein 3	149	135	0.90
23411	NAD-dependent deacetylase sirtuin-1	40	36	0.90
1656	Probable ATP-dependent RNA helicase DDX6	50	45	0.90
100288473	-	58	52	0.90
6733	Serine/threonine-protein kinase SRPK2	357	322	0.90
84108	Polycomb group RING finger protein 6	195	176	0.90
-	Granzyme B Precursor	27	25	0.90
3824	Natural killer cells antigen CD94	42	38	0.90
3014	Histone H2A.x	156	141	0.90
4256	Matrix Gla protein Precursor	2838	2561	0.90
2045	Ephrin type-A receptor 7 Precursor	91	82	0.90
58480	Rho-related GTP-binding protein RhoU	18	16	0.90
146429	Putative solute carrier family 22 member ENSG00000182157	8	8	0.90
3717	Tyrosine-protein kinase JAK2	37	33	0.90
23594	Origin recognition complex subunit 6	96	87	0.90
3483	Insulin-like growth factor-binding protein complex acid labile chain Precursor	50	45	0.90
165100	Uncharacterized protein C2orf57	15	14	0.90
57583	Transmembrane protein 181	68	61	0.90
1737	Dihydropyridine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial Precursor	157	141	0.90
100131199	-	24	22	0.90
221079	ADP-ribosylation factor-like protein 5B	62	56	0.90
6506	Excitatory amino acid transporter 2	8	7	0.90
5050	Platelet-activating factor acetylhydrolase IB subunit gamma	343	309	0.90
646048	-	28	25	0.90
132243	Histone H1oo	97	87	0.90
9645	Protein MICAL-2	257	232	0.90
64377	Carbohydrate sulfotransferase 8	64	58	0.90
-	Hemoglobin subunit delta	13	12	0.90
-	Collagen alpha-2(IV) chain Precursor	1052	950	0.90
29801	Probable palmitoyltransferase ZDHHC8	26	24	0.90
283643	Uncharacterized protein C10orf80	37	34	0.90
-	RNA-binding Raly-like protein	28	25	0.90
84874	Zinc finger protein 514	35	32	0.90
57719	Anoctamin-8	149	134	0.90
-	Atlastin-3	140	126	0.90
5791	Receptor-type tyrosine-protein phosphatase epsilon Precursor	438	395	0.90
55841	Protein WWC3	34	31	0.90
401647	Uncharacterized protein C10orf132	54	48	0.90
83943	Mitochondrial inner membrane protease subunit 2	100	91	0.90

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
123920	CKLF-like MARVEL transmembrane domain-containing protein 3	533	481	0.90
5291	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit beta isoform	96	86	0.90
8557	Telethonin	19	18	0.90
582	Dipeptidyl-peptidase 3	56	50	0.90
57573	Zinc finger protein 471	22	20	0.90
-	-	156	141	0.90
100292691	-	17	15	0.90
1938	Elongation factor 2	1401	1265	0.90
-	Uncharacterized protein LOC205251	313	283	0.90
55275	Vacuolar protein sorting-associated protein 53 homolog	26	24	0.90
64063	Brain-specific serine protease 4 Precursor	30	27	0.90
8484	Galanin receptor type 3	128	116	0.90
146310	RING finger protein 151	53	48	0.90
5606	Dual specificity mitogen-activated protein kinase kinase 3	130	117	0.90
10564	Brefeldin A-inhibited guanine nucleotide-exchange protein 2	30	27	0.90
81844	Tripartite motif-containing protein 56	27	24	0.90
201232	Monocarboxylate transporter 13	49	45	0.90
730256	-	23	21	0.90
9517	Serine palmitoyltransferase 2	106	96	0.90
55540	Interleukin-17 receptor B Precursor	39	35	0.90
-	Pleckstrin homology domain-containing family A member 4	61	55	0.90
83786	FERM domain-containing protein 8	850	768	0.90
-	-	19	17	0.90
55937	Apolipoprotein M	9	8	0.90
149345	Protein shisa-4 Precursor	190	172	0.90
26232	F-box only protein 2	32	29	0.90
8433	Undifferentiated embryonic cell transcription factor 1	18	17	0.90
5690	Proteasome subunit beta type-2	906	819	0.90
-	solute carrier family 35, member E2	37	34	0.90
83605	Malcavernin	648	586	0.90
10670	Ras-related GTP-binding protein A	1058	957	0.90
100287219	-	46	41	0.90
2041	Ephrin type-A receptor 1 Precursor	23	20	0.90
732432	Rho-associated protein kinase 1	189	171	0.90
219285	Sterile alpha motif domain-containing protein 9-like	26	24	0.90
23567	Zinc finger protein 346	66	60	0.90
126370	Olfactory receptor 111	13	12	0.90
165	Adipocyte enhancer-binding protein 1 Precursor	144	130	0.90
128434	V-set and transmembrane domain-containing protein 2-like protein Precursor	40	36	0.90
8839	WNT1-inducible-signaling pathway protein 2 Precursor	17	15	0.90
51592	E3 ubiquitin-protein ligase TRIM33	91	83	0.90
142678	E3 ubiquitin-protein ligase MIB2	50	45	0.90
84669	Ubiquitin carboxyl-terminal hydrolase 32	17	15	0.90
56951	Keratinocytes-associated transmembrane protein 2 Precursor	276	250	0.90
5436	DNA-directed RNA polymerase II subunit RPB7	729	660	0.90
51060	Thioredoxin domain-containing protein 12 Precursor	581	526	0.90
2181	Long-chain-fatty-acid-CoA ligase 3	331	299	0.90
79990	Pleckstrin homology domain-containing family H member 3 Precursor	25	23	0.90
57187	THO complex subunit 2	218	197	0.90

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
27344	ProSAAS Precursor	517	468	0.90
100292390	-	24	22	0.90
3163	Heme oxygenase 2	702	636	0.91
200734	Sprouty-related, EVH1 domain-containing protein 2	232	210	0.91
26013	Lethal(3)malignant brain tumor-like protein	17	15	0.91
-	Putative uncharacterized protein LOC645739	136	123	0.91
284390	Zinc finger protein 763	7	6	0.91
93185	Immunoglobulin superfamily member 8 Precursor	65	59	0.91
6448	N-sulphoglucosamine sulphohydrolase Precursor	246	223	0.91
84296	DNA replication complex GINS protein SLD5	37	34	0.91
-	-	10899	9868	0.91
-	Protein yippee-like 1	127	115	0.91
84959	Ubiquitin-associated and SH3 domain-containing protein B	15	14	0.91
92305	Transmembrane protein 129 Precursor	60	54	0.91
126541	Olfactory receptor 10H4	357	324	0.91
29992	Paired immunoglobulin-like type 2 receptor alpha Precursor	40	37	0.91
10307	Amyloid beta A4 precursor protein-binding family B member 3	60	54	0.91
55166	Centromere protein Q	82	74	0.91
161931	Adenosine deaminase domain-containing protein 2	28	25	0.91
29926	Mannose-1-phosphate guanylttransferase alpha	83	75	0.91
5201	Prefoldin subunit 1	839	760	0.91
-	Uncharacterized protein ENSP00000382820 Fragment	8	7	0.91
56102	Protocadherin gamma-B3 Precursor	39	35	0.91
100289794	-	20	18	0.91
642843	Putative cleavage and polyadenylation specificity factor subunit 4-like protein	12	11	0.91
-	OTU domain-containing protein 1	15	14	0.91
375775	Patatin-like phospholipase domain-containing protein 7	28	25	0.91
64760	UPF0518 protein FAM160B2	29	26	0.91
8795	Tumor necrosis factor receptor superfamily member 10B Precursor	1090	988	0.91
2300	Forkhead box protein L1	20	18	0.91
100293942	-	38	35	0.91
79738	Bardet-Biedl syndrome 10 protein	118	107	0.91
11309	Solute carrier organic anion transporter family member 2B1	11	10	0.91
57348	Protein tweety homolog 1	21	19	0.91
440695	ETS translocation variant 3-like protein	20	18	0.91
8850	Histone acetyltransferase PCAF	14	13	0.91
282991	Biogenesis of lysosome-related organelles complex 1 subunit 2	13	11	0.91
100289203	-	58	53	0.91
727758	ROCK1 protein	189	171	0.91
9587	MAD2L1-binding protein	663	600	0.91
100293148	-	13	12	0.91
96459	Folliculin-interacting protein 1	28	26	0.91
-	Activating transcription factor 7-interacting protein 2	7	7	0.91
-	TBC1 domain family member 10A	55	50	0.91
25957	Splicing factor, arginine/serine-rich 18	1040	943	0.91
23612	Pleckstrin homology-like domain family A member 3	322	292	0.91
55173	28S ribosomal protein S10, mitochondrial	455	412	0.91
51255	E3 ubiquitin-protein ligase RNF181	42	38	0.91

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
207	RAC-alpha serine/threonine-protein kinase	385	349	0.91
219743	Peroxisomal leader peptide-processing protease	44	40	0.91
440400	Ribonuclease kappa	1918	1739	0.91
-	Tenascin-R Precursor	27	24	0.91
8546	AP-3 complex subunit beta-1	411	373	0.91
9031	Tyrosine-protein kinase BAZ1B	19	17	0.91
119392	Uncharacterized protein C10orf78	90	82	0.91
10273	STIP1 homology and U box-containing protein 1	383	348	0.91
8460	Protein-tyrosine sulfotransferase 1	114	104	0.91
51710	Zinc finger protein ZnFP12	56	51	0.91
9341	Vesicle-associated membrane protein 3	786	713	0.91
200942	Kelch domain-containing protein 8B	507	460	0.91
29990	Paired immunoglobulin-like type 2 receptor beta Precursor	264	239	0.91
100289611	-	33	30	0.91
2677	Vitamin K-dependent gamma-carboxylase	64	58	0.91
5985	Replication factor C subunit 5	68	61	0.91
93611	F-box only protein 44	13	11	0.91
7508	DNA repair protein complementing XP-C cells	652	592	0.91
-	Adapter protein CIKS	75	68	0.91
2629	Glucosylceramidase Precursor	306	278	0.91
100128403	-	49	45	0.91
28978	Transmembrane protein 14A	309	281	0.91
221830	DNA-directed RNA polymerase I subunit RPA43	292	265	0.91
125228	Uncharacterized protein C18orf19	85	77	0.91
-	Xaa-Pro dipeptidase	772	700	0.91
92070	Uncharacterized protein C4orf42	67	61	0.91
8824	Carboxylesterase 2 Precursor	261	237	0.91
4725	NADH dehydrogenase [ubiquinone] iron-sulfur protein 5	5104	4632	0.91
-	CF132_HUMAN Isoform 3 of Q5T0Z8 - Homo sapiens	6	6	0.91
57507	Zinc finger protein 608	36	32	0.91
9967	Thyroid hormone receptor-associated protein 3	110	100	0.91
-	Putative protein TMEM137	25	23	0.91
253935	Angiotensin-related protein 5 Precursor	21	19	0.91
100291475	-	39	36	0.91
115426	E3 ubiquitin-protein ligase UHRF2	179	162	0.91
-	Period circadian protein homolog 1	19	17	0.91
-	Protein FAM182A	26	24	0.91
389649	Putative uncharacterized protein FLJ43582	23	20	0.91
10291	Splicing factor 3 subunit 1	169	154	0.91
6376	Fractalkine Precursor	9	9	0.91
388939	Uncharacterized protein C2orf71	28	25	0.91
26509	Myoferlin	44	40	0.91
-	-	35	31	0.91
100289396	-	19	18	0.91
60485	Protein salvador homolog 1	254	231	0.91
100292447	-	10	9	0.91
-	Docking protein 3	26	24	0.91
100288980	-	221	201	0.91
112476	Proline-rich transmembrane protein 2	13	12	0.91
3397	DNA-binding protein inhibitor ID-1	929	844	0.91
-	Peptide YY Precursor	119	109	0.91
267	Autocrine motility factor receptor, isoform 2	132	120	0.91
195814	Epidermal retinal dehydrogenase 2	23	21	0.91
55337	UPF0515 protein C19orf66	270	245	0.91

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3184	Heterogeneous nuclear ribonucleoprotein D0	4200	3816	0.91
8510	Matrix metalloproteinase-23 Precursor	45	41	0.91
-	Aryl hydrocarbon receptor nuclear translocator	13	12	0.91
3269	Histamine H1 receptor	117	106	0.91
146	Alpha-1D adrenergic receptor	30	27	0.91
327	Acylamino-acid-releasing enzyme	222	202	0.91
9287	Trace amine-associated receptor 2	31	29	0.91
10979	Fermitin family homolog 2	343	311	0.91
100287265	-	42	38	0.91
64858	DNA cross-link repair 1B protein	33	30	0.91
51	Peroxisomal acyl-coenzyme A oxidase 1	152	138	0.91
100288180	-	51	46	0.91
8612	Lipid phosphate phosphohydrolase 2	203	184	0.91
7262	Pleckstrin homology-like domain family A member 2	411	373	0.91
11100	Heterogeneous nuclear ribonucleoprotein U-like protein 1	22	20	0.91
55561	Serine/threonine-protein kinase MRCK gamma	9	8	0.91
53838	Uncharacterized protein C11orf24 Precursor	29	26	0.91
-	Uncharacterized protein C1orf126	35	32	0.91
83759	RNA-binding protein 4B	133	121	0.91
219902	Transmembrane protein 136	76	69	0.91
7064	Thimet oligopeptidase	128	116	0.91
-	-	104	94	0.91
100289507	-	29	26	0.91
6344	Secretin receptor Precursor	38	34	0.91
3146	High mobility group protein B1	313	285	0.91
8481	Oral-facial-digital syndrome 1 protein	88	80	0.91
100289833	-	37	33	0.91
89781	Hermansky-Pudlak syndrome 4 protein	34	31	0.91
54812	Aftiphilin	149	135	0.91
11273	Ataxin-2-like protein	24	21	0.91
727967	Ribosome biogenesis protein BOP1	64	58	0.91
5881	Ras-related C3 botulinum toxin substrate 3 Precursor	134	122	0.91
113655	Major facilitator superfamily domain-containing protein 3	143	130	0.91
572	Bcl2 antagonist of cell death	520	473	0.91
-	2-oxoglutarate and iron-dependent oxygenase domain-containing protein 2	71	65	0.91
57609	Disco-interacting protein 2 homolog B	141	128	0.91
55322	UPF0489 protein C5orf22	127	116	0.91
204851	Homeodomain-interacting protein kinase 1	6	5	0.91
-	Autophagy protein 5	327	297	0.91
25950	RWD domain-containing protein 3	98	89	0.91
84067	UPF0518 protein FAM160A2	102	93	0.91
284018	Putative uncharacterized protein C17orf58	142	129	0.91
167	Cysteine-rich secretory protein 1 Precursor	333	303	0.91
283212	Kelch-like protein 35	16	14	0.91
10826	Uncharacterized protein C5orf4	55	50	0.91
788	Mitochondrial carnitine/acylcarnitine carrier protein	128	117	0.91
121340	Transcription factor Sp7	174	159	0.91
100289366	Putative uncharacterized protein ENSP00000383356	48	44	0.91
162967	Zinc finger protein 320	60	55	0.91
84910	Transmembrane protein 87B Precursor	53	48	0.91
-	Seven transmembrane helix receptor	71	64	0.91
1370	Carboxypeptidase N subunit 2 Precursor	52	47	0.91
100131857	-	42	38	0.91

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
8574	Aflatoxin B1 aldehyde reductase member 2	553	504	0.91
-	Chromobox protein homolog 7	9	9	0.91
6548	Sodium/hydrogen exchanger 1	265	242	0.91
64167	Endoplasmic reticulum aminopeptidase 2	128	117	0.91
63027	Solute carrier family 22 member 23	366	334	0.91
114928	G-protein coupled receptor-associated sorting protein 2	47	43	0.91
10554	1-acyl-sn-glycerol-3-phosphate acyltransferase alpha	79	72	0.91
820	Cathelicidin antimicrobial peptide Precursor	13	12	0.91
100289065	-	63	57	0.91
-	Coiled-coil domain-containing protein 18	50	46	0.91
-	Putative uncharacterized protein C3orf49	54	50	0.91
54453	Ras and Rab interactor 2	342	312	0.91
2999	Granzyme H Precursor	15	14	0.91
-	Zinc finger protein 302	45	41	0.91
-	Bile salt-activated lipase Precursor	26	24	0.91
8641	-	11	10	0.91
11117	EMILIN-1 Precursor	151	138	0.91
55362	Transmembrane protein 63B	33	30	0.91
64794	Probable ATP-dependent RNA helicase DDX31	49	45	0.91
121665	Signal peptide peptidase-like 3	112	102	0.91
-	-	23	21	0.91
286527	NB thymosin beta	54	49	0.91
5440	DNA-directed RNA polymerases I, II, and III subunit RPABC4	838	764	0.91
-	-	238	217	0.91
145873	Mesoderm posterior protein 2	16	14	0.91
100290941	-	41	37	0.91
-	Putative uncharacterized protein FLJ33534	28	26	0.91
-	-	5901	5381	0.91
-	Plastin-3	2826	2577	0.91
54904	Histone-lysine N-methyltransferase NSD3	36	33	0.91
3712	Isovaleryl-CoA dehydrogenase, mitochondrial Precursor	161	147	0.91
-	Uncharacterized protein C4orf29 Precursor	67	62	0.91
1315	Coatomer subunit beta	1836	1675	0.91
7750	Zinc finger MYM-type protein 2	73	67	0.91
54979	HRAS-like suppressor 2	24	22	0.91
638	Bcl-2-interacting killer	54	49	0.91
10263	Cyclin-dependent kinase 2-associated protein 2	814	743	0.91
11045	Uropod-like protein 1a	37	34	0.91
7084	Thymidine kinase 2, mitochondrial Precursor	132	121	0.91
26716	Olfactory receptor 2H1	59	54	0.91
139735	Zinc finger protein 92 homolog	49	45	0.91
2785	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-3 Precursor	3053	2786	0.91
7385	Cytochrome b-c1 complex subunit 2, mitochondrial Precursor	1258	1148	0.91
63826	Serine racemase	127	116	0.91
771	Carbonic anhydrase 12 Precursor	38	35	0.91
-	Protein polybromo-1	41	37	0.91
80153	Enhancer of mRNA-decapping protein 3	72	66	0.91
-	Sugar phosphate exchanger 2	20	18	0.91
5819	Poliovirus receptor-related protein 2 Precursor	422	385	0.91
208	RAC-beta serine/threonine-protein kinase	45	41	0.91
-	-	86	78	0.91

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9382	Conserved oligomeric Golgi complex subunit 1	208	190	0.91
115201	Cysteine protease ATG4A	280	255	0.91
100290602	-	59	54	0.91
100291383	-	30	28	0.91
57863	Cell adhesion molecule 3 Precursor	14	13	0.91
136319	Myotrophin	5316	4856	0.91
84302	Transmembrane protein C9orf125	29	26	0.91
-	MAX gene-associated protein	212	194	0.91
22893	Bromo adjacent homology domain-containing 1 protein	106	97	0.91
-	Sorting nexin-29	55	50	0.91
90627	StAR-related lipid transfer protein 13	96	87	0.91
6388	Stromal cell-derived factor 2 Precursor	824	753	0.91
-	Protein YIF1A	802	733	0.91
8704	Beta-1,4-galactosyltransferase 2	107	97	0.91
647716	-	34	31	0.91
8192	Putative ATP-dependent Clp protease proteolytic subunit, mitochondrial Precursor	1006	919	0.91
25823	Tryptase gamma Precursor	104	95	0.91
-	Transmembrane protein 79	22	21	0.91
83549	Uridine-cytidine kinase 1	69	63	0.91
2189	Fanconi anemia group G protein	51	46	0.91
83695	Uncharacterized protein C12orf32	225	205	0.91
79646	Pantothenate kinase 3	41	38	0.91
-	-	1856	1696	0.91
284827	Keratin-associated protein 13-4	85	78	0.91
79465	NKG2D ligand 3 Precursor	44	40	0.91
92105	Integrator complex subunit 4	183	167	0.91
25900	Intermediate filament family orphan 1	346	316	0.91
5984	Replication factor C subunit 4	153	139	0.91
27173	Zinc transporter ZIP1	443	405	0.91
84516	Dynactin subunit 5	327	299	0.91
6342	Non-specific lipid-transfer protein	1806	1651	0.91
3007	Histone H1.3	15	14	0.91
2131	Exostosin-1	748	684	0.91
343171	Olfactory receptor 2W3	20	18	0.91
100291709	-	28	25	0.91
55096	-	29	26	0.91
11188	Nischarin	26	24	0.91
10559	CMP-sialic acid transporter	502	459	0.91
2733	Nucleoporin GLE1	64	59	0.91
9028	Rhomboid-related protein 1	7	7	0.91
201799	Transmembrane protein 154 Precursor	109	100	0.91
26039	SS18-like protein 1	27	24	0.91
-	KRAB domain-containing protein ZNF747	58	53	0.91
116039	Protein odd-skipped-related 2	25	23	0.91
54925	Zinc finger protein 434	94	86	0.91
5978	RE1-silencing transcription factor	131	120	0.91
100287576	-	42	38	0.91
-	Nestin	229	209	0.91
113263	Glucocorticoid-induced transcript 1 protein	63	58	0.91
7913	Protein DEK	952	871	0.91
9267	Cytohesin-1	360	329	0.91
5143	cAMP-specific 3',5'-cyclic phosphodiesterase 4C	24	22	0.91
644914	Histone H3.3	155	142	0.91

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5889	DNA repair protein RAD51 homolog 3	101	92	0.92
-	WD40 repeat-containing protein SMU1	229	209	0.92
4694	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 1	2459	2250	0.92
5064	Paralemmmin	81	74	0.92
100131473	-	19	17	0.92
55346	T-complex protein 11-like protein 1	72	66	0.92
2878	Glutathione peroxidase 3 Precursor	41	37	0.92
-	LysM and putative peptidoglycan-binding domain-containing protein 4	55	50	0.92
3851	Keratin, type II cytoskeletal 4	28	25	0.92
-	-	20	18	0.92
-	Uncharacterized protein C17orf53	13	12	0.92
29941	Serine/threonine-protein kinase N3	36	33	0.92
100293202	-	66	60	0.92
100292423	-	109	99	0.92
11014	ER lumen protein retaining receptor 2	3052	2794	0.92
7779	Zinc transporter 1	40	36	0.92
84548	Transmembrane protein 185A	61	56	0.92
10483	Protein transport protein Sec23B	412	378	0.92
92235	Inactive dual specificity phosphatase 27	34	31	0.92
1655	Probable ATP-dependent RNA helicase DDX5	4478	4101	0.92
622	D-beta-hydroxybutyrate dehydrogenase, mitochondrial Precursor	84	77	0.92
1611	Death-associated protein 1	655	600	0.92
203076	Uncharacterized protein C8orf74	320	293	0.92
81846	Myotubularin-related protein 13	85	78	0.92
2764	Glia maturation factor beta	584	534	0.92
-	Endonuclease VIII-like 1	180	165	0.92
55632	G2/M phase-specific E3 ubiquitin-protein ligase	54	49	0.92
51263	39S ribosomal protein L30, mitochondrial Precursor	258	236	0.92
51318	39S ribosomal protein L35, mitochondrial Precursor	270	247	0.92
29967	Low-density lipoprotein receptor-related protein 12 Precursor	50	46	0.92
22818	Coatomer subunit zeta-1	2080	1906	0.92
51156	Protein Z-dependent protease inhibitor Precursor	24	22	0.92
65220	NAD kinase	20	18	0.92
7384	Cytochrome b-c1 complex subunit 1, mitochondrial Precursor	655	600	0.92
5441	DNA-directed RNA polymerases I, II, and III subunit RPABC5	145	132	0.92
5612	52 kDa repressor of the inhibitor of the protein kinase	240	220	0.92
3149	High mobility group protein B3	433	397	0.92
54880	BCL-6 corepressor	62	57	0.92
51599	Lipolysis-stimulated lipoprotein receptor	33	30	0.92
7693	Zinc finger protein 134	28	25	0.92
1142	Neuronal acetylcholine receptor subunit beta-3 Precursor	431	395	0.92
63929	Probable Xaa-Pro aminopeptidase 3	46	42	0.92
-	-	8	8	0.92
3747	Potassium voltage-gated channel subfamily C member 2	37	34	0.92
83690	Cysteine-rich secretory protein LCCL domain-containing 1 Precursor	33	30	0.92
91543	Radical S-adenosyl methionine domain-containing protein 2	34	31	0.92

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1318	Probable low affinity copper uptake protein 2 (Copper transporter 2)	126	116	0.92
8573	Peripheral plasma membrane protein CASK	30	27	0.92
55124	Piwi-like protein 2	18	16	0.92
51631	Putative RNA-binding protein Luc7-like 2	489	448	0.92
65018	Serine/threonine-protein kinase PINK1, mitochondrial Precursor	77	70	0.92
51454	PTB domain-containing engulfment adapter protein 1	131	120	0.92
7127	Tumor necrosis factor, alpha-induced protein 2	45	42	0.92
54058	Uncharacterized protein C21orf58	7	6	0.92
84930	Microtubule-associated serine/threonine-protein kinase-like	38	35	0.92
100287616	-	12	11	0.92
5921	Ras GTPase-activating protein	143	131	0.92
730456	-	14	13	0.92
149175	Glycoprotein endo-alpha-1,2-mannosidase-like protein	21	19	0.92
7009	Bax inhibitor 1	4053	3717	0.92
1803	Dipeptidyl peptidase 4	26	24	0.92
90678	E3 ubiquitin-protein ligase LRSAM1	65	60	0.92
29979	Ubiquilin-1	225	206	0.92
-	Protein deltex-3-like	33	30	0.92
57089	Ectonucleoside triphosphate diphosphohydrolase 7	44	41	0.92
5731	Prostaglandin E2 receptor EP1 subtype	54	50	0.92
79174	Cysteine-rich with EGF-like domain protein 2 Precursor	830	761	0.92
-	Tissue alpha-L-fucosidase Precursor	241	221	0.92
11244	Zinc fingers and homeoboxes protein 1	72	66	0.92
6887	T-cell acute lymphocytic leukemia protein 2	22	20	0.92
28957	28S ribosomal protein S28, mitochondrial	98	90	0.92
6794	Serine/threonine-protein kinase 11	135	124	0.92
84922	Plt3-interacting zinc finger protein 1	36	33	0.92
-	40S ribosomal protein S27-like protein	2914	2674	0.92
56911	TAK1-like protein	187	172	0.92
80777	Cytochrome b5 type B Precursor	1201	1102	0.92
27183	Vacuolar protein sorting-associating protein 4A	312	287	0.92
3481	Insulin-like growth factor II Precursor	33	31	0.92
7186	TNF receptor-associated factor 2	76	70	0.92
26140	Actin-related protein 2/3 complex subunit 4	74	68	0.92
-	LAG1 longevity assurance homolog 2	687	630	0.92
163778	Small proline-rich protein 4	48	44	0.92
100288006	-	24	22	0.92
8111	Sphingosylphosphorylcholine receptor	36	33	0.92
60673	UPF0453 protein C12orf44	336	309	0.92
1207	Methylosome subunit pICln	1544	1417	0.92
56252	YLP motif-containing protein 1	26	23	0.92
-	RNA polymerase II-associated factor 1 homolog	295	271	0.92
100289991	-	139	127	0.92
57591	MKL/myocardin-like protein 1	7	6	0.92
55858	Transmembrane protein 165	896	823	0.92
3275	Protein arginine N-methyltransferase 2	427	393	0.92
170393	Uncharacterized protein C10orf91	83	76	0.92
100128687	-	7	6	0.92
5641	Legumain Precursor	868	797	0.92
80725	p130Cas-associated protein	33	31	0.92
10073	Snurportin-1	342	315	0.92
54521	WD repeat-containing protein 44 (Rabphilin-11)	92	84	0.92

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
399967	PATE-like protein M Precursor	30	28	0.92
100294360	-	52	48	0.92
114794	Leucine-rich repeat and fibronectin type-III domain-containing protein 6 Precursor	33	30	0.92
100294412	Huntingtin-interacting protein 1-related protein	44	40	0.92
3425	Alpha-L-iduronidase Precursor	129	118	0.92
6698	Cornifin-A	205	188	0.92
2852	G-protein coupled estrogen receptor 1	34	32	0.92
84233	Transmembrane protein 126A	809	744	0.92
23765	Interleukin-17 receptor A Precursor	127	116	0.92
6406	Semenogelin-1 Precursor	31	29	0.92
-	Transforming acidic coiled-coil-containing protein 1	580	533	0.92
6879	Transcription initiation factor TFIID subunit 7	612	563	0.92
9179	AP-4 complex subunit mu-1	127	117	0.92
-	Putative nucleoside diphosphate kinase	3742	3439	0.92
143384	Uncharacterized protein C10orf46	72	66	0.92
140823	Protein MGR2 homolog	3812	3503	0.92
10714	DNA polymerase delta subunit 3	36	33	0.92
8521	Chorion-specific transcription factor GCMA	13	12	0.92
83443	Splicing factor 3B subunit 5	3218	2959	0.92
5701	26S protease regulatory subunit 7	2252	2070	0.92
11018	Transmembrane emp24 domain-containing protein 1 Precursor	292	268	0.92
55619	Dedicator of cytokinesis protein 10 (Zizimin-3)	10	10	0.92
51208	Claudin-18	6	6	0.92
100292626	Putative uncharacterized protein C3orf46	99	91	0.92
79717	Phosphopantothenate-cysteine ligase	696	640	0.92
5229	Geranylgeranyl transferase type-1 subunit beta	93	86	0.92
4537	NADH-ubiquinone oxidoreductase chain 3	10190	9369	0.92
-	WD repeat-containing protein 8	121	111	0.92
100290355	-	68	63	0.92
375759	Uncharacterized protein C9orf50	17	15	0.92
4771	Merlin	66	61	0.92
9766	Uncharacterized protein KIAA0247 Precursor	189	174	0.92
55852	Testis-expressed sequence 2 protein	148	136	0.92
4240	Lactadherin Precursor	70	64	0.92
1548	Cytochrome P450 2A6	53	49	0.92
100133609	E3 ubiquitin-protein ligase MARCH3	268	247	0.92
2861	Probable G-protein coupled receptor 37 Precursor	8	8	0.92
54903	Meckel syndrome type 1 protein	46	43	0.92
57447	Protein NDRG2	30	27	0.92
100134346	-	18	16	0.92
6464	SHC-transforming protein 1	924	850	0.92
170680	SPR1 protein	60	55	0.92
646643	Putative uncharacterized serine/threonine-protein kinase SgK069	10	9	0.92
6051	Aminopeptidase B	381	350	0.92
-	Nuclear autoantigen Sp-100	868	799	0.92
729580	-	192	177	0.92
153768	PRELI domain-containing protein 2	101	93	0.92
8243	Structural maintenance of chromosomes protein 1A	73	67	0.92
54741	Leptin receptor gene-related protein	1033	951	0.92
662	Vesicle transport protein SEC20	208	192	0.92
-	Pleckstrin homology domain-containing family A member 8	62	57	0.92

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10743	Retinoic acid-induced protein 1	62	57	0.92
22848	AP2-associated protein kinase 1	207	190	0.92
4719	NADH-ubiquinone oxidoreductase 75 kDa subunit, mitochondrial Precursor	44	40	0.92
-	Serin B6	544	501	0.92
100132919	-	22	21	0.92
23387	Serine/threonine-protein kinase QSK	12	11	0.92
60598	Potassium channel subfamily K member 15	17	16	0.92
-	cDNA FLJ31222 fis, clone KIDNE2004294FLJ31222 protein, isoform CRA_b	20	18	0.92
-	cDNA FLJ31668 fis, clone NT2RI2004916	34	32	0.92
64975	39S ribosomal protein L41, mitochondrial Precursor	519	478	0.92
113091	Tuberoinsulin peptide of 39 residues Precursor	67	62	0.92
10455	Peroxisomal 3,2-trans-enoyl-CoA isomerase	867	798	0.92
-	Zinc finger protein 287	44	40	0.92
3336	10 kDa heat shock protein, mitochondrial	47	43	0.92
84923	Protein FAM104A	79	73	0.92
23357	Protein angel homolog 1	100	92	0.92
23335	WD repeat-containing protein 7	61	56	0.92
122769	Peptidylprolyl isomerase-like 5	181	167	0.92
100134722	-	9	8	0.92
8161	Coilin (p80)	136	125	0.92
84662	Zinc finger protein GLIS2	44	40	0.92
51657	Serine/threonine/tyrosine-interacting-like protein 1	217	200	0.92
283537	Solute carrier family 46 member 3 Precursor	36	33	0.92
23140	Zinc finger ZZ-type and EF-hand domain-containing protein 1	122	112	0.92
-	Uncharacterized protein ENSP00000340488 Fragment	14	13	0.92
4790	Nuclear factor NF-kappa-B p105 subunit	264	244	0.92
27336	HIV Tat-specific factor 1 (Tat-SF1)	207	190	0.92
2355	Fos-related antigen 2	32	30	0.92
7272	Dual specificity protein kinase TTK	47	44	0.92
8208	Chromatin assembly factor 1 subunit B	57	52	0.92
9482	Syntaxin-8	193	178	0.92
-	-	80	74	0.92
10109	Actin-related protein 2/3 complex subunit 2	8820	8131	0.92
3091	Hypoxia-inducible factor 1 alpha	541	499	0.92
100287612	-	27	25	0.92
5790	Protein tyrosine phosphatase receptor type C-associated protein	20	18	0.92
50636	Anoctamin-7	22	21	0.92
7355	UDP-galactose translocator	19	17	0.92
9169	SFRS2-interacting protein	387	357	0.92
-	Serine/threonine-protein kinase 40	37	34	0.92
4861	Neuronal PAS domain-containing protein 1	63	58	0.92
728294	D-2-hydroxyglutarate dehydrogenase, mitochondrial Precursor	111	103	0.92
-	Chloride channel protein ClC-Kb	32	30	0.92
-	Cytochrome P450 2S1	12	11	0.92
-	Pro-neuregulin-3, membrane-bound isoform Precursor	69	64	0.92
80824	Dual specificity protein phosphatase 16	24	22	0.92
100292717	-	14	13	0.92
134553	UPF0461 protein C5orf24	170	157	0.92
100287994	-	17	15	0.92

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55137	Fidgetin	6	6	0.92
5529	Serine/threonine-protein phosphatase 2A 56 kDa regulatory subunit epsilon isoform	428	395	0.92
-	HEAT repeat-containing protein 2	222	204	0.92
3015	Histone H2A.Z	5201	4798	0.92
-	Putative homeodomain transcription factor 1	184	170	0.92
8887	Tax1-binding protein 1	1475	1361	0.92
10477	Ubiquitin-conjugating enzyme E2 E3	466	430	0.92
-	Metastasis-associated protein MTA1	201	186	0.92
23250	Probable phospholipid-transporting ATPase 1H	65	60	0.92
9868	Mitochondrial import receptor subunit TOM70	174	161	0.92
127579	DC-STAMP domain-containing protein 2	8	7	0.92
144132	Dynein heavy chain domain-containing protein 1	36	33	0.92
10272	Follistatin-related protein 3 Precursor	20	19	0.92
122830	N-acetyltransferase MAK3 homolog	112	103	0.92
9213	Xenotropic and polytropic retrovirus receptor 1	215	199	0.92
84299	Uncharacterized protein C17orf37	684	631	0.92
6809	Syntaxin-3	227	210	0.92
65082	Vacuolar protein sorting-associated protein 33A	77	71	0.92
100292792	-	48	45	0.92
27034	Isobutyryl-CoA dehydrogenase, mitochondrial Precursor	76	70	0.92
-	-	9	8	0.92
7291	Twist-related protein 1	24	22	0.92
442425	Forkhead box protein B2	14	13	0.92
9020	Mitogen-activated protein kinase kinase kinase 14	19	17	0.92
-	Serine/threonine-protein kinase tousel-like 2	144	133	0.92
1750	Homeobox protein DLX-6	10	9	0.92
3609	Interleukin enhancer-binding factor 3	88	81	0.92
6783	Estrogen sulfotransferase	45	42	0.92
27238	G patch domain and KOW motifs-containing protein	225	208	0.92
57687	Probable oxidoreductase KIAA1576	88	82	0.92
26523	Protein argonaute-1	27	25	0.92
53344	Cysteine-rich hydrophobic domain 1 protein	8	8	0.92
79671	NLR family member X1 Precursor	37	34	0.92
22878	Protein TRS85 homolog	150	139	0.92
2073	DNA repair protein complementing XP-G cells	314	289	0.92
29965	LITAF-like protein	76	70	0.92
3756	Potassium voltage-gated channel subfamily H member 1	42	39	0.92
1181	Chloride channel protein 2	38	36	0.92
5719	26S proteasome non-ATPase regulatory subunit 13	767	708	0.92
115703	TC10/CDC42 GTPase-activating protein	54	50	0.92
-	Glutamyl-peptide cyclotransferase-like protein	25	23	0.92
728715	Uncharacterized protein ENSP00000266432	31	28	0.92
90507	Secernin-2	204	188	0.92
79058	Tether containing UBX domain for GLUT4	45	41	0.92
746	UPF0197 transmembrane protein C11orf10	3596	3321	0.92
100288901	-	29	27	0.92
28956	Mitogen-activated protein-binding protein-interacting protein	620	572	0.92
100292535	-	27	25	0.92
-	Protein arginine N-methyltransferase 7	99	91	0.92
23457	ATP-binding cassette sub-family B member 9 Precursor	52	48	0.92
-	Cleft lip and palate transmembrane protein 1-like protein	1213	1121	0.92
201562	Protein-tyrosine phosphatase-like member B	49	45	0.92

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10288	Leukocyte immunoglobulin-like receptor subfamily B member 2 Precursor	10	9	0.92
9688	Nuclear pore complex protein Nup93	600	554	0.92
-	-	7	6	0.92
8099	Cyclin-dependent kinase 2-associated protein 1	9278	8572	0.92
643236	Transmembrane protein 72	9	8	0.92
-	Hemicentin-1 Precursor	197	182	0.92
100130814	-	101	93	0.92
54796	Zinc finger protein basonuclin-2	30	27	0.92
56141	Protocadherin alpha-7 Precursor	33	30	0.92
441009	-	12	11	0.92
6191	40S ribosomal protein S4, X isoform	8436	7797	0.92
100129826	-	11	10	0.92
7257	Translin-associated protein X	183	169	0.92
100134409	-	17	16	0.92
64318	Nucleolar complex protein 3 homolog	111	102	0.92
155060	Protein ZNF783	59	55	0.92
348487	Protein FAM131C	191	177	0.92
727765	Diacylglycerol O-acyltransferase 1	134	124	0.92
10507	Semaphorin-4D Precursor	51	47	0.92
81892	SRA stem-loop-interacting RNA-binding protein, mitochondrial Precursor	2707	2503	0.92
23555	Tetraspanin-15	211	195	0.92
83719	Protein yippee-like 3	327	303	0.92
5911	Ras-related protein Rap-2a Precursor	274	254	0.92
29883	CCR4-NOT transcription complex subunit 7	490	453	0.92
55870	Probable histone-lysine N-methyltransferase ASH1L	205	190	0.92
80006	UPF0533 protein C5orf44	176	163	0.92
9079	LIM domain-binding protein 2	182	169	0.92
23071	Thioredoxin domain-containing protein 4 Precursor	1389	1285	0.92
23557	SNARE-associated protein Snapin	387	358	0.92
51304	Palmitoyltransferase ZDHHC3	128	119	0.92
100288498	-	11	10	0.93
79850	Protein FAM57A	179	166	0.93
-	[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 1, mitochondrial Precursor	12	11	0.93
26149	Zinc finger protein 658	6	5	0.93
100134102	-	15	14	0.93
100288105	cDNA FLJ34090 fis, clone FCBBF3006399	13	12	0.93
8799	Peroxisomal membrane protein 11B	250	231	0.93
100286968	-	12	11	0.93
-	-	14798	13692	0.93
9889	Zinc finger BED domain-containing protein 4	70	65	0.93
7844	RING finger protein 103	152	141	0.93
10165	Calcium-binding mitochondrial carrier protein Aralar2	169	156	0.93
100294401	-	20	19	0.93
130814	PQ-loop repeat-containing protein 3 Precursor	275	254	0.93
90589	Zinc finger protein 625	6	6	0.93
-	Dihydroxyacetone phosphate acyltransferase	538	498	0.93
8932	Methyl-CpG-binding domain protein 2	727	673	0.93
54910	Semaphorin-4C Precursor	65	60	0.93
6059	ATP-binding cassette sub-family E member 1	597	552	0.93
374897	Suprabasin Precursor	50	46	0.93
-	tRNA 2'-phosphotransferase 1	415	384	0.93

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
7407	Valyl-tRNA synthetase	236	218	0.93
9474	Autophagy protein 5	66	61	0.93
-	Uncharacterized protein ENSP00000375222	26	24	0.93
-	-	1035	958	0.93
-	Ran-binding protein 3	17	16	0.93
5290	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit alpha isoform	29	27	0.93
7869	Semaphorin-3B Precursor	53	49	0.93
10213	26S proteasome non-ATPase regulatory subunit 14	1868	1730	0.93
6156	60S ribosomal protein L30	23086	21382	0.93
284611	Protein FAM102B	27	25	0.93
29980	Protein downstream neighbor of Son	143	133	0.93
53947	Lactosylceramide 4-alpha-galactosyltransferase	441	408	0.93
29925	Mannose-1-phosphate guanylttransferase beta	90	83	0.93
100132472	-	14	13	0.93
6154	60S ribosomal protein L26	18372	17020	0.93
1852	Dual specificity protein phosphatase 9	258	239	0.93
652708	Uncharacterized protein ENSP00000355193	26	24	0.93
8225	Putative GTP-binding protein 6	86	79	0.93
146923	RUN domain-containing protein 1	91	84	0.93
134430	WD repeat-containing protein 36	168	156	0.93
905	Cyclin-T2	93	86	0.93
58491	Endothelial zinc finger protein induced by tumor necrosis factor alpha	37	35	0.93
55276	Phosphoglucomutase-2	201	186	0.93
7867	MAP kinase-activated protein kinase 3	145	134	0.93
79703	Putative uncharacterized protein C11orf80	117	109	0.93
29978	Ubiquilin-2	35	32	0.93
140890	Splicing factor, arginine/serine-rich 12	469	434	0.93
23142	DCN1-like protein 4	71	65	0.93
-	GTPase IMAP family member 6	563	522	0.93
-	YEATS domain-containing protein 2	428	397	0.93
23243	Serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit A	199	184	0.93
1952	Cadherin EGF LAG seven-pass G-type receptor 2 Precursor	270	251	0.93
2633	Interferon-induced guanylate-binding protein 1	108	100	0.93
24144	Tuftelin-interacting protein 11	115	107	0.93
85026	Uncharacterized protein C9orf37	40	37	0.93
149699	Gametocyte-specific factor 1-like	30	27	0.93
112398	Egl nine homolog 2	299	277	0.93
114609	Toll/interleukin-1 receptor domain-containing adapter protein	32	30	0.93
79902	Nucleoporin NUP85	342	317	0.93
150275	Coiled-coil domain-containing protein 117	57	53	0.93
80185	Uncharacterized protein C8orf41	156	144	0.93
-	Disks large-associated protein 5	111	103	0.93
10099	Tetraspanin-3	2589	2402	0.93
5338	Phospholipase D2	51	47	0.93
54469	AN1-type zinc finger protein 6	1185	1099	0.93
26053	Autism susceptibility gene 2 protein	8	7	0.93
57642	Collagen alpha-1(XX) chain Precursor	14	13	0.93
65057	Adrenocortical dysplasia protein homolog	54	50	0.93
2303	Forkhead box protein C2	446	414	0.93

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5526	Serine/threonine-protein phosphatase 2A 56 kDa regulatory subunit beta isoform	30	28	0.93
81615	Transmembrane protein 163	30	28	0.93
4728	NADH dehydrogenase [ubiquinone] iron-sulfur protein 8, mitochondrial Precursor	810	752	0.93
203522	Protein DDX26B	10	10	0.93
362	Aquaporin-5	7	6	0.93
-	-	41	38	0.93
9296	V-type proton ATPase subunit F	1826	1694	0.93
23742	Protein C15orf2	12	11	0.93
-	Mitochondrial import receptor subunit TOM34	259	240	0.93
27018	Protein BEX3	6076	5639	0.93
4191	Malate dehydrogenase, mitochondrial Precursor	1356	1258	0.93
81033	Potassium voltage-gated channel subfamily H member 6	37	34	0.93
92181	Ubiquitin domain-containing protein 2	104	96	0.93
822	Macrophage-capping protein	523	485	0.93
23788	Mitochondrial carrier homolog 2	1490	1383	0.93
5496	Protein phosphatase 1G	720	668	0.93
100128703	-	12	11	0.93
10985	Translational activator GCN1	293	272	0.93
100292490	-	30	27	0.93
8408	Serine/threonine-protein kinase ULK1	82	76	0.93
828	Calcyphosin	71	66	0.93
547	Kinesin-like protein KIF1A	87	81	0.93
56917	Meis1, myeloid ecotropic viral integration site 1 homolog 3 isoform 1	24	22	0.93
-	Mitochondrial 18 kDa protein	246	228	0.93
7543	Zinc finger X-chromosomal protein	45	42	0.93
11128	DNA-directed RNA polymerase III subunit RPC1	53	50	0.93
5516	Serine/threonine-protein phosphatase 2A catalytic subunit beta isoform	1850	1718	0.93
-	Carcinoembryonic antigen-related cell adhesion molecule 21 Precursor	15	14	0.93
10243	Gephyrin	64	60	0.93
23336	Desmuslin	80	75	0.93
646508	Putative protein FAM90A-like	12	11	0.93
112574	Sorting nexin-18	41	38	0.93
-	NEDD4 family-interacting protein 1	215	199	0.93
1121	Rab proteins geranylgeranyltransferase component A 1	58	54	0.93
6746	Translocon-associated protein subunit beta Precursor	5653	5252	0.93
100293934	Putative uncharacterized protein ENSP00000383356	60	56	0.93
8341	Histone H2B type 1-N	110	103	0.93
4197	Myelodysplasia syndrome 1 protein	37	34	0.93
55224	Ethanolamine kinase 2	48	44	0.93
9362	Copine-6	248	230	0.93
284889	-	14	13	0.93
1103	Choline O-acetyltransferase	20	19	0.93
650638	Signal recognition particle 54 kDa protein	740	688	0.93
374454	Keratin, type II cytoskeletal 1b	21	20	0.93
642475	Putative uncharacterized protein C8orf73	22	21	0.93
83694	Ribosomal protein S6 kinase-like 1	7	6	0.93
2259	Fibroblast growth factor 14	19	18	0.93
-	Uncharacterized protein C22orf25	76	71	0.93
51603	Putative methyltransferase KIAA0859	97	91	0.93

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1504	Chymotrypsinogen B2 Precursor	40	37	0.93
2071	TFIIH basal transcription factor complex helicase XPB subunit	322	300	0.93
2784	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-3	71	66	0.93
79778	MICAL-like protein 2	269	250	0.93
149461	Claudin-19	11	10	0.93
9410	U5 small nuclear ribonucleoprotein 40 kDa protein	472	439	0.93
400916	Coiled-coil-helix-coiled-coil-helix domain-containing protein 10 Precursor	522	485	0.93
-	-	8731	8121	0.93
1622	Acyl-CoA-binding protein	1868	1738	0.93
92815	Histone H2A type 3	100	93	0.93
100290261	-	30	28	0.93
100133760	Histone demethylase JARID1B	146	136	0.93
100133752	-	7	7	0.93
220	Aldehyde dehydrogenase family 1 member A3	22	20	0.93
-	Leucine-rich repeats and immunoglobulin-like domains protein 1 Precursor	159	148	0.93
125965	Cytochrome c oxidase subunit VIb isoform 2	66	62	0.93
125476	INO80 complex subunit C	503	468	0.93
5947	Retinol-binding protein 1	202	188	0.93
55672	Neuroblastoma breakpoint family member 1	71	66	0.93
8655	Dynein light chain 1, cytoplasmic	4913	4571	0.93
3068	Hepatoma-derived growth factor	1781	1657	0.93
-	Transmembrane protein 181	633	589	0.93
6760	Protein SSXT	323	301	0.93
221416	Uncharacterized protein C6orf223	533	496	0.93
128025	WD repeat-containing protein 64	20	19	0.93
651986	-	27	25	0.93
4499	Metallothionein-1M	16	15	0.93
4111	Melanoma-associated antigen 12	22	21	0.93
-	Kelch-like protein 5	216	201	0.93
5884	Cell cycle checkpoint protein RAD17	164	153	0.93
146540	Zinc finger protein 785	44	41	0.93
1183	H(+)/Cl(-) exchange transporter 4	45	42	0.93
57513	Caskin-2	84	78	0.93
-	Putative uncharacterized protein	81	75	0.93
11093	A disintegrin and metalloproteinase with thrombospondin motifs 13 Precursor	33	31	0.93
10952	Protein transport protein Sec61 subunit beta	2678	2492	0.93
6662	Transcription factor SOX-9	17	16	0.93
55272	U3 small nucleolar ribonucleoprotein protein IMP3	507	472	0.93
-	Mucolipin-1	91	85	0.93
642395	Paraspeckle component 1	181	168	0.93
9772	Uncharacterized protein KIAA0195	74	69	0.93
9762	Uncharacterized protein KIAA0552	22	20	0.93
-	cAMP-specific 3',5'-cyclic phosphodiesterase 7B	76	70	0.93
246175	CCR4-NOT transcription complex subunit 6-like	31	29	0.93
6499	superkiller viralicidic activity 2-like homolog	56	52	0.93
23585	Transmembrane protein 50A	707	659	0.93
4668	Alpha-N-acetylgalactosaminidase Precursor	199	185	0.93
51283	Bifunctional apoptosis regulator	442	412	0.93

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
84617	Tubulin beta-6 chain	3550	3306	0.93
11015	ER lumen protein retaining receptor 3	297	276	0.93
-	-	44	41	0.93
-	WD repeat-containing protein 48	133	124	0.93
2700	Gap junction alpha-3 protein	46	43	0.93
197358	Protein NLRC3	18	17	0.93
-	Vasodilator-stimulated phosphoprotein	385	358	0.93
202052	DnaJ homolog subfamily C member 18	37	35	0.93
1191	Clusterin Precursor	2973	2769	0.93
729012	Spindle and kinetochore-associated protein 2	297	277	0.93
54472	Toll-interacting protein	45	42	0.93
65264	Ubiquitin-conjugating enzyme E2 Z	601	560	0.93
646509	-	24	22	0.93
140831	Zinc finger SWIM domain-containing protein 3	79	74	0.93
10147	Putative splicing factor, arginine/serine-rich 14	133	124	0.93
100293247	-	66	61	0.93
100287932	Mitochondrial import inner membrane translocase subunit Tim23	579	540	0.93
22979	Protein EFR3 homolog B	149	139	0.93
91408	Transcription factor BTF3 homolog 4	252	235	0.93
442213	Patched domain-containing protein C6orf138	27	25	0.93
-	Zinc finger protein 589	11	10	0.93
51338	Membrane-spanning 4-domains subfamily A member 4A	36	33	0.93
23080	Uncharacterized protein KIAA0241	62	57	0.93
9697	Translocation-associated membrane protein 2	317	295	0.93
84285	Probable RNA-binding protein EIF1AD	65	61	0.93
100131403	-	12	11	0.93
4306	Mineralocorticoid receptor	8	7	0.93
114800	Coiled-coil domain-containing protein 85A	104	97	0.93
100134189	Mediator of RNA polymerase II transcription subunit 27	160	150	0.93
51247	Polyadenylate-binding protein-interacting protein 2	1317	1228	0.93
-	Putative olfactory receptor 7A2	7	7	0.93
100288263	LOC644617 protein Fragment	154	144	0.93
55028	Uncharacterized protein C17orf80	60	56	0.93
10371	Semaphorin-3A Precursor	15	14	0.93
114899	Complement C1q tumor necrosis factor-related protein 3 Precursor	9	8	0.93
-	Fatty acid desaturase 2	1884	1757	0.93
113277	Transmembrane protein 106A	25	23	0.93
170954	Phostensin	536	500	0.93
-	Dedicator of cytokinesis protein 4	27	25	0.93
-	Synaptonemal complex central element protein 1	27	25	0.93
2307	Forkhead box protein S1	62	58	0.93
57733	Cytosolic beta-glucosidase	12	11	0.93
161247	Fat-inducing protein 1	40	38	0.93
4686	Nuclear cap-binding protein subunit 1	184	172	0.93
3455	Interferon-alpha/beta receptor beta chain Precursor	314	293	0.93
283375	Zinc transporter ZIP5 Precursor	29	27	0.93
100287428	Paraneoplastic antigen-like protein 6A	80	75	0.93
100132214	cDNA FLJ50902, moderately similar to Ras GTPase-activating protein 4	37	34	0.93
83641	Protein FAM107B	604	564	0.93
3991	Hormone-sensitive lipase	66	62	0.93
408186	Uncharacterized protein ENSP00000335173	32	30	0.93

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9765	Zinc finger FYVE domain-containing protein 16 (Endofin)	102	95	0.93
84456	Lethal(3)malignant brain tumor-like 3 protein	213	199	0.93
-	Glycine receptor subunit alpha-4 Precursor	27	25	0.93
54467	Ankyrin repeat and IBR domain-containing protein 1	120	112	0.93
22880	MORC family CW-type zinc finger protein 2	291	271	0.93
4731	NADH dehydrogenase [ubiquinone] flavoprotein 3, mitochondrial Precursor	560	523	0.93
22888	RING finger protein 37	44	41	0.93
23633	Importin subunit alpha-7 (Karyopherin subunit alpha-6)	191	179	0.93
91689	UPF0466 protein C22orf32, mitochondrial Precursor	44	41	0.93
2802	Golgin subfamily A member 3	419	391	0.93
79947	Dehydrodolichyl diphosphate synthase	52	48	0.93
28992	MACRO domain-containing protein 1	23	22	0.93
7593	Myeloid zinc finger 1	84	78	0.93
91404	SEC14 domain and spectrin repeat-containing protein 1	269	251	0.93
5432	DNA-directed RNA polymerase II subunit RPB3	298	279	0.93
-	Coiled-coil domain-containing protein 99	225	210	0.93
119	Beta-adducin	25	24	0.93
6843	Vesicle-associated membrane protein 1	15	14	0.93
-	-	26	25	0.93
847	Catalase	197	184	0.93
100293070	-	15	14	0.93
-	Polypyrimidine tract-binding protein 2	42	40	0.93
-	-	37	35	0.93
-	Annexin A5	5541	5176	0.93
7049	TGF-beta receptor type III Precursor	22	21	0.93
9994	CASP8-associated protein 2	72	67	0.93
-	-	913	853	0.93
51573	Glycerophosphodiester phosphodiesterase 1	553	516	0.93
116349	Putative uncharacterized protein LOC116349 Precursor	18	17	0.93
1317	High affinity copper uptake protein 1	41	38	0.93
92092	Zinc finger CCCH-type antiviral protein 1-like	30	28	0.93
51092	SID1 transmembrane family member 2 Precursor	13	12	0.93
3054	Host cell factor	21	20	0.93
3987	LIM and senescent cell antigen-like-containing domain protein 1	2425	2266	0.93
116541	39S ribosomal protein L54, mitochondrial Precursor	802	750	0.93
51684	Suppressor of fused homolog	12	11	0.93
260294	Putative methyltransferase NSUN5C	101	95	0.93
8569	MAP kinase-interacting serine/threonine-protein kinase 1	102	96	0.93
6706	Small proline-rich protein 2G	6	5	0.93
81602	Cytidine and dCMP deaminase domain-containing protein 1	13	12	0.93
-	Protein LAP2	379	355	0.93
25880	Transmembrane protein 186	110	103	0.93
59274	Mesoderm development candidate 1	79	74	0.93
23617	Testis-specific serine/threonine-protein kinase 2	29	27	0.93
100292734	-	9	8	0.93
84869	Carbonyl reductase 4	105	98	0.93
818	Calcium/calmodulin-dependent protein kinase type II gamma chain	91	85	0.93
100289266	-	21	19	0.93
5863	Ral guanine nucleotide dissociation stimulator-like 2	313	293	0.93
2935	Eukaryotic peptide chain release factor GTP-binding subunit ERF3A	881	824	0.94

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1847	Dual specificity protein phosphatase 5	423	396	0.94
84440	Rab11 family-interacting protein 4	9	8	0.94
84458	Ligand-dependent corepressor	105	99	0.94
219899	Tubulin-specific chaperone cofactor E-like protein	26	24	0.94
100287510	3-phosphoinositide-dependent protein kinase 1	48	45	0.94
27332	Zinc finger protein 638	69	65	0.94
-	Nicotinate phosphoribosyltransferase	101	94	0.94
-	Uncharacterized hematopoietic stem/progenitor cells protein MDS027	6	5	0.94
79939	Solute carrier family 35 member E1	78	73	0.94
-	ATP-binding cassette sub-family A member 5	74	69	0.94
162427	Protein FAM134C	16	15	0.94
10881	Actin-like protein 7A	12	11	0.94
81543	Leucine-rich repeat-containing protein 3 Precursor	9	8	0.94
8148	TATA-binding protein-associated factor 2N	43	41	0.94
8390	Olfactory receptor 1G1	12	11	0.94
22875	Ectonucleotide pyrophosphatase/phosphodiesterase family member 4 Precursor	59	55	0.94
93986	Forkhead box protein P2	12	12	0.94
51621	Krueppel-like factor 13	7	6	0.94
100134695	Putative uncharacterized protein FLJ40140	22	21	0.94
54994	Protein C20orf11	190	178	0.94
29952	Dipeptidyl-peptidase 2 Precursor	322	302	0.94
-	Centrosomal protein of 120 kDa	15	14	0.94
100293608	HSPC088 Fragment	54	51	0.94
338328	Glycosylphosphatidylinositol-anchored high density lipoprotein-binding protein 1 Precursor	60	56	0.94
6942	Transcription factor 20	86	81	0.94
79724	Zinc finger protein 768	73	68	0.94
-	Signal recognition particle 68 kDa protein	478	447	0.94
23588	Kelch domain-containing protein 2	321	300	0.94
26003	Golgi reassembly-stacking protein 2	300	281	0.94
400696	-	6	6	0.94
5630	Peripherin	32	30	0.94
3420	Isocitrate dehydrogenase [NAD] subunit beta, mitochondrial Precursor	696	651	0.94
7200	Prothyroliberin Precursor	48	45	0.94
26994	RING finger protein 11	749	701	0.94
57592	Zinc finger protein 687	12	11	0.94
283899	INO80 complex subunit E	49	46	0.94
-	N-acetylated-alpha-linked acidic dipeptidase-like protein	113	105	0.94
79892	UPF0557 protein C10orf119	265	248	0.94
30818	Calsenilin	44	41	0.94
-	Protein slowmo homolog 2	422	395	0.94
9130	Protein FAM50A	1146	1074	0.94
10960	Vesicular integral-membrane protein VIP36 Precursor	892	835	0.94
3596	Interleukin-13 Precursor	25	24	0.94
-	Alpha-1,3-mannosyltransferase ALG2	268	251	0.94
8027	Signal transducing adapter molecule 1	95	89	0.94
387755	Protein inscuteable homolog	6	6	0.94
56886	UDP-glucose:glycoprotein glucosyltransferase 1 Precursor	39	36	0.94
55421	Uncharacterized protein C17orf85	115	108	0.94
56674	Transmembrane protein 9B Precursor	953	893	0.94
114824	Paraneoplastic antigen-like protein 5	16	15	0.94

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3690	Integrin beta-3 Precursor	79	74	0.94
-	Glycogen phosphorylase, brain form	130	122	0.94
130074	UPF0541 protein FAM168B (p20)	42	40	0.94
83935	Transmembrane protein 133	22	21	0.94
6210	40S ribosomal protein S15a	18494	17337	0.94
340602	Uncharacterized protein LOC340602	45	42	0.94
26115	Protein TANC2	79	74	0.94
3835	Kinesin-like protein KIF22	169	158	0.94
9459	Rho guanine nucleotide exchange factor 6	100	94	0.94
6612	Small ubiquitin-related modifier 3 Precursor	584	548	0.94
153527	Zinc finger matrin-type protein 2	521	489	0.94
9938	Rho GTPase-activating protein 25	14	13	0.94
54863	Torsin family protein C9orf167	468	439	0.94
51112	Tetratricopeptide repeat protein 15	112	105	0.94
-	Folate transporter-like protein DKFZp547H025	50	46	0.94
6375	Lymphotactin Precursor	17	16	0.94
-	Major facilitator superfamily domain-containing protein 5	148	139	0.94
283337	Zinc finger protein 740	9	8	0.94
51379	Cytokine receptor-like factor 3	96	90	0.94
7283	Tubulin gamma-1 chain	886	831	0.94
3295	Peroxisomal multifunctional enzyme type 2	475	445	0.94
6640	Alpha-1-syntrophin	1445	1356	0.94
6256	Retinoic acid receptor RXR-alpha	129	121	0.94
6652	Sorbitol dehydrogenase	286	268	0.94
-	Lactosylceramide alpha-2,3-sialyltransferase	105	99	0.94
63979	Fidgetin-like protein 1	68	64	0.94
51550	Cyclin-dependent kinase 2-interacting protein	249	233	0.94
10046	Mastermind-like domain-containing protein 1	23	22	0.94
64755	UPF0420 protein C16orf58	163	153	0.94
94104	GC-rich sequence DNA-binding factor homolog	68	64	0.94
53	Lysosomal acid phosphatase Precursor	92	86	0.94
100292522	-	85	80	0.94
4853	Neurogenic locus notch homolog protein 2 Precursor	26	25	0.94
8577	Tomoregulin-1 Precursor	113	106	0.94
59335	PR domain zinc finger protein 12	19	18	0.94
-	N-terminal acetyltransferase complex ARD1 subunit homolog A	334	314	0.94
-	Trifunctional enzyme subunit beta, mitochondrial Precursor	1115	1046	0.94
5681	Serine/threonine-protein kinase H1	173	162	0.94
23438	Probable histidyl-tRNA synthetase, mitochondrial Precursor	138	129	0.94
3772	ATP-sensitive inward rectifier potassium channel 15	13	12	0.94
100131251	-	18	17	0.94
10672	Guanine nucleotide-binding protein subunit alpha-13	224	210	0.94
54739	XIAP-associated factor 1	49	46	0.94
8342	Histone H2B type 1-M	57	54	0.94
11153	FIC domain-containing protein	41	38	0.94
171546	Small subunit of serine palmitoyltransferase A	122	114	0.94
341416	Olfactory receptor 6C2	22	21	0.94
8880	Far upstream element-binding protein 1	722	678	0.94
55671	Serine/threonine-protein phosphatase 4 regulatory subunit 3A	245	230	0.94
8789	Fructose-1,6-bisphosphatase isozyme 2	26	24	0.94

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
26872	Metalloreductase STEAP1	162	152	0.94
100287750	Uncharacterized protein C1orf86	17	16	0.94
57468	Solute carrier family 12 member 5	9	9	0.94
3445	Interferon alpha-8 Precursor	105	99	0.94
2581	Galactocerebrosidase Precursor	118	111	0.94
55572	FAD-dependent oxidoreductase domain-containing protein 1	105	99	0.94
80219	Protein COQ10 B, mitochondrial Precursor	215	202	0.94
4121	Mannosyl-oligosaccharide 1,2-alpha-mannosidase IA	24	22	0.94
2067	DNA excision repair protein ERCC-1	338	318	0.94
340543	Transcription elongation factor A protein-like 5	30	28	0.94
9398	Immunoglobulin superfamily member 2 Precursor	30	28	0.94
9733	Squamous cell carcinoma antigen recognized by T-cells 3	169	158	0.94
8417	Syntaxin-7	486	457	0.94
-	Bridging integrator 3	178	167	0.94
8893	Translation initiation factor eIF-2B subunit epsilon	278	261	0.94
100290913	-	33	31	0.94
-	Uncharacterized protein C14orf133	107	101	0.94
23401	GSK-3-binding protein FRAT2	30	28	0.94
-	Mitotic spindle assembly checkpoint protein MAD2A	114	107	0.94
51053	Geminin	276	259	0.94
3608	Interleukin enhancer-binding factor 2	1637	1539	0.94
163590	Torsin-1A-interacting protein 2	33	31	0.94
7584	Zinc finger protein 35	40	38	0.94
55693	JmjC domain-containing histone demethylation protein 3D	49	46	0.94
649034	pepsinogen 3, group I	394	371	0.94
30001	ERO1-like protein alpha Precursor	235	221	0.94
27036	Sialic acid-binding Ig-like lectin 7 Precursor	99	93	0.94
149563	Putative uncharacterized protein C1orf64	6	6	0.94
1489	Cardiotrophin-1	16	15	0.94
1329	Cytochrome c oxidase subunit 5B, mitochondrial Precursor	1837	1727	0.94
162	AP-1 complex subunit beta-1	989	930	0.94
-	Selenoprotein M Precursor	754	709	0.94
84269	Coiled-coil-helix-coiled-coil-helix domain-containing protein 5	162	152	0.94
6996	G/T mismatch-specific thymine DNA glycosylase	215	202	0.94
55676	Zinc transporter 6	45	42	0.94
431705	Astacin-like metalloendopeptidase Precursor	17	16	0.94
55051	UPF0614 protein C14orf102	19	18	0.94
51380	Cysteine sulfinic acid decarboxylase	63	59	0.94
55973	B-cell receptor-associated protein 29	244	229	0.94
100131031	-	46	44	0.94
-	Carboxy-terminal domain RNA polymerase II polypeptide A small phosphatase 2	66	62	0.94
4148	Matrilin-3 Precursor	10	10	0.94
6169	60S ribosomal protein L38	11581	10891	0.94
10490	Vesicle transport through interaction with t-SNAREs homolog 1B	865	814	0.94
55789	DEP domain-containing protein 1B	44	42	0.94
81537	Sphingosine-1-phosphate phosphatase 1	15	14	0.94
100289552	-	24	23	0.94
3326	Heat shock protein HSP 90-beta	5758	5416	0.94
221060	Uncharacterized protein C10orf111	9	9	0.94
80820	Endonuclease/exonuclease/phosphatase family domain-containing protein 1	6	6	0.94

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
22981	Ninein-like protein	261	245	0.94
55731	Uncharacterized protein C17orf63	14	13	0.94
1406	Cone-rod homeobox protein	57	53	0.94
85458	Dixin	81	77	0.94
54386	Telomeric repeat-binding factor 2-interacting protein 1	693	652	0.94
-	Stimulated by retinoic acid gene 13 protein homolog	627	590	0.94
9670	Importin-13	39	37	0.94
57403	Ras-related protein Rab-22A	141	132	0.94
23259	Phospholipase DDHD2	49	46	0.94
100287449	-	40	38	0.94
79845	RING finger protein 122	21	20	0.94
54995	3-oxoacyl-[acyl-carrier-protein] synthase, mitochondrial Precursor	61	58	0.94
84079	Ankyrin repeat domain-containing protein 27	35	33	0.94
8031	Nuclear receptor coactivator 4	1792	1686	0.94
100287805	-	30	28	0.94
10237	Solute carrier family 35 member B1	927	872	0.94
900	Cyclin-G1	1921	1808	0.94
57610	Ran-binding protein 10	9	9	0.94
126375	Zinc finger protein 792	12	11	0.94
50507	NADPH oxidase 4	225	212	0.94
-	TBC1 domain family member 13	168	158	0.94
259239	Protein WFDIC11 Precursor	9	8	0.94
116085	Solute carrier family 22 member 12	97	91	0.94
3161	Hyaluronan mediated motility receptor	113	106	0.94
2012	Epithelial membrane protein 1	2508	2361	0.94
56910	StAR-related lipid transfer protein 7, mitochondrial Precursor	2758	2596	0.94
79090	Trafficking protein particle complex subunit 6A	197	186	0.94
83941	TM2 domain-containing protein 1 Precursor	502	473	0.94
-	Zinc finger and BTB domain-containing protein 22	74	69	0.94
647343	-	64	60	0.94
10548	Transmembrane 9 superfamily member 1 Precursor	395	372	0.94
-	Kynurenine-oxoglutarate transaminase 1	57	53	0.94
10847	Helicase SRCAP	44	42	0.94
7004	Transcriptional enhancer factor TEF-3	147	138	0.94
114789	Calcium-binding mitochondrial carrier protein SCaMC-2	175	165	0.94
84988	Protein phosphatase 1 regulatory subunit 16A	161	152	0.94
727997	40S ribosomal protein S12	20948	19731	0.94
201798	Tigger transposable element-derived protein 4	84	79	0.94
1845	Dual specificity protein phosphatase 3	516	486	0.94
79066	Putative methyltransferase METT10D	24	23	0.94
768	Carbonic anhydrase 9 Precursor	19	18	0.94
128240	Apolipoprotein A-I-binding protein Precursor	725	683	0.94
10038	Poly [ADP-ribose] polymerase 2	182	171	0.94
10458	Brain-specific angiogenesis inhibitor 1-associated protein 2	64	61	0.94
23051	Zinc fingers and homeoboxes protein 3	23	22	0.94
51294	Protocadherin-12 Precursor (Vascular cadherin-2)	453	427	0.94
57606	SLAIN motif-containing protein 2	68	64	0.94
-	Putative hexokinase HKDC1	8	8	0.94
150771	Inositol 1,4,5-triphosphate receptor-interacting protein-like 1 Precursor	22	20	0.94
23241	Phosphofurin acidic cluster sorting protein 2	26	24	0.94
9274	B-cell CLL/lymphoma 7 protein family member C	240	226	0.94

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
150684	COMM domain-containing protein 1	593	558	0.94
-	Lysosomal acid lipase/cholesteryl ester hydrolase Precursor	444	418	0.94
85406	DnaJ homolog subfamily C member 14	114	107	0.94
54539	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 11, mitochondrial Precursor	1140	1074	0.94
51507	UPF0549 protein C20orf43	820	773	0.94
-	Neuralized-like protein 1	30	28	0.94
64750	E3 ubiquitin-protein ligase SMURF2	419	395	0.94
79816	Transducin-like enhancer protein 6	37	35	0.94
25966	C2 domain-containing protein 2 Precursor	7	7	0.94
1593	Cytochrome P450 27, mitochondrial Precursor	40	38	0.94
-	Potassium channel subfamily K member 1	58	55	0.94
152137	Coiled-coil domain-containing protein 50	882	832	0.94
-	Putative protein USP6-like 1	116	109	0.94
26272	F-box only protein 4	53	50	0.94
55233	Mps one binder kinase activator-like 1B	825	778	0.94
7155	DNA topoisomerase 2-beta	448	422	0.94
-	Target of Myb protein 1	78	74	0.94
3020	Histone H3.3	12415	11709	0.94
147687	Zinc finger protein 417	50	47	0.94
-	Glycerophosphodiester phosphodiesterase domain-containing protein 3	39	37	0.94
100291283	-	122	115	0.94
51643	Transmembrane BAX inhibitor motif-containing protein 4	1069	1009	0.94
63967	Claspin	72	68	0.94
1385	cAMP response element-binding protein	290	274	0.94
23133	PHD finger protein 8	20	19	0.94
8269	Transmembrane protein 187	60	56	0.94
56121	Protocadherin beta-15 Precursor	66	62	0.94
3298	Heat shock factor protein 2	75	71	0.94
-	-	34	32	0.94
100134147	-	16	15	0.94
199800	hypothetical protein LOC199800	218	205	0.94
55147	Probable RNA-binding protein 23	136	128	0.94
375346	Transmembrane protein 110	41	38	0.94
3459	Interferon-gamma receptor alpha chain Precursor	325	307	0.94
23405	Endoribonuclease Dicer	27	25	0.94
55744	Uncharacterized protein C7orf44	457	431	0.94
7386	Cytochrome b-c1 complex subunit Rieske, mitochondrial Precursor	1916	1808	0.94
54876	Uncharacterized protein C4orf30	59	56	0.94
4117	Serine/threonine-protein kinase MAK	17	16	0.94
220202	Protein atonal homolog 7	14	14	0.94
91875	Tetratricopeptide repeat protein 5	96	91	0.94
1962	Peroxisomal bifunctional enzyme	13	13	0.94
-	Mediator of RNA polymerase II transcription subunit 13	117	110	0.94
10327	Alcohol dehydrogenase [NADP+]	939	886	0.94
8731	mRNA cap guanine-N7 methyltransferase	149	141	0.94
100131294	Ras-related protein Rab-13	4181	3948	0.94
-	Uncharacterized protein ENSP00000316510	31	29	0.94
23678	Serine/threonine-protein kinase Sgk3	75	71	0.94
27440	Cat eye syndrome critical region protein 5 Precursor	270	255	0.94
126668	Tudor domain-containing protein 10	23	22	0.94
-	Olfactory receptor 51T1	7	7	0.94

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
84926	SPRY domain-containing protein 3	213	201	0.94
401052	Uncharacterized protein ENSP00000373319	43	41	0.94
57010	Calcium-binding protein 4	187	177	0.94
54939	COMM domain-containing protein 4	1410	1332	0.94
388076	40S ribosomal protein S8	22565	21316	0.94
100288196	-	106	100	0.94
50614	Polypeptide N-acetylgalactosaminyltransferase 9	13	13	0.94
55593	OTU domain-containing protein 5	137	129	0.94
100289310	-	23	22	0.94
-	Alpha-aminoadipic semialdehyde dehydrogenase	629	595	0.94
2224	Farnesyl pyrophosphate synthetase	5006	4731	0.94
-	-	403	381	0.95
55644	Probable O-sialoglycoprotein endopeptidase	241	228	0.95
-	-	2571	2430	0.95
-	Seven transmembrane helix receptor	45	42	0.95
3108	HLA class II histocompatibility antigen, DM alpha chain Precursor	10	9	0.95
374354	NHL repeat-containing protein 2	24	23	0.95
-	-	437	413	0.95
8085	Histone-lysine N-methyltransferase MLL2	8	8	0.95
125058	TBC1 domain family member 16	24	22	0.95
9768	PCNA-associated factor	1027	971	0.95
222865	Transmembrane protein 130 Precursor	76	71	0.95
1652	D-dopachrome decarboxylase	1437	1358	0.95
283159	Olfactory receptor 8D1	25	24	0.95
8202	Nuclear receptor coactivator 3	25	24	0.95
23786	Bcl-2-like protein 13	147	139	0.95
8935	Src kinase-associated phosphoprotein 2	271	257	0.95
6007	Blood group Rh(D) polypeptide	53	50	0.95
8803	Succinyl-CoA ligase [ADP-forming] subunit beta, mitochondrial Precursor	242	229	0.95
80315	Cytoplasmic polyadenylation element-binding protein 4	32	31	0.95
-	40S ribosomal protein S21	16712	15803	0.95
10045	SH2 domain-containing protein 3A	29	28	0.95
100294394	-	11	10	0.95
4074	Cation-dependent mannose-6-phosphate receptor Precursor	602	569	0.95
-	Olfactory receptor 6C4	100	94	0.95
137492	Vacuolar protein sorting-associated protein 37A	158	150	0.95
3315	Heat shock protein beta-1	558	528	0.95
51426	DNA polymerase kappa	36	34	0.95
100289938	Cytoplasmic tRNA 2-thiolation protein 2	34	32	0.95
7402	Utrophin	17	16	0.95
124402	Protein FAM100A	45	43	0.95
100130387	-	38	36	0.95
51292	GMP reductase 2	399	378	0.95
100292149	-	58	55	0.95
29940	Dermatan-sulfate epimerase Precursor	93	88	0.95
23564	N(G),N(G)-dimethylarginine dimethylaminohydrolase 2	1068	1011	0.95
10127	Zinc finger protein 263	102	97	0.95
10475	Tripartite motif-containing protein 38	217	206	0.95
54765	Tripartite motif-containing protein 44	197	186	0.95
55093	Uncharacterized protein C8orf32	194	183	0.95
3273	Histidine-rich glycoprotein Precursor	105	99	0.95
10897	Protein YIF1A	1359	1286	0.95

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
221687	RING finger protein 182	6	6	0.95
54868	Transmembrane protein 104	70	66	0.95
6908	TATA-box-binding protein	131	124	0.95
-	Chromodomain-helicase-DNA-binding protein 4	480	455	0.95
-	-	2485	2351	0.95
7569	Zinc finger protein 182	24	22	0.95
22997	Protein turtle homolog B Precursor	24	23	0.95
6165	60S ribosomal protein L35a	11513	10897	0.95
388474	60S ribosomal protein L7a	13975	13227	0.95
83548	Conserved oligomeric Golgi complex subunit 3	156	148	0.95
728802	-	8	8	0.95
797	Calcitonin gene-related peptide 2 Precursor	42	40	0.95
5861	Ras-related protein Rab-1A	2353	2227	0.95
8082	Sarcospan	21	19	0.95
-	Acyl-coenzyme A thioesterase 9	1133	1072	0.95
54873	Palmdelphin	1107	1048	0.95
10328	Neighbor of COX4	422	400	0.95
11325	ATP-dependent RNA helicase DDX42	98	93	0.95
-	-	49	47	0.95
7022	Transcription factor AP-2 gamma	6	6	0.95
6945	Max-like protein X	208	197	0.95
2116	ETS translocation variant 2	16	15	0.95
-	Nucleoside diphosphate kinase, mitochondrial Precursor	744	705	0.95
-	Dr1-associated corepressor	549	520	0.95
6363	C-C motif chemokine 19 Precursor	27	25	0.95
199675	Mast cell-expressed membrane protein 1	25	23	0.95
29934	Sorting nexin-12	34	32	0.95
100288764	CDNA FLJ20802 fis, clone ADSU01223	15	14	0.95
55662	Hypoxia-inducible factor 1-alpha inhibitor	64	60	0.95
-	LIM/homeobox protein Lhx3	20	19	0.95
5193	Peroxisome assembly protein 12	39	37	0.95
51809	N-acetylgalactosaminyltransferase 7	592	561	0.95
26517	Mitochondrial import inner membrane translocase subunit Tim13	1027	973	0.95
100288775	-	35	33	0.95
-	-	9	9	0.95
55330	Protein cappuccino homolog	284	269	0.95
51398	UPF0139 membrane protein C19orf56	1381	1308	0.95
9917	Protein FAM20B Precursor	460	436	0.95
221662	RNA-binding protein 24	230	218	0.95
8572	PDZ and LIM domain protein 4	424	402	0.95
64123	EGF, latrophilin and seven transmembrane domain-containing protein 1 Precursor	2995	2838	0.95
81691	Putative RNA exonuclease NEF-sp	21	20	0.95
4924	Nucleobindin-1 Precursor	195	184	0.95
22934	Ribose-5-phosphate isomerase	241	229	0.95
1437	Granulocyte-macrophage colony-stimulating factor Precursor	30	28	0.95
55343	GDP-fucose transporter 1	73	70	0.95
100292207	-	41	39	0.95
56993	Mitochondrial import receptor subunit TOM22 homolog	1245	1180	0.95
80179	Myosin-XIX	146	138	0.95
118424	Ubiquitin-conjugating enzyme E2 J2	387	366	0.95

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
498	ATP synthase subunit alpha, mitochondrial Precursor	7989	7572	0.95
5738	Prostaglandin F2 receptor negative regulator Precursor	97	92	0.95
-	Hydroxysteroid dehydrogenase-like protein 2	306	290	0.95
202	Absent in melanoma 1 protein	12	11	0.95
196074	Putative S-adenosyl-L-methionine-dependent methyltransferase METT5D1	61	57	0.95
4733	Developmentally-regulated GTP-binding protein 1	657	623	0.95
257364	Sorting nexin-33	42	40	0.95
90592	Zinc finger protein 700	34	32	0.95
100294305	-	20	19	0.95
5689	Proteasome subunit beta type-1 Precursor	4953	4698	0.95
79147	Fukutin-related protein	112	106	0.95
6659	Transcription factor SOX-4	735	697	0.95
80011	NEFA-interacting nuclear protein NIP30	263	249	0.95
79872	E3 ubiquitin-protein ligase Hakai	52	49	0.95
-	Hepatitis B virus X-interacting protein	1271	1205	0.95
51035	UBX domain-containing protein 1	806	765	0.95
100289317	-	16	15	0.95
100131326	-	23	22	0.95
29842	Transcription factor CP2-like protein 1	12	11	0.95
5817	Poliovirus receptor Precursor	132	125	0.95
100287151	-	272	258	0.95
27141	Cell death activator CIDE-B	23	21	0.95
10498	Histone-arginine methyltransferase CARM1	541	514	0.95
53407	Syntaxin-18	48	45	0.95
6242	Rhotekin	26	24	0.95
-	-	9355	8878	0.95
-	Zinc finger protein 416	41	39	0.95
51286	Cell cycle exit and neuronal differentiation protein 1	64	60	0.95
23378	Cerebral protein 1	94	89	0.95
8467	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A member 5	335	318	0.95
390081	Olfactory receptor 52E4	10	9	0.95
22899	Rho guanine nucleotide exchange factor 15	36	34	0.95
9948	WD repeat-containing protein 1	3291	3124	0.95
-	Spliceosome RNA helicase BAT1	582	553	0.95
100134152	-	12	12	0.95
5825	ATP-binding cassette sub-family D member 3	73	69	0.95
5253	PHD finger protein 2	139	132	0.95
-	KH domain-containing, RNA-binding, signal transduction-associated protein 1 (p68)	974	924	0.95
10907	Thioredoxin-like protein 4A	42	40	0.95
100287772	-	66	63	0.95
-	Elongator complex protein 4	96	91	0.95
2993	Glycophorin-A Precursor	20	19	0.95
55262	Uncharacterized protein C7orf43	30	28	0.95
6634	Small nuclear ribonucleoprotein Sm D3	1556	1477	0.95
85465	Ethanolaminephosphotransferase 1	61	58	0.95
124359	Chromodomain Y-like protein 2	31	30	0.95
55776	Uncharacterized protein C6orf64	178	169	0.95
51329	ADP-ribosylation factor-like protein 6-interacting protein 4	2209	2098	0.95
1780	Cytoplasmic dynein 1 intermediate chain 1	23	22	0.95
9189	Zinc finger BED domain-containing protein 1	299	284	0.95
84301	Protein DDI1 homolog 2	46	44	0.95

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
26000	TBC1 domain family member 10B	90	85	0.95
50613	Ubiquilin-3	17	16	0.95
257019	FERM domain-containing protein 3	96	91	0.95
9810	E3 ubiquitin-protein ligase BRE1B	160	152	0.95
-	NFU1 iron-sulfur cluster scaffold homolog, mitochondrial Precursor	585	556	0.95
517	ATP synthase lipid-binding protein, mitochondrial Precursor	4972	4723	0.95
-	HMG box transcription factor BBX	423	402	0.95
55347	Abhydrolase domain-containing protein 10, mitochondrial Precursor	282	268	0.95
10282	BET1 homolog	9	8	0.95
80071	Coiled-coil domain-containing protein 15	47	45	0.95
84914	Zinc finger protein 587	36	35	0.95
100292196	-	100	95	0.95
-	RNA exonuclease 4	143	136	0.95
-	Fibulin-5 Precursor	31	30	0.95
-	Immunoglobulin Lambda light chain V gene segment	33	31	0.95
4358	Protein Mpv17	702	667	0.95
-	-	1583	1505	0.95
56927	Protein GPR108 Precursor	253	240	0.95
23603	Coronin-1C	779	740	0.95
-	Probable histone-lysine N-methyltransferase ASH1L	38	36	0.95
939	CD27 antigen Precursor	54	51	0.95
51524	Transmembrane protein 138	104	99	0.95
9167	Cytochrome c oxidase subunit 7A-related protein, mitochondrial Precursor	2558	2432	0.95
100132247	NPIP-like protein KIAA0220	570	542	0.95
284402	Secretoglobulin-like protein LOC284402 Precursor	16	15	0.95
8914	Protein timeless homolog	179	170	0.95
7067	Thyroid hormone receptor alpha	16	15	0.95
729973	Coiled-coil domain-containing protein 72	1644	1563	0.95
3796	Kinesin-like protein KIF2A	551	523	0.95
100128160	-	23	22	0.95
27303	RNA-binding motif, single-stranded-interacting protein 3	49	47	0.95
78988	Ribosomal protein 63, mitochondrial	911	866	0.95
3308	Heat shock 70 kDa protein 4	554	527	0.95
5165	[Pyruvate dehydrogenase (lipoamide)] kinase isozyme 3, mitochondrial Precursor	34	32	0.95
10126	Dynein light chain 4, axonemal	78	75	0.95
10914	Poly(A) polymerase alpha	565	538	0.95
114883	Oxysterol-binding protein-related protein 9	667	635	0.95
-	Golgin subfamily A member 5	374	355	0.95
3069	Vigilin	1490	1417	0.95
-	Uncharacterized protein C9orf80	199	189	0.95
100294410	-	42	39	0.95
112714	Tubulin alpha-3E chain	34	33	0.95
3930	Lamin-B receptor	617	587	0.95
9652	Tetratricopeptide repeat protein 37	183	174	0.95
4298	Protein ENL	36	35	0.95
50618	Intersectin-2	31	29	0.95
10522	Deformed epidermal autoregulatory factor 1 homolog	395	375	0.95
100289830	-	94	89	0.95
79786	Kelch-like protein 36	40	38	0.95

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Protein SPT2 homolog	10	10	0.95
245711	Speedy protein A	38	36	0.95
1019	Cell division protein kinase 4	1035	985	0.95
4259	Microsomal glutathione S-transferase 3	1573	1496	0.95
79875	Thrombospondin type-1 domain-containing protein 4 Precursor	58	55	0.95
23131	G patch domain-containing protein 8	56	53	0.95
389197	Uncharacterized protein FLJ46481	35	33	0.95
4722	NADH dehydrogenase [ubiquinone] iron-sulfur protein 3, mitochondrial Precursor	1054	1003	0.95
285556	-	15	14	0.95
5834	Glycogen phosphorylase, brain form	166	158	0.95
254887	Probable palmitoyltransferase ZDHHC23	73	69	0.95
689	Transcription factor BTF3	6962	6625	0.95
2316	Filamin-A	293	279	0.95
55454	Chondroitin sulfate N-acetylgalactosaminyltransferase 2	59	56	0.95
331	Baculoviral IAP repeat-containing protein 4	26	24	0.95
-	Syncoilin-1	132	126	0.95
-	Alpha-1,6-mannosylglycoprotein 6-beta-N-acetylglucosaminyltransferase B	18	18	0.95
5557	DNA primase small subunit	60	57	0.95
54946	Solute carrier family 41 member 3	260	248	0.95
100289205	-	65	62	0.95
8835	Suppressor of cytokine signaling 2	31	30	0.95
2872	MAP kinase-interacting serine/threonine-protein kinase 2	193	183	0.95
127294	Myomesin-3	69	66	0.95
377841	Ectonucleoside triphosphate diphosphohydrolase 8	33	31	0.95
-	-	17998	17130	0.95
-	FK506-binding protein 10 Precursor	591	563	0.95
-	-	1823	1735	0.95
-	Putative uncharacterized protein ENSP00000381802	232	221	0.95
1454	Casein kinase I isoform epsilon	1475	1405	0.95
254552	Nucleoside diphosphate-linked moiety X motif 8, mitochondrial Precursor	109	104	0.95
51449	Prenylcysteine oxidase 1 Precursor	260	247	0.95
160897	Integral membrane protein GPR180 Precursor	167	159	0.95
4287	Ataxin-3	16	16	0.95
85450	Inositol 1,4,5-triphosphate receptor-interacting protein Precursor	160	152	0.95
84727	SPRY domain-containing SOCS box protein 2	154	147	0.95
4076	Caprin-1	758	722	0.95
10139	ADP-ribosylation factor-related protein 1	388	369	0.95
55094	G patch domain-containing protein 1	24	22	0.95
100289438	-	30	29	0.95
6903	Tubulin-specific chaperone C	169	161	0.95
-	Splicing factor, arginine/serine-rich 15	243	232	0.95
92304	Secretogloblin family 3A member 1 Precursor	13	12	0.95
29894	Cleavage and polyadenylation specificity factor subunit 1	132	126	0.95
118987	PDZ domain-containing protein 8	76	72	0.95
116093	Disrupted in renal carcinoma protein 1	22	21	0.95
1417	Beta-crystallin B3	32	30	0.95
-	Uncharacterized protein FLJ46358	11	10	0.95
5093	Poly(rC)-binding protein 1	2668	2542	0.95

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
4820	NK-tumor recognition protein	46	43	0.95
7764	Zinc finger protein 217	7	6	0.95
3181	Heterogeneous nuclear ribonucleoproteins A2/B1	3489	3325	0.95
817	Calcium/calmodulin-dependent protein kinase type II delta chain	56	53	0.95
-	CDNA FLJ25155 fis, clone CBR07976	47	45	0.95
-	Putative UPF0607 protein ENSP00000381514	41	39	0.95
90378	Atherin	36	34	0.95
89849	Autophagy-related protein 16-2	91	87	0.95
727761	Thymidylate kinase	736	702	0.95
653361	Putative neutrophil cytosol factor 1B	338	322	0.95
7629	Zinc finger protein 76	28	27	0.95
6238	Ribosome-binding protein 1	509	485	0.95
-	-	16256	15497	0.95
-	Carnitine O-palmitoyltransferase 1, brain isoform	205	195	0.95
347732	Cation channel sperm-associated protein 3	58	55	0.95
23381	Protein SMG5	44	42	0.95
7433	Vasoactive intestinal polypeptide receptor 1 Precursor	10	10	0.95
84861	Kelch-like protein 22	151	144	0.95
54454	ATPase family AAA domain-containing protein 2B	26	25	0.95
8263	Factor VIII intron 22 protein	208	199	0.95
-	Oxysterol-binding protein-related protein 8	36	35	0.95
65055	Receptor expression-enhancing protein 1	11	10	0.95
-	Glycogen [starch] synthase, muscle	137	131	0.95
9820	Cullin-7	117	112	0.95
641	Bloom syndrome protein	24	23	0.95
130872	Activator of 90 kDa heat shock protein ATPase homolog 2	101	96	0.95
91869	Protein RFT1 homolog	17	17	0.95
27348	Torsin-1B Precursor	96	92	0.95
100291888	-	43	41	0.95
-	Sin3 histone deacetylase corepressor complex component SDS3	87	83	0.95
10022	Insulin-like peptide INSL5 Precursor	14	14	0.95
8811	Galanin receptor type 2	10	10	0.95
79631	Elongation factor Tu GTP-binding domain-containing protein 1	70	67	0.95
51186	WW domain-binding protein 5	2833	2703	0.95
-	Negative elongation factor A	76	72	0.95
10201	Nucleoside diphosphate kinase 6	197	188	0.95
23081	Lysine-specific demethylase 4C	36	35	0.95
10951	Chromobox protein homolog 1	1460	1393	0.95
92579	Glucose-6-phosphatase 3	42	40	0.95
10001	Mediator of RNA polymerase II transcription subunit 6	358	342	0.95
100289508	-	8	7	0.95
132321	UPF0462 protein C4orf33	47	45	0.95
6545	Cationic amino acid transporter 4	33	32	0.95
-	Toll-like receptor 8 Precursor	17	17	0.95
-	Zinc finger MYND domain-containing protein 11	84	80	0.95
2064	Receptor tyrosine-protein kinase erbB-2 Precursor	39	37	0.95
25836	Nipped-B-like protein	242	231	0.95
65980	Bromodomain-containing protein 9	179	171	0.95
100288181	-	45	43	0.95
93343	Multivesicular body subunit 12A	201	192	0.95

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
221981	Thrombospondin type-1 domain-containing protein 7A Precursor	64	61	0.95
132949	Acyl-CoA synthetase family member 4	53	51	0.95
-	BET1 homolog	385	367	0.95
51253	39S ribosomal protein L37, mitochondrial Precursor	922	880	0.95
23395	Probable leucyl-tRNA synthetase, mitochondrial Precursor	21	20	0.95
-	Transcriptional repressor NF-X1	115	109	0.96
10978	Pre-mRNA cleavage complex II protein Clp1	301	287	0.96
59353	Transmembrane protein 35	47	45	0.96
-	-	53	50	0.96
1809	Dihydropyrimidinase-related protein 3	130	124	0.96
-	Mucin-5B Precursor	45	43	0.96
85013	Transmembrane protein 128	162	155	0.96
-	-	11	10	0.96
3983	Actin-binding LIM protein 1	294	281	0.96
25879	Protocadherin-23	18	17	0.96
339896	Glutamate decarboxylase-like protein 1	18	17	0.96
-	Mannosyl-oligosaccharide 1,2-alpha-mannosidase IA	54	51	0.96
501	Alpha-aminoacidic semialdehyde dehydrogenase	504	481	0.96
6176	60S acidic ribosomal protein P1	38319	36612	0.96
79575	Abhydrolase domain-containing protein 8	145	139	0.96
100294462	-	36	35	0.96
80856	Protein lunapark	46	44	0.96
115361	Guanylate-binding protein 4	72	69	0.96
8774	Gamma-soluble NSF attachment protein	130	124	0.96
-	WD repeat-containing protein 92	72	69	0.96
-	SH2B adapter protein 1	151	144	0.96
7175	Nucleoprotein TPR	89	85	0.96
8910	Epsilon-sarcoglycan Precursor	405	387	0.96
2321	Vascular endothelial growth factor receptor 1 Precursor	25	24	0.96
-	DNA-directed RNA polymerase II subunit RPB11-b2	1419	1356	0.96
3320	Heat shock protein HSP 90-alpha	3306	3160	0.96
81552	EGFR-coamplified and overexpressed protein Precursor	793	758	0.96
348235	Spindle and kinetochore-associated protein 2	36	34	0.96
57154	E3 ubiquitin-protein ligase SMURF1	73	70	0.96
55133	S1 RNA-binding domain-containing protein 1	61	59	0.96
10048	Ran-binding protein 9	226	216	0.96
729792	-	8	8	0.96
149465	WD repeat-containing protein 65	12	11	0.96
100290481	-	15	14	0.96
8891	Translation initiation factor eIF-2B subunit gamma	364	348	0.96
1657	DmX-like protein 1	33	32	0.96
54517	Pseudouridylate synthase 7 homolog	111	106	0.96
100133842	Galectin-3-binding protein Precursor	10	10	0.96
55573	Protein CDV3 homolog	209	200	0.96
56165	Tudor domain-containing protein 1	22	21	0.96
23237	Activity-regulated cytoskeleton-associated protein	37	36	0.96
100131552	-	18	17	0.96
79095	UPF0184 protein C9orf16 (EST00098)	635	607	0.96
78992	Protein YIPF2	304	291	0.96
8174	Mucosal addressin cell adhesion molecule 1 Precursor	22	21	0.96
4005	Rhombotin-2	781	747	0.96
100133695	Protein FAM71E2	12	12	0.96
8694	Diacylglycerol O-acyltransferase 1	120	115	0.96

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
29796	Cytochrome b-c1 complex subunit 9	85	81	0.96
10587	Thioredoxin reductase 2, mitochondrial Precursor	119	114	0.96
4335	Max-binding protein MNT	24	23	0.96
6369	C-C motif chemokine 24 Precursor	30	29	0.96
22924	Microtubule-associated protein RP/EB family member 3	10	10	0.96
-	E1A-binding protein p400	123	118	0.96
51150	45 kDa calcium-binding protein Precursor	867	830	0.96
112755	Syntaxin-1B	17	16	0.96
64838	Fibronectin type III domain-containing protein 4 Precursor	150	144	0.96
7866	Interferon-related developmental regulator 2	348	333	0.96
348180	UPF0432 protein C16orf84	66	63	0.96
343263	Myosin-binding protein H-like	10	10	0.96
-	Cytoskeleton-associated protein 4	926	887	0.96
-	Methenyltetrahydrofolate synthetase domain-containing protein	17	16	0.96
92400	Probable RNA-binding protein 18	138	132	0.96
100130370	Putative uncharacterized protein DKFZp761P0212 Fragment	101	97	0.96
100293808	-	14	13	0.96
81847	RING finger protein 146	222	213	0.96
8829	Neuropilin-1 Precursor	271	260	0.96
55823	Vacuolar protein sorting-associated protein 11 homolog	141	135	0.96
23624	Signal transduction protein CBL-C	8	8	0.96
64100	Epididymal sperm-binding protein 1 Precursor	20	19	0.96
-	Proteasome assembly chaperone 2	705	675	0.96
-	Paired box protein Pax-5	31	30	0.96
10536	Probable G-protein coupled receptor 162	301	288	0.96
9338	transcription elongation factor A (SID-like 1	241	231	0.96
81502	Minor histocompatibility antigen H13	607	581	0.96
56938	Aryl hydrocarbon receptor nuclear translocator-like protein 2	98	93	0.96
-	2',3'-cyclic-nucleotide 3'-phosphodiesterase	267	256	0.96
5929	Retinoblastoma-binding protein 5	43	41	0.96
1969	Ephrin type-A receptor 2 Precursor	814	780	0.96
3164	Nuclear receptor subfamily 4 group A member 1	28	27	0.96
6497	Ski oncogene	29	28	0.96
-	Histone-lysine N-methyltransferase SETD2	168	161	0.96
1592	Cytochrome P450 26A1	16	15	0.96
57459	Transcriptional repressor p66-beta (p66/p68)	7	7	0.96
-	U5 small nuclear ribonucleoprotein 200 kDa helicase	31	30	0.96
-	Protein sprouty homolog 4	27	26	0.96
55129	Anoctamin-10	147	141	0.96
-	HRAS-like suppressor 3	660	632	0.96
100290783	-	18	18	0.96
79446	WD repeat-containing protein 25	96	92	0.96
54621	Ig-like domain-containing protein FLJ20674 Precursor	67	64	0.96
2745	Glutaredoxin-1	404	387	0.96
8678	Beclin-1	499	478	0.96
56926	Nicalin Precursor	52	49	0.96
100292848	-	18	17	0.96
-	Pumilio domain-containing protein C14orf21	91	87	0.96
10769	Serine/threonine-protein kinase PLK2	2201	2110	0.96
51747	Cisplatin resistance-associated overexpressed protein	1184	1135	0.96
4774	Nuclear factor 1 A-type	95	91	0.96

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1522	Cathepsin Z Precursor	265	254	0.96
9640	Zinc finger protein 592	21	20	0.96
6817	Sulfotransferase 1A1	482	462	0.96
10681	Guanine nucleotide-binding protein subunit beta-5	120	115	0.96
4815	Ninjurin-2	13	12	0.96
2512	Ferritin light chain	24219	23220	0.96
-	APAF1-interacting protein	169	162	0.96
64756	ATP synthase mitochondrial F1 complex assembly factor 1 Precursor	33	32	0.96
23361	Zinc finger protein 629	17	16	0.96
257169	Uncharacterized protein C9orf43	39	37	0.96
-	Cell division protein kinase 4	680	652	0.96
-	Natural resistance-associated macrophage protein 1	22	21	0.96
201292	Tripartite motif-containing protein 65	110	105	0.96
-	-	8776	8415	0.96
7307	Splicing factor U2AF 35 kDa subunit	2060	1975	0.96
80314	Enhancer of polycomb homolog 1	31	29	0.96
54957	Thioredoxin-like protein 4B	61	58	0.96
79876	Ubiquitin-like modifier-activating enzyme 5	241	231	0.96
6208	40S ribosomal protein S14	19772	18964	0.96
25962	Protein virilizer homolog	257	246	0.96
-	GOR antigen Fragment	26	25	0.96
151188	ADP-ribosylation factor-like protein 6-interacting protein 6	334	320	0.96
653631	Axin interactor, dorsalization-associated protein	869	834	0.96
64710	Nuclear ubiquitous casein and cyclin-dependent kinases substrate	4792	4597	0.96
6876	Transgelin	47	46	0.96
100292296	-	32	31	0.96
56246	Melanocortin-2 receptor accessory protein	16	15	0.96
7553	Zinc finger protein 7	23	22	0.96
-	Metallothionein-1X	195	187	0.96
148022	TIR domain-containing adapter molecule 1	146	140	0.96
79960	Protein Jade-1	82	78	0.96
166929	Phosphatidylcholine:ceramide cholinephosphotransferase 2	9	8	0.96
79070	KDEL motif-containing protein 1 Precursor	95	92	0.96
2564	Gamma-aminobutyric acid receptor subunit epsilon Precursor	54	51	0.96
54677	Peroxisomal carnitine O-octanoyltransferase	56	54	0.96
10772	FUS-interacting serine/arginine-rich protein 1	182	175	0.96
4292	DNA mismatch repair protein Mlh1	208	200	0.96
57168	Aspartate beta-hydroxylase domain-containing protein 2	62	60	0.96
644538	Putative uncharacterized protein LOC644538	36	34	0.96
22891	Talanin	157	151	0.96
-	TANK-binding kinase 1-binding protein	81	78	0.96
8600	Tumor necrosis factor ligand superfamily member 11	30	28	0.96
-	Potassium voltage-gated channel subfamily A member 2	18	17	0.96
1025	Cell division protein kinase 9	125	120	0.96
1520	Cathepsin S Precursor	121	116	0.96
10010	TRAF family member-associated NF-kappa-B activator	660	634	0.96
8733	Glycosylphosphatidylinositol anchor attachment 1 protein	215	207	0.96
64411	Centaurin-delta-3	268	257	0.96
120103	Proton-coupled amino acid transporter 4	155	148	0.96
84196	Ubiquitin carboxyl-terminal hydrolase 48	60	57	0.96
-	Protein FAM170A	11	11	0.96

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5007	Oxysterol-binding protein 1	191	183	0.96
90933	Tripartite motif-containing protein 41	14	13	0.96
9898	Ubiquitin-associated protein 2-like	77	74	0.96
100292322	-	28	27	0.96
14	Angio-associated migratory cell protein	366	351	0.96
84978	FERM domain-containing protein 5	72	69	0.96
7620	Zinc finger protein 69	94	90	0.96
539	ATP synthase subunit O, mitochondrial Precursor	3173	3048	0.96
22983	Microtubule-associated serine/threonine-protein kinase 1	91	87	0.96
1120	Choline/ethanolamine kinase	502	483	0.96
259230	Phosphatidylcholine:ceramide cholinephosphotransferase 1	38	37	0.96
22904	Protein strawberry notch homolog 2	9	9	0.96
6309	Lathosterol oxidase	223	214	0.96
9440	Mediator of RNA polymerase II transcription subunit 17	332	319	0.96
192669	Eukaryotic translation initiation factor 2C 3	36	35	0.96
-	Paired amphipathic helix protein Sin3b	126	121	0.96
-	-	31157	29936	0.96
7923	Estradiol 17-beta-dehydrogenase 8	52	50	0.96
904	Cyclin-T1	28	27	0.96
79676	2-oxoglutarate and iron-dependent oxygenase domain-containing protein 2	26	25	0.96
10947	AP-3 complex subunit mu-2	67	64	0.96
9684	Leucine-rich repeat-containing protein 14	19	18	0.96
-	Rho guanine nucleotide exchange factor 19	57	54	0.96
64506	Cytoplasmic polyadenylation element-binding protein 1	94	90	0.96
4363	Multidrug resistance-associated protein 1	17	16	0.96
79781	IQ and AAA domain-containing protein	17	16	0.96
11193	VW domain-binding protein 4	71	68	0.96
79873	Nucleoside diphosphate-linked moiety X motif 18	178	171	0.96
153090	Disabled homolog 2-interacting protein	62	60	0.96
1412	Beta-crystallin A2	21	20	0.96
337976	Keratin-associated protein 20-2	47	46	0.96
196051	Phosphatidic acid phosphatase type 2 domain-containing protein 1A	129	124	0.96
11196	SEC23-interacting protein (p125)	225	216	0.96
84141	Protein FAM176A	350	336	0.96
5190	Peroxisome assembly factor 2	70	67	0.96
57142	Reticulon-4	5575	5359	0.96
5238	Phosphoacetylglucosamine mutase	491	472	0.96
8674	Vesicle-associated membrane protein 4 (VAMP-4) [Source:UniProtKB/Swiss-Prot;Acc:O75379]	49	47	0.96
-	-	6494	6244	0.96
10098	Tetraspanin-5	505	486	0.96
2068	TFIIH basal transcription factor complex helicase subunit	118	113	0.96
54963	Uridine-cytidine kinase-like 1	174	167	0.96
644096	LYR motif-containing protein 8	104	100	0.96
-	Actin-related protein 8	266	255	0.96
-	ARF GTPase-activating protein GIT2	84	81	0.96
9695	ER degradation-enhancing alpha-mannosidase-like 1	34	33	0.96
26269	F-box only protein 8	155	149	0.96
4059	Lutheran blood group glycoprotein Precursor	16	15	0.96
51281	Ankyrin repeat and MYND domain-containing protein 1	16	16	0.96
-	-	214	206	0.96
27231	Nicotinamide riboside kinase 2	218	210	0.96

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
84668	Hyccin	89	86	0.96
-	Protein kinase C iota type	155	149	0.96
55036	Coiled-coil domain-containing protein 40	35	33	0.96
6217	40S ribosomal protein S16	24569	23642	0.96
6193	40S ribosomal protein S5	10391	9999	0.96
55623	THUMP domain-containing protein 1	197	190	0.96
57184	Uncharacterized protein C15orf17	82	79	0.96
25939	SAM domain and HD domain-containing protein 1	43	41	0.96
4713	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 7	1223	1177	0.96
9943	Serine/threonine-protein kinase OSR1	145	139	0.96
51109	Retinol dehydrogenase 11	920	886	0.96
1478	Cleavage stimulation factor 64 kDa subunit	126	122	0.96
-	NF-kappa-B inhibitor-like protein 2	68	66	0.96
84818	Interleukin-17 receptor C Precursor	68	66	0.96
83959	Sodium bicarbonate transporter-like protein 11	93	89	0.96
9562	Multiple inositol polyphosphate phosphatase 1 Precursor	261	251	0.96
374882	Transmembrane protein 205	1363	1312	0.96
317749	Dehydrogenase/reductase SDR family member 4-like 2 Precursor	292	281	0.96
7818	28S ribosomal protein S29, mitochondrial	1224	1178	0.96
54993	Zinc finger and SCAN domain-containing protein 2	27	26	0.96
148206	Zinc finger protein 714	61	58	0.96
9703	UPF0378 protein KIAA0100 Precursor	125	120	0.96
10474	Transcriptional adapter 3-like	109	105	0.96
-	UDP-N-acetylhexosamine pyrophosphorylase	577	556	0.96
9208	Leucine-rich repeat flightless-interacting protein 1	722	695	0.96
126374	Wilms tumor protein 1-interacting protein	131	127	0.96
8519	Interferon-induced transmembrane protein 1	116	111	0.96
9862	Mediator of RNA polymerase II transcription subunit 24	325	313	0.96
81704	Dedicator of cytokinesis protein 8	34	33	0.96
5428	DNA polymerase subunit gamma-1	217	209	0.96
8428	Serine/threonine-protein kinase 24	2164	2084	0.96
-	Acetolactate synthase-like protein	100	97	0.96
-	Secretory carrier-associated membrane protein 1	175	169	0.96
100289281	-	100	97	0.96
146198	Zinc finger protein 90 homolog	46	45	0.96
6095	Nuclear receptor ROR-alpha	42	41	0.96
515	ATP synthase subunit b, mitochondrial Precursor	3348	3226	0.96
1912	Polyhomeotic-like protein 2	671	647	0.96
283951	-	312	300	0.96
79155	TNFAIP3-interacting protein 2	150	145	0.96
100129268	-	70	67	0.96
81488	Protein GRINL1A	140	135	0.96
3097	Transcription factor HIVEP2	27	26	0.96
81873	Actin-related protein 2/3 complex subunit 5-like protein	926	893	0.96
5973	N-acetylglucosamine 2-epimerase	57	55	0.96
56181	Protein FAM54B	94	91	0.96
10634	GAS2-like protein 1	416	401	0.96
-	-	45	43	0.96
25804	U6 snRNA-associated Sm-like protein LSm4	1022	985	0.96
65080	39S ribosomal protein L44, mitochondrial Precursor	323	312	0.96

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
57580	Phosphatidylinositol 3,4,5-trisphosphate-dependent Rac exchanger 1 protein	45	43	0.96
128372	Olfactory receptor 6N1	17	16	0.96
65003	39S ribosomal protein L11, mitochondrial Precursor	453	437	0.96
9058	Solute carrier family 13 member 2	31	30	0.96
349667	Reticulon-4 receptor-like 2 Precursor	42	40	0.96
-	F-actin-capping protein subunit alpha-1	1438	1387	0.96
-	HIG1 domain family member 2B	475	458	0.96
-	Engulfment and cell motility protein 2	64	61	0.96
4642	Myosin-IId	16	15	0.96
199692	Zinc finger protein 627	104	101	0.96
81620	DNA replication factor Cdt1	45	44	0.96
64118	tRNA-dihydrouridine synthase 1-like	164	158	0.96
3300	DnaJ homolog subfamily B member 2	43	42	0.96
-	Nucleosome-binding protein 1	43	42	0.96
3837	Importin subunit beta-1	2596	2504	0.96
5343	Plasminogen-related protein B Precursor	25	24	0.96
136051	Zinc finger protein 786	74	72	0.96
147011	Protein PROCA1	30	29	0.96
339231	ADP-ribosylation factor-like protein 16	276	266	0.96
317772	Histone H2A type 2-B	14	13	0.96
11030	RNA-binding protein with multiple splicing	62	60	0.96
10211	Flotillin-1	1066	1029	0.96
79016	DET1- and DDB1-associated protein 1	373	360	0.96
552900	BolA-like protein 2	33	32	0.96
57222	Endoplasmic reticulum-Golgi intermediate compartment protein 1	321	310	0.96
7919	Spliceosome RNA helicase BAT1	244	236	0.96
57380	Magnesium transporter MRS2 homolog, mitochondrial Precursor	201	194	0.97
284040	CMT1A duplicated region transcript 4 protein	35	33	0.97
132789	Glucosamine-6-phosphate isomerase 2	143	138	0.97
10988	Methionine aminopeptidase 2	243	235	0.97
23126	Pogo transposable element with ZNF domain	105	101	0.97
1763	DNA2-like helicase	11	11	0.97
-	Serine/threonine-protein kinase 36	50	48	0.97
644613	Putative uncharacterized protein LOC644613 Precursor	8	8	0.97
55917	CTTNBP2 N-terminal-like protein	255	246	0.97
79142	PHD finger protein 23	211	204	0.97
85364	Zinc finger CCHC domain-containing protein 3	51	49	0.97
84866	Transmembrane protein 25 Precursor	112	108	0.97
51477	Inositol-3-phosphate synthase	99	96	0.97
441869	hypothetical protein LOC441869	26	25	0.97
1636	Angiotensin-converting enzyme Precursor	19	19	0.97
84842	4-hydroxyphenylpyruvate dioxygenase-like protein	43	42	0.97
9343	116 kDa U5 small nuclear ribonucleoprotein component	404	390	0.97
-	Interferon-gamma receptor beta chain Precursor	397	383	0.97
100291747	-	6	5	0.97
91947	Arrestin domain-containing protein 4	14	13	0.97
84245	Translation initiation factor eIF-2B subunit alpha/beta/delta-like protein	40	39	0.97
-	Protein DGCR6L	142	137	0.97
100293909	Elongation factor 1-alpha 2	11	10	0.97
-	Inhibitor of growth protein 5	37	36	0.97

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
25865	Serine/threonine-protein kinase D2	606	585	0.97
285382	UPF0524 protein C3orf70	23	22	0.97
6355	C-C motif chemokine 8 Precursor	24	23	0.97
159119	Heat shock transcription factor, Y-linked	21	20	0.97
196446	Uncharacterized protein C12orf28 Precursor	20	19	0.97
201895	Uncharacterized protein C4orf34	430	415	0.97
4222	Homeobox protein MOX-1	13	12	0.97
-	DNA methyltransferase 1-associated protein 1	248	240	0.97
51144	Estradiol 17-beta-dehydrogenase 12	788	761	0.97
23710	Gamma-aminobutyric acid receptor-associated protein-like 1	670	647	0.97
29888	Striatin-4	23	23	0.97
-	Chromodomain-helicase-DNA-binding protein 3	14	13	0.97
388536	Zinc finger protein 790	164	159	0.97
79867	Tectonic-2 Precursor	25	24	0.97
100127889	Uncharacterized protein C10orf131	37	36	0.97
83637	Zinc finger MIZ domain-containing protein 2	129	125	0.97
1796	Docking protein 1	179	173	0.97
23066	Cullin-associated NEDD8-dissociated protein 2	24	23	0.97
10518	Calcium and integrin-binding family member 2	24	23	0.97
9557	Chromodomain-helicase-DNA-binding protein 1-like	102	99	0.97
-	Gamma-taxilin	40	39	0.97
-	UPF0595 protein C22orf40	31	30	0.97
54187	Sialic acid synthase	968	936	0.97
126003	Trafficking protein particle complex subunit 5	1976	1911	0.97
6201	40S ribosomal protein S7	15706	15186	0.97
79758	dehydrogenase/reductase (SDR family) member 12 isoform 2	58	56	0.97
54470	Protein ARM CX6	614	594	0.97
2889	Rap guanine nucleotide exchange factor 1	92	89	0.97
27342	RAB guanine nucleotide exchange factor (GEF) 1	237	229	0.97
54958	Transmembrane protein 160	322	311	0.97
4682	Nucleotide-binding protein 1	174	168	0.97
79894	Zinc finger protein 672	64	62	0.97
219858	Olfactory receptor 8B12	31	30	0.97
-	Krueppel-like factor 10	171	165	0.97
254272	TBC1 domain family member 28	11	10	0.97
5742	Prostaglandin G/H synthase 1 Precursor	695	672	0.97
23476	Bromodomain-containing protein 4	132	127	0.97
729964	Cyclin-dependent kinases regulatory subunit 1	500	484	0.97
100287284	-	27	26	0.97
-	-	54	53	0.97
11041	N-acetyllactosaminide beta-1,3-N- acetylglucosaminyltransferase	135	131	0.97
27230	Stress-associated endoplasmic reticulum protein 1	1073	1039	0.97
116138	Kelch domain-containing protein 3	75	72	0.97
25824	Peroxisomal protein 5, mitochondrial Precursor	3153	3051	0.97
100288412	-	26	25	0.97
85025	Transmembrane protein 60	294	285	0.97
157848	NKG homeobox 3	55	53	0.97
-	Glutamate receptor, ionotropic kainate 5 Precursor	19	18	0.97
-	ADP-sugar pyrophosphatase	1302	1261	0.97
1549	Cytochrome P450 2A7	22	21	0.97
100292175	-	154	149	0.97

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3490	Insulin-like growth factor-binding protein 7 Precursor	15085	14601	0.97
51071	Putative deoxyribose-phosphate aldolase	343	332	0.97
5880	Ras-related C3 botulinum toxin substrate 2 Precursor	615	596	0.97
10983	Cyclin-I	2774	2686	0.97
391358	TRM112-like protein	3297	3192	0.97
3801	Kinesin-like protein KIFC3	303	293	0.97
9520	Puromycin-sensitive aminopeptidase	935	905	0.97
6429	Splicing factor, arginine/serine-rich 4	496	480	0.97
7484	Protein Wnt-9b Precursor	16	16	0.97
2961	Transcription initiation factor IIE subunit beta	327	317	0.97
63874	Abhydrolase domain-containing protein 4	117	113	0.97
51155	Hematological and neurological expressed 1 protein	1051	1017	0.97
373	GTP-binding protein ARD-1	52	50	0.97
9334	Beta-1,4-galactosyltransferase 5	861	834	0.97
-	-	1500	1453	0.97
-	U6 snRNA-associated Sm-like protein LSm2	957	927	0.97
9793	Cytoskeleton-associated protein 5	153	148	0.97
-	Phosphatidylinositol-5-phosphate 4-kinase type-2 beta	51	50	0.97
7975	Transcription factor MafK	9	9	0.97
25978	Charged multivesicular body protein 2b	176	171	0.97
10938	EH domain-containing protein 1	88	85	0.97
53917	Ras-related protein Rab-24	256	248	0.97
388272	UPF0547 protein C16orf87	89	86	0.97
-	F86B1_HUMAN Isoform 2 of Q8N7N1 · Homo sapiens (Human)	29	28	0.97
5148	Retinal rod rhodopsin-sensitive cGMP 3',5'-cyclic phosphodiesterase subunit gamma	33	32	0.97
132160	Protein phosphatase 1M	33	32	0.97
645372	-	21	20	0.97
6330	Sodium channel subunit beta-4 Precursor	20	19	0.97
100288809	-	35	34	0.97
56260	Putative uncharacterized protein C8orf44	127	123	0.97
2288	FK506-binding protein 4	501	485	0.97
2773	Guanine nucleotide-binding protein G(k) subunit alpha	86	84	0.97
51501	Uncharacterized protein C11orf73	717	694	0.97
160622	General receptor for phosphoinositides 1-associated scaffold protein	128	124	0.97
-	Sodium-dependent phosphate transporter 1	2085	2020	0.97
100294347	-	25	24	0.97
84447	E3 ubiquitin-protein ligase synoviolin Precursor	23	23	0.97
55709	Kelch repeat and BTB domain-containing protein 4	135	131	0.97
340542	Protein BEX5	48	47	0.97
388324	Protein INCA1	11	11	0.97
-	-	145	140	0.97
55339	WD repeat-containing protein 33	153	148	0.97
124935	Large neutral amino acids transporter small subunit 4	38	37	0.97
5901	GTP-binding nuclear protein Ran	6721	6515	0.97
79629	Occludin/ELL domain-containing protein 1	58	57	0.97
57699	Copine-5	15	14	0.97
4050	Lymphotoxin-beta	17	16	0.97
8870	immediate early response 3	1137	1102	0.97
-	Poly(A)-specific ribonuclease PARN-like domain-containing protein 1 Precursor	27	26	0.97
100289963	-	15	15	0.97

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100129975	60S ribosomal protein L10	16609	16103	0.97
2020	Homeobox protein engrailed-2	8	8	0.97
8450	Cullin-4B	169	164	0.97
55793	Protein FAM63A	38	37	0.97
-	PDZ domain-containing RING finger protein 4	6	5	0.97
-	Alanine-glyoxylate aminotransferase 2-like 2	90	87	0.97
55763	Exocyst complex component 1	317	308	0.97
51171	17-beta-hydroxysteroid dehydrogenase 14	205	199	0.97
5192	Peroxisome assembly protein 10	152	147	0.97
207063	Dehydrogenase/reductase SDR family member on chromosome X Precursor	259	251	0.97
3486	Insulin-like growth factor-binding protein 3 Precursor	36	35	0.97
91461	Protein kinase-like protein SgK493	43	42	0.97
-	BMP-2-inducible protein kinase	134	130	0.97
23151	GRAM domain-containing protein 4	45	44	0.97
113000	RNA pseudouridylate synthase domain-containing protein 1	58	57	0.97
10643	Insulin-like growth factor 2 mRNA-binding protein 3	153	148	0.97
64834	Elongation of very long chain fatty acids protein 1	1255	1217	0.97
92609	Mitochondrial import inner membrane translocase subunit TIM50 Precursor	396	384	0.97
9209	Leucine-rich repeat flightless-interacting protein 2	233	226	0.97
-	Interleukin-17 receptor A Precursor	67	65	0.97
143244	Eukaryotic translation initiation factor 5A-1	639	620	0.97
90113	von Willebrand factor A domain-containing protein 5B2	10	10	0.97
7707	Zinc finger protein 148	239	232	0.97
54913	Ribonuclease P protein subunit p25	129	125	0.97
51100	Endophilin-B1	1613	1565	0.97
23443	UDP-N-acetylglucosamine transporter	211	205	0.97
56852	E3 ubiquitin-protein ligase RAD18	57	55	0.97
391359	-	24	23	0.97
53343	ADP-ribose pyrophosphatase, mitochondrial Precursor	381	370	0.97
3096	Zinc finger protein 40	16	16	0.97
-	Leucine-rich repeat-containing protein 38 Precursor	63	61	0.97
-	Semaphorin-6A Precursor	13	13	0.97
5080	Paired box protein Pax-6	58	56	0.97
81788	NUAK family SNF1-like kinase 2	22	21	0.97
113444	Uncharacterized protein C1orf212	294	285	0.97
-	Ankyrin repeat domain-containing protein 24	12	11	0.97
8986	Ribosomal protein S6 kinase alpha-4	55	54	0.97
11165	Diphosphoinositol polyphosphate phosphohydrolase 1	697	677	0.97
5886	UV excision repair protein RAD23 homolog A	547	532	0.97
9219	Metastasis-associated protein MTA2	112	109	0.97
-	LisH domain and HEAT repeat-containing protein KIAA1468	74	72	0.97
57175	Coronin-1B	194	188	0.97
26580	Seipin	131	127	0.97
284013	Vitelline membrane outer layer protein 1 homolog Precursor	17	17	0.97
9659	Rho GTPase-activating protein 7	27	26	0.97
6522	Anion exchange protein 2	12	11	0.97
100291625	-	21	20	0.97
151195	Cyclin-Y-like protein 1	179	174	0.97
11034	Destrin	5331	5178	0.97

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
54497	HEAT repeat-containing protein 5B	111	108	0.97
1203	Ceroid-lipofuscinosis neuronal protein 5 Precursor	591	574	0.97
57690	Trinucleotide repeat-containing gene 6C protein	116	113	0.97
6453	Intersectin-1	285	277	0.97
683	ADP-ribosyl cyclase 2 Precursor	127	124	0.97
25790	nasopharyngeal epithelium specific protein 1	33	32	0.97
390243	Probable folate receptor delta Precursor	16	16	0.97
60528	Zinc phosphodiesterase ELAC protein 2	282	274	0.97
100133503	Leucine-rich repeat-containing protein 37A3 Precursor	67	65	0.97
493	Plasma membrane calcium-transporting ATPase 4	11	11	0.97
5888	DNA repair protein RAD51 homolog 1	218	212	0.97
29015	Solute carrier family 43 member 3	288	280	0.97
84304	Nucleoside diphosphate-linked moiety X motif 22	200	195	0.97
100294451	-	42	41	0.97
1798	UDP-N-acetylglucosamine-dolichyl-phosphate N-acetylglucosaminophosphotransferase	260	253	0.97
-	STE20-related adapter protein	59	57	0.97
3460	Interferon-gamma receptor beta chain Precursor	771	750	0.97
-	UPF0405 protein TMEM103	169	165	0.97
200205	Putative transferase C1orf69, mitochondrial Precursor	22	22	0.97
283416	Putative uncharacterized protein C12orf61	54	52	0.97
100291124	-	59	58	0.97
155185	Archaemetzincin-1	18	17	0.97
81706	Protein phosphatase 1 regulatory subunit 14C	23	22	0.97
100291230	-	9	8	0.97
-	-	11167	10856	0.97
-	Tensin-1	40	39	0.97
100132506	-	31	31	0.97
-	Mitogen-activated protein kinase 15	31	30	0.97
5116	Pericentrin	17	16	0.97
100133047	-	144	140	0.97
5833	Ethanolamine-phosphate cytidyltransferase	101	98	0.97
10963	Stress-induced-phosphoprotein 1	946	920	0.97
7531	14-3-3 protein epsilon	133	129	0.97
2959	Transcription initiation factor IIB	282	274	0.97
23077	Probable E3 ubiquitin-protein ligase MYCBP2	193	187	0.97
388403	Protein yippee-like 2	495	481	0.97
90665	F-box-like/WD repeat-containing protein TBL1Y	6	6	0.97
64110	Melanoma-associated antigen F1	59	58	0.97
-	Centrosomal protein of 78 kDa	73	71	0.97
-	-	15	14	0.97
59341	Transient receptor potential cation channel subfamily V member 4	15	14	0.97
9751	Double-strand-break repair protein rad21-like protein 1	16	16	0.97
11198	FACT complex subunit SPT16	336	327	0.97
10856	RuvB-like 2	537	523	0.97
119504	UPF0448 protein C10orf104	838	816	0.97
-	Proto-oncogene tyrosine-protein kinase Fes/Fps	57	56	0.97
27089	Cytochrome b-c1 complex subunit 8	3668	3569	0.97
90993	cAMP-responsive element-binding protein 3-like protein 1	13	12	0.97
55714	Teneurin-3	31	30	0.97
728896	-	8	8	0.97
10651	Metaxin-2	540	525	0.97
2494	Nuclear receptor subfamily 5 group A member 2	19	18	0.97

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9469	Carbohydrate sulfotransferase 3	77	75	0.97
55536	Cell division cycle-associated 7-like protein	641	624	0.97
56623	72 kDa inositol polyphosphate 5-phosphatase	62	60	0.97
22885	Actin-binding LIM protein 3	30	29	0.97
346	Apolipoprotein C-IV Precursor	72	70	0.97
9390	Solute carrier family 22 member 13	24	23	0.97
6155	60S ribosomal protein L27	14221	13845	0.97
10114	Homeodomain-interacting protein kinase 3	16	16	0.97
7319	Ubiquitin-conjugating enzyme E2 A	637	620	0.97
5598	Mitogen-activated protein kinase 7	10	10	0.97
908	T-complex protein 1 subunit zeta	1624	1581	0.97
100289215	-	13	13	0.97
55156	Armadillo repeat-containing protein 1	864	841	0.97
9380	Glyoxylate reductase/hydroxypyruvate reductase	979	953	0.97
-	Dystrophia myotonica WD repeat-containing protein	120	117	0.97
1797	Protein Dom3Z	85	83	0.97
8347	Histone H2B type 1-C/E/F/G/I	51	50	0.97
64921	CAS1 domain-containing protein 1 Precursor	56	55	0.97
160140	Uncharacterized protein C11orf65	28	27	0.97
257202	Glutathione peroxidase 6 Precursor	144	140	0.97
58488	Phosphatidylcholine transfer protein	147	143	0.97
230	Fructose-bisphosphate aldolase C	140	136	0.97
4216	Mitogen-activated protein kinase kinase kinase 4	59	58	0.97
54553	HCG1791715Putative uncharacterized protein DKFZp434I0714 Fragment	9	9	0.97
8456	Forkhead box protein N1	44	42	0.97
10425	Protein ariadne-2 homolog	160	156	0.97
57231	Sorting nexin-14	616	600	0.97
730198	-	12	11	0.97
51157	Zinc finger protein 580	75	73	0.97
64087	Methylcrotonoyl-CoA carboxylase beta chain, mitochondrial Precursor	40	39	0.97
84271	Polymerase delta-interacting protein 3	61	59	0.97
6234	40S ribosomal protein S28	18750	18266	0.97
55055	Protein zwilch homolog	276	269	0.97
11333	28 kDa heat- and acid-stable phosphoprotein	603	587	0.97
199223	Tetratricopeptide repeat protein 21A	44	42	0.97
9812	Uncharacterized protein KIAA0141	128	125	0.97
2967	General transcription factor IIH subunit 3	104	102	0.97
-	Mediator of RNA polymerase II transcription subunit 1	21	20	0.97
140461	Ankyrin repeat and SOCS box protein 8	293	285	0.97
6461	SH2 domain-containing adapter protein B	9	9	0.97
51504	TRM112-like protein	3687	3593	0.97
114769	Caspase recruitment domain-containing protein 16	51	49	0.97
-	-	3153	3072	0.97
889	Krev interaction trapped protein 1	95	92	0.97
52	Low molecular weight phosphotyrosine protein phosphatase	707	689	0.97
128989	Uncharacterized protein C22orf25	211	206	0.97
643355	-	32	31	0.97
254122	Sorting nexin-32	20	20	0.97
729123	60S ribosomal protein L7-like 1	798	778	0.97
306	Annexin A3	1181	1151	0.97
9662	Centrosomal protein of 135 kDa	38	37	0.97
55614	Kinesin-like protein KIF16B	19	18	0.97

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
375449	Microtubule-associated serine/threonine-protein kinase 4	304	297	0.97
-	ATP synthase subunit b, mitochondrial Precursor	3173	3094	0.98
5597	Mitogen-activated protein kinase 6	248	242	0.98
9095	T-box transcription factor TBX19	52	51	0.98
389435	60S ribosomal protein L27a	70	69	0.98
27158	NADPH-dependent diflavin oxidoreductase 1	13	13	0.98
25820	Protein ariadne-1 homolog	189	184	0.98
58538	MAGUK p55 subfamily member 4	192	187	0.98
1355	Cytochrome c oxidase assembly protein COX15 homolog	76	74	0.98
29943	Protein-arginine deiminase type-1	60	59	0.98
100289284	-	22	22	0.98
100287566	-	33	32	0.98
64097	Band 4.1-like protein 4A	18	18	0.98
-	Glycogenin-2	40	39	0.98
-	-	117	114	0.98
8175	Splicing factor 3A subunit 2	20	20	0.98
6314	Ataxin-7	8	8	0.98
7737	RING finger protein 113A	131	128	0.98
7375	Ubiquitin carboxyl-terminal hydrolase 4	845	824	0.98
57446	Protein NDRG3	46	45	0.98
5685	Proteasome subunit alpha type-4	2210	2157	0.98
100294187	-	14	14	0.98
9124	PDZ and LIM domain protein 1	694	677	0.98
1627	Drebrin	398	388	0.98
-	CWF19-like protein 1	129	126	0.98
7455	Zonadhesin Precursor	13	13	0.98
6885	Mitogen-activated protein kinase kinase kinase 7	349	340	0.98
11044	DNA polymerase sigma	418	408	0.98
7062	Trichohyalin	40	39	0.98
339929	-	13	13	0.98
284613	Cytochrome b561 domain-containing protein 1	87	85	0.98
149041	Roquin	34	33	0.98
89122	Tripartite motif-containing protein 4	57	55	0.98
54763	Ropporin-1A	13	13	0.98
23560	Nucleolar GTP-binding protein 1	517	505	0.98
26276	Vacuolar protein sorting-associated protein 33B	150	146	0.98
23295	Probable E3 ubiquitin-protein ligase MGRN1	24	24	0.98
57614	LisH domain and HEAT repeat-containing protein KIAA1468	9	8	0.98
127545	Putative uncharacterized protein ENSP00000383883	3569	3487	0.98
7716	Vascular endothelial zinc finger 1	174	170	0.98
-	PP7080	112	109	0.98
-	Palmitoyltransferase ZDHHC18	157	153	0.98
-	ETS domain-containing protein Elk-1	15	15	0.98
10589	Dr1-associated corepressor	386	377	0.98
257101	Zinc finger protein 683	11	10	0.98
53346	Transmembrane 6 superfamily member 1	251	246	0.98
100129191	-	22	21	0.98
5692	Proteasome subunit beta type-4 Precursor	3391	3314	0.98
54780	Non-SMC element 4 homolog A	534	522	0.98
-	Uncharacterized protein C9orf119	888	868	0.98
100287926	-	10	10	0.98
341880	Solute carrier family 35 member F4	10	9	0.98
729669	-	15	15	0.98

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
7142	Nuclear transition protein 2	8	8	0.98
3382	Islet cell autoantigen 1	392	383	0.98
3730	Anosmin-1 Precursor	9	8	0.98
1738	Dihydropolyl dehydrogenase, mitochondrial Precursor	932	911	0.98
100293478	-	13	13	0.98
10657	KH domain-containing, RNA-binding, signal transduction-associated protein 1	1074	1050	0.98
400506	Protein C16orf88	165	161	0.98
83862	Transmembrane protein 120A	213	208	0.98
386676	Keratin-associated protein 10-9	24	23	0.98
100292859	-	43	42	0.98
89792	Galactose-3-O-sulfotransferase 3	15	14	0.98
51111	Histone-lysine N-methyltransferase SUV420H1	55	54	0.98
3176	Histamine N-methyltransferase	156	153	0.98
94033	Ferritin, mitochondrial Precursor	17	17	0.98
55758	REST corepressor 3	88	86	0.98
100129720	-	27	26	0.98
29082	Charged multivesicular body protein 4a	181	177	0.98
9551	ATP synthase subunit f, mitochondrial	2229	2180	0.98
100294417	-	87	85	0.98
-	Coiled-coil domain-containing protein 78	18	18	0.98
4436	DNA mismatch repair protein Msh2	299	293	0.98
7267	Tetratricopeptide repeat protein 3	415	406	0.98
4705	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 10, mitochondrial Precursor	634	621	0.98
55746	Nuclear pore complex protein Nup133	213	208	0.98
11108	PR domain zinc finger protein 4	183	179	0.98
-	Amyotrophic lateral sclerosis 2 chromosomal region candidate gene 16 protein	38	37	0.98
10309	Cyclin-O	346	339	0.98
51181	L-xylulose reductase	377	368	0.98
-	-	1064	1041	0.98
81930	Kinesin-like protein KIF18A	27	26	0.98
10040	TOM1-like protein 1	6	6	0.98
100291129	-	63	62	0.98
143941	Tetratricopeptide repeat protein 36	27	26	0.98
9524	Synaptic glycoprotein SC2	450	441	0.98
51444	E3 ubiquitin-protein ligase RNF138	54	53	0.98
2995	Glycophorin-C	173	169	0.98
-	Programmed cell death 1 ligand 1 Precursor	71	69	0.98
6605	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily E member 1	1057	1035	0.98
100286983	-	14	13	0.98
6723	Spermidine synthase	1796	1758	0.98
84276	Nicotin-1	82	80	0.98
200081	Alpha-taxilin	135	132	0.98
-	Trinucleotide repeat-containing gene 6B protein	29	29	0.98
2551	GA-binding protein alpha chain	34	34	0.98
-	Heterogeneous nuclear ribonucleoprotein D-like	1501	1469	0.98
642755	Protein MYLE	320	314	0.98
1186	Chloride channel protein 7	48	47	0.98
51172	N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase Precursor	121	118	0.98
-	Protein DGCR8	47	46	0.98

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	WD repeat-containing protein 19	23	22	0.98
2324	Vascular endothelial growth factor receptor 3 Precursor	124	121	0.98
-	Glutamine and serine-rich protein 1	19	18	0.98
-	Uncharacterized protein C21orf59	462	452	0.98
9555	Core histone macro-H2A.1	1297	1271	0.98
79660	Protein phosphatase 1 regulatory subunit 3B	49	48	0.98
57707	TLN domain-containing protein KIAA1609	182	178	0.98
64795	Protein RMD5 homolog A	45	44	0.98
3073	Beta-hexosaminidase subunit alpha Precursor	152	149	0.98
100133578	N-acetylserotonin O-methyltransferase-like protein	62	61	0.98
337978	Keratin-associated protein 21-2	63	61	0.98
105	Double-stranded RNA-specific editase B2	69	68	0.98
163933	Protein FAM43B	564	553	0.98
81605	Ubiquitin-related modifier 1 homolog	950	930	0.98
7428	Von Hippel-Lindau disease tumor suppressor	142	139	0.98
84450	Zinc finger protein 512	100	98	0.98
100128994	-	12	12	0.98
129642	Membrane-bound O-acyltransferase domain-containing protein 2	56	55	0.98
84418	UPF0467 protein C5orf32	502	492	0.98
100287314	cDNA FLJ75546	9	9	0.98
-	Putative uncharacterized protein ENSP00000385251 Fragment	5993	5874	0.98
-	Uridine/cytidine kinase-like 1	270	265	0.98
26048	Zinc finger protein 500	16	16	0.98
100292043	-	25	24	0.98
4540	NADH-ubiquinone oxidoreductase chain 5	4631	4540	0.98
54499	Transmembrane and coiled-coil domain-containing protein 1	1248	1224	0.98
100291609	-	45	44	0.98
1572	Cytochrome P450 2F1	10	10	0.98
57498	Kinase D-interacting substrate of 220 kDa	16	16	0.98
3911	Laminin subunit alpha-5 Precursor	318	312	0.98
149603	Protein RNF187	54	53	0.98
23177	Centrosomal protein of 68 kDa	62	61	0.98
23424	Tudor domain-containing protein 7	108	106	0.98
64434	Nucleolar MIF4G domain-containing protein 1	95	93	0.98
26057	Ankyrin repeat domain-containing protein 17	223	219	0.98
1340	Cytochrome c oxidase subunit 6B1	4334	4251	0.98
5149	Retinal cone rhodopsin-sensitive cGMP 3',5'-cyclic phosphodiesterase subunit gamma	15	14	0.98
23157	Septin-6	174	171	0.98
27341	Ribosomal RNA-processing protein 7 homolog A	232	228	0.98
64207	Enhanced at puberty protein 1	93	91	0.98
100128647	Ubiquitin-conjugating enzyme E2 D3	1965	1927	0.98
-	cDNA FLJ26472 fis, clone KDN04506	95	93	0.98
-	-	37	37	0.98
115704	EVI5-like protein	37	36	0.98
55711	Fatty acyl-CoA reductase 2	147	144	0.98
116224	Protein FAM122A	110	108	0.98
10910	Suppressor of G2 allele of SKP1 homolog	1259	1235	0.98
197335	WD repeat-containing protein 90	18	18	0.98
347862	Parkinson disease 7 domain-containing protein 1 Precursor	35	34	0.98
11052	Cleavage and polyadenylation specificity factor subunit 6	136	134	0.98

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-	72	70	0.98
85236	Histone H2B type 1-K	190	186	0.98
7586	Zinc finger protein with KRAB and SCAN domains 1	106	104	0.98
5594	Mitogen-activated protein kinase 1	285	279	0.98
23396	Phosphatidylinositol-4-phosphate 5-kinase type-1 gamma	316	310	0.98
55785	FYVE, RhoGEF and PH domain-containing protein 6	11	11	0.98
-	-	290	285	0.98
100291222	-	9	9	0.98
64222	Torsin-3A Precursor	30	30	0.98
740	39S ribosomal protein L49, mitochondrial	227	223	0.98
23198	Proteasome activator complex subunit 4	275	270	0.98
3182	Heterogeneous nuclear ribonucleoprotein A/B	931	915	0.98
140885	Tyrosine-protein phosphatase non-receptor type substrate 1 Precursor	143	140	0.98
10069	RWD domain-containing protein 2B	377	370	0.98
-	GA-binding protein subunit beta-2	20	19	0.98
100131381	-	12	12	0.98
3839	Importin subunit alpha-3	1251	1229	0.98
-	Stromal membrane-associated protein 2	17	16	0.98
8509	Bifunctional heparan sulfate N-deacetylase/N-sulfotransferase 2	193	190	0.98
23600	Complement C1q tumor necrosis factor-related protein 3 Precursor	65	64	0.98
100287281	-	70	69	0.98
56255	Thioredoxin domain-containing protein 13 Precursor	141	138	0.98
10524	Histone acetyltransferase HTATIP	198	194	0.98
113452	Transmembrane protein 54	257	252	0.98
64787	Epidermal growth factor receptor kinase substrate 8-like protein 2	103	101	0.98
3000	Retinal guanylyl cyclase 1 Precursor	31	31	0.98
6573	Folate transporter 1	74	72	0.98
26750	Ribosomal protein S6 kinase delta-1	66	64	0.98
-	tRNA (adenine-N(1)-methyltransferase catalytic subunit TRM61	35	35	0.98
9774	Bcl-2-associated transcription factor 1	275	270	0.98
-	Solute carrier family 23 member 1	14	14	0.98
3726	Transcription factor jun-B	68	67	0.98
6209	40S ribosomal protein S15	18172	17857	0.98
-	Splicing factor, arginine/serine-rich 16	87	85	0.98
1977	Eukaryotic translation initiation factor 4E	14	14	0.98
10402	Type 2 lactosamine alpha-2,3-sialyltransferase	399	392	0.98
84517	Actin-related protein M1	98	96	0.98
100292552	-	47	46	0.98
728392	-	9	9	0.98
10659	CUG-BP- and ETR-3-like factor 2	19	19	0.98
139105	BEN domain-containing protein 2	10	10	0.98
79768	Uncharacterized protein C15orf29	60	59	0.98
55608	Ankyrin repeat domain-containing protein 10	150	147	0.98
-	-	43	43	0.98
79228	THO complex subunit 6 homolog	92	90	0.98
79188	Transmembrane protein 43	288	283	0.98
285800	Proline-rich protein 18	18	18	0.98
5147	Retinal rod rhodopsin-sensitive cGMP 3',5'-cyclic phosphodiesterase subunit delta	217	213	0.98

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9330	General transcription factor 3C polypeptide 3	166	164	0.98
55526	Probable 2-oxoglutarate dehydrogenase E1 component	149	146	0.98
-	DHKT1, mitochondrial Precursor			
-	BCL2/adenovirus E1B 19 kDa protein-interacting protein 2	903	888	0.98
3713	Involucrin	29	29	0.98
22836	Rho-related BTB domain-containing protein 3	391	385	0.98
100287500	Paraneoplastic antigen-like protein 6B	13	13	0.98
22905	Epsin-2	23	23	0.98
728226	Gamma-glutamyltranspeptidase 1 Precursor	18	17	0.98
-	39S ribosomal protein L30, mitochondrial Precursor	422	415	0.98
9586	cAMP-responsive element-binding protein 5	41	40	0.98
27130	Inversin	114	112	0.98
1676	DNA fragmentation factor subunit alpha	314	309	0.98
-	Zinc finger protein 341	31	30	0.98
100133636	-	23	22	0.98
4879	Natriuretic peptides B Precursor	6	6	0.98
8581	Lymphocyte antigen 6D Precursor	37	36	0.98
25973	Probable prolyl-tRNA synthetase, mitochondrial Precursor	50	49	0.98
1951	Solute carrier family 26 member 6	32	32	0.98
23054	Nuclear receptor coactivator 6	15	15	0.98
10382	Tubulin beta-4 chain	16	16	0.98
51455	DNA repair protein REV1	55	54	0.98
-	CYP2G1 homolog protein Fragment	13	13	0.98
337867	Ubiquitin-associated domain-containing protein 2 Precursor	190	187	0.98
374383	Putative uncharacterized protein	51	50	0.98
	DKFZp686121167DKFZp686O24166 protein			
152007	Golgi-associated plant pathogenesis-related protein 1	291	287	0.98
203069	R3H and coiled-coil domain-containing protein 1	170	167	0.98
23215	BAT2 domain-containing protein 1	407	401	0.98
79807	Glutathione S-transferase C-terminal domain-containing protein	11	11	0.98
10087	Collagen type IV alpha-3-binding protein	164	162	0.98
51258	39S ribosomal protein L51, mitochondrial Precursor	1166	1148	0.98
118813	Zinc finger FYVE domain-containing protein 27	11	10	0.98
84232	Repressor of RNA polymerase III transcription MAF1 homolog	274	269	0.98
3732	CD82 antigen	196	193	0.98
-	GPI ethanolamine phosphate transferase 2	46	45	0.98
79152	Fatty acid 2-hydroxylase	13	13	0.98
55450	Calcium/calmodulin-dependent protein kinase II inhibitor 1	196	193	0.98
51750	Tumor necrosis factor receptor superfamily member 6B Precursor	28	28	0.98
4931	Nuclear valosin-containing protein-like	155	153	0.98
113177	Uncharacterized protein C19orf36 Precursor	38	37	0.99
-	Dedicator of cytokinesis protein 10 (Zizimin-3)	10	10	0.99
255919	transmembrane protein 188 (TMEM188), mRNA	220	217	0.99
81545	F-box only protein 38	215	212	0.99
6484	CMP-N-acetylneuraminate-beta-galactosamide-alpha-2,3-sialyltransferase	37	36	0.99
166336	Prickle-like protein 2	27	27	0.99
23235	Serine/threonine-protein kinase SNF1-like kinase 2	9	9	0.99
84270	Bcl10-interacting CARD protein	391	385	0.99
100127946	-	109	108	0.99
3338	DnaJ homolog subfamily C member 4	334	329	0.99

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100134011	PR domain zinc finger protein 15	52	51	0.99
54951	COMM domain-containing protein 8	356	351	0.99
-	Dynamin-binding protein	220	217	0.99
100133528	HIG1 domain family member 1A	1657	1633	0.99
-	-	200	197	0.99
54606	Probable ATP-dependent RNA helicase DDX56	385	380	0.99
645490	-	12	12	0.99
57030	Vesicular glutamate transporter 1	39	39	0.99
64682	Anaphase-promoting complex subunit 1	57	56	0.99
-	Hypoxanthine-guanine phosphoribosyltransferase	628	619	0.99
100287552	PNAS-119	175	173	0.99
29071	C1GALT1-specific chaperone 1	170	167	0.99
5365	Plexin-B3 Precursor	43	42	0.99
4913	Endonuclease III-like protein 1	147	145	0.99
23279	Nuclear pore complex protein Nup160	70	69	0.99
-	Protein flightless-1 homolog	951	937	0.99
54442	BTB/POZ domain-containing protein KCTD5	371	366	0.99
79037	Transmembrane protein PVRIG	42	42	0.99
-	-	19	18	0.99
1583	Cytochrome P450 11A1, mitochondrial Precursor	8	8	0.99
-	M-phase phosphoprotein 9	48	47	0.99
94081	Sideroflexin-1	261	257	0.99
9131	Apoptosis-inducing factor 1, mitochondrial Precursor	394	389	0.99
-	Uncharacterized protein C17orf73	37	36	0.99
79073	Transmembrane protein 109 Precursor	724	714	0.99
51000	Adenosine 3'-phospho 5'-phosphosulfate transporter 2	213	210	0.99
29994	Bromodomain adjacent to zinc finger domain protein 2B	226	223	0.99
1298	Collagen alpha-2(IX) chain Precursor	8	8	0.99
-	Cullin-3	647	638	0.99
64374	Nucleotide exchange factor SIL1 Precursor	275	271	0.99
55869	Histone deacetylase 8	123	121	0.99
55103	Ras-specific guanine nucleotide-releasing factor RalGPS2	16	16	0.99
11161	Probable ergosterol biosynthetic protein 28	763	752	0.99
9675	Uncharacterized protein KIAA0406	65	64	0.99
80776	B9 domain-containing protein 2	106	105	0.99
93058	Protein COQ10 A, mitochondrial Precursor	65	64	0.99
10379	Interferon regulatory factor 9	35	35	0.99
9978	RING-box protein 1	2125	2097	0.99
5702	26S protease regulatory subunit 6A	1216	1200	0.99
11070	Transmembrane protein 115	102	101	0.99
100289734	-	17	17	0.99
2077	ETS domain-containing transcription factor ERF	116	115	0.99
7326	Ubiquitin-conjugating enzyme E2 G1	546	539	0.99
55756	Integrator complex subunit 9	82	81	0.99
9429	ATP-binding cassette sub-family G member 2	28	28	0.99
54700	RNA polymerase I-specific transcription initiation factor RRN3	159	156	0.99
6632	small nuclear ribonucleoprotein D1 polypeptide 16kDa (SNRPD1), mRNA	215	212	0.99
9879	Probable ATP-dependent RNA helicase DDX46	369	364	0.99
56616	Diablo homolog, mitochondrial Precursor	453	447	0.99
8189	Symplekin	295	291	0.99
54764	Zinc finger Ran-binding domain-containing protein 1	102	101	0.99
5159	Beta-type platelet-derived growth factor receptor Precursor	39	38	0.99

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23005	Mitogen-activated protein kinase-binding protein 1	7	7	0.99
51528	JNK1-associated membrane protein	559	551	0.99
-	-	1012	999	0.99
87	Alpha-actinin-1	2044	2018	0.99
10594	Pre-mRNA-processing-splicing factor 8	468	462	0.99
23063	Wings apart-like protein homolog	99	97	0.99
55737	Vacuolar protein sorting-associated protein 35	635	627	0.99
2342	Protein farnesyltransferase subunit beta	47	47	0.99
64400	AKT-interacting protein	240	237	0.99
51554	C-C chemokine receptor type 11	12	12	0.99
23119	Hypermethylated in cancer 2 protein	40	39	0.99
100290804	RING finger protein 4	87	85	0.99
23196	Constitutive coactivator of PPAR-gamma-like protein 1	2688	2654	0.99
1612	Death-associated protein kinase 1	28	28	0.99
22876	Phosphatidylinositol phosphatase SAC2	8	8	0.99
10360	Nucleoplasmin-3	511	504	0.99
3910	Laminin subunit alpha-4 Precursor	3086	3048	0.99
51026	Vesicle transport protein GOT1B	279	275	0.99
9112	Metastasis-associated protein MTA1	31	31	0.99
3631	Type I inositol-3,4-bisphosphate 4-phosphatase	16	16	0.99
100131076	-	24	24	0.99
2194	Fatty acid synthase	1458	1441	0.99
64928	39S ribosomal protein L14, mitochondrial Precursor	170	168	0.99
23683	Serine/threonine-protein kinase D3	77	76	0.99
153770	PLAC8-like protein 1	24	24	0.99
3570	Interleukin-6 receptor subunit alpha Precursor	49	48	0.99
-	-	97	96	0.99
337963	Keratin-associated protein 23-1	15	15	0.99
79102	RING finger protein 26	55	54	0.99
26164	GTP-binding protein 5	93	92	0.99
6648	Superoxide dismutase [Mn], mitochondrial Precursor	338	334	0.99
10274	Cohesin subunit SA-1	26	26	0.99
-	Ankyrin	1578	1560	0.99
100293660	-	8	8	0.99
29117	Bromodomain-containing protein 7	318	315	0.99
345456	Profilin-3	38	37	0.99
55163	Pyridoxine-5'-phosphate oxidase	185	182	0.99
6434	Splicing factor, arginine/serine-rich 10	339	335	0.99
84287	Probable palmitoyltransferase ZDHHC16	427	422	0.99
64895	Poly(A) polymerase gamma	68	67	0.99
91833	WD repeat-containing protein 20	94	93	0.99
8872	Cell division cycle protein 123 homolog	1209	1195	0.99
134288	Transmembrane protein 174	102	100	0.99
9846	GRB2-associated-binding protein 2	21	21	0.99
11021	Ras-related protein Rab-35	87	86	0.99
341359	Synaptotagmin-10	16	16	0.99
143162	FERM and PDZ domain-containing protein 2	13	12	0.99
729897	-	135	134	0.99
1999	ETS-related transcription factor Elf-3	9	8	0.99
50804	Myelin expression factor 2	218	215	0.99
9610	Ras and Rab interactor 1	127	125	0.99
54858	Pyroglutamyl-peptidase 1	66	65	0.99
91647	ATP synthase mitochondrial F1 complex assembly factor 2 Precursor	164	162	0.99

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
54877	Zinc finger CCHC domain-containing protein 2	70	69	0.99
7158	Tumor suppressor p53-binding protein 1	244	241	0.99
8411	Early endosome antigen 1	29	28	0.99
90417	Putative TRAF4-associated factor 1	262	259	0.99
8703	Beta-1,4-galactosyltransferase 3	170	168	0.99
90990	Kinesin-like protein KIFC2	58	58	0.99
2101	Steroid hormone receptor ERR1	113	112	0.99
100290462	-	65	64	0.99
8723	Sorting nexin-4	276	273	0.99
6730	Signal recognition particle 68 kDa protein	381	377	0.99
-	-	1162	1150	0.99
728431	-	15	15	0.99
100288225	-	38	37	0.99
3903	Leukocyte-associated immunoglobulin-like receptor 1 Precursor	6	6	0.99
-	Protein dpy-19 homolog 1	78	78	0.99
8764	Tumor necrosis factor receptor superfamily member 14 Precursor	255	252	0.99
100288314	-	33	32	0.99
5693	Proteasome subunit beta type-5 Precursor	2424	2399	0.99
55344	Phosphatidylinositol-specific phospholipase C X domain-containing protein 1	46	46	0.99
60672	Invasion-inhibitory protein 45	66	65	0.99
63946	Doublesex- and mab-3-related transcription factor C2	38	38	0.99
79084	Methylosome protein 50	257	254	0.99
404217	Cortecin-1	348	344	0.99
57533	TBC1 domain family member 14	83	82	0.99
100292688	-	31	31	0.99
115106	Coiled-coil domain-containing protein 5	517	512	0.99
116844	Leucine-rich alpha-2-glycoprotein Precursor	32	31	0.99
7289	Tubby-related protein 3	106	105	0.99
142689	Ankyrin repeat and SOCS box protein 12	79	78	0.99
8518	Elongator complex protein 1	189	188	0.99
7545	Zinc finger protein ZIC 1	15	15	0.99
121260	Solute carrier family 15 member 4	87	86	0.99
50810	Hepatoma-derived growth factor-related protein 3	236	234	0.99
-	Putative HLA class I histocompatibility antigen, alpha chain H Precursor	2026	2006	0.99
60682	Stromal membrane-associated protein 1	164	162	0.99
5589	Glucosidase 2 subunit beta Precursor	183	181	0.99
10471	Prefoldin subunit 6	148	147	0.99
-	Novel protein	14	14	0.99
5634	Ribose-phosphate pyrophosphokinase 2	259	256	0.99
-	Anaphase-promoting complex subunit 5	316	313	0.99
284361	UPF0510 protein C19orf63 Precursor	476	472	0.99
11253	Endoplasmic reticulum mannosyl-oligosaccharide 1,2-alpha-mannosidase	118	117	0.99
83891	Sorting nexin-25	19	19	0.99
54849	Differentially expressed in FDCP 8 homolog	242	240	0.99
79165	Leukocyte receptor cluster member 1	128	127	0.99
91949	Conserved oligomeric Golgi complex subunit 7	78	77	0.99
91833	WD repeat-containing protein 20	68	68	0.99
-	L antigen family member 3	414	410	0.99
29985	Zinc transporter ZIP3	135	134	0.99

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
728734	-	15	15	0.99
5937	RNA-binding motif, single-stranded-interacting protein 1	850	842	0.99
57130	Probable cation-transporting ATPase 13A1	155	154	0.99
10491	Cartilage-associated protein Precursor	43	42	0.99
23528	Zinc finger protein 281	121	120	0.99
23190	UBX domain-containing protein 4	630	625	0.99
79133	Probable methyltransferase C20orf7 Precursor	86	86	0.99
100132291	40S ribosomal protein S27	16509	16366	0.99
-	Uncharacterized protein C2orf81	36	36	0.99
284297	Scavenger receptor cysteine-rich domain-containing protein LOC284297 Precursor	160	158	0.99
2747	Glutamate dehydrogenase 2, mitochondrial Precursor	262	259	0.99
3589	Interleukin-11 Precursor	36	36	0.99
5906	Ras-related protein Rap-1A Precursor	615	610	0.99
9538	Etoposide-induced protein 2.4 homolog	1459	1446	0.99
1788	DNA (cytosine-5)-methyltransferase 3A	167	165	0.99
2593	Guanidinoacetate N-methyltransferase	517	512	0.99
-	-	8426	8355	0.99
100134359	-	17	17	0.99
80196	E3 ubiquitin-protein ligase RNF34	233	231	0.99
8453	Cullin-2	379	376	0.99
357	Protein Shroom2	63	62	0.99
90987	Zinc finger protein 251	47	46	0.99
25980	Uncharacterized protein C20orf4	265	263	0.99
25844	Protein YIPF3	823	816	0.99
50808	GTP:AMP phosphotransferase mitochondrial	389	386	0.99
-	Connector enhancer of kinase suppressor of ras 2	123	122	0.99
730032	-	34	34	0.99
-	Replication protein A 14 kDa subunit	356	353	0.99
10399	Guanine nucleotide-binding protein subunit beta-2-like 1	20236	20076	0.99
4048	Leukotriene A-4 hydrolase	1634	1621	0.99
10908	Neuropathy target esterase	44	44	0.99
7349	Urocortin Precursor	23	23	0.99
79701	PKHD domain-containing transmembrane protein FLJ22222	302	300	0.99
83930	MLN64 N-terminal domain homolog	440	437	0.99
51309	Armadillo repeat-containing X-linked protein 1	297	295	0.99
10717	AP-4 complex subunit beta-1	69	68	0.99
2887	Growth factor receptor-bound protein 10	238	236	0.99
201158	Protein FAM18B	637	632	0.99
152579	Sec1 family domain-containing protein 2	74	74	0.99
-	Ubiquitin carboxyl-terminal hydrolase isozyme L3	630	625	0.99
5355	Proteolipid protein 2	1136	1127	0.99
-	NLRP1 protein	122	121	0.99
5433	DNA-directed RNA polymerase II subunit RPB4	134	133	0.99
-	Heterogeneous nuclear ribonucleoprotein D0	1918	1904	0.99
399979	Sorting nexin-19	104	104	0.99
84310	Uncharacterized protein C7orf50	664	659	0.99
2592	Galactose-1-phosphate uridylyltransferase	119	118	0.99
122416	Ankyrin repeat domain-containing protein 9	18	18	0.99
89853	Protein FAM125B	152	151	0.99
84532	Acetyl-coenzyme A synthetase 2-like, mitochondrial Precursor	25	25	0.99
116372	Ly6/PLAUR domain-containing protein 1 Precursor	1187	1179	0.99

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Protein phosphatase Slingshot homolog 3	13	13	0.99
100133770	Vacuolar protein sorting-associated protein 35	693	688	0.99
-	STE20-like serine/threonine-protein kinase	147	146	0.99
730441	-	9	9	0.99
4302	Protein AF-17	48	48	0.99
6038	Ribonuclease 4 Precursor	84	84	0.99
641808	Uncharacterized protein MGC35361	38	38	0.99
5422	DNA polymerase alpha catalytic subunit	20	20	0.99
10208	Ubiquitin-specific peptidase-like protein 1	118	117	0.99
91612	Protein Churchill	1144	1137	0.99
-	-	29	29	0.99
78996	Modulator of retrovirus infection homolog	194	193	0.99
25843	Mps one binder kinase activator-like 3	406	403	0.99
90135	BTB/POZ domain-containing protein 6	290	288	0.99
9276	Coatomer subunit beta'	977	971	0.99
100287379	-	16	16	0.99
55959	Extracellular sulfatase Sulf2 Precursor	2058	2045	0.99
9101	Ubiquitin carboxyl-terminal hydrolase 8	154	153	0.99
10449	3-ketoacyl-CoA thiolase, mitochondrial	389	387	0.99
-	Serine/threonine-protein kinase WNK2	25	24	0.99
3199	Homeobox protein Hox-A2	11	11	0.99
644353	zinc finger, CCHC domain containing 18 (ZCCHC18), transcript variant 1, mRNA	21	21	0.99
-	Olfactory receptor 1L1	23	23	0.99
100293590	-	37	36	0.99
5575	cAMP-dependent protein kinase type I-beta regulatory subunit	45	45	0.99
826	Calpain small subunit 1	3826	3803	0.99
1026	Cyclin-dependent kinase inhibitor 1 (p21)	4011	3987	0.99
84795	Probable oxidoreductase C10orf33	41	40	0.99
955	Ectonucleoside triphosphate diphosphohydrolase 6	208	207	0.99
10454	Mitogen-activated protein kinase kinase kinase 7-interacting protein 1	16	15	0.99
22794	Protein CASC3	308	306	0.99
55761	Tetratricopeptide repeat protein 17	50	50	0.99
151246	Shugoshin-like 2	33	33	0.99
115650	Tumor necrosis factor receptor superfamily member 13C	27	27	0.99
-	ERO1-like protein alpha Precursor	346	344	0.99
6923	Transcription elongation factor B polypeptide 2	4440	4414	0.99
6747	Translocon-associated protein subunit gamma	513	510	0.99
23499	Microtubule-actin cross-linking factor 1, isoforms 1/2/3/5	35	35	0.99
-	RNA-binding protein 42	82	82	0.99
100291405	Protein tyrosine phosphatase-like protein PTPLAD1	761	757	0.99
-	Uncharacterized protein MGC39606	40	40	0.99
100290395	-	20	20	0.99
-	Syntaxin-10	472	469	0.99
246184	Anaphase-promoting complex subunit CDC26	484	481	0.99
1175	AP-2 complex subunit sigma-1	1552	1543	0.99
55607	Neurabin-1	22	22	0.99
1441	Granulocyte colony-stimulating factor receptor Precursor	39	39	0.99
-	Podocin	21	21	0.99
-	Protein unc-45 homolog B	22	22	0.99

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
50485	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A-like protein 1	78	77	0.99
1418	Gamma-crystallin A	5	5	0.99
-	-	37	36	0.99
440292	-	25	25	0.99
653506	Meteorin-like protein Precursor	404	402	1.00
388125	Nuclear-localized factor 2	197	196	1.00
201164	Phospholipase D6	38	38	1.00
100131686	-	59	59	1.00
51146	Alpha-1,4-N-acetylglucosaminyltransferase	208	207	1.00
170591	Protein S100-Z	14	14	1.00
23431	AP-4 complex subunit epsilon-1	48	48	1.00
55588	Mediator of RNA polymerase II transcription subunit 29	70	70	1.00
729385	-	61	60	1.00
100131209	-	15	15	1.00
3849	Keratin, type II cytoskeletal 2 epidermal	8	8	1.00
-	Immunoglobulin Kappa light chain V gene segment	8	8	1.00
8766	Ras-related protein Rab-11A	243	241	1.00
10868	Ubiquitin carboxyl-terminal hydrolase 20	40	40	1.00
6618	snRNA-activating protein complex subunit 2	59	59	1.00
-	Ankyrin repeat domain-containing protein 17	159	158	1.00
55069	UPF0458 protein C7orf42	466	464	1.00
23452	Angiopoietin-related protein 2 Precursor	40	40	1.00
100291835	-	18	18	1.00
27244	Sestrin-1	370	369	1.00
4968	N-glycosylase/DNA lyase	36	35	1.00
653550	-	23	23	1.00
51174	Tubulin delta chain	34	34	1.00
5970	Transcription factor p65	58	57	1.00
22944	DNA/RNA-binding protein KIN17	162	162	1.00
960	CD44 antigen Precursor	71	71	1.00
3385	Intercellular adhesion molecule 3 Precursor	103	103	1.00
23211	Zinc finger CCCH domain-containing protein 4	534	532	1.00
10247	Ribonuclease UK114	88	87	1.00
64241	ATP-binding cassette sub-family G member 8	28	28	1.00
3421	Isocitrate dehydrogenase [NAD] subunit gamma, mitochondrial Precursor	424	423	1.00
29775	Caspase recruitment domain-containing protein 10	55	55	1.00
6249	CAP-Gly domain-containing linker protein 1	144	144	1.00
23283	Cleavage stimulation factor 64 kDa subunit, tau variant	49	49	1.00
85446	Zinc finger homeobox protein 2	21	21	1.00
197258	L-fucose kinase	85	84	1.00
-	Metalloreductase STEAP3	93	92	1.00
-	Voltage-dependent calcium channel subunit alpha-2/delta-4 Precursor	25	25	1.00
51246	Protein shisa-5 Precursor	519	517	1.00
5520	Serine/threonine-protein phosphatase 2A 55 kDa regulatory subunit B alpha isoform	889	886	1.00
100132418	Uncharacterized PRO1102-like protein LOC100132418	87	86	1.00
5073	Poly(A)-specific ribonuclease PARN	113	112	1.00
5281	Phosphatidylinositol-glycan biosynthesis class F protein	393	392	1.00
2806	Aspartate aminotransferase, mitochondrial Precursor	1700	1695	1.00
6749	FACT complex subunit SSRP1	620	619	1.00
5756	Twinfilin-1	801	799	1.00

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9775	Eukaryotic initiation factor 4A-III	997	994	1.00
23041	Protein MON2 homolog	128	128	1.00
9265	Cytohesin-3	55	55	1.00
5376	Peripheral myelin protein 22	325	324	1.00
100293126	-	227	227	1.00
196294	Mitochondrial inner membrane protease subunit 1	85	85	1.00
10427	Protein transport protein Sec24B	199	198	1.00
6687	Paraplegin	155	155	1.00
-	YLP motif-containing protein 1	313	312	1.00
-	Putative uncharacterized protein C3orf46	72	72	1.00
153571	Protein CEI Precursor	44	44	1.00
79178	Thiamine-triphosphatase	21	21	1.00
8662	Eukaryotic translation initiation factor 3 subunit B	1538	1534	1.00
100132457	Small nuclear ribonucleoprotein G	2622	2616	1.00
-	Centrosomal protein of 68 kDa	203	202	1.00
-	INO80 complex subunit D	6	6	1.00
22898	DENN domain-containing protein 3	21	21	1.00
-	T-cell surface glycoprotein CD1c Precursor	30	30	1.00
348093	RNA-binding protein with multiple splicing 2	31	31	1.00
10335	Protein MRV1	34	34	1.00
100131863	40S ribosomal protein S18	24507	24459	1.00
55783	FtsJ methyltransferase domain-containing protein 1	76	76	1.00
389	Rho-related GTP-binding protein RhoC Precursor	3851	3844	1.00
5965	ATP-dependent DNA helicase Q1	163	163	1.00
1665	Putative pre-mRNA-splicing factor ATP-dependent RNA helicase DHX15	971	969	1.00
100293952	-	37	37	1.00
6474	Short stature homeobox protein 2	20	20	1.00
57551	Serine/threonine-protein kinase TAO1	47	47	1.00
9925	Zinc finger and BTB domain-containing protein 5	40	40	1.00
-	14 kDa phosphohistidine phosphatase	658	657	1.00
51538	Nucleolar protein of 40 kDa	776	775	1.00
9945	Glucosamine-fructose-6-phosphate aminotransferase [isomerizing] 2	71	71	1.00
373863	Dead end protein homolog 1	30	30	1.00
84129	Nephrocystin-3	33	33	1.00
100130563	-	22	22	1.00
51012	Protein slowmo homolog 2	365	364	1.00
79691	Queuine tRNA-ribosyltransferase domain-containing protein 1	39	39	1.00
-	Putative SNURF-like protein	71	71	1.00
5623	Persephin Precursor	11	11	1.00
81031	Solute carrier family 2, facilitated glucose transporter member 10	30	30	1.00
100128918	Uncharacterized protein C6orf132	31	31	1.00
6873	Transcription initiation factor TFIIID subunit 2	178	178	1.00
-	Apolipoprotein A-I-binding protein Precursor	843	842	1.00
-	STAGA complex 65 subunit gamma	121	121	1.00
8669	Eukaryotic translation initiation factor 3 subunit J	1189	1188	1.00
3169	Hepatocyte nuclear factor 3-alpha	25	25	1.00
10124	ADP-ribosylation factor-like protein 4A	396	396	1.00
7756	Zinc finger protein 207	530	529	1.00
1892	Enoyl-CoA hydratase, mitochondrial Precursor	1637	1635	1.00
126205	NACHT, LRR and PYD domains-containing protein 8	25	25	1.00

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
56257	7SK snRNA methylphosphate capping enzyme	211	211	1.00
-	Follistatin-related protein 4 Precursor	23	23	1.00
8290	Histone H3.1t	2843	2842	1.00
81688	Uncharacterized protein C6orf62	557	556	1.00
260429	Serine protease 33 Precursor	25	25	1.00
81566	Cysteine/serine-rich nuclear protein 2	218	218	1.00
50809	Heterochromatin protein 1-binding protein 3	166	166	1.00
9782	Matrin-3	449	449	1.00
1284	Collagen alpha-2(IV) chain Precursor	3642	3640	1.00
56122	Protocadherin beta-14 Precursor	16	16	1.00
81572	p53 and DNA damage-regulated protein 1	229	229	1.00
114826	SET and MYND domain-containing protein 4	32	32	1.00
10873	NADP-dependent malic enzyme, mitochondrial Precursor	228	228	1.00
327657	Serpin A9 Precursor	32	32	1.00
54986	Serine/threonine-protein kinase ULK4	17	17	1.00
-	CD97 antigen Precursor	63	63	1.00
100128827	-	7	7	1.00
9731	Uncharacterized protein KIAA0562	134	134	1.00
3234	Homeobox protein Hox-D8	84	84	1.00
9443	Mediator of RNA polymerase II transcription subunit 7	114	114	1.00
1841	Thymidylate kinase	702	702	1.00
54708	E3 ubiquitin-protein ligase MARCH5	169	169	1.00
79886	Uncharacterized protein C9orf82	141	141	1.00
100292551	-	33	33	1.00
-	-	182	182	1.00
84146	Zinc finger protein 644	111	111	1.00
-	TRAF family member-associated NF-kappa-B activator	478	478	1.00
81554	Williams-Beuren syndrome chromosomal region 16 protein	134	134	1.00
100293599	-	7	7	1.00
11072	Dual specificity protein phosphatase 14	972	972	1.00
116511	Mas-related G-protein coupled receptor MRG	23	23	1.00
30827	CpG-binding protein	189	189	1.00
9061	Bifunctional 3'-phosphoadenosine 5'-phosphosulfate synthetase 1	550	550	1.00
6950	T-complex protein 1 subunit alpha	2942	2945	1.00
7755	Zinc finger protein 205	38	38	1.00
284358	MEF2-activating SAP transcriptional regulatory protein	35	35	1.00
286148	Protein dpy-19 homolog 4	105	105	1.00
22823	Metal-response element-binding transcription factor 2	144	145	1.00
-	Ubiquitin-protein ligase E3B	90	90	1.00
7419	Voltage-dependent anion-selective channel protein 3	1767	1770	1.00
92822	Zinc finger protein 276	36	36	1.00
5313	Pyruvate kinase isozymes R/L	17	17	1.00
8079	Myeloid leukemia factor 2	147	147	1.00
-	Uncharacterized protein ENSP00000318184 Fragment	101	101	1.00
55356	Solute carrier family 22 member 15	31	31	1.00
100292027	-	15	15	1.00
9377	Cytochrome c oxidase subunit 5A, mitochondrial Precursor	3163	3168	1.00
29090	TIM21-like protein, mitochondrial Precursor	292	292	1.00
3858	Keratin, type I cytoskeletal 10	27	27	1.00
7855	Frizzled-5 Precursor	35	35	1.00
7709	Zinc finger and BTB domain-containing protein 17	220	221	1.00
647087	PL-5283 protein (PL-5283), mRNA	46	46	1.00
3035	Histidyl-tRNA synthetase, cytoplasmic	86	86	1.00

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
84229	Coiled-coil domain-containing protein 135	19	19	1.00
-	Phosphatidylinositol glycan anchor biosynthesis class U protein	192	193	1.00
7187	TNF receptor-associated factor 3	73	73	1.00
11166	Transcription factor SOX-21	31	31	1.00
57534	E3 ubiquitin-protein ligase MIB1	107	107	1.00
100129000	-	5	5	1.00
23598	POZ-, AT hook-, and zinc finger-containing protein 1	122	122	1.00
-	Sodium channel protein type 1 subunit alpha	24	24	1.00
5008	Oncostatin-M Precursor	73	73	1.00
-	Matrin-3	560	561	1.00
22895	Rabphilin-3A (Exophilin-1)	10	10	1.00
11214	A-kinase anchor protein 13	260	261	1.00
55851	Gamma-secretase subunit PEN-2	209	210	1.00
7360	UTP-glucose-1-phosphate uridylyltransferase	948	950	1.00
80204	F-box only protein 11	340	341	1.00
26610	Elongator complex protein 4	61	61	1.00
65979	Phosphatase and actin regulator 4	100	100	1.00
23625	Protein FAM89B	361	362	1.00
114790	Serine/threonine kinase 11-interacting protein	16	16	1.00
132946	ADP-ribosylation factor-like protein 9	13	13	1.00
10248	Ribonuclease P protein subunit p20	316	317	1.00
9448	Mitogen-activated protein kinase kinase kinase kinase 4	660	662	1.00
729956	UPF0626 protein A	65	65	1.00
51506	Ufm1-conjugating enzyme 1	1179	1182	1.00
5411	Pinin	765	767	1.00
5465	Peroxisome proliferator-activated receptor alpha	185	185	1.00
11197	Wnt inhibitory factor 1 Precursor	13	13	1.00
644166	Ribosomal protein S26 Fragment	5815	5832	1.00
4946	Ornithine decarboxylase antizyme	12143	12179	1.00
5337	Phospholipase D1	165	166	1.00
727815	M-phase phosphoprotein 8	119	120	1.00
337975	Keratin-associated protein 20-1	24	24	1.00
-	CP052_HUMAN Isoform 2 of Q8NHV5 · Homo sapiens (Human)	35	35	1.00
26036	Zinc finger protein 451	103	103	1.00
339366	ADAMTS-like protein 5 Precursor	18	18	1.00
-	NHP2-like protein 1	1838	1844	1.00
64386	Matrix metalloproteinase-25 Precursor	28	28	1.00
-	Zinc finger MYM-type protein 4	109	110	1.00
144699	F-box/LRR-repeat protein 14	27	27	1.00
-	Dynein light chain roadblock-type 1	2207	2215	1.00
8744	Tumor necrosis factor ligand superfamily member 9	66	67	1.00
54165	DCN1-like protein 1	115	115	1.00
533	V-type proton ATPase 21 kDa proteolipid subunit	1047	1050	1.00
6712	Spectrin beta chain, brain 2	15	15	1.00
10120	Beta-centractin	165	165	1.00
100293000	-	12	12	1.00
192286	HIG1 domain family member 2A	664	666	1.00
-	-	67	68	1.00
4832	Nucleoside diphosphate kinase 3	436	438	1.00
25759	SHC-transforming protein 2	42	42	1.00
10980	COP9 signalosome complex subunit 6	1962	1969	1.00
158	Adenylosuccinate lyase	653	655	1.00

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23324	Epididymis-specific alpha-mannosidase Precursor	26	26	1.00
6586	Slit homolog 3 protein Precursor	1185	1190	1.00
149076	Zinc finger protein 362	21	21	1.00
-	WD repeat-containing protein 51B	36	36	1.00
-	Zinc finger protein 548	37	37	1.00
117144	Cation channel sperm-associated protein 1	14	14	1.00
729148	Nogo-B receptor Precursor	297	298	1.00
51527	UPF0279 protein C14orf129	289	290	1.00
-	Fructose-bisphosphate aldolase C	105	106	1.00
54881	Testis-expressed sequence 10 protein	106	107	1.00
9415	Fatty acid desaturase 2	2024	2033	1.00
55611	Ubiquitin thioesterase OTUB1	631	634	1.00
-	Dolichyl pyrophosphate Man9GlcNAc2 alpha-1,3-glucosyltransferase	132	132	1.00
55298	RING finger protein 121	117	118	1.00
10572	Apoptosis regulatory protein Siva	949	953	1.00
5930	Retinoblastoma-binding protein 6	82	82	1.00
-	Patched domain-containing protein 2	71	72	1.00
100287049	-	16	16	1.00
22874	Pleckstrin homology domain-containing family A member 6	19	19	1.00
-	Nucleolin	1358	1365	1.00
54968	Transmembrane protein 70	644	648	1.00
10478	Peroxisomal membrane protein PMP34	138	139	1.00
100294033	Protein FAM115A	38	38	1.01
23583	Single-strand selective monofunctional uracil DNA glycosylase	103	103	1.01
55650	GPI mannosyltransferase 2	20	21	1.01
9368	Ezrin-radixin-moesin-binding phosphoprotein 50	93	93	1.01
9801	39S ribosomal protein L19, mitochondrial Precursor	639	642	1.01
10935	Thioredoxin-dependent peroxide reductase, mitochondrial Precursor	1327	1334	1.01
283	Angiogenin Precursor	116	117	1.01
10362	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily E member 1-related	241	242	1.01
6626	U1 small nuclear ribonucleoprotein A	620	623	1.01
-	MSTP150	21	21	1.01
64081	Phenazine biosynthesis-like domain-containing protein	45	45	1.01
3766	ATP-sensitive inward rectifier potassium channel 10	31	31	1.01
100292768	-	16	16	1.01
162681	Uncharacterized protein C18orf54 Precursor	19	19	1.01
1396	Cysteine-rich protein 1	34	34	1.01
6480	Beta-galactoside alpha-2,6-sialyltransferase 1	775	780	1.01
55320	Uncharacterized potential DNA-binding protein C14orf106	91	91	1.01
375612	Lipoma HMGIC fusion partner-like 3 protein	15	15	1.01
400073	Uncharacterized protein FLJ40142	73	74	1.01
60526	UPF0554 protein C2orf43	62	62	1.01
23774	Bromodomain-containing protein 1	123	123	1.01
57326	Pre-B-cell leukemia transcription factor-interacting protein 1	488	491	1.01
124912	Sperm acrosome membrane-associated protein 3	23	23	1.01
8620	FMR1amide-related peptides Precursor	77	77	1.01
7320	Ubiquitin-conjugating enzyme E2 B	167	168	1.01
6117	Replication protein A 70 kDa DNA-binding subunit	505	508	1.01
4968	N-glycosylase/DNA lyase	54	54	1.01

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
25828	Thioredoxin, mitochondrial Precursor	594	598	1.01
84726	Protein BAT2-like	657	661	1.01
23398	Peptidylprolyl isomerase domain and WD repeat-containing protein 1	274	275	1.01
100128949	-	18	18	1.01
359	Aquaporin-2	6	6	1.01
84522	Protein jagunal homolog 1	499	502	1.01
26952	Submaxillary gland androgen-regulated protein 3A Precursor	8	8	1.01
79982	DnaJ homolog subfamily B member 14	55	56	1.01
540	Copper-transporting ATPase 2	56	57	1.01
-	Proline-rich protein PRCC	167	169	1.01
84619	Zinc finger CCH-type with G patch domain-containing protein	57	58	1.01
729446	AT-rich interactive domain-containing protein 1B	165	167	1.01
100293848	-	44	44	1.01
79041	Trimeric intracellular cation channel type A	17	17	1.01
27005	Ubiquitin carboxyl-terminal hydrolase 21	24	24	1.01
10553	Oxidoreductase HTATIP2	504	507	1.01
9746	Calsyntenin-3 Precursor	20	21	1.01
1047	Calmegin Precursor	20	20	1.01
84326	CP013_HUMAN Isoform 3 of Q96S19 - Homo sapiens (Human)	973	979	1.01
79618	Homeobox-containing protein 1	105	105	1.01
54681	Putative HIF-prolyl hydroxylase PH-4	194	195	1.01
-	Ras-related protein Rab-34	400	402	1.01
80221	Acyl-CoA synthetase family member 2, mitochondrial Precursor	60	60	1.01
7458	Eukaryotic translation initiation factor 4H	2302	2318	1.01
222	Aldehyde dehydrogenase family 3 member B2	8	8	1.01
100134141	Hydrocephalus-inducing protein homolog	35	35	1.01
387264	Keratin-associated protein 5-1	14	14	1.01
57541	Zinc finger protein 398	64	64	1.01
5860	Dihydropteridine reductase	531	535	1.01
202915	Transmembrane protein 184A	9	9	1.01
100288109	-	55	56	1.01
9370	Adiponectin Precursor	5	5	1.01
10840	10-formyltetrahydrofolate dehydrogenase	16	16	1.01
100286913	-	17	17	1.01
197259	Mixed lineage kinase domain-like protein	116	117	1.01
113829	Probable UDP-sugar transporter protein SLC35A4	174	175	1.01
340665	Cytochrome P450 26C1	6	6	1.01
5822	Periodic tryptophan protein 2 homolog	323	326	1.01
10445	Microspherule protein 1	147	149	1.01
10939	AFG3-like protein 2	139	140	1.01
-	Retinoid-inducible serine carboxypeptidase Precursor	258	260	1.01
100128440	-	73	73	1.01
-	Postmeiotic segregation increased 2-like protein 8	81	82	1.01
100292612	-	6	6	1.01
6423	Secreted frizzled-related protein 2 Precursor	20	20	1.01
729417	-	25	25	1.01
54809	Sterile alpha motif domain-containing protein 9	61	61	1.01
147660	Zinc finger protein 578	56	56	1.01
-	-	6418	6468	1.01
23644	Enhancer of mRNA-decapping protein 4	28	28	1.01

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Vacuolar protein sorting-associated protein 72 homolog	383	386	1.01
8313	Axin-2	14	14	1.01
2534	Proto-oncogene tyrosine-protein kinase Fyn	574	579	1.01
4200	NAD-dependent malic enzyme, mitochondrial Precursor	184	185	1.01
27434	DNA polymerase mu	74	74	1.01
54991	Uncharacterized protein C1orf159 Precursor	49	49	1.01
339201	Uncharacterized protein C17orf65	29	29	1.01
57122	Nuclear pore complex protein Nup107	172	174	1.01
10463	Zinc transporter 9	231	233	1.01
56654	Neural proliferation differentiation and control protein 1 Precursor	2599	2621	1.01
642558	FUS-interacting serine-arginine-rich protein 1	80	81	1.01
163859	UPF0667 protein C1orf55	59	60	1.01
-	-	1007	1015	1.01
79891	Zinc finger protein 671	12	12	1.01
-	Nuclear respiratory factor 1	19	20	1.01
389217	-	34	34	1.01
970	CD70 antigen	7	7	1.01
54529	Asparagine synthetase domain-containing protein 1	387	391	1.01
54973	Integrator complex subunit 11	207	209	1.01
94056	Synapse-associated protein 1	425	428	1.01
55213	RCC1 and BTB domain-containing protein 1	212	214	1.01
29896	Transformer-2 protein homolog	793	800	1.01
51291	GEM-interacting protein	13	13	1.01
7342	Upstream-binding protein 1	35	35	1.01
2648	General control of amino acid synthesis protein 5-like 2	288	291	1.01
386684	Keratin-associated protein 12-4	11	11	1.01
51495	Protein tyrosine phosphatase-like protein PTPLAD1	1961	1979	1.01
5097	Protocadherin-1 Precursor	22	22	1.01
11338	Splicing factor U2AF 65 kDa subunit	27	27	1.01
-	26S protease regulatory subunit 8	1323	1335	1.01
3656	Interleukin-1 receptor-associated kinase-like 2	32	32	1.01
100134860	Putative thiosulfate sulfurtransferase KAT	301	304	1.01
79183	Alpha-tocopherol transfer protein-like	63	64	1.01
22900	Caspase recruitment domain-containing protein 8	188	190	1.01
94134	Rho GTPase-activating protein 12	38	38	1.01
-	-	7	7	1.01
11277	Three prime repair exonuclease 1	80	80	1.01
135228	CD109 antigen Precursor	67	67	1.01
100293406	-	14	14	1.01
9203	Zinc finger MYM-type protein 3	13	13	1.01
3052	Cytochrome c-type heme lyase	621	627	1.01
145282	Mirror-image polydactyly gene 1 protein	78	79	1.01
79893	Gametogenetin-binding protein 2	382	386	1.01
7181	Nuclear receptor subfamily 2 group C member 1	132	133	1.01
652904	Uncharacterized protein ENSP00000368241	344	348	1.01
100288535	-	36	36	1.01
112611	RWD domain-containing protein 2A	126	127	1.01
81576	Coiled-coil domain-containing protein 130	361	365	1.01
6567	Monocarboxylate transporter 8	24	24	1.01
11221	Dual specificity protein phosphatase 10	46	47	1.01
116115	Zinc finger protein 526	24	24	1.01
29843	Sentrin-specific protease 1	41	42	1.01
373156	Glutathione S-transferase kappa 1	1010	1021	1.01

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Protein MICAL-3	32	32	1.01
100292575	Melanoma-associated antigen C2	25	25	1.01
55117	Orphan sodium- and chloride-dependent neurotransmitter transporter NTT73	16	16	1.01
59307	Single Ig IL-1-related receptor	406	410	1.01
6311	Ataxin-2	114	115	1.01
360203	Glycosyltransferase 6 domain-containing protein 1	10	10	1.01
50813	COP9 signalosome complex subunit 7a	255	258	1.01
10574	T-complex protein 1 subunit eta	1530	1547	1.01
3030	Trifunctional enzyme subunit alpha, mitochondrial Precursor	1744	1763	1.01
51593	Serrate RNA effector molecule homolog	66	67	1.01
-	UPF0378 protein KIAA0100 Precursor	202	204	1.01
25831	E3 ubiquitin-protein ligase HECTD1	26	27	1.01
10245	Mitochondrial import inner membrane translocase subunit Tim17-B	426	431	1.01
80712	Homeobox protein ESX1	31	32	1.01
-	Immunoglobulin heavy chain C gene segment	80	80	1.01
59352	Leucine-rich repeat-containing G-protein coupled receptor 6 Precursor	24	24	1.01
506	ATP synthase subunit beta, mitochondrial Precursor	4466	4515	1.01
3552	Interleukin-1 alpha Precursor	95	96	1.01
4899	Nuclear respiratory factor 1	50	50	1.01
84817	Thioredoxin domain-containing protein 17	1636	1655	1.01
374739	testis/prostate/placenta-expressed protein isoform 1	28	28	1.01
339779	Uncharacterized protein C2orf53	42	42	1.01
4967	2-oxoglutarate dehydrogenase E1 component, mitochondrial Precursor	51	51	1.01
-	39S ribosomal protein L2, mitochondrial Precursor	161	162	1.01
-	Uroplakin-3A Precursor	12	12	1.01
-	Uncharacterized protein C20orf198	75	75	1.01
146802	Multidrug and toxin extrusion protein 2	15	15	1.01
157285	Tyrosine-protein kinase SgK223	291	294	1.01
55192	DnaJ homolog subfamily C member 17	189	191	1.01
134	Adenosine receptor A1	12	13	1.01
653325	UPF0574 protein C9orf169	16	16	1.01
4904	Nuclease-sensitive element-binding protein 1	5685	5752	1.01
56937	Transmembrane prostate androgen-induced protein	151	152	1.01
79861	Tubulin alpha chain-like 3	116	117	1.01
79020	UPF0415 protein C7orf25	121	122	1.01
4696	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 3	1608	1627	1.01
54504	Probable serine carboxypeptidase CPVL Precursor	17	17	1.01
9682	JmjC domain-containing histone demethylation protein 3A	234	237	1.01
9883	nuclear pore membrane protein 121	31	31	1.01
221035	Receptor expression-enhancing protein 3	436	442	1.01
57189	Protein LCHN	129	131	1.01
-	-	2716	2749	1.01
63910	Uncharacterized MFS-type transporter C20orf59	55	56	1.01
54885	TBC1 domain family member 8B	16	16	1.01
25932	Chloride intracellular channel protein 4	3290	3331	1.01
23729	Sedoheptulokinase	71	71	1.01
-	Solute carrier family 22 member 9	15	16	1.01
1553	Cytochrome P450 2A13	17	17	1.01

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100293897	-	9	9	1.01
268	Muellerian-inhibiting factor Precursor	453	459	1.01
65982	Zinc finger and SCAN domain-containing protein 18	192	194	1.01
100291522	-	25	25	1.01
-	Uncharacterized protein C1orf122	1596	1616	1.01
80347	Bifunctional coenzyme A synthase	133	135	1.01
55677	Protein IWS1 homolog	140	141	1.01
100291992	-	12	12	1.01
10999	Long-chain fatty acid transport protein 4	34	34	1.01
-	-	6975	7064	1.01
4950	Occludin	20	21	1.01
25934	Protein NipSnap homolog 3A	549	556	1.01
150483	Tektin-4	23	23	1.01
10193	E3 ubiquitin-protein ligase NRDP1	142	144	1.01
7323	Ubiquitin-conjugating enzyme E2 D3	2767	2804	1.01
3678	Integrin alpha-5 Precursor	2388	2420	1.01
79269	WD repeat-containing protein 32	147	148	1.01
1415	Beta-crystallin B2	378	383	1.01
100293088	-	502	509	1.01
55374	Transmembrane and coiled-coil domain-containing protein 6	37	37	1.01
55066	Pyruvate dehydrogenase phosphatase regulatory subunit, mitochondrial Precursor	12	12	1.01
150962	Putative tRNA pseudouridine synthase Pus10	15	15	1.01
5591	DNA-dependent protein kinase catalytic subunit	334	338	1.01
83860	Transcription initiation factor TFIID subunit 3	53	53	1.01
56241	Sushi domain-containing protein 2 Precursor	31	31	1.01
2060	Epidermal growth factor receptor substrate 15	632	641	1.01
1965	Eukaryotic translation initiation factor 2 subunit 1	162	164	1.01
100289074	Putative uncharacterized protein ENSP00000375389 Fragment	6	6	1.01
56302	Transient receptor potential cation channel subfamily V member 5	36	36	1.01
146849	Coiled-coil domain-containing protein 42A	12	12	1.01
8798	Dual specificity tyrosine-phosphorylation-regulated kinase 4	119	121	1.01
125170	Smith-Magenis syndrome chromosome region candidate gene 7 protein	45	46	1.01
9747	Protein FAM115A	211	214	1.01
131566	Discoidin, CUB and LCCL domain-containing protein 2 Precursor	79	80	1.01
2937	Glutathione synthetase	377	383	1.01
51126	N-acetyltransferase 5	908	921	1.01
5707	26S proteasome non-ATPase regulatory subunit 1	1247	1265	1.01
4217	Mitogen-activated protein kinase kinase kinase 5	13	14	1.01
9238	Protein TBRG4	145	147	1.01
6769	SH3 and cysteine-rich domain-containing protein	11	11	1.01
79959	Centrosomal protein of 76 kDa	64	65	1.01
57544	Thioredoxin domain-containing protein 16 Precursor	22	22	1.02
-	Uncharacterized protein C1orf79	291	295	1.02
26145	Interferon regulatory factor 2-binding protein 1	16	16	1.02
115557	Guanine nucleotide exchange factor GEFT	44	45	1.02
339448	Uncharacterized protein C1orf174	121	123	1.02
-	cDNA FLJ26850 fis, clone PRS07964FLJ26850 protein	13	13	1.02
84932	Ras-related protein Rab-2B	249	252	1.02

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
7341	Small ubiquitin-related modifier 1 Precursor	2061	2092	1.02
100131311	-	12	12	1.02
91419	Mitochondrial inner membrane protease ATP23 homolog	43	44	1.02
387521	Ubiquitin-conjugating enzyme E2 variant 1	191	194	1.02
4236	Microfibrillar-associated protein 1	478	485	1.02
192111	Phosphoglycerate mutase family member 5 Precursor	74	75	1.02
5635	Phosphoribosyl pyrophosphate synthetase-associated protein 1	680	691	1.02
23047	Sister chromatid cohesion protein PDS5 homolog B	173	176	1.02
7029	Transcription factor Dp-2	155	157	1.02
25987	Tsukushin Precursor	223	226	1.02
51088	Kelch-like protein 5	190	193	1.02
6770	Steroidogenic acute regulatory protein, mitochondrial Precursor	14	15	1.02
84661	Protein dpy-30 homolog	997	1013	1.02
55638	Syntabulin	22	23	1.02
80727	Protein tweety homolog 3	775	788	1.02
100293006	-	18	18	1.02
648	Polycomb complex protein BMI-1	310	315	1.02
583	Bardet-Biedl syndrome 2 protein	238	242	1.02
26273	F-box only protein 3	54	55	1.02
54550	N-terminal EF-hand calcium-binding protein 2	14	14	1.02
-	-	564	574	1.02
-	Collagen alpha-4(IV) chain Precursor	13	13	1.02
1773	Deoxyribonuclease-1 Precursor	20	20	1.02
-	-	19	20	1.02
3754	Potassium voltage-gated channel subfamily F member 1	27	28	1.02
79803	Hermansky-Pudlak syndrome 6 protein	235	239	1.02
57569	Rho GTPase-activating protein 20	12	12	1.02
-	RAD52 motif-containing protein 1	24	25	1.02
51588	E3 SUMO-protein ligase PIAS4	402	408	1.02
-	Transmembrane protein 199	350	355	1.02
79800	Amyotrophic lateral sclerosis 2 chromosomal region candidate gene 8 protein	10	10	1.02
-	3-mercaptopyruvate sulfurtransferase	1112	1130	1.02
100132622	-	13	13	1.02
63916	Engulfment and cell motility protein 2	22	23	1.02
9324	High mobility group nucleosome-binding domain-containing protein 3	424	431	1.02
5519	Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A beta isoform	217	221	1.02
1176	AP-3 complex subunit sigma-1	1728	1757	1.02
570	Bile acid-CoA:amino acid N-acyltransferase	11	11	1.02
112936	Vacuolar protein sorting-associated protein 26B	116	118	1.02
339229	Uncharacterized protein C1orf90	102	104	1.02
1487	C-terminal-binding protein 1	870	884	1.02
55827	Nuclear receptor interaction protein	175	178	1.02
252839	Transmembrane protein 9 Precursor	358	364	1.02
51321	Archaemetzincin-2	689	701	1.02
9540	Putative quinone oxidoreductase	84	86	1.02
3083	Hepatocyte growth factor activator Precursor	34	34	1.02
64430	Pecanex-like protein C1orf135	148	151	1.02
-	Roundabout homolog 1 Precursor	56	57	1.02
-	-	7757	7888	1.02

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
27161	Eukaryotic translation initiation factor 2C 2	148	150	1.02
6786	Stromal interaction molecule 1 Precursor	30	30	1.02
152926	Protein phosphatase 1K, mitochondrial Precursor	21	21	1.02
58985	Interleukin-22 receptor subunit alpha-1 Precursor	14	15	1.02
55256	1,2-dihydroxy-3-keto-5-methylthiopentene dioxygenase	997	1014	1.02
159	Adenylosuccinate synthetase isozyme 2	631	641	1.02
6565	Solute carrier family 15 member 2	66	68	1.02
353219	Kidney-associated antigen 1	29	30	1.02
54556	Inhibitor of growth protein 3	55	56	1.02
400569	Mediator of RNA polymerase II transcription subunit 11	156	159	1.02
80208	Spatacsin	184	187	1.02
201176	Rho GTPase activating protein 27 isoform a	178	181	1.02
-	Uncharacterized protein C21orf94	32	32	1.02
10116	Protein fem-1 homolog B	22	22	1.02
100292787	-	42	43	1.02
-	CIDEC protein	46	47	1.02
7314	Ubiquitin	10781	10968	1.02
118881	Catechol-O-methyltransferase domain-containing protein 1	45	46	1.02
54020	Glycerol-3-phosphate transporter	27	27	1.02
2157	Coagulation factor VIII Precursor	211	215	1.02
80177	Myc target protein 1	1155	1175	1.02
100130982	-	14	14	1.02
-	Putative metalloprotease C21orf57	31	32	1.02
100291016	-	38	39	1.02
5188	Probable glutamyl-tRNA(Gln) amidotransferase subunit B, mitochondrial Precursor	57	58	1.02
100129697	cDNA FLJ26728 fis, clone PNC06635	11	11	1.02
26097	Uncharacterized protein C1orf77	581	591	1.02
100291683	-	5	6	1.02
23038	WD and tetratricopeptide repeats protein 1	23	23	1.02
7351	Mitochondrial uncoupling protein 2	9	9	1.02
4998	Origin recognition complex subunit 1	24	24	1.02
-	-	384	391	1.02
-	Formin-binding protein 1	54	55	1.02
8970	Histone H2B type 1-J	32	33	1.02
-	Anthrax toxin receptor 2 Precursor	92	94	1.02
23253	Ankyrin repeat domain-containing protein 12	267	272	1.02
-	Serine/threonine-protein kinase MARK1	21	21	1.02
100131061	-	27	27	1.02
126321	Uncharacterized MFS-type transporter C19orf28	143	146	1.02
3118	HLA class II histocompatibility antigen, DQ(6) alpha chain Precursor	19	20	1.02
90	Activin receptor type-1 Precursor	124	126	1.02
5325	Zinc finger protein PLAGL1	78	79	1.02
-	-	123	125	1.02
6400	Protein sel-1 homolog 1 Precursor	35	36	1.02
29935	Replication protein A 30 kDa subunit	25	26	1.02
-	Methyltransferase-like protein 10	231	236	1.02
192683	Secretory carrier-associated membrane protein 5	61	62	1.02
3831	Kinesin light chain 1	986	1005	1.02
6341	Protein SCO1 homolog, mitochondrial Precursor	145	148	1.02
29988	Solute carrier family 2, facilitated glucose transporter member 8	79	80	1.02
51490	Uncharacterized protein C9orf114	161	164	1.02

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-	17349	17674	1.02
100294413	-	12	12	1.02
-	-	3053	3111	1.02
79140	Coiled-coil domain-containing protein 28B	73	74	1.02
26740	Olfactory receptor 1J2	33	33	1.02
133690	Calcyphosin-like protein	7	7	1.02
23646	Phospholipase D3	534	544	1.02
675	Breast cancer type 2 susceptibility protein	20	20	1.02
166785	Methylmalonic aciduria type A protein, mitochondrial Precursor	65	66	1.02
55207	ADP-ribosylation factor-like protein 8B	726	740	1.02
26468	LIM/homeobox protein Lhx6.1	60	61	1.02
386681	Keratin-associated protein 10-8	49	50	1.02
-	-	3190	3252	1.02
-	cDNA FLJ25694 fis, clone TST04471	38	39	1.02
57414	Rhomboid domain-containing protein 2	343	349	1.02
3267	Nucleoporin-like protein RIP	207	211	1.02
4267	CD99 antigen Precursor	3439	3506	1.02
-	Uncharacterized protein MGC16385	37	38	1.02
23365	Rho guanine nucleotide exchange factor 12	35	35	1.02
-	Integrin beta-7 Precursor	20	20	1.02
-	DNA polymerase iota	123	125	1.02
9475	Rho-associated protein kinase 2	79	81	1.02
-	-	267	272	1.02
3703	Dolichyl-diphosphooligosaccharide-protein glycosyltransferase subunit STT3A	1183	1206	1.02
-	-	7	7	1.02
81857	Mediator of RNA polymerase II transcription subunit 25	18	18	1.02
-	Zinc finger protein 768	43	44	1.02
-	cDNA FLJ40448 fis, clone TESTI2040815	66	68	1.02
-	Ubiquitin thioesterase OTU1	13	13	1.02
3283	3 beta-hydroxysteroid dehydrogenase/Delta 5->4-isomerase type 1	8	9	1.02
8896	Protein BUD31 homolog	1238	1263	1.02
-	Rap guanine nucleotide exchange factor 1	33	33	1.02
165257	Complement C1q-like protein 2 Precursor	66	67	1.02
55617	Threonine aspartase 1	62	64	1.02
28952	Coiled-coil domain-containing protein 22	55	56	1.02
11073	DNA topoisomerase 2-binding protein 1	192	196	1.02
55027	HEAT repeat-containing protein 3	60	61	1.02
6729	Signal recognition particle 54 kDa protein	997	1017	1.02
51091	O-phosphoseryl-tRNA(Sec) selenium transferase	65	66	1.02
-	-	1802	1839	1.02
81887	LAS1-like protein	113	115	1.02
23338	Protein Jade-2	44	45	1.02
63915	Protein Muted homolog	87	88	1.02
112950	Mediator of RNA polymerase II transcription subunit 8	513	524	1.02
7695	Zinc finger protein 136	31	32	1.02
79072	FAST kinase domain-containing protein 3	31	32	1.02
26301	Globoside alpha-1,3-N-acetylgalactosaminyltransferase 1	98	100	1.02
5111	Proliferating cell nuclear antigen	1809	1846	1.02
4704	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 9, mitochondrial Precursor	708	723	1.02

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
81577	Glucose-fructose oxidoreductase domain-containing protein 2 Precursor	142	145	1.02
-	Collagen alpha-1(XVIII) chain Precursor	1708	1743	1.02
151449	Growth/differentiation factor 7 Precursor	9	9	1.02
10260	C-myc promoter-binding protein	83	85	1.02
10294	DnaJ homolog subfamily A member 2	489	499	1.02
3235	Homeobox protein Hox-D9	45	46	1.02
27436	Echinoderm microtubule-associated protein-like 4	72	73	1.02
10314	LanC-like protein 1 (p40)	298	304	1.02
23510	BTB/POZ domain-containing protein KCTD2	47	48	1.02
-	-	3468	3540	1.02
7644	Zinc finger protein 91	147	150	1.02
284086	Serine/threonine-protein kinase Nek8	14	14	1.02
473	Arginine-glutamic acid dipeptide repeats protein	34	34	1.02
23416	Potassium voltage-gated channel subfamily H member 3	10	11	1.02
57002	Uncharacterized protein C7orf36	163	167	1.02
1371	Coproporphyrinogen III oxidase, mitochondrial Precursor	170	174	1.02
9600	Membrane-associated phosphatidylinositol transfer protein 1	102	104	1.02
78987	Cysteine-rich with EGF-like domain protein 1 Precursor	146	149	1.02
55048	Vacuolar protein sorting-associated protein 37C	193	197	1.02
550	Ancient ubiquitous protein 1 Precursor	1003	1025	1.02
4190	Malate dehydrogenase, cytoplasmic	358	366	1.02
4311	Neprilysin	182	186	1.02
5036	Proliferation-associated protein 2G4	3032	3097	1.02
11162	Nucleoside diphosphate-linked moiety X motif 6	78	80	1.02
85377	MICAL-like protein 1	94	96	1.02
1474	Cystatin-M Precursor	32	33	1.02
64426	Sin3 histone deacetylase corepressor complex component SDS3	41	41	1.02
-	ATXN1 protein Fragment	13	13	1.02
100288418	-	28630	29244	1.02
10966	Ras-related protein Rab-40B	83	85	1.02
-	Dual oxidase maturation factor 1	328	335	1.02
8560	Sphingolipid delta(4)-desaturase DES1	1653	1689	1.02
55741	ER degradation-enhancing alpha-mannosidase-like 2 Precursor	197	201	1.02
100292999	Rheumatoid factor RF-IP24 Fragment	15	15	1.02
285368	Proline-rich transmembrane protein 3 Precursor	8	8	1.02
50862	RING finger protein 141	310	317	1.02
100129285	cDNA FLJ41354 fis, clone BRAWH2014876	18	18	1.02
84294	rRNA-processing protein UTP23 homolog	285	291	1.02
9567	GTP-binding protein 1	149	152	1.02
10052	Gap junction gamma-1 protein	25	25	1.02
389997	-	12	13	1.02
3852	Keratin, type II cytoskeletal 5	43	44	1.02
100128328	-	19	19	1.02
-	Sestrin-3	8	8	1.02
5297	Phosphatidylinositol 4-kinase alpha	30	31	1.02
28958	Coiled-coil domain-containing protein 56	734	751	1.02
-	Amyloid beta A4 precursor protein-binding family B member 3	24	24	1.02
8409	Protein UXT	1194	1220	1.02
100288671	-	30	30	1.02

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
390811	-	56	57	1.02
55008	Probable E3 ubiquitin-protein ligase HERC6	8	8	1.02
389024	-	34	35	1.02
100293923	-	21	21	1.02
84164	Activating signal cointegrator 1 complex subunit 2	218	223	1.02
-	Branched-chain-amino-acid aminotransferase, mitochondrial Precursor	137	140	1.02
100130208	-	6	6	1.02
63917	Polypeptide N-acetylgalactosaminyltransferase 11	140	144	1.02
440689	Histone H2B type 2-F	9	10	1.02
646817	Protein SET	49	50	1.02
29919	Uncharacterized protein C18orf8	164	167	1.02
-	Transcription termination factor 1	108	111	1.02
84134	Mitochondrial import receptor subunit TOM40B	65	66	1.02
90459	Histone mRNA 3'-exonuclease 1	47	48	1.02
26005	C2 domain-containing protein 3	6	6	1.02
9819	TSC22 domain family protein 2	237	242	1.02
8658	Tankyrase-1	16	17	1.02
55534	Mastermind-like protein 3	18	18	1.02
5463	POU domain, class 6, transcription factor 1	16	17	1.02
51726	DnaJ homolog subfamily B member 11 Precursor	1256	1284	1.02
29890	Putative RNA-binding protein 15B	347	355	1.02
26056	Rab11 family-interacting protein 5	331	338	1.02
-	Chromosome 1-amplified sequence 3	22	23	1.02
80000	GREB1-like protein	14	14	1.02
116988	ArfGAP, GTPase, ANK repeat and PH domain-containing protein 3	644	658	1.02
-	WD repeat domain 46	206	210	1.02
51751	HIG1 domain family member 1B	25	25	1.02
11285	Beta-1,4-galactosyltransferase 7	212	217	1.02
57589	Protein RIC1 homolog	19	19	1.02
51439	Protein FAM8A1	259	265	1.02
30844	EH domain-containing protein 4	671	687	1.02
2768	Guanine nucleotide-binding protein subunit alpha-12	329	337	1.02
342979	Paralemmin-3	35	35	1.02
256302	Protein GTLF3B	157	160	1.02
23429	RING1 and YY1-binding protein	69	71	1.02
-	-	33	34	1.02
5537	Serine/threonine-protein phosphatase 6 catalytic subunit	104	107	1.02
84872	Zinc finger CCCH domain-containing protein 10	55	57	1.02
81631	Microtubule-associated proteins 1A/1B light chain 3B Precursor	1843	1885	1.02
2548	Lysosomal alpha-glucosidase Precursor	322	329	1.02
201725	Uncharacterized protein C4orf46	181	185	1.02
5871	Mitogen-activated protein kinase kinase kinase kinase 2	266	273	1.02
80273	GrpE protein homolog 1, mitochondrial Precursor	381	390	1.02
5706	26S protease regulatory subunit S10B	566	580	1.02
51566	Armadillo repeat-containing X-linked protein 3	448	458	1.02
219954	Olfactory receptor 9I1	16	16	1.02
5092	Pterin-4-alpha-carbinolamine dehydratase	822	842	1.02
5456	POU domain, class 3, transcription factor 4	7	7	1.02
100130009	High mobility group protein HMG-I/HMG-Y	266	272	1.02
5511	Nuclear inhibitor of protein phosphatase 1	137	140	1.02

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5868	Ras-related protein Rab-5A	205	210	1.02
-	Cysteine protease ATG4B	278	284	1.02
-	t-SNARE coiled-coil homology domain-containing protein C1orf142	92	94	1.02
84337	Transcription elongation factor 1 homolog	328	336	1.02
95	Aminoacylase-1	55	57	1.02
6422	Secreted frizzled-related protein 1 Precursor	49	50	1.02
81608	Pre-mRNA 3'-end-processing factor FIP1	159	163	1.02
5480	Peptidyl-prolyl cis-trans isomerase C	601	616	1.02
-	Lipase maturation factor 1	28	28	1.02
7072	Nucleolysin TIA-1 isoform p40	441	452	1.02
10269	CAAX prenyl protease 1 homolog	711	728	1.02
100288730	-	14	15	1.02
10933	Mortality factor 4-like protein 1	2002	2050	1.02
9320	Probable E3 ubiquitin-protein ligase TRIP12	660	676	1.02
23158	TBC1 domain family member 9	27	27	1.02
5427	DNA polymerase epsilon subunit 2	59	61	1.02
441876	40S ribosomal protein S16	21947	22476	1.02
100293795	-	17	17	1.02
57693	Zinc finger protein 317	108	111	1.02
10534	Sjogren syndrome/scleroderma autoantigen 1	228	233	1.02
738	UPF0680 protein C11orf2	551	565	1.02
645960	-	18	19	1.02
51082	DNA-directed RNA polymerases I and III subunit RPAC2	201	205	1.02
81532	Mps one binder kinase activator-like 2	236	241	1.02
100127922	-	17	17	1.02
51606	V-type proton ATPase subunit H	342	350	1.02
647166	-	21	21	1.02
9373	Phospholipase A-2-activating protein	186	191	1.02
400110	-	155	159	1.02
29100	Transmembrane protein 208	258	265	1.02
9874	Serine/threonine-protein kinase tousled-like 1	58	60	1.02
55268	Enoyl-CoA hydratase domain-containing protein 2, mitochondrial Precursor	182	186	1.02
9581	Prolyl endopeptidase-like	125	128	1.02
55145	THAP domain-containing protein 1	111	114	1.02
9453	Geranylgeranyl pyrophosphate synthetase	101	103	1.02
388122	Uncharacterized protein ENSP00000382149 Fragment	5022	5147	1.02
23770	FK506-binding protein 8	30	30	1.02
-	MKI67 FHA domain-interacting nucleolar phosphoprotein	121	124	1.02
92211	Protocadherin-21 Precursor	13	13	1.03
79086	UPF0608 protein C19orf42 Precursor	343	351	1.03
60496	L-aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase	276	283	1.03
549	Methylglutaconyl-CoA hydratase, mitochondrial Precursor	58	59	1.03
55049	Uncharacterized protein C19orf60	386	396	1.03
89941	Mitochondrial Rho GTPase 2	771	791	1.03
79882	Zinc finger CCCH domain-containing protein 14	430	441	1.03
1213	Clathrin heavy chain 1	1046	1073	1.03
93664	Calcium-dependent secretion activator 2	26	26	1.03
26157	GTPase IMAP family member 2	298	306	1.03
5699	Proteasome subunit beta type-10 Precursor	129	133	1.03
-	IF2GL_HUMAN Isoform 2 of Q2VIR3 - Homo sapiens (Human)	377	386	1.03

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100288802	-	54	55	1.03
389043	-	17	18	1.03
9103	Low affinity immunoglobulin gamma Fc region receptor II-b Precursor	7	8	1.03
6139	60S ribosomal protein L17	23410	24005	1.03
23481	Pescadillo homolog 1	56	57	1.03
140730	Regulating synaptic membrane exocytosis protein 4	13	13	1.03
-	Dolichol-phosphate mannosyltransferase	619	634	1.03
-	Pleckstrin homology domain-containing family A member 7	8	9	1.03
100292133	-	9	10	1.03
84262	Proteasome assembly chaperone 3	266	273	1.03
146909	Kinesin-like protein KIF18B	15	16	1.03
9965	Fibroblast growth factor 19 Precursor	71	73	1.03
2825	Probable G-protein coupled receptor 1	24	25	1.03
79071	Elongation of very long chain fatty acids protein 6	77	79	1.03
645969	Selenoprotein T Precursor	829	851	1.03
-	Glycophorin-C	137	141	1.03
11098	Serine protease 23 Precursor	5618	5764	1.03
51601	Lipoyltransferase 1, mitochondrial Precursor	14	15	1.03
84640	Ubiquitin carboxyl-terminal hydrolase 38	308	316	1.03
645296	ribosomal protein L17-like	16298	16723	1.03
441027	hypothetical protein LOC441027	31	32	1.03
57018	Cyclin-L1	280	287	1.03
57662	Uncharacterized protein KIAA1543	25	25	1.03
11152	PRA1 family protein 2	283	290	1.03
51765	Serine/threonine-protein kinase MST4	15	15	1.03
-	Arginyl-tRNA-protein transferase 1	52	54	1.03
100288869	RBL1 protein Fragment	16	17	1.03
8326	Frizzled-9 Precursor	44	45	1.03
-	Glutathione S-transferase P	3294	3382	1.03
-	Receptor-interacting serine/threonine-protein kinase 4	43	44	1.03
5654	Serine protease HTRA1 Precursor	4515	4636	1.03
54675	Cardiolipin synthetase	567	582	1.03
27013	Uncharacterized protein C2orf24	49	51	1.03
100289760	Ig epsilon chain C region	14	15	1.03
9764	Uncharacterized protein KIAA0513	13	13	1.03
51768	Transmembrane 7 superfamily member 3 Precursor	338	347	1.03
100293194	-	9	9	1.03
-	Putative uncharacterized LOC388882	27	28	1.03
100292019	HCG2000720Hypothetical gene supported by AK054822	16	17	1.03
84950	Pre-mRNA-splicing factor 38A	54	55	1.03
509	ATP synthase subunit gamma, mitochondrial Precursor	1938	1990	1.03
6204	40S ribosomal protein S10	3077	3160	1.03
23165	Nuclear pore complex protein Nup205	225	231	1.03
84274	Ubiquinone biosynthesis methyltransferase COQ5, mitochondrial Precursor	253	260	1.03
-	Uncharacterized protein C14orf53	39	40	1.03
-	Reticulocalbin-2 Precursor	787	809	1.03
51474	LIM domain and actin-binding protein 1	403	414	1.03
-	-	5215	5357	1.03
64359	Nucleoredoxin	12	12	1.03
51016	UPF0172 protein FAM158A	89	91	1.03
83439	Transcription factor 7-like 1	127	130	1.03
29124	Galactoside-binding soluble lectin 13	8	8	1.03

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23389	Mediator of RNA polymerase II transcription subunit 13-like	33	33	1.03
9650	Mitochondrial fission regulator 1	183	188	1.03
9716	Intron-binding protein aquarius	28	28	1.03
84300	Uncharacterized protein C6orf125	808	830	1.03
27115	cAMP-specific 3',5'-cyclic phosphodiesterase 7B	78	80	1.03
5715	26S proteasome non-ATPase regulatory subunit 9	495	509	1.03
11174	A disintegrin and metalloproteinase with thrombospondin motifs 6 Precursor	9	9	1.03
27090	Alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-1,3-N-acetyl-galactosaminide alpha-2,6-sialyltransferase	304	312	1.03
-	UPF0326 protein FAM152A	407	418	1.03
51185	Protein cereblon	257	264	1.03
83460	Transmembrane protein 93	285	293	1.03
253982	Aspartate beta-hydroxylase domain-containing protein 1	11	12	1.03
22937	Sterol regulatory element-binding protein cleavage-activating protein	16	16	1.03
9681	DEP domain-containing protein 5	13	14	1.03
54797	Mediator of RNA polymerase II transcription subunit 18	65	67	1.03
51015	Isochorismatase domain-containing protein 1	202	207	1.03
29115	SAP30-binding protein	35	36	1.03
9958	Ubiquitin carboxyl-terminal hydrolase 15	143	147	1.03
7335	Ubiquitin-conjugating enzyme E2 variant 1	14	15	1.03
23275	GDP-fucose protein O-fucosyltransferase 2 Precursor	11	11	1.03
-	ATP-binding cassette sub-family D member 4	142	146	1.03
7873	Protein ARMET Precursor	4472	4598	1.03
646483	60S ribosomal protein L6	18813	19345	1.03
2119	ETS translocation variant 5	147	151	1.03
1836	Sulfate transporter	169	174	1.03
140456	Ankyrin repeat and SOCS box protein 11	5	6	1.03
-	-	149	154	1.03
7978	Transcription termination factor, mitochondrial Precursor	81	84	1.03
79594	Mitochondrial ubiquitin ligase activator of NFKB 1	195	200	1.03
84320	Acyl-CoA-binding domain-containing protein 6	291	300	1.03
115362	Guanylate-binding protein 5	7	7	1.03
10773	Zinc finger and BTB domain-containing protein 6	40	42	1.03
100292054	-	96	99	1.03
100128666	-	124	127	1.03
80131	Leucine-rich repeat-containing protein 8E	40	41	1.03
80095	Zinc finger protein 606	36	37	1.03
25927	CB1 cannabinoid receptor-interacting protein 1	499	513	1.03
10013	Histone deacetylase 6	21	22	1.03
79137	Protein FAM134A	291	299	1.03
-	Spermatogenesis-associated protein 20 Precursor	153	157	1.03
29946	SERTA domain-containing protein 3	137	141	1.03
9699	Regulating synaptic membrane exocytosis protein 2	34	35	1.03
528	V-type proton ATPase subunit C 1	365	376	1.03
5042	Polyadenylate-binding protein 3	2862	2945	1.03
100131683	CDNA FLJ26096 fis, clone SLV00701	9	9	1.03
5688	Proteasome subunit alpha type-7	3888	4001	1.03
5596	Mitogen-activated protein kinase 4	11	12	1.03
6205	40S ribosomal protein S11	18136	18665	1.03
163	AP-2 complex subunit beta-1	300	308	1.03
663	BCL2/adenovirus E1B 19 kDa protein-interacting protein 2	903	930	1.03

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
27095	Trafficking protein particle complex subunit 3	710	730	1.03
81607	Poliovirus receptor-related protein 4 Precursor	57	58	1.03
-	Isoleucyl-tRNA synthetase, mitochondrial Precursor	323	333	1.03
100130174	-	14	15	1.03
100291247	-	6	6	1.03
6449	Small glutamine-rich tetratricopeptide repeat-containing protein alpha	268	275	1.03
84529	Uncharacterized protein C15orf41	225	232	1.03
-	WD repeat-containing protein 6	17	18	1.03
3797	Kinesin-like protein KIF3C	107	110	1.03
1857	Segment polarity protein dishevelled homolog DVL-3	50	52	1.03
23464	2-amino-3-ketobutyrate coenzyme A ligase, mitochondrial Precursor	311	320	1.03
100133001	-	50	52	1.03
64852	U6 snRNA-specific terminal uridylyltransferase 1	49	50	1.03
8454	Cullin-1	183	189	1.03
340900	-	13	13	1.03
11030	RNA-binding protein with multiple splicing	302	311	1.03
1528	Cytochrome b5	168	173	1.03
-	-	17	18	1.03
439921	Matrix-remodeling-associated protein 7	195	200	1.03
80731	Thrombospondin type-1 domain-containing protein 7B Precursor	20	20	1.03
79906	MORN repeat-containing protein 1	14	14	1.03
6015	E3 ubiquitin-protein ligase RING1	414	426	1.03
200576	FYVE finger-containing phosphoinositide kinase	169	174	1.03
2107	Eukaryotic peptide chain release factor subunit 1	508	523	1.03
100130890	-	64	66	1.03
9094	Protein unc-119 homolog A	243	250	1.03
-	-	2133	2197	1.03
79798	Armadillo repeat-containing protein 5	56	58	1.03
9857	Centrosome-associated protein 350	196	202	1.03
26519	Mitochondrial import inner membrane translocase subunit Tim10	134	138	1.03
-	Seven transmembrane helix receptor	15	15	1.03
-	Periphrin-1	968	997	1.03
7525	Proto-oncogene tyrosine-protein kinase Yes	924	952	1.03
80227	Proteasomal ATPase-associated factor 1	157	161	1.03
1945	Ephrin-A4 Precursor	175	180	1.03
-	Dipeptidyl-peptidase 3	562	579	1.03
8631	Src kinase-associated phosphoprotein 1	14	14	1.03
2926	G-rich RNA sequence binding factor 1 isoform 2	511	526	1.03
-	-	403	415	1.03
57799	Ras-related protein Rab-40C	34	35	1.03
5521	Serine/threonine-protein phosphatase 2A 55 kDa regulatory subunit B beta isoform	17	18	1.03
10863	ADAM 28 Precursor	23	24	1.03
4701	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 7	757	780	1.03
23351	cDNA FLJ75063	92	95	1.03
7733	Zinc finger protein 180	25	25	1.03
100293882	-	8	8	1.03
6814	Syntaxin-binding protein 3	443	457	1.03
-	-	341	351	1.03

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
27335	Eukaryotic translation initiation factor 3 subunit K	1932	1992	1.03
22883	Calsyntenin-1 Precursor	32	33	1.03
23302	WSC domain-containing protein 1	75	77	1.03
51762	Ras-related protein Rab-8B	60	61	1.03
3984	LIM domain kinase 1	89	92	1.03
148304	Uncharacterized protein C1orf74	9	10	1.03
-	Cadherin EGF LAG seven-pass G-type receptor 1 Precursor	7	7	1.03
158586	Zinc finger X-linked protein ZXDB	21	22	1.03
81565	Nuclear distribution protein nudE-like 1	116	120	1.03
29881	Niemann-Pick C1-like protein 1 Precursor	22	23	1.03
9200	Protein-tyrosine phosphatase-like member A	218	225	1.03
10972	Transmembrane emp24 domain-containing protein 10 Precursor	1040	1073	1.03
728229	-	8	8	1.03
11267	Vacuolar-sorting protein SNF8	50	52	1.03
83596	Bcl-2-related proline-rich protein	160	165	1.03
9556	6.8 kDa mitochondrial proteolipid	736	759	1.03
-	Pentatricopeptide repeat-containing protein 2	54	56	1.03
100287824	-	9	9	1.03
126393	Heat shock protein beta-6	23	23	1.03
-	-	2804	2894	1.03
-	Ras-related protein Rab-1A	2787	2876	1.03
1663	Probable ATP-dependent RNA helicase DDX11	125	129	1.03
-	Mitochondrial tRNA-specific 2-thiouridylase 1	159	165	1.03
353116	RILP-like protein 1	264	272	1.03
1306	Collagen alpha-1(XV) chain Precursor	31	32	1.03
378832	Uncharacterized protein C21orf123	8	8	1.03
-	Uncharacterized protein C20orf29	39	40	1.03
-	FUS-interacting serine-arginine-rich protein 1	546	564	1.03
8833	GMP synthase [glutamine-hydrolyzing]	511	527	1.03
92106	Oxidoreductase NAD-binding domain-containing protein 1 Precursor	46	47	1.03
10096	Actin-related protein 3	1866	1927	1.03
27242	Tumor necrosis factor receptor superfamily member 21 Precursor	156	161	1.03
-	zinc finger and BTB domain containing 8	160	166	1.03
3792	Kell blood group glycoprotein	25	26	1.03
81671	Transmembrane protein 49	1271	1313	1.03
8345	Histone H2B type 1-H (H2B.j)(H2B.j)	67	69	1.03
390282	Eukaryotic translation initiation factor 3 subunit F	5422	5602	1.03
388591	RING finger protein 207	5	5	1.03
-	Striated muscle preferentially expressed protein kinase	27	28	1.03
2779	Guanine nucleotide-binding protein G(t) subunit alpha-1	31	32	1.03
140739	NEDD8-conjugating enzyme UBE2F	226	233	1.03
5887	UV excision repair protein RAD23 homolog B	1521	1572	1.03
284701	-	15	15	1.03
51077	rRNA-processing protein FCF1 homolog	19	19	1.03
-	Sigma 1-type opioid receptor	209	216	1.03
223	4-trimethylaminobutyraldehyde dehydrogenase	494	511	1.03
-	Beta-secretase 1 Precursor	58	60	1.03
51397	COMM domain-containing protein 10	382	395	1.03
151230	Kelch-like protein 23	23	23	1.03
-	Serine/threonine-protein kinase 16	92	95	1.03
-	-	17	18	1.03

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
114294	Serine beta-lactamase-like protein LACTB, mitochondrial Precursor	134	138	1.03
84899	Transmembrane and TPR repeat-containing protein 4	117	121	1.03
-	-	6505	6725	1.03
27112	Transmembrane protein FAM155B	35	36	1.03
-	-	263	271	1.03
23483	dTDP-D-glucose 4,6-dehydratase	228	236	1.03
84572	N-acetylglucosamine-1-phosphotransferase subunit gamma Precursor	415	429	1.03
-	Melanoregulin	27	28	1.03
1760	Myotonin-protein kinase	10	10	1.03
8533	COP9 signalosome complex subunit 3	789	816	1.03
8241	RNA-binding protein 10	46	48	1.03
8517	NF-kappa-B essential modulator	86	89	1.03
-	-	10	10	1.03
23607	CD2-associated protein	247	256	1.03
11135	Cdc42 effector protein 1	69	71	1.03
27040	Linker for activation of T-cells family member 1	12	12	1.03
644093	-	12	12	1.03
6356	Eotaxin Precursor	22	23	1.03
4437	DNA mismatch repair protein Msh3	98	101	1.03
9367	Ras-related protein Rab-9A	285	295	1.03
-	-	353	366	1.03
58509	Uncharacterized protein C19orf29	232	240	1.03
8335	Histone H2A type 1-B/E	55	57	1.03
6767	Hsc70-interacting protein	188	194	1.03
7103	Tetraspanin-8	19	20	1.03
100289265	-	25	25	1.03
7988	Zinc finger protein 212	65	68	1.03
-	PEST proteolytic signal-containing nuclear protein	941	974	1.03
54793	BTB/POZ domain-containing protein KCTD9	94	97	1.03
6631	U1 small nuclear ribonucleoprotein C	2656	2748	1.03
4864	Niemann-Pick C1 protein Precursor	201	208	1.03
9679	Protein FAM53B	11	12	1.03
57645	Pogo transposable element with KRAB domain	248	257	1.03
10233	Leucine-rich repeat-containing protein 23	82	85	1.03
10184	Lipoma HMGIC fusion partner-like 2 protein	33	34	1.03
80262	UPF0183 protein C16orf70	29	30	1.03
54676	GTP-binding protein 2	96	99	1.04
53826	FXRD domain-containing ion transport regulator 6 Precursor	75	78	1.04
4702	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 8	1283	1328	1.04
100293149	Protein phosphatase 1 regulatory subunit 3F	8	8	1.04
5094	Poly(rC)-binding protein 2	2255	2335	1.04
64785	DNA replication complex GINS protein PSF3	87	90	1.04
9700	Separin	27	28	1.04
-	-	40	42	1.04
254863	UPF0451 protein C17orf61 Precursor	1124	1164	1.04
55916	NTF2-related export protein 2	17	18	1.04
11275	Kelch-like protein 2	65	68	1.04
-	Uncharacterized protein C1orf54 Precursor	862	892	1.04
440026	Transmembrane protein 41B	51	53	1.04
7791	Zyxin	165	171	1.04

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
85365	Alpha-1,3-mannosyltransferase ALG2	557	577	1.04
100128672	CDNA FLJ26755 fis, clone PRS02037	33	34	1.04
130502	Tetratricopeptide repeat protein 32	135	140	1.04
-	Transmembrane protein 54	258	267	1.04
64754	SET and MYND domain-containing protein 3	164	170	1.04
-	39S ribosomal protein L27, mitochondrial	681	705	1.04
84132	Ubiquitin carboxyl-terminal hydrolase 42	17	18	1.04
84557	Microtubule-associated proteins 1A/1B light chain 3A Precursor	159	164	1.04
-	Zinc finger protein 671	16	17	1.04
11102	Ribonuclease P protein subunit p14	295	306	1.04
10175	Protein cornichon homolog	2091	2166	1.04
56912	UPF0360 protein C11orf60	211	219	1.04
51645	Peptidyl-prolyl cis-trans isomerase-like 1	158	164	1.04
100290512	-	14	15	1.04
2521	RNA-binding protein FUS	1209	1252	1.04
2854	Probable G-protein coupled receptor 32	8	8	1.04
4233	Hepatocyte growth factor receptor Precursor	40	41	1.04
-	Uncharacterized protein C14orf128	33	35	1.04
-	3-phosphoinositide-dependent protein kinase 1	187	194	1.04
653147	60S ribosomal protein L26-like 1	971	1006	1.04
5339	Plectin-1	873	905	1.04
3145	Porphobilinogen deaminase	76	79	1.04
-	Putative uncharacterized protein DL8Q12	20	20	1.04
-	Arginine vasopressin-induced protein 1	35	36	1.04
84623	Kin of IRRF-like protein 3 Precursor	20	21	1.04
646344	-	22	23	1.04
100294460	-	24	25	1.04
85403	ELL-associated factor 1	36	37	1.04
79777	Acyl-CoA-binding domain-containing protein 4	8	9	1.04
55191	Glutamine-dependent NAD(+) synthetase	520	539	1.04
348793	WD repeat-containing protein 53	95	99	1.04
-	-	458	475	1.04
1974	Eukaryotic initiation factor 4A-II	2529	2623	1.04
-	-	13917	14431	1.04
84336	Transmembrane protein 101	245	254	1.04
946	Sialic acid-binding Ig-like lectin 6 Precursor	9	9	1.04
2354	Protein fosB	7	7	1.04
79091	Uncharacterized protein C16orf68	162	168	1.04
-	-	1186	1230	1.04
-	Putative uncharacterized protein ENSP00000384592 Fragment	35	36	1.04
100293297	Dual specificity protein phosphatase 15	43	44	1.04
26275	3-hydroxyisobutyryl-CoA hydrolase, mitochondrial Precursor	184	191	1.04
7851	MAL-like protein	382	397	1.04
91039	Dipeptidyl peptidase 9	36	37	1.04
54752	Fibronectin type III domain-containing protein 8	31	32	1.04
57470	Leucine-rich repeat-containing protein 47	798	828	1.04
55084	Sine oculis-binding protein homolog	10	10	1.04
7416	Voltage-dependent anion-selective channel protein 1	1540	1598	1.04
1311	Cartilage oligomeric matrix protein Precursor	19	20	1.04
8846	Alkylated DNA repair protein alkB homolog 1	115	119	1.04
5717	26S proteasome non-ATPase regulatory subunit 11	1284	1333	1.04

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9973	Copper chaperone for superoxide dismutase	189	196	1.04
100293268	-	19	19	1.04
-	UPF0544 protein C5orf45	71	73	1.04
10036	Chromatin assembly factor 1 subunit A	127	132	1.04
79698	Zinc finger matrin-type protein 4	19	19	1.04
170690	A disintegrin and metalloproteinase with thrombospondin motifs 16 Precursor	7	7	1.04
51647	UPF0195 protein FAM96B	1200	1245	1.04
100130906	-	23	24	1.04
9452	Integral membrane protein 2A	70	73	1.04
728694	-	13	14	1.04
57599	WD repeat-containing protein 48	52	54	1.04
4869	Nucleophosmin	20544	21324	1.04
-	T-cell receptor beta C gene segment	326	339	1.04
7494	X-box-binding protein 1	1178	1223	1.04
80310	Platelet-derived growth factor D Precursor	189	197	1.04
55379	Leucine-rich repeat-containing protein 59	882	916	1.04
10573	39S ribosomal protein L28, mitochondrial Precursor	253	262	1.04
60487	tRNA guanosine-2'-O-methyltransferase TRM11 homolog	58	60	1.04
10197	Proteasome activator complex subunit 3	44	45	1.04
6195	Ribosomal protein S6 kinase alpha-1	42	44	1.04
57720	Protein GPR107 Precursor	17	17	1.04
205428	UPF0672 protein C3orf58 Precursor	290	301	1.04
199857	UDP-N-acetylglucosamine transferase subunit ALG14 homolog	119	124	1.04
11112	3-hydroxyisobutyrate dehydrogenase, mitochondrial Precursor	284	294	1.04
-	Pre-mRNA-processing factor 40 homolog A	588	611	1.04
-	F-box/WD repeat-containing protein 2	153	159	1.04
-	Rab11 family-interacting protein 5	196	204	1.04
2059	Epidermal growth factor receptor kinase substrate 8	30	31	1.04
114898	Complement C1q tumor necrosis factor-related protein 2 Precursor	15	15	1.04
85453	Testis-specific Y-encoded-like protein 5	5	6	1.04
1891	Delta(3,5)-Delta(2,4)-dienoyl-CoA isomerase, mitochondrial Precursor	907	942	1.04
100290973	-	14	15	1.04
729458	Methyl-CpG-binding domain protein 3-like 2	8	8	1.04
5509	Protein phosphatase 1 regulatory subunit 3D	20	21	1.04
90956	Uncharacterized aarF domain-containing protein kinase 2	206	214	1.04
-	Transmembrane BAX inhibitor motif-containing protein 4	1440	1496	1.04
162073	Inositol 1,4,5-triphosphate receptor-interacting protein-like 2 Precursor	722	750	1.04
1635	Deoxycytidylate deaminase	594	617	1.04
51202	Probable ATP-dependent RNA helicase DDX47	732	761	1.04
1778	Cytoplasmic dynein 1 heavy chain 1	1576	1637	1.04
79622	U11/U12 small nuclear ribonucleoprotein 25 kDa protein	375	389	1.04
-	Sulfotransferase 1C2	63	65	1.04
8369	Histone H4-like protein type G	9	9	1.04
115992	RING finger protein 166	135	140	1.04
7741	Zinc finger protein 187	41	42	1.04
81555	Protein YIPF5	1612	1675	1.04
-	Putative uncharacterized protein FLJ42102	39	41	1.04
1479	Cleavage stimulation factor 77 kDa subunit	296	307	1.04

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9785	PremRNA-splicing factor ATP-dependent RNA helicase PRP16	150	156	1.04
-	Spermatogenesis-associated protein 2-like protein	126	131	1.04
51330	Tumor necrosis factor receptor superfamily member 12A Precursor	1148	1193	1.04
5607	Dual specificity mitogen-activated protein kinase kinase 5	80	84	1.04
26122	Enhancer of polycomb homolog 2	89	93	1.04
4538	NADH-ubiquinone oxidoreductase chain 4	1524	1584	1.04
5691	Proteasome subunit beta type-3	1459	1517	1.04
-	Dedicator of cytokinesis protein 7	9	9	1.04
-	-	332	345	1.04
4077	Next to BRCA1 gene 1 protein	484	503	1.04
64786	TBC1 domain family member 15	312	324	1.04
85317	B melanoma antigen 3 Precursor	29	31	1.04
7107	Integral membrane protein GPR137B	194	201	1.04
64777	Protein RMD5 homolog B	156	162	1.04
7556	Zinc finger protein 10	29	30	1.04
139341	FUN14 domain-containing protein 1	328	341	1.04
84545	39S ribosomal protein L43, mitochondrial Precursor	598	621	1.04
4157	Tubulin beta-3 chain	11	12	1.04
-	-	97	101	1.04
50814	Sterol-4-alpha-carboxylate 3-dehydrogenase, decarboxylating	226	235	1.04
23271	Calmodulin-regulated spectrin-associated protein 1-like protein 1	89	92	1.04
9777	Transmembrane 9 superfamily member 4 Precursor	60	62	1.04
55651	H/ACA ribonucleoprotein complex subunit 2	567	590	1.04
100188893	Prickle-like protein 4	822	855	1.04
11059	NEDD4-like E3 ubiquitin-protein ligase WWP1	131	136	1.04
80700	UBX domain-containing protein 6	243	253	1.04
23300	ATM interactor	264	275	1.04
-	cDNA FLJ45122 fis, clone BRAWH3036247, weakly similar to Zinc finger protein 228	37	39	1.04
401551	WD repeat-containing protein 38	21	22	1.04
5740	Prostacyclin synthase	19	19	1.04
921	T-cell surface glycoprotein CD5 Precursor	11	12	1.04
730167	-	118	123	1.04
117143	Transcriptional adapter 1-like protein	79	83	1.04
55324	ATP-binding cassette sub-family F member 3	180	188	1.04
344657	Leucine-rich repeat and IQ domain-containing protein 4	37	38	1.04
1537	Cytochrome c1, heme protein, mitochondrial Precursor	1950	2030	1.04
3955	Beta-1,3-N-acetylglucosaminyltransferase lunatic fringe	6	6	1.04
51300	Transmembrane protein C3orf1	524	545	1.04
5532	Serine/threonine-protein phosphatase 2B catalytic subunit beta isoform	59	61	1.04
-	-	4915	5114	1.04
3266	GTPase ERas Precursor	59	61	1.04
25945	Poliovirus receptor-related protein 3 Precursor	233	242	1.04
57224	NHS-like protein 1	66	69	1.04
55238	Putative sodium-coupled neutral amino acid transporter 7	157	163	1.04
10838	Zinc finger protein 275	39	40	1.04
100292110	-	8	8	1.04
6683	Spastin	89	92	1.04
100294398	PITSLRE serine/threonine-protein kinase CDC2L2	48	50	1.04

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
832	F-actin-capping protein subunit beta	653	680	1.04
27166	PRELI domain-containing protein 1, mitochondrial Precursor	1020	1062	1.04
4848	CCR4-NOT transcription complex subunit 2	453	471	1.04
57451	Teneurin-2	39	40	1.04
119032	Uncharacterized protein C10orf32	275	286	1.04
83482	Transcriptional repressor scratch 1	13	14	1.04
7743	Zinc finger protein 189	80	84	1.04
9739	Histone-lysine N-methyltransferase SETD1A	70	73	1.04
-	Vesicle-associated membrane protein-associated protein B/C	111	115	1.04
23059	Clusterin-associated protein 1	99	103	1.04
54840	Aprataxin	253	264	1.04
7316	Ubiquitin	41	43	1.04
64328	Exportin-4	21	22	1.04
63905	Protein MANBAL	331	345	1.04
8195	McKusick-Kaufman/Bardet-Biedl syndromes putative chaperonin	110	114	1.04
-	-	2245	2339	1.04
100289403	-	39	40	1.04
29844	TCF3 fusion partner	412	430	1.04
54495	Protein disulfide-isomerase TXNDC10 Precursor	400	417	1.04
83872	Hemicentin-1 Precursor	16	16	1.04
5898	Ras-related protein Ral-A Precursor	4222	4401	1.04
-	Mediator of RNA polymerase II transcription subunit 23	21	22	1.04
-	Beta-glucuronidase Precursor	418	436	1.04
347	Apolipoprotein D Precursor	11	11	1.04
-	Methyl-CpG-binding domain protein 4	216	225	1.04
3028	3-hydroxyacyl-CoA dehydrogenase type-2	957	998	1.04
400566	Uncharacterized protein C17orf97	13	13	1.04
-	Breast cancer metastasis-suppressor 1	306	319	1.04
100128813	-	12	13	1.04
150356	Chondroadherin-like protein Precursor	24	25	1.04
648576	Leucine-rich repeat-containing protein 45	29	30	1.04
-	COMM domain-containing protein 8	182	190	1.04
5730	Prostaglandin-H2 D-isomerase Precursor	6	6	1.04
2770	Guanine nucleotide-binding protein G(i), alpha-1 subunit	29	31	1.04
146861	Protein AMAC1	20	21	1.04
154796	Angiotensin	53	55	1.04
6619	snRNA-activating protein complex subunit 3	234	245	1.04
2287	FK506-binding protein 3	1183	1234	1.04
653354	Protein ARM CX6	810	845	1.04
57404	Cytochrome P450 20A1	93	97	1.04
8726	Polycomb protein EED	240	250	1.04
2175	Fanconi anemia group A protein	15	15	1.04
3737	Potassium voltage-gated channel subfamily A member 2	9	10	1.04
6845	Vesicle-associated membrane protein 7	220	230	1.04
3276	Protein arginine N-methyltransferase 1	302	315	1.04
11147	HERV-H LTR-associating 3 isoform 3	7	8	1.04
9604	E3 ubiquitin-protein ligase RNF14	453	473	1.04
22863	Uncharacterized protein KIAA0831	145	151	1.04
157506	Retinol dehydrogenase 10	58	60	1.04
55152	DALR anticodon-binding domain-containing protein 3	202	211	1.04
22913	RNA-binding protein Raly	555	579	1.04
5927	Histone demethylase JARID1A	387	404	1.04

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
81831	Neuropilin and tolloid-like protein 2 Precursor	127	133	1.04
6427	Splicing factor, arginine/serine-rich 2	1095	1143	1.04
3516	Recombining binding protein suppressor of hairless	407	425	1.04
51248	PDZ domain-containing protein 11	296	309	1.04
10577	Epididymal secretory protein E1 Precursor	4822	5032	1.04
57510	Exportin-5	57	59	1.04
7026	COUP transcription factor 2	587	612	1.04
6812	Syntaxin-binding protein 1	55	57	1.04
5198	Phosphoribosylformylglycinamide synthase	42	44	1.04
100290539	-	35	37	1.04
23030	Lysine-specific demethylase 4B	51	53	1.04
4552	Methionine synthase reductase, mitochondrial Precursor	59	62	1.04
64969	28S ribosomal protein S5, mitochondrial	431	450	1.04
11194	ATP-binding cassette sub-family B member 8, mitochondrial Precursor	16	16	1.04
729535	Uncharacterized protein C21orf70	514	536	1.04
1043	CAMPATH-1 antigen Precursor	12	12	1.04
2720	Beta-galactosidase Precursor	777	811	1.04
132299	OCIA domain-containing protein 2	1579	1649	1.04
-	-	520	543	1.04
-	Cirhin	249	260	1.04
-	WAS protein family homolog 2	19	20	1.04
51133	BTB/POZ domain-containing protein KCTD3	68	71	1.04
196528	AT-rich interactive domain-containing protein 2	121	126	1.04
23014	F-box only protein 21	307	321	1.04
729199	-	11	11	1.04
81890	Queuine tRNA-ribosyltransferase	66	69	1.04
25776	Protein chibby homolog 1	437	456	1.04
116254	Uncharacterized protein C6orf72 Precursor	493	515	1.04
-	Tripartite motif-containing protein 41	23	24	1.04
337969	Keratin-associated protein 19-2	40	42	1.04
-	Leucine-rich repeat LGI family member 4 Precursor	40	42	1.04
5213	6-phosphofructokinase, muscle type	366	383	1.04
80230	RUN and FYVE domain-containing protein 1	880	920	1.04
10298	Serine/threonine-protein kinase PAK 4	457	478	1.04
90809	Transmembrane protein 55B	121	127	1.04
-	Mitochondrial inner membrane protein OXA1L Precursor	1728	1805	1.04
25898	RING finger and CHY zinc finger domain-containing protein 1	340	356	1.05
558	Tyrosine-protein kinase receptor UFO Precursor	709	741	1.05
100287464	-	19	20	1.05
170572	5-hydroxytryptamine receptor 3C Precursor	52	54	1.05
26017	Protein FAM32A	1060	1108	1.05
100294234	-	27	29	1.05
2990	Beta-glucuronidase Precursor	344	360	1.05
2635	Guanylate-binding protein 3	52	54	1.05
10671	Dynactin subunit 6	334	349	1.05
10308	Zinc finger protein 267	77	80	1.05
23118	Mitogen-activated protein kinase kinase 7-interacting protein 2	241	252	1.05
3113	HLA class II histocompatibility antigen, DP alpha chain Precursor	21	22	1.05
23462	Hairy/enhancer-of-split related with YRPW motif protein 1	39	41	1.05
27343	DNA polymerase lambda	22	23	1.05

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
124944	Uncharacterized potential DNA-binding protein C17orf49	930	972	1.05
10540	Dynactin subunit 2	776	812	1.05
1376	Carnitine O-palmitoyltransferase 2, mitochondrial Precursor	156	164	1.05
9282	Mediator of RNA polymerase II transcription subunit 14	7	7	1.05
1296	Collagen alpha-2(VIII) chain Precursor	57	60	1.05
100131128	Mitochondrial import inner membrane translocase subunit Tim8 B	1967	2057	1.05
80298	mTERF domain-containing protein 3, mitochondrial Precursor	54	56	1.05
64092	SAM domain-containing protein SAMSN-1	65	68	1.05
154810	Angiomotin-like protein 1	35	36	1.05
497661	Uncharacterized protein C18orf32	672	703	1.05
55602	CDKN2A-interacting protein	60	63	1.05
1953	Multiple epidermal growth factor-like domains 6 Precursor	25	26	1.05
83900	Keratin-associated protein 9-3	60	62	1.05
1488	C-terminal-binding protein 2	170	178	1.05
-	-	6	6	1.05
9926	Acyl-CoA:lysophosphatidylglycerol acyltransferase 1	52	54	1.05
3853	Keratin, type II cytoskeletal 6A	22	23	1.05
83744	Zinc finger protein 484	24	25	1.05
23023	Transmembrane and coiled-coil domains protein 1	68	72	1.05
92745	Sodium-coupled neutral amino acid transporter 5	49	51	1.05
645602	-	23	24	1.05
1350	Cytochrome c oxidase subunit 7C, mitochondrial Precursor	2352	2461	1.05
29105	UPF0468 protein C16orf80	407	426	1.05
84284	Nucleoside-triphosphatase C1orf57	256	268	1.05
-	Dolichyldiphosphatase 1	202	211	1.05
84272	Protein YIPF4	789	825	1.05
3972	Lutropin subunit beta Precursor	81	85	1.05
631	Filensin	69	72	1.05
953	Ectonucleoside triphosphate diphosphohydrolase 1	258	270	1.05
92558	Coiled-coil domain-containing protein 64A	9	9	1.05
157695	Uncharacterized protein C8orf42	22	23	1.05
3550	Protein Red	654	685	1.05
84289	Inhibitor of growth protein 5	36	38	1.05
56851	UPF0480 protein C15orf24 Precursor	648	679	1.05
7110	TATA element modulatory factor	51	53	1.05
587	Branched-chain-amino-acid aminotransferase, mitochondrial Precursor	549	574	1.05
51290	Endoplasmic reticulum-Golgi intermediate compartment protein 2	751	787	1.05
3059	Hematopoietic lineage cell-specific protein	1339	1402	1.05
130612	Transmembrane protein 198	10	10	1.05
-	General transcription factor IIH subunit 5	755	791	1.05
6773	Signal transducer and activator of transcription 2 (p113)	252	264	1.05
5083	Paired box protein Pax-9	27	28	1.05
5270	Glia-derived nexin Precursor	349	366	1.05
3381	Bone sialoprotein 2 Precursor	27	29	1.05
25988	MBD2-interacting zinc finger protein	51	54	1.05
79792	Gasdermin-D	111	116	1.05
9937	DNA cross-link repair 1A protein	35	37	1.05
100287289	-	7	7	1.05
3875	Keratin, type I cytoskeletal 18	1825	1911	1.05

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
51649	28S ribosomal protein S23, mitochondrial	427	447	1.05
9066	Synaptotagmin-7	12	12	1.05
3183	Heterogeneous nuclear ribonucleoproteins C1/C2	265	278	1.05
8603	Uncharacterized protein C4orf8	19	20	1.05
1937	Elongation factor 1-gamma	9997	10471	1.05
6329	Sodium channel protein type 4 subunit alpha	21	22	1.05
155061	Zinc finger protein 746	75	78	1.05
-	Zinc finger protein 280D	44	46	1.05
79921	Transcription elongation factor A protein-like 4	1007	1056	1.05
64428	Nuclear prelamin A recognition factor-like protein	56	59	1.05
4692	Necdin	435	456	1.05
-	-	585	613	1.05
29997	Glioma tumor suppressor candidate region gene 2 protein (p60)	1102	1154	1.05
-	Olfactory receptor OR11-140	14	14	1.05
-	RNA polymerase-associated protein LEO1	297	311	1.05
7353	Ubiquitin fusion degradation protein 1 homolog	1790	1875	1.05
25963	Transmembrane protein 87A Precursor	371	389	1.05
8527	Diacylglycerol kinase delta	16	16	1.05
94059	Leukocyte receptor cluster member 9	731	766	1.05
314	Retina-specific copper amine oxidase Precursor	20	21	1.05
9353	Slit homolog 2 protein Precursor	23	24	1.05
91289	Lipase maturation factor 2	562	589	1.05
4882	Atrial natriuretic peptide receptor B Precursor	255	268	1.05
93183	GPI mannosyltransferase 1	127	133	1.05
8837	CASP8 and FADD-like apoptosis regulator Precursor	187	196	1.05
139322	Apolipoprotein O-like Precursor	17	18	1.05
222962	Equilibrative nucleoside transporter 4	128	134	1.05
57679	Alsin	30	31	1.05
374969	Coiled-coil domain-containing protein 23	424	444	1.05
-	-	42	44	1.05
79713	Transmembrane protein 149 Precursor	30	31	1.05
25994	Coiled-coil domain-containing protein 13	54	56	1.05
-	Gamma-interferon-inducible protein Ifi-16	990	1038	1.05
139596	Uracil phosphoribosyltransferase	177	186	1.05
286753	Tumor suppressor candidate 5	9	9	1.05
93974	ATPase inhibitor, mitochondrial Precursor	983	1031	1.05
51299	Neuritin Precursor	182	191	1.05
83982	Protein FAM14A Precursor	454	476	1.05
100292224	-	7	7	1.05
-	Runt-related transcription factor 1	28	29	1.05
7757	Zinc finger protein 208	15	15	1.05
928	CD9 antigen (p24)	5077	5325	1.05
81894	Mitoferrin-2	102	107	1.05
997	Ubiquitin-conjugating enzyme E2 R1	1408	1478	1.05
64925	Coiled-coil domain-containing protein 71	22	23	1.05
-	Stathmin-4	10	11	1.05
10827	Protein FAM114A2	178	187	1.05
100287986	-	128	135	1.05
10384	Butyrophilin subfamily 3 member A3 Precursor	93	98	1.05
80176	SPRY domain-containing SOCS box protein 1	182	191	1.05
390916	Nucleoside diphosphate-linked moiety X motif 19, mitochondrial Precursor	20	21	1.05
100289580	-	13	14	1.05

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55775	Tyrosyl-DNA phosphodiesterase 1	180	189	1.05
60490	Phosphopantothenoylcysteine decarboxylase	21	22	1.05
58493	Uncharacterized protein C9orf80	164	172	1.05
-	PELP1_HUMAN Isoform 2 of Q8IZL8 · Homo sapiens (Human)	235	247	1.05
10409	Brain acid soluble protein 1	1455	1527	1.05
441631	Tetraspanin-11	7	7	1.05
148418	Sterile alpha motif domain-containing protein 13	43	46	1.05
51105	Tudor domain-containing protein PHF20L1	136	142	1.05
55024	B-cell scaffold protein with ankyrin repeats	11	11	1.05
403244	Olfactory receptor 2T35	105	110	1.05
284252	BTB/POZ domain-containing protein KCTD1	58	61	1.05
-	Translocon-associated protein subunit beta Precursor	3917	4112	1.05
100293130	Zinc finger and BTB domain-containing protein 7B	16	16	1.05
79760	Gem-associated protein 7	244	256	1.05
-	Bromodomain-containing protein 8 (p120)	203	213	1.05
-	Codanin-1	6	7	1.05
-	Polycystin-1 Precursor	7	8	1.05
54477	Pleckstrin homology domain-containing family A member 5	18	19	1.05
51013	3'-5' exoribonuclease CSL4 homolog	555	583	1.05
4664	NGF1-A-binding protein 1	26	27	1.05
11228	Ras association domain-containing protein 8	39	41	1.05
8892	Translation initiation factor eIF-2B subunit beta	1981	2081	1.05
3214	Homeobox protein Hox-B4	81	85	1.05
-	Pre-mRNA-splicing factor ISY1 homolog	423	444	1.05
55757	UDP-glucose-glycoprotein glucosyltransferase 2 Precursor	78	82	1.05
2002	ETS domain-containing protein Elk-1	40	42	1.05
3310	Heat shock 70 kDa protein 6	19	20	1.05
6207	40S ribosomal protein S13	14647	15389	1.05
-	Putative pancreatic polypeptide 2	6	6	1.05
53918	Protein pelota homolog	366	384	1.05
6360	C-C motif chemokine 16 Precursor	13	14	1.05
25999	CAP-Gly domain-containing linker protein 3	22	23	1.05
91937	T-cell immunoglobulin and mucin domain-containing protein 4 Precursor	632	664	1.05
60412	Exocyst complex component 4	30	31	1.05
25792	Cipl-interacting zinc finger protein	35	37	1.05
55113	XK-related protein 8	54	57	1.05
4868	Probable proline dehydrogenase 2	10	10	1.05
2954	Maleylacetoacetate isomerase	101	106	1.05
5910	Rap1 GTPase-GDP dissociation stimulator 1	520	546	1.05
1030	Cyclin-dependent kinase 4 inhibitor B	83	88	1.05
55596	Zinc finger CCHC domain-containing protein 8	107	113	1.05
3032	Trifunctional enzyme subunit beta, mitochondrial Precursor	1130	1188	1.05
9516	Lipopolysaccharide-induced tumor necrosis factor-alpha factor	126	132	1.05
10787	Nck-associated protein 1	1707	1795	1.05
9702	Centrosomal protein of 57 kDa	130	136	1.05
2323	SL cytokine Precursor	47	49	1.05
84080	Uncharacterized protein C16orf48	142	150	1.05
134548	Ankyrin repeat domain-containing protein 43 Precursor	27	28	1.05
55181	UPF0487 protein C17orf71	269	283	1.05
8406	Sushi repeat-containing protein SRPX Precursor	708	745	1.05

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
120227	Vitamin D 25-hydroxylase	84	88	1.05
387103	Cancer-up-regulated gene 2 protein	197	207	1.05
-	Matrix-remodeling-associated protein 7	510	536	1.05
6426	Splicing factor, arginine/serine-rich 1	1261	1326	1.05
22948	T-complex protein 1 subunit epsilon	1225	1289	1.05
130574	Ly6/PLAUR domain-containing protein 6 Precursor	20	21	1.05
23363	Obscurin-like protein 1 Precursor	17	18	1.05
55957	Protein lin-37 homolog (Antolefinin)	97	102	1.05
84971	Cysteine protease ATG4D	100	105	1.05
4610	L-myc-1 proto-oncogene protein	31	32	1.05
5831	Pyrroline-5-carboxylate reductase 1, mitochondrial Precursor	229	241	1.05
26121	U4/U6 small nuclear ribonucleoprotein Prp31	198	209	1.05
80168	2-acylglycerol O-acyltransferase 2	6	6	1.05
84885	Probable palmitoyltransferase ZDHHC12	88	92	1.05
645864	Putative MAGE domain-containing protein ENSP00000382884	18	19	1.05
100292465	-	19	20	1.05
6439	Pulmonary surfactant-associated protein B Precursor	45	48	1.05
5364	Plexin-B1 Precursor	44	46	1.05
100131844	Anaphase-promoting complex subunit 11	3584	3772	1.05
441806	-	910	958	1.05
10055	SUMO-activating enzyme subunit 1	858	903	1.05
100294457	-	10	10	1.05
8667	Eukaryotic translation initiation factor 3 subunit H	2469	2599	1.05
5118	Procollagen C-endopeptidase enhancer 1 Precursor	31	33	1.05
6643	Sorting nexin-2	403	425	1.05
7516	DNA repair protein XRCC2	18	19	1.05
10336	Polycomb group RING finger protein 3	111	117	1.05
201134	Coiled-coil domain-containing protein 46	135	142	1.05
-	Putative uncharacterized protein DKFZp586L1323	6	6	1.05
56943	Enhancer of yellow 2 transcription factor homolog	1996	2102	1.05
-	-	35	37	1.05
23208	Synaptotagmin-11	163	172	1.05
10644	Insulin-like growth factor 2 mRNA-binding protein 2	12	13	1.05
-	COMM domain-containing protein 3	496	523	1.05
79158	N-acetylglucosamine-1-phosphotransferase subunits alpha/beta Precursor	32	33	1.05
-	B-cell lymphoma 3-encoded protein	45	47	1.05
2188	Fanconi anemia group F protein	108	113	1.05
112616	CKLF-like MARVEL transmembrane domain-containing protein 7	1099	1157	1.05
100293844	HCG1987623LOC651900 protein Fragment	14	15	1.05
1775	Deoxyribonuclease-1-like 2 Precursor	8	8	1.05
57721	Methyltransferase-like protein KIAA1627	164	172	1.05
7008	Thyrotroph embryonic factor	66	70	1.05
84967	U7 snRNA-associated Sm-like protein LSm10	238	251	1.05
10103	Tetraspanin-1	21	23	1.05
-	Sodium bicarbonate cotransporter 3	221	233	1.05
57102	Uncharacterized protein C12orf4	124	131	1.05
5664	Presenilin-2	88	93	1.05
80129	Coiled-coil domain-containing protein C6orf97	17	18	1.05
54496	Protein arginine N-methyltransferase 7	33	35	1.05

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Succinyl-CoA ligase [GDP-forming] subunit alpha, mitochondrial Precursor	804	847	1.05
-	Macrophage-stimulating protein receptor Precursor	12	13	1.05
90678	E3 ubiquitin-protein ligase LRSAM1	146	154	1.05
4162	Cell surface glycoprotein MUC18 Precursor	5783	6096	1.05
-	-	8346	8798	1.05
339487	Protein archease	255	269	1.05
51434	Anaphase-promoting complex subunit 7	193	204	1.05
-	Uncharacterized protein ENSP00000383436	30	32	1.05
54507	ADAMTS-like protein 4 Precursor	8	8	1.05
100128355	-	30	32	1.05
-	Phosphoinositide 3-kinase adapter protein 1	13	14	1.05
-	Uncharacterized protein ENSP00000324580	20	21	1.05
286068	-	14	15	1.05
51676	Ankyrin repeat and SOCS box protein 2	56	59	1.05
90411	Multiple coagulation factor deficiency protein 2 Precursor	1142	1204	1.05
100292623	-	13	13	1.05
-	TBC domain-containing protein kinase-like protein	90	95	1.05
824	Calpain-2 catalytic subunit Precursor	2154	2272	1.05
6949	Treacle protein	21	22	1.05
79473	Olfactory receptor 52N1	14	15	1.05
7468	Probable histone-lysine N-methyltransferase NSD2	33	35	1.05
51368	Testis-expressed sequence 264 protein Precursor	112	118	1.06
8625	DNA-binding protein RFXANK	303	319	1.06
100131988	-	9	9	1.06
129285	KLRAQ motif-containing protein 1	119	126	1.06
79694	Glycoprotein endo-alpha-1,2-mannosidase cDNA FLJ51355	63	66	1.06
100292747	-	10	11	1.06
100292979	-	7	8	1.06
6120	Ribulose-phosphate 3-epimerase	265	279	1.06
127933	Serine/threonine-protein kinase Kist	16	17	1.06
55146	Probable palmitoyltransferase ZDHHC4	384	406	1.06
730278	Protein S100-A11	4493	4742	1.06
378	ADP-ribosylation factor 4	3590	3789	1.06
-	-	2678	2826	1.06
200373	Uncharacterized protein MGC33657	12	13	1.06
57062	ATP-dependent RNA helicase DDX24	522	551	1.06
3654	Interleukin-1 receptor-associated kinase 1	1132	1195	1.06
3428	Gamma-interferon-inducible protein Ifi-16	1214	1281	1.06
-	-	31	33	1.06
58515	Selenoprotein K	621	656	1.06
400720	Zinc finger protein 772	8	8	1.06
56478	Eukaryotic translation initiation factor 4E transporter	29	30	1.06
100292183	-	6	7	1.06
5981	Replication factor C subunit 1	111	117	1.06
115950	Zinc finger protein 653	28	30	1.06
100289899	Transcription elongation factor A protein 1	491	518	1.06
138639	Protein tyrosine phosphatase domain-containing protein 1	26	27	1.06
401427	Olfactory receptor 2A4	14	15	1.06
399664	RNA-binding protein MEX3D	359	379	1.06
7376	Oxysterols receptor LXR-beta	186	196	1.06
3692	Eukaryotic translation initiation factor 6	1164	1230	1.06
83658	Dynein light chain roadblock-type 1	2141	2262	1.06
100131525	-	23	24	1.06

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
119548	Pancreatic lipase-related protein 3 Precursor	17	18	1.06
5445	Serum paraoxonase/arylesterase 2	1543	1630	1.06
147807	Zinc finger protein 524	38	40	1.06
7918	Protein BAT4	158	167	1.06
6884	Transcription initiation factor TFIIID subunit 13	26	27	1.06
100291275	-	12	13	1.06
51692	Cleavage and polyadenylation specificity factor subunit 3	311	328	1.06
57146	Promethin	184	194	1.06
-	RING finger protein 170	145	153	1.06
22845	Dolichol kinase	238	251	1.06
127703	UPF0500 protein C1orf216	149	158	1.06
339665	Solute carrier family 35 member E4	35	37	1.06
10667	Phenylalanyl-tRNA synthetase, mitochondrial Precursor	49	52	1.06
88745	UPF0399 protein C6orf153	566	599	1.06
80148	PQ-loop repeat-containing protein 1	42	44	1.06
-	Ubiquitin carboxyl-terminal hydrolase 24	86	91	1.06
201965	RWD domain-containing protein 4A	124	131	1.06
51280	Golgi membrane protein 1	1314	1389	1.06
100291183	-	13	13	1.06
8890	Translation initiation factor eIF-2B subunit delta	380	402	1.06
4999	Origin recognition complex subunit 2	71	75	1.06
22803	5'-3' exoribonuclease 2	826	873	1.06
6880	Transcription initiation factor TFIIID subunit 9	1064	1125	1.06
79639	Transmembrane protein 53	16	17	1.06
22982	Disco-interacting protein 2 homolog C	8	8	1.06
127262	Tumor protein p63-regulated gene 1-like protein	422	446	1.06
80895	Integrin-linked kinase-associated serine/threonine phosphatase 2C	170	180	1.06
51569	Ubiquitin-fold modifier 1 Precursor	709	750	1.06
1455	Casein kinase I isoform gamma-2	797	843	1.06
9553	39S ribosomal protein L33, mitochondrial	474	501	1.06
6585	Slit homolog 1 protein Precursor	12	13	1.06
5515	Serine/threonine-protein phosphatase 2A catalytic subunit alpha isoform	1375	1454	1.06
10285	Survival of motor neuron-related-splicing factor 30	307	325	1.06
9818	Nucleoporin p58/p45	204	216	1.06
8905	AP-1 complex subunit sigma-2	397	420	1.06
28988	Drebrin-like protein	332	351	1.06
9326	Zinc finger HIT domain-containing protein 3	583	617	1.06
3669	Interferon-stimulated gene 20 kDa protein	105	111	1.06
57506	Mitochondrial antiviral-signaling protein	109	115	1.06
221496	LEM domain-containing protein 2	58	61	1.06
5104	Plasma serine protease inhibitor Precursor	24	26	1.06
55260	Transmembrane protein 143	51	53	1.06
25946	Zinc finger protein 385A	26	27	1.06
25766	Pre-mRNA-processing factor 40 homolog B	20	21	1.06
5877	Guanine nucleotide exchange factor MSS4	40	42	1.06
56850	GRIP1-associated protein 1	149	158	1.06
57727	Nuclear receptor coactivator 5	181	191	1.06
-	-	74	78	1.06
6622	Alpha-synuclein	409	432	1.06
100287762	-	24	25	1.06
7916	HLA-B associated transcript-2	15	16	1.06
7329	SUMO-conjugating enzyme UBC9	976	1034	1.06

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55437	STE20-related kinase adapter protein beta	144	153	1.06
100290304	-	15	16	1.06
375616	cysteine rich BMP regulator 2 isoform 2	15	16	1.06
79943	Zinc finger protein 696	35	37	1.06
54329	Probable G-protein coupled receptor 85	19	20	1.06
6047	RING finger protein 4	192	204	1.06
84749	Ubiquitin carboxyl-terminal hydrolase 30	48	50	1.06
8089	YEATS domain-containing protein 4	133	141	1.06
84901	NFATC2-interacting protein	154	163	1.06
4649	Myosin-IXa	87	92	1.06
114034	Target of EGR1 protein 1	87	92	1.06
90353	ATP-binding domain-containing protein 3	34	36	1.06
27429	Serine protease HTRA2, mitochondrial Precursor	90	96	1.06
10164	Carbohydrate sulfotransferase 4	23	25	1.06
10607	WD repeat-containing protein SAZD	115	121	1.06
727866	Protein FAM156A	47	50	1.06
196394	Protein AMN1 homolog	57	60	1.06
11231	Translocation protein SEC63 homolog	611	647	1.06
11337	Gamma-aminobutyric acid receptor-associated protein	4131	4378	1.06
79699	Protein zyg-11 homolog B	252	267	1.06
64135	Interferon-induced helicase C domain-containing protein 1	31	33	1.06
26233	F-box/LRR-repeat protein 6	163	173	1.06
2197	Ubiquitin-like protein FUBI	11491	12177	1.06
9630	Guanine nucleotide-binding protein subunit alpha-14	24	26	1.06
54931	RNA (guanine-9'-methyltransferase domain-containing protein 1, mitochondrial Precursor	223	236	1.06
-	Zinc finger protein 509	42	44	1.06
-	Sodium/potassium/calcium exchanger 6 Precursor	80	85	1.06
55600	Intellectin-1 Precursor	7	8	1.06
6404	P-selectin glycoprotein ligand 1 Precursor	432	458	1.06
8884	Sodium-dependent multivitamin transporter	103	109	1.06
90639	Cytochrome c oxidase assembly protein COX19	31	33	1.06
150383	UPF0595 protein C22orf40	14	15	1.06
-	Uncharacterized protein C3orf34	27	29	1.06
100129869	-	19	20	1.06
7411	Prefoldin subunit 3	999	1060	1.06
4915	BDNF/NT-3 growth factors receptor Precursor	7	8	1.06
100291816	-	10	11	1.06
100288076	-	7	8	1.06
339105	Polyserase-3 Precursor	13	14	1.06
10220	Growth/differentiation factor 11 Precursor	26	28	1.06
6185	Dolichyl-diphosphooligosaccharide-protein glycosyltransferase subunit 2 Precursor	1730	1835	1.06
5295	Phosphatidylinositol 3-kinase regulatory subunit alpha	73	77	1.06
-	BTB/POZ domain-containing protein KCTD17	94	100	1.06
84188	Fatty acyl-CoA reductase 1	63	66	1.06
9144	Synaptogyrin-2 (Cellugyrin)	8	9	1.06
5062	Serine/threonine-protein kinase PAK 2	52	55	1.06
100293892	-	14	15	1.06
8848	TSC22 domain family protein 1	826	876	1.06
-	Nucleoside diphosphate kinase 7	253	269	1.06
64419	Myotubularin-related protein 14	117	124	1.06
-	Abhydrolase domain-containing protein 14A	46	48	1.06

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55806	Protein hairless [Source:UniProtKB/Swiss-Prot;Acc:O43593]	20	21	1.06
55929	DNA methyltransferase 1-associated protein 1	205	217	1.06
-	Platelet receptor Gi24 Precursor	29	31	1.06
5471	Amidophosphoribosyltransferase Precursor	46	49	1.06
2135	Exostosin-like 2	202	214	1.06
10961	Endoplasmic reticulum protein ERp29 Precursor	1049	1114	1.06
23359	Transmembrane protein KIAA0574	41	43	1.06
23596	Opsin-3	507	538	1.06
153364	Beta-lactamase-like protein FLJ75971	28	30	1.06
11183	Mitogen-activated protein kinase kinase kinase 5	158	168	1.06
-	Uncharacterized protein CXorf45	197	209	1.06
5718	26S proteasome non-ATPase regulatory subunit 12	704	748	1.06
113179	tRNA-specific adenosine deaminase-like protein 3	28	30	1.06
53944	Casein kinase I isoform gamma-1	136	145	1.06
5354	Myelin proteolipid protein	13	14	1.06
29937	Neudessin Precursor	481	510	1.06
138716	Alba-like protein C9orf23	269	286	1.06
51201	Palmitoyltransferase ZDHHC2	83	89	1.06
26469	Tyrosine-protein phosphatase non-receptor type 18	65	69	1.06
23326	Ubiquitin carboxyl-terminal hydrolase 22	769	816	1.06
92667	Uncharacterized protein C20orf72	220	234	1.06
2820	Glycerol-3-phosphate dehydrogenase, mitochondrial Precursor	62	66	1.06
55975	Kelch-like protein 7	125	133	1.06
-	Oxysterol-binding protein-related protein 11	66	71	1.06
2678	Gamma-glutamyltranspeptidase 1 Precursor	12	13	1.06
2168	Fatty acid-binding protein, liver	11	12	1.06
66008	Trafficking kinesin-binding protein 2	106	113	1.06
10229	Ubiquinone biosynthesis protein COQ7 homolog	76	81	1.06
100289465	HCG1993240Serologically defined breast cancer antigen NY-BR-40 Fragment	10	10	1.06
100130344	-	6	7	1.06
10987	COP9 signalosome complex subunit 5	997	1059	1.06
79848	Centrosome and spindle pole-associated protein 1	27	29	1.06
23001	WD repeat and FYVE domain-containing protein 3	92	98	1.06
10765	Histone demethylase JARID1B	231	245	1.06
55010	UPF0419 protein C12orf48	19	20	1.06
54923	Lck-interacting transmembrane adapter 1	27	29	1.06
8013	Nuclear receptor subfamily 4 group A member 3	14	15	1.06
79022	Transmembrane protein 106C	309	328	1.06
8804	Protein CREG1 Precursor	145	154	1.06
9987	Heterogeneous nuclear ribonucleoprotein D-like	381	405	1.06
10605	Polyadenylate-binding protein-interacting protein 1	173	184	1.06
100291539	-	7	7	1.06
-	Serine/threonine-protein phosphatase PP1-gamma catalytic subunit	559	594	1.06
-	-	236	251	1.06
1476	Cystatin-B	4941	5255	1.06
5340	Plasminogen Precursor	11	12	1.06
9231	Disks large homolog 5	119	127	1.06
388135	UPF0583 protein C15orf59	9	10	1.06
1500	Catenin delta-1 (p120 catenin)	542	577	1.06
93380	Transmembrane protein 32 Precursor	167	177	1.06

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
54464	5'-3' exoribonuclease 1	26	28	1.06
149708	WAP four-disulfide core domain protein 5 Precursor	11	11	1.06
4282	macrophage migration inhibitory factor	6538	6957	1.06
80162	Acid trehalase-like protein 1	64	68	1.06
115098	Coiled-coil domain-containing protein 124	335	356	1.06
2232	NADPH:adenodoxin oxidoreductase, mitochondrial Precursor	320	340	1.06
9145	Synaptogyrin-1	39	42	1.06
55279	Zinc finger protein 654	159	170	1.06
-	cDNA: FLJ22477 fis, clone HRC10815	87	93	1.06
83743	Glutamate-rich WD repeat-containing protein 1	142	152	1.06
142940	Probable tRNA pseudouridine synthase 1	134	142	1.06
2848	Probable G-protein coupled receptor 25	15	16	1.06
3752	Potassium voltage-gated channel subfamily D member 3	19	20	1.06
100292591	-	35	37	1.06
23175	Lipin-1	63	67	1.06
646960	-	22	24	1.06
51729	WW domain-binding protein 11	82	88	1.06
55781	Serine/threonine-protein kinase RIO2	195	207	1.06
81618	Integral membrane protein 2C	37	40	1.06
-	-	24	26	1.06
645086	Small acidic protein	1765	1879	1.06
50854	Protein G8	1331	1418	1.06
-	Protein tweety homolog 3	327	349	1.06
3640	Tyrosine-protein kinase JAK3	38	40	1.06
4776	Nuclear factor of activated T-cells, cytoplasmic 4	6	7	1.06
11124	FAS-associated factor 1	104	111	1.06
84851	Tripartite motif-containing protein 52	22	24	1.06
100288047	-	13	14	1.07
25992	Sushi, nidogen and EGF-like domain-containing protein 1 Precursor	12	13	1.07
30813	Visual system homeobox 1	21	23	1.07
91782	Charged multivesicular body protein 7	435	463	1.07
56652	Twinkle protein, mitochondrial Precursor	20	22	1.07
-	39S ribosomal protein L23, mitochondrial	1021	1087	1.07
-	Interleukin-15 receptor subunit alpha Precursor	82	87	1.07
54978	Transmembrane protein C2orf18 Precursor	22	23	1.07
55092	Transmembrane protein 51	152	162	1.07
90580	Uncharacterized protein C19orf52	113	121	1.07
6878	Transcription initiation factor TFIID subunit 6	33	35	1.07
3749	Potassium voltage-gated channel subfamily C member 4	31	33	1.07
-	Striatin	14	15	1.07
91750	Protein lin-52 homolog	60	64	1.07
100287837	-	11	12	1.07
79444	Baculoviral IAP repeat-containing protein 7	15	16	1.07
339745	Speckle-type POZ protein-like	15	16	1.07
643368	-	11	11	1.07
202451	Putative uncharacterized protein Fragment	28	29	1.07
-	cDNA FLJ45974 fis, clone PLACE7018452	55	59	1.07
-	-	15539	16564	1.07
84912	UDP-xylose and UDP-N-acetylglucosamine transporter	71	76	1.07
-	Zinc finger FYVE domain-containing protein 19	227	242	1.07
6872	Transcription initiation factor TFIID subunit 1	45	48	1.07

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100290563	-	6	6	1.07
-	-	43	46	1.07
84933	Uncharacterized protein CSorf76	202	216	1.07
115290	F-box only protein 17	93	100	1.07
55341	Large subunit GTPase 1 homolog	271	289	1.07
27113	Bcl-2-binding component 3	569	607	1.07
55552	Zinc finger protein 823	36	38	1.07
9441	Mediator of RNA polymerase II transcription subunit 26	24	25	1.07
100290139	-	5	6	1.07
27347	STE20/SPS1-related proline-alanine-rich protein kinase	63	67	1.07
80325	Ankyrin repeat and BTB/POZ domain-containing protein 1	60	64	1.07
100128108	-	17	18	1.07
56672	Proline-rich protein BCA3	461	491	1.07
9528	Transmembrane protein 59 Precursor	2393	2553	1.07
-	-	5558	5930	1.07
55293	Ubiquitin-conjugating enzyme E2 variant 3	128	137	1.07
435	Argininosuccinate lyase	237	252	1.07
90141	EF-hand domain-containing protein C14orf143	71	76	1.07
728530	-	5	6	1.07
-	ATP-dependent metalloprotease YME1L1	1275	1361	1.07
64375	Zinc finger protein Eos	41	43	1.07
10450	Peptidyl-prolyl cis-trans isomerase E	398	424	1.07
93100	Nicotinate phosphoribosyltransferase	60	64	1.07
57462	Uncharacterized family 31 glucosidase KIAA1161	59	63	1.07
9215	Glycosyltransferase-like protein LARGE1	19	20	1.07
124454	Probable glutamyl-tRNA synthetase, mitochondrial Precursor	34	36	1.07
51714	Selenoprotein T Precursor	146	156	1.07
26268	F-box only protein 9	676	721	1.07
653268	Centaurin-gamma-like family member 4	68	73	1.07
124512	UPF0563 protein C17orf95	260	277	1.07
23228	Inactive phospholipase C-like protein 2	14	15	1.07
9914	Calcium-transporting ATPase type 2C member 2	87	93	1.07
81839	Vang-like protein 1	29	31	1.07
90462	Zinc finger protein 605	33	35	1.07
1119	Choline kinase alpha	56	60	1.07
57095	UPF0424 protein C1orf128	264	282	1.07
54808	Dymeclin	265	283	1.07
1155	Tubulin folding cofactor B	1459	1558	1.07
126382	Nuclear receptor 2C2-associated protein	63	68	1.07
-	Protein spinster homolog 3	14	14	1.07
4798	Nuclear factor related to kappa-B-binding protein	28	29	1.07
119358	Small nuclear ribonucleoprotein Sm D2	6502	6944	1.07
8722	Cathepsin F Precursor	114	121	1.07
-	Negative elongation factor E	1004	1072	1.07
-	UPF0547 protein C16orf87	70	75	1.07
333926	Protein phosphatase 1J	19	20	1.07
10	Arylamine N-acetyltransferase 2	10	10	1.07
51513	Transcription factor ETV7	42	45	1.07
9184	Mitotic checkpoint protein BUB3	922	984	1.07
337977	Keratin-associated protein 21-1	81	87	1.07
51272	BET1-like protein	25	27	1.07
4013	Loss of heterozygosity 11 chromosomal region 2 gene A protein	36	39	1.07

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Protein FAM86D	135	145	1.07
100132635	Gastric mucin Fragment	14	15	1.07
-	FACT complex subunit SSRP1	747	798	1.07
2519	Plasma alpha-L-fucosidase Precursor	536	572	1.07
-	-	54	57	1.07
374659	HD domain-containing protein 3	227	243	1.07
84634	KISS-1 receptor	24	26	1.07
286436	Histone H2B type F-M	9	10	1.07
-	Leukemia-associated protein 1	61	65	1.07
3588	Interleukin-10 receptor beta chain Precursor	186	198	1.07
-	-	33	35	1.07
116285	Acyl-coenzyme A synthetase ACSM1, mitochondrial Precursor	9	9	1.07
3954	LETM1 and EF-hand domain-containing protein 1, mitochondrial Precursor	32	34	1.07
79693	YrdC domain-containing protein, mitochondrial Precursor	192	205	1.07
27077	B9 domain-containing protein 1	88	94	1.07
51070	Nitric oxide synthase-interacting protein	529	565	1.07
-	Uncharacterized protein FLJ46757	6	7	1.07
23586	Probable ATP-dependent RNA helicase DDX58	112	120	1.07
-	-	9	10	1.07
-	Galectin-related protein	16	17	1.07
11264	Peroxisomal membrane protein 4	27	28	1.07
57864	Thymic stromal cotransporter homolog	8	8	1.07
57097	Poly [ADP-ribose] polymerase 11	11	12	1.07
100290359	-	45	48	1.07
246243	Ribonuclease H1	466	498	1.07
57228	Small transmembrane and glycosylated protein	118	126	1.07
5875	Geranylgeranyl transferase type-2 subunit alpha	79	84	1.07
57458	Transmembrane and coiled-coil domains protein 3	97	104	1.07
253868	Putative uncharacterized protein C20orf200	16	17	1.07
-	FAS-associated factor 1	77	83	1.07
-	UBX domain-containing protein 6	192	206	1.07
1950	Pro-epidermal growth factor Precursor	60	64	1.07
162515	Monocarboxylate transporter 11	11	11	1.07
118980	Sideroflexin-2	16	18	1.07
84250	Ankyrin repeat domain-containing protein 32	16	17	1.07
646879	-	25	27	1.07
79003	Protein MIS12 homolog	138	148	1.07
9909	DENN domain-containing protein 4B	383	409	1.07
10535	Ribonuclease H2 subunit A	242	259	1.07
90011	Putative killer cell immunoglobulin-like receptor-like protein KIR3DX1 Precursor	12	13	1.07
23518	R3H domain-containing protein 1	110	118	1.07
4726	NADH dehydrogenase [ubiquinone] iron-sulfur protein 6, mitochondrial Precursor	1937	2072	1.07
115353	Leucine-rich repeat-containing protein 42	335	358	1.07
8021	Nuclear pore complex protein Nup214	70	74	1.07
5934	Retinoblastoma-like protein 2	70	75	1.07
731231	Sodium channel protein type 5 subunit alpha	147	157	1.07
10611	PDZ and LIM domain protein 5	354	379	1.07
100291689	-	14	15	1.07
3581	Interleukin-9 receptor Precursor	19	20	1.07

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
4751	Serine/threonine-protein kinase Nek2	10	11	1.07
3448	Interferon alpha-14 Precursor	39	41	1.07
26984	Vesicle trafficking protein SEC22a	170	182	1.07
100132515	-	14	15	1.07
84243	Palmitoyltransferase ZDHHC18	97	104	1.07
100127905	Putative UPF0601 protein FAM165A	41	44	1.07
100290317	-	6	6	1.07
22870	Serine/threonine-protein phosphatase 6 regulatory subunit 1	135	144	1.07
79877	Dephospho-CoA kinase domain-containing protein	23	24	1.07
83660	Talin-2	22	23	1.07
23244	Sister chromatid cohesion protein PDS5 homolog A	33	35	1.07
-	Forkhead box protein K2	38	41	1.07
26515	Mitochondrial import inner membrane translocase subunit Tim9 B	24	25	1.07
-	-	17	18	1.07
9025	E3 ubiquitin-protein ligase RNF8	18	19	1.07
29780	Beta-parvin (Affixin)	43	46	1.07
51535	Periphrin-1	26	28	1.07
8634	RNA 3'-terminal phosphate cyclase	1057	1132	1.07
4300	Protein AF-9	53	57	1.07
9260	PDZ and LIM domain protein 7	44	47	1.07
55628	Zinc finger protein 407	9	10	1.07
51009	Derlin-2	675	723	1.07
51093	UPF0431 protein C1orf66	60	64	1.07
154007	U11/U12 small nuclear ribonucleoprotein 48 kDa protein	38	41	1.07
54915	YTH domain family protein 1	429	460	1.07
-	Mitogen-activated protein kinase kinase kinase 3	170	182	1.07
94107	Transmembrane protein 203	259	277	1.07
375323	Lipoma HMGIC fusion partner-like 4 protein	14	15	1.07
29101	RNA polymerase II subunit A C-terminal domain phosphatase SSU72	1549	1659	1.07
-	Peroxisome assembly factor 2	42	45	1.07
1456	Casein kinase I isoform gamma-3	166	177	1.07
55908	Hepatocellular carcinoma-associated protein TD26 Precursor	18	19	1.07
26168	Sentrin-specific protease 3	153	164	1.07
26031	Oxysterol-binding protein-related protein 3	104	111	1.07
-	-	21	22	1.07
100291953	-	39	42	1.07
83473	Katanin p60 ATPase-containing subunit A-like 2	28	30	1.07
25904	CCR4-NOT transcription complex subunit 10	50	53	1.07
64860	Armadillo repeat-containing X-linked protein 5	23	25	1.07
5435	DNA-directed RNA polymerases I, II, and III subunit RPABC2	924	990	1.07
137107	Ribosomal protein L1	8386	8988	1.07
390998	-	6	7	1.07
51191	Probable E3 ubiquitin-protein ligase HERC5	34	36	1.07
5095	Propionyl-CoA carboxylase alpha chain, mitochondrial Precursor	115	123	1.07
100127913	-	17	19	1.07
23187	Pleckstrin homology-like domain family B member 1	231	248	1.07

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
7045	Transforming growth factor-beta-induced protein ig-h3 Precursor	130	139	1.07
9342	Synaptosomal-associated protein 29	233	249	1.07
285237	Uncharacterized protein C3orf38	169	181	1.07
-	Acyl-CoA synthetase family member 3, mitochondrial Precursor	51	54	1.07
54476	E3 ubiquitin-protein ligase RNF216	74	79	1.07
5504	Protein phosphatase inhibitor 2	248	266	1.07
83544	Dynein light chain 1, axonemal	47	50	1.07
-	X-ray radiation resistance-associated protein 1	24	25	1.07
23451	Splicing factor 3B subunit 1	350	375	1.07
6103	X-linked retinitis pigmentosa GTPase regulator	30	32	1.07
3735	Lysyl-tRNA synthetase	1232	1321	1.07
-	Protein PPRC1	124	134	1.07
100133588	-	17	18	1.07
55914	Protein LAP2	73	78	1.07
55154	Protein misato homolog 1	110	118	1.07
85315	Membrane progesterin receptor beta	101	109	1.07
-	Protein FAM57B	26	28	1.07
642	Bleomycin hydrolase	680	730	1.07
65258	Metallophosphoesterase 1	69	74	1.07
-	-	19	21	1.07
8220	Protein DGCR14	85	91	1.07
59	Actin, aortic smooth muscle	441	473	1.07
54941	E3 ubiquitin-protein ligase RNF125	42	45	1.07
23091	Zinc finger CCCH domain-containing protein 13	38	41	1.07
10749	Kinesin-like protein KIF1C	24	25	1.07
80021	Transmembrane protein 62	67	72	1.07
114793	Formin-like protein 2	23	25	1.07
59342	Retinoid-inducible serine carboxypeptidase Precursor	266	285	1.07
-	HIRA-interacting protein 3	74	80	1.07
84449	Zinc finger protein 333	11	12	1.07
59286	Ubiquitin-like protein 5	2932	3147	1.07
100134934	Uncharacterized protein FLJ39785	180	194	1.07
-	Zinc finger protein 286A	50	53	1.07
84105	Pterin-4'-alpha'-carbinolamine dehydratase 2	146	157	1.07
1429	Quinone oxidoreductase	239	256	1.07
-	Integral membrane protein GPR175	59	63	1.07
-	-	174	187	1.07
57129	39S ribosomal protein L47, mitochondrial Precursor	91	98	1.07
80274	Signal peptide, CUB and EGF-like domain-containing protein 1 Precursor	23	25	1.07
23172	Protein FAM175B	112	121	1.07
64789	Uncharacterized protein C1orf176	64	69	1.07
-	Serine/threonine-protein kinase TAO3	131	140	1.07
-	cDNA FLJ32095 fis, clone OCBBF2000998	13	14	1.07
-	Receptor expression-enhancing protein 5	641	689	1.07
84541	Kelch repeat and BTB domain-containing protein 8	30	32	1.07
347454	Ankyrin repeat domain-containing protein 58	9	10	1.07
57019	Anamorsin	695	746	1.07
6748	Translocon-associated protein subunit delta Precursor	3933	4225	1.07
8888	80 kDa MCM3-associated protein	507	545	1.07
-	ataxin 3 isoform 1	199	213	1.07
129787	Transmembrane protein 18	33	36	1.07

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100292961	-	40	43	1.07
3215	Homeobox protein Hox-B5	95	102	1.07
100289092	-	10	11	1.07
55215	Fanconi anemia group I protein	126	135	1.07
145264	Serpin A12 Precursor	7	7	1.07
5265	Alpha-1-antitrypsin Precursor	13	13	1.07
10128	Leucine-rich PPR motif-containing protein, mitochondrial Precursor	385	413	1.07
-	Nuclear receptor coactivator 7	366	394	1.07
118487	Coiled-coil-helix-coiled-coil-helix domain-containing protein 1	902	969	1.07
60685	AN1-type zinc finger protein 3	167	179	1.07
23640	Hsp70-binding protein 1	173	186	1.07
57677	Zinc finger protein 14 homolog	14	15	1.07
199745	THAP domain-containing protein 8	63	68	1.07
-	-	398	428	1.07
5601	Mitogen-activated protein kinase 9	238	256	1.07
220004	Uncharacterized protein C11orf66	19	20	1.07
169200	Transmembrane protein 64	90	97	1.07
5317	Plakophilin-1	6	7	1.07
54998	Aurora kinase A-interacting protein	1925	2069	1.07
8061	Fos-related antigen 1	170	182	1.08
55505	H/ACA ribonucleoprotein complex subunit 3	4256	4575	1.08
284098	Phosphatidylinositol-glycan biosynthesis class W protein	87	94	1.08
11173	A disintegrin and metalloproteinase with thrombospondin motifs 7 Precursor	11	12	1.08
-	MHC class I polypeptide-related sequence A	125	135	1.08
143684	Protein FAM76B	32	35	1.08
8693	-	17	18	1.08
7337	Ubiquitin-protein ligase E3A	321	346	1.08
170960	Zinc finger protein 721	133	143	1.08
-	Protein NDRG4	262	282	1.08
-	MIT domain-containing protein 1	330	355	1.08
23203	Mitochondrial-processing peptidase subunit alpha Precursor	363	390	1.08
7701	Zinc finger protein 142	5	6	1.08
258010	Small VCP/p97-interacting protein	995	1070	1.08
51264	39S ribosomal protein L27, mitochondrial	782	842	1.08
645212	-	62	67	1.08
-	-	24860	26738	1.08
1027	Cyclin-dependent kinase inhibitor 1B	90	97	1.08
7541	Zinc finger protein 161 homolog	62	67	1.08
-	Cysteine-rich PAK1 inhibitor	31	34	1.08
100290926	-	13	14	1.08
3337	DnaJ homolog subfamily B member 1	518	557	1.08
91137	Solute carrier family 25 member 46	122	131	1.08
-	Receptor-interacting serine/threonine-protein kinase 5	96	104	1.08
-	-	81	87	1.08
-	Citrate lyase subunit beta-like protein, mitochondrial Precursor	56	60	1.08
4695	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 2	1602	1723	1.08
283358	N-acetyl-beta-glucosaminyl-glycoprotein 4-beta-N-acetylgalactosaminyltransferase 2	17	19	1.08
1639	Dynactin subunit 1	67	72	1.08

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1020	Cell division protein kinase 5	119	128	1.08
266727	MAM domain-containing glycosylphosphatidylinositol anchor protein 1 Precursor	63	68	1.08
100288160	Esophagus cancer-related gene-2 interaction susceptibility protein Fragment	22	23	1.08
58472	Sulfide:quinone oxidoreductase, mitochondrial Precursor	334	360	1.08
84993	Ubiquitin-like protein 7	213	230	1.08
100128267	-	21	23	1.08
10730	ATP-dependent metalloprotease YME1L1	1071	1153	1.08
-	Dihydropyrimidinase-related protein 3	520	560	1.08
114569	Protein MAL2	49	52	1.08
85290	Keratin-associated protein 4-3	62	67	1.08
5782	Tyrosine-protein phosphatase non-receptor type 12	1033	1112	1.08
6610	Sphingomyelin phosphodiesterase 2	48	52	1.08
139716	GRB2-associated-binding protein 3	7	8	1.08
54851	Ankyrin repeat domain-containing protein 49	103	111	1.08
-	-	824	888	1.08
5805	6-pyruvoyl tetrahydrobiopterin synthase	256	276	1.08
100292055	-	40	43	1.08
84316	LSM domain-containing protein 1	1572	1693	1.08
29110	Serine/threonine-protein kinase TBK1	364	392	1.08
100129825	-	9	10	1.08
10421	CD2 antigen cytoplasmic tail-binding protein 2	393	423	1.08
6895	TAR RNA-binding protein 2	55	59	1.08
90007	Midnolin	194	209	1.08
5892	DNA repair protein RAD51 homolog 4	49	53	1.08
-	-	63	68	1.08
2395	Frataxin, mitochondrial Precursor	14	15	1.08
653881	60S ribosomal protein L3	26566	28620	1.08
5986	Beta-1,3-N-acetylglucosaminyltransferase radical fringe	83	89	1.08
55687	Mitochondrial tRNA-specific 2-thiouridylase 1	169	182	1.08
53335	B-cell lymphoma/leukemia 11A	9	10	1.08
219833	Putative uncharacterized protein C11orf45 Precursor	7	7	1.08
93129	Protein orai-3	263	283	1.08
100293658	PPPDE peptidase domain-containing protein 1	154	166	1.08
4580	Metaxin-1	412	444	1.08
146059	Codanin-1	45	49	1.08
-	Coiled-coil domain-containing protein 102B	9	10	1.08
-	Adrenodoxin-like protein, mitochondrial Precursor	152	164	1.08
-	Phosphoglucomutase-1	97	104	1.08
89801	Protein phosphatase 1 regulatory subunit 3F	26	28	1.08
-	-	950	1023	1.08
91452	Acyl-CoA-binding domain-containing protein 5	84	91	1.08
26205	Glucocorticoid modulatory element-binding protein 2	28	30	1.08
5576	cAMP-dependent protein kinase type II-alpha regulatory subunit	51	55	1.08
85459	Leucine-rich repeat-containing protein KIAA1731	15	16	1.08
6218	40S ribosomal protein S17	18983	20461	1.08
54626	Transcription factor HES-2	31	33	1.08
7572	Zinc finger protein 24	125	134	1.08
84313	Vacuolar protein-sorting-associated protein 25	553	596	1.08
100290142	Up-regulated during skeletal muscle growth protein 5	3049	3286	1.08
79035	Oligonucleotide/oligosaccharide-binding fold-containing protein 2B	46	50	1.08

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
152518	NF-X1-type zinc finger protein NFXL1	16	17	1.08
200185	Keratinocytes-associated protein 2	2326	2508	1.08
220979	Uncharacterized protein C10orf25 Precursor	13	14	1.08
-	Zinc finger protein 410	95	102	1.08
54813	Kelch-like protein 28	50	54	1.08
1122	Rab proteins geranylgeranyltransferase component A 2	23	24	1.08
27304	Molybdenum cofactor synthesis protein 3	58	62	1.08
-	U4/U6 small nuclear ribonucleoprotein Prp4	250	269	1.08
4258	Microsomal glutathione S-transferase 2	1350	1457	1.08
25956	Protein transport protein Sec31B	13	14	1.08
100292782	-	10	10	1.08
-	L-fucose kinase	49	53	1.08
100130255	-	25	27	1.08
4782	Nuclear factor 1 C-type	34	37	1.08
11269	ATP-dependent RNA helicase DDX19B	196	211	1.08
57722	Neighbor of punc e11 Precursor	36	38	1.08
403313	Presqualene diphosphate phosphatase	27	29	1.08
84894	Leucine-rich repeat and immunoglobulin-like domain-containing nogo receptor-interacting protein 1 Precursor	16	17	1.08
6129	60S ribosomal protein L7	16106	17382	1.08
55727	BTB/POZ domain-containing protein 7	154	166	1.08
55004	UPF0404 protein C11orf59	969	1045	1.08
10196	Protein arginine N-methyltransferase 3	85	92	1.08
2631	Protein NipSnap homolog 2	567	612	1.08
-	Zinc finger protein 227	33	35	1.08
55559	UCHL5-interacting protein	25	27	1.08
10212	ATP-dependent RNA helicase DDX39	810	874	1.08
255374	Beta-lactamase-like protein LOC255374	39	42	1.08
100133473	Nucleolar complex protein 2 homolog	259	280	1.08
-	Coiled-coil domain-containing protein 17	37	40	1.08
5687	Proteasome subunit alpha type-6	1556	1680	1.08
65009	Protein NDRG4	361	390	1.08
6871	Transcriptional adapter 2-alpha	90	97	1.08
63920	Transposon-derived Buster3 transposase-like protein	24	26	1.08
91801	Alkylated DNA repair protein alkB homolog 8	35	38	1.08
348110	UPF0552 protein C15orf38	48	52	1.08
57410	N-terminal kinase-like protein	108	116	1.08
100131801	-	737	796	1.08
100291668	-	10	11	1.08
115908	Collagen triple helix repeat-containing protein 1 Precursor	578	624	1.08
-	Golgin-45	114	123	1.08
181	Agouti-related protein Precursor	6	7	1.08
285484	-	18	19	1.08
-	Tetratricopeptide repeat protein 5	116	126	1.08
643037	-	11	12	1.08
2853	Probable G-protein coupled receptor 31	10	10	1.08
-	Enoyl-CoA hydratase domain-containing protein 2, mitochondrial Precursor	72	77	1.08
439992	40S ribosomal protein S3a	5717	6175	1.08
116841	t-SNARE coiled-coil homology domain-containing protein C1orf142	204	220	1.08
2072	DNA repair endonuclease XPF	120	130	1.08
23256	Sec1 family domain-containing protein 1	312	337	1.08
90624	LYR motif-containing protein 7	48	52	1.08

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
4752	Serine/threonine-protein kinase Nek3	102	110	1.08
64403	Cadherin-24 Precursor	19	20	1.08
91368	CDKN2A interacting protein N-terminal like (CDKN2AIPNL), mRNA	378	409	1.08
84173	ELMO domain-containing protein 3	38	42	1.08
8412	Breast cancer anti-estrogen resistance protein 3	170	183	1.08
-	Zinc finger protein 12	44	48	1.08
-	-	1649	1782	1.08
-	Nuclear receptor-binding factor 2	187	202	1.08
7511	Xaa-Pro aminopeptidase 1	746	807	1.08
400591	Uncharacterized protein FLJ44815	31	33	1.08
65094	JmjC domain-containing protein 4	39	43	1.08
100294395	-	93	101	1.08
324	Adenomatous polyposis coli protein	21	23	1.08
254428	Solute carrier family 41 member 1	167	181	1.08
84366	Small nuclear protein PRAC	10	11	1.08
8209	Periodic tryptophan protein 2 homolog	509	550	1.08
9990	Solute carrier family 12 member 6	25	27	1.08
6993	Dynein light chain Tetex-type 1	3270	3537	1.08
23192	Cysteine protease ATG4B	187	202	1.08
6500	S-phase kinase-associated protein 1	7118	7698	1.08
55862	Enoyl-CoA hydratase domain-containing protein 1	261	283	1.08
9815	ARF GTPase-activating protein GIT2	53	57	1.08
147949	Zinc finger protein 583	17	18	1.08
145553	Magnesium-dependent phosphatase 1	141	153	1.08
-	CAP-Gly domain-containing linker protein 1 (Restin)	239	259	1.08
323	Amyloid beta A4 precursor protein-binding family B member 2	191	206	1.08
100131811	-	11	12	1.08
9552	Sperm-associated antigen 7	759	821	1.08
64343	5-azacytidine-induced protein 2	101	109	1.08
402	ADP-ribosylation factor-like protein 2	2748	2973	1.08
25893	Tripartite motif-containing protein 58	14	15	1.08
100287415	-	23	25	1.08
9636	Interferon-induced 17 kDa protein Precursor	688	744	1.08
-	Acyl-CoA-binding domain-containing protein 5	110	119	1.08
22869	Zinc finger protein 510	20	21	1.08
3265	GTPase HRas Precursor	357	386	1.08
4548	Methionine synthase	148	160	1.08
-	Cullin-4A	134	145	1.08
6574	Sodium-dependent phosphate transporter 1	1488	1610	1.08
56945	28S ribosomal protein S22, mitochondrial	409	442	1.08
11095	A disintegrin and metalloproteinase with thrombospondin motifs 8 Precursor	27	29	1.08
-	Nibrin	34	36	1.08
136647	TTD non-photosensitive 1 protein	570	617	1.08
341116	Membrane-spanning 4-domains subfamily A member 10	51	55	1.08
91012	LAG1 longevity assurance homolog 5	262	283	1.08
6992	Protein phosphatase 1 regulatory subunit 11	116	126	1.08
9319	Thyroid receptor-interacting protein 13	79	86	1.08
55180	Protein Lines homolog 1	87	94	1.08
2049	Ephrin type-B receptor 3 Precursor	18	20	1.08
81034	Mitochondrial folate transporter/carrier	227	246	1.08

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
6168	60S ribosomal protein L37a	24562	26587	1.08
11151	Coronin-1A	26	29	1.08
149951	COMM domain-containing protein 7	695	752	1.08
100289162	-	16	18	1.08
51526	Uncharacterized protein C2orf111	320	346	1.08
196996	GRAM domain-containing protein 2	37	40	1.08
9049	AH receptor-interacting protein	200	216	1.08
117283	Inositol hexaphosphate kinase 3	9	9	1.08
2010	Emerin	248	269	1.08
2517	Tissue alpha-L-fucosidase Precursor	237	257	1.08
93643	Tight junction-associated protein 1	27	29	1.08
761	Carbonic anhydrase 3	17	18	1.08
1975	Eukaryotic translation initiation factor 4B	2683	2906	1.08
100294357	HCG1820743, isoform CRA_aLOC442028 protein	7	8	1.08
10632	ATP synthase subunit g, mitochondrial	230	250	1.08
8508	Protein NipSnap homolog 1	274	296	1.08
-	Zinc finger protein 503	6	6	1.08
348738	Uncharacterized protein C2orf48	26	28	1.08
-	Seven transmembrane helix receptor	8	9	1.08
84733	Chromobox protein homolog 2	25	27	1.08
729566	-	14	15	1.08
9044	TATA-binding protein-associated factor 172	224	243	1.08
51428	Probable ATP-dependent RNA helicase DDX41	290	314	1.08
-	Caseinolytic peptidase B protein homolog	73	79	1.08
2296	Forkhead box protein C1	455	493	1.08
4987	Nociceptin receptor	30	32	1.08
158427	Uncharacterized protein C9orf97	49	53	1.08
8629	Jerky protein homolog	43	46	1.08
100288216	-	26	28	1.08
4784	Nuclear factor 1 X-type	36	39	1.08
23403	F-box only protein 46	12	13	1.08
3093	Ubiquitin-conjugating enzyme E2 K	1221	1323	1.08
-	RNA-binding protein 26	215	233	1.08
-	-	144	156	1.08
64284	Ras-related protein Rab-17	9	10	1.08
729986	-	16	17	1.08
84264	Hydroxyacylglutathione hydrolase-like protein	31	34	1.08
6101	Oxygen-regulated protein 1	5	6	1.08
55230	Ubiquitin carboxyl-terminal hydrolase 40	98	107	1.08
2931	Glycogen synthase kinase-3 alpha	356	386	1.08
6647	Superoxide dismutase [Cu-Zn]	3873	4200	1.08
10493	Synaptic vesicle membrane protein VAT-1 homolog	143	155	1.08
10645	Calcium/calmodulin-dependent protein kinase kinase 2	102	111	1.08
83854	Angiotensin-related protein 6 Precursor	18	19	1.08
23137	Structural maintenance of chromosomes protein 5	39	42	1.08
56650	Claudin domain-containing protein 1	616	668	1.08
81542	Thioredoxin domain-containing protein 1 Precursor	650	705	1.08
80155	NMDA receptor-regulated protein 1	70	76	1.08
259217	Heat shock 70 kDa protein 12A	7	8	1.08
22933	NAD-dependent deacetylase sirtuin-2	157	170	1.08
23162	Ataxin-2-like protein	250	271	1.08
-	U2-associated protein SR140	90	98	1.08
57674	RING finger protein 213	111	120	1.08
4650	Myosin-Ixb	190	206	1.08

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Glycosyltransferase 8 domain-containing protein 1	612	664	1.09
257068	PI-PLC X domain-containing protein 2	10	11	1.09
51719	Calcium-binding protein 39	252	273	1.09
-	von Willebrand factor C and EGF domain-containing protein Precursor	21	23	1.09
-	28S ribosomal protein S5, mitochondrial	198	215	1.09
375444	Uncharacterized protein C5orf34	26	29	1.09
83541	Protein FAM110A	15	17	1.09
51141	Insulin-induced gene 2 protein	152	165	1.09
7592	Zinc finger protein 41	13	14	1.09
55197	Regulation of nuclear pre-mRNA domain-containing protein 1A	140	152	1.09
9706	Serine/threonine-protein kinase ULK2	22	24	1.09
10005	Acyl-coenzyme A thioesterase 8	241	262	1.09
9730	Protein VPRBP	40	43	1.09
6468	F-box/WD repeat-containing protein 4	34	37	1.09
-	-	631	685	1.09
-	-	5614	6096	1.09
100129148	-	6	7	1.09
8883	NEDD8-activating enzyme E1 regulatory subunit	1384	1503	1.09
125950	Ribonucleoprotein PTB-binding 1	11	11	1.09
254102	EH domain-binding protein 1-like protein 1	39	42	1.09
64979	39S ribosomal protein L36, mitochondrial Precursor	538	585	1.09
10994	Acetolactate synthase-like protein	151	164	1.09
253461	Zinc finger and BTB domain-containing protein 38	199	216	1.09
-	-	4394	4773	1.09
92129	Protein ripply1	11	12	1.09
11177	Bromodomain adjacent to zinc finger domain protein 1A	118	128	1.09
79644	3-oxo-5-alpha-steroid 4-dehydrogenase 3	385	418	1.09
22902	Protein RUFY3	91	99	1.09
55178	RNA methyltransferase-like protein 1	114	124	1.09
283237	Tetratricopeptide repeat protein 9C	201	219	1.09
2023	Alpha-enolase	8486	9221	1.09
6731	Signal recognition particle 72 kDa protein	499	542	1.09
100101267	Nuclear envelope pore membrane protein POM 121C	707	769	1.09
-	Nucampholin homolog	144	157	1.09
112858	TP53-regulating kinase	67	73	1.09
-	ATP synthase-coupling factor 6, mitochondrial Precursor	2291	2489	1.09
65263	Pyrroline-5-carboxylate reductase 3	21	23	1.09
4255	Methylated-DNA-protein-cysteine methyltransferase	653	710	1.09
202559	KH domain-containing, RNA-binding, signal transduction-associated protein 2	13	14	1.09
221476	Peptidase inhibitor 16 Precursor	12	13	1.09
64951	28S ribosomal protein S24, mitochondrial Precursor	1059	1152	1.09
51121	60S ribosomal protein L26-like 1	984	1070	1.09
80124	Deubiquitinating protein VCIP135	51	55	1.09
78986	Dual specificity protein phosphatase 26	10	11	1.09
-	Glycosyltransferase 25 family member 3 Precursor	226	246	1.09
26135	Plasminogen activator inhibitor 1 RNA-binding protein	1794	1950	1.09
10352	Tryptophanyl-tRNA synthetase, mitochondrial Precursor	126	137	1.09
3105	HLA class I histocompatibility antigen, A-3 alpha chain Precursor	303	329	1.09
1838	Dystrobrevin beta	24	26	1.09
55435	Uncharacterized protein C4orf16	302	329	1.09

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Bromodomain-containing protein 1	61	66	1.09
3683	Integrin alpha-L Precursor	32	35	1.09
113178	Secretory carrier-associated membrane protein 4	438	477	1.09
282809	WD repeat-containing protein 51B	75	81	1.09
3948	L-lactate dehydrogenase C chain	97	105	1.09
30009	T-box transcription factor TBX21	8	9	1.09
-	Putative uncharacterized protein C1orf97	52	57	1.09
2523	Galactoside 2-alpha-L-fucosyltransferase 1	51	55	1.09
100294423	-	17	19	1.09
100129981	-	10	11	1.09
100129827	LOC100129827 proteinHCG1991909	18	20	1.09
55267	Putative uncharacterized protein C22orf26	20	22	1.09
5479	Peptidyl-prolyl cis-trans isomerase B Precursor	3506	3814	1.09
23780	Apolipoprotein L2	39	42	1.09
-	Actin-binding LIM protein 3	18	19	1.09
-	Zinc finger protein 304	30	33	1.09
-	Cytochrome b5 domain-containing protein 1	19	20	1.09
-	-	96	105	1.09
-	Myc box-dependent-interacting protein 1	251	273	1.09
158219	Tetratricopeptide repeat protein 39B	32	35	1.09
89797	Neuron navigator 2	57	62	1.09
4802	Nuclear transcription factor Y subunit gamma	81	88	1.09
100287910	-	27	30	1.09
7936	Negative elongation factor E	1326	1444	1.09
5164	[Pyruvate dehydrogenase (lipoamide)] kinase isozyme 2, mitochondrial Precursor	33	36	1.09
123355	Leucine-rich repeat-containing protein 28	64	70	1.09
-	Tumor suppressor candidate 3	245	267	1.09
70	Actin, alpha cardiac muscle 1	48	52	1.09
79004	CUE domain-containing protein 2	1205	1312	1.09
100131713	60S ribosomal protein L29	9210	10029	1.09
1316	Krueppel-like factor 6	1548	1685	1.09
10876	Epididymal secretory protein E3-alpha Precursor	9	10	1.09
90233	Zinc finger protein 551	39	42	1.09
-	-	9542	10392	1.09
27	Tyrosine-protein kinase ABL2	20	22	1.09
-	RNA-binding protein 41	42	46	1.09
11284	Bifunctional polynucleotide phosphatase/kinase	379	413	1.09
126298	Immunity-related GTPase family Q protein	38	42	1.09
23216	TBC1 domain family member 1	58	63	1.09
55771	Proline-rich protein 11	55	60	1.09
27239	Probable G-protein coupled receptor 162	34	37	1.09
5395	Mismatch repair endonuclease PMS2	68	74	1.09
-	Slit homolog 2 protein Precursor	63	69	1.09
100294456	-	7	8	1.09
51530	Nuclear-interacting partner of ALK	255	277	1.09
9413	Uncharacterized protein C9orf61 Precursor	47	51	1.09
3594	Interleukin-12 receptor beta-1 chain Precursor	19	21	1.09
10434	Acyl-protein thioesterase 1	690	752	1.09
221895	Juxtaposed with another zinc finger protein 1	96	104	1.09
5528	Serine/threonine-protein phosphatase 2A 56 kDa regulatory subunit delta isoform	351	382	1.09
84938	Cysteine protease ATG4C	75	82	1.09
83746	Lethal(3)malignant brain tumor-like 2 protein	112	122	1.09

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
51069	39S ribosomal protein L2, mitochondrial Precursor	98	107	1.09
2870	G protein-coupled receptor kinase 6	92	101	1.09
51547	NAD-dependent deacetylase sirtuin-7	60	66	1.09
50865	Heme-binding protein 1 (p22HBP)	238	260	1.09
9975	Nuclear receptor subfamily 1 group D member 2	67	73	1.09
653789	similar to RPL23AP7 protein	560	610	1.09
8841	Histone deacetylase 3	139	151	1.09
-	Zinc finger protein 764	20	22	1.09
79441	Uncharacterized protein C4orf15	58	63	1.09
-	Protein FAM57A (CT120 protein)	199	217	1.09
84962	Protein ajuba	82	89	1.09
154791	UPF0562 protein C7orf55	469	511	1.09
-	-	12354	13474	1.09
3151	Non-histone chromosomal protein HMG-17	38	41	1.09
-	Zinc finger protein 702	279	305	1.09
27111	Syntenin-2	68	74	1.09
7702	Zinc finger protein 143	93	102	1.09
81556	UPF0464 protein C15orf44	239	261	1.09
7480	Protein Wnt-10b Precursor	8	9	1.09
10431	Mitochondrial import inner membrane translocase subunit Tim23	829	904	1.09
27023	Forkhead box protein B1	14	16	1.09
-	Serologically defined breast cancer antigen NY-BR-73 Fragment	27	30	1.09
56339	N6-adenosine-methyltransferase 70 kDa subunit	502	547	1.09
128272	Rho guanine nucleotide exchange factor 19	45	50	1.09
57181	Zinc transporter ZIP10 Precursor	126	137	1.09
23173	Methionine aminopeptidase 1	423	462	1.09
-	LAS1-like protein	69	76	1.09
253430	Inositol polyphosphate multikinase	49	54	1.09
57465	TBC1 domain family member 24	47	51	1.09
-	-	10	11	1.09
55861	Dysbindin domain-containing protein 2	103	113	1.09
1459	Casein kinase II subunit alpha'	712	777	1.09
28512	NF-kappa-B inhibitor-interacting Ras-like protein 1	21	23	1.09
11201	DNA polymerase iota	97	106	1.09
4720	NADH dehydrogenase [ubiquinone] iron-sulfur protein 2, mitochondrial Precursor	497	543	1.09
-	Inositol hexakisphosphate and diphosphoinositol-pentakisphosphate kinase 2	117	128	1.09
-	Beta/gamma crystallin domain-containing protein FLJ33880	64	70	1.09
79874	Rab GTPase-binding effector protein 2	36	39	1.09
81617	Calcium-binding protein 39-like	51	56	1.09
2193	Phenylalanyl-tRNA synthetase alpha chain	340	372	1.09
65117	Arginine/serine-rich coiled-coil protein 2	334	364	1.09
25818	Kallikrein-5 Precursor	14	15	1.09
494143	Cation transport regulator-like protein 2	157	172	1.09
10687	Paraneoplastic antigen Ma2	26	29	1.09
-	-	6781	7407	1.09
64432	28S ribosomal protein S25, mitochondrial	27	30	1.09
64096	GDNF family receptor alpha-4 Precursor	14	15	1.09
283373	Serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit C	7	8	1.09

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
11031	Ras-related protein Rab-31	171	187	1.09
130367	Sphingosine-1-phosphate phosphatase 2	7	8	1.09
6124	60S ribosomal protein L4	15360	16782	1.09
54870	Glutamine-rich protein 1	113	124	1.09
5709	26S proteasome non-ATPase regulatory subunit 3	698	763	1.09
-	Autophagy-related protein 2 homolog A	138	151	1.09
113251	La-related protein 4	59	65	1.09
50617	V-type proton ATPase 116 kDa subunit a isoform 4	20	22	1.09
100131836	-	13	15	1.09
-	Abl interactor 1	235	257	1.09
6657	Transcription factor SOX-2	6	6	1.09
26278	Sacsin	257	281	1.09
-	RING finger protein 126	201	220	1.09
-	Zinc finger protein 429	45	49	1.09
197407	Zinc finger protein 48	22	25	1.09
79048	SECIS-binding protein 2	179	195	1.09
26046	Zinc finger protein 294	97	106	1.09
64897	Uncharacterized protein C12orf43	57	62	1.09
100131895	Keratin-associated protein 5-5	101	110	1.09
1831	TSC22 domain family protein 3	119	130	1.09
22826	DnaJ homolog subfamily C member 8	642	702	1.09
1028	Cyclin-dependent kinase inhibitor 1C	44	48	1.09
79053	Probable dolichyl pyrophosphate Glc1Man9GlcNAc2 alpha-1,3-glucosyltransferase	828	906	1.09
91582	40S ribosomal protein S19-binding protein 1	631	690	1.09
4603	Myb-related protein A	17	18	1.09
147991	Protein dpy-19 homolog 3	12	13	1.09
7398	Ubiquitin carboxyl-terminal hydrolase 1	112	123	1.09
63894	Uncharacterized protein C14orf133	127	139	1.09
10962	Protein AF1q	723	791	1.09
-	-	227	248	1.09
-	Calycalin-binding protein	911	996	1.09
23541	SEC14-like protein 2	51	56	1.09
83879	Cell division cycle-associated protein 7	85	93	1.09
116143	WD repeat-containing protein 92	49	54	1.09
4700	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 6	257	281	1.09
100134444	ATP-sensitive inward rectifier potassium channel 12	8	8	1.09
54906	Uncharacterized protein C10orf18	200	219	1.09
219541	Mediator of RNA polymerase II transcription subunit 19	418	457	1.09
56548	Carbohydrate sulfotransferase 7	78	85	1.09
4817	Nitrilase homolog 1	312	341	1.09
-	F-box only protein 6	40	43	1.09
25940	Protein FAM98A	1173	1283	1.09
144404	Transmembrane protein 120B	29	31	1.09
58497	Protein prune homolog	38	42	1.09
10520	Zinc finger protein 211	17	19	1.09
100293142	V2-19 protein Fragment	43	47	1.09
10206	Tripartite motif-containing protein 13	148	162	1.09
388341	Leucine-rich repeat-containing protein C17orf76	13	14	1.09
54602	NEDD4 family-interacting protein 2	219	240	1.09
8987	Starch-binding domain-containing protein 1	14	16	1.09
92140	Protein LYRIC	958	1049	1.09
348995	Nucleoporin Nup43 (p42)	259	284	1.09

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
81609	Sorting nexin-27	12	13	1.09
25864	Abhydrolase domain-containing protein 14A	85	93	1.09
6183	28S ribosomal protein S12, mitochondrial Precursor	707	774	1.09
10898	Cleavage and polyadenylation specificity factor subunit 4	140	154	1.09
8895	Copine-3	29	31	1.09
-	Immunoglobulin Lambda light chain V gene segment	28	30	1.09
8073	Protein tyrosine phosphatase type IVA 2	1247	1365	1.09
26504	Metal transporter CNNM4	27	30	1.09
25953	Probable hydrolase PNKD	330	361	1.09
79723	Histone-lysine N-methyltransferase SUV39H2	80	88	1.09
29929	Dolichyl pyrophosphate Man9GlcNAc2 alpha-1,3-glucosyltransferase	54	59	1.09
25979	Dehydrogenase/reductase SDR family member 7B	141	155	1.09
10953	Mitochondrial import receptor subunit TOM34	242	264	1.09
10067	Secretory carrier-associated membrane protein 3	472	517	1.09
4792	NF-kappa-B inhibitor alpha	624	683	1.09
55174	Integrator complex subunit 10	192	210	1.10
-	Importin-4	179	196	1.10
6720	Sterol regulatory element-binding protein 1	14	15	1.10
7691	Zinc finger protein 132	16	18	1.10
-	U4/U6.U5 tri-snRNP-associated protein 3	362	396	1.10
728607	Protein MANBAL	403	441	1.10
6152	60S ribosomal protein L24	15770	17272	1.10
100291918	-	79	87	1.10
-	-	205	224	1.10
100130288	-	9	10	1.10
54905	Cytochrome P450 2W1	16	17	1.10
124995	39S ribosomal protein L10, mitochondrial Precursor	587	643	1.10
5184	Xaa-Pro dipeptidase	628	688	1.10
100291497	PPPDE peptidase domain-containing protein 1	241	264	1.10
6785	Elongation of very long chain fatty acids protein 4	50	55	1.10
25800	Zinc transporter ZIP6 Precursor	65	71	1.10
10284	Histone deacetylase complex subunit SAP18	2609	2859	1.10
28989	Methyltransferase-like protein 11A	393	431	1.10
100130837	-	7	8	1.10
15	Serotonin N-acetyltransferase	10	11	1.10
2537	Interferon alpha-inducible protein 6 Precursor	606	664	1.10
9588	Peroxisomal protein 6	3342	3662	1.10
2159	Coagulation factor X Precursor	12	14	1.10
85313	Peptidyl-prolyl cis-trans isomerase-like 4	158	173	1.10
54518	Amyloid beta A4 precursor protein-binding family B member 1-interacting protein	9	10	1.10
10287	Regulator of G-protein signaling 19	335	367	1.10
22796	Conserved oligomeric Golgi complex subunit 2	62	68	1.10
338755	Olfactory receptor 2AG2	14	16	1.10
6303	Diamine acetyltransferase 1	1120	1228	1.10
23299	Protein bicaudal D homolog 2	24	26	1.10
6374	C-X-C motif chemokine 5 Precursor	14	15	1.10
318	Bis(5'-nucleosyl)-tetraphosphatase [asymmetrical]	233	256	1.10
90024	-	71	77	1.10
-	ATP-binding cassette transporter sub-family C member 8	8	9	1.10
5167	Ectonucleotide pyrophosphatase/phosphodiesterase family member 1	14	15	1.10

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1174	AP-1 complex subunit sigma-1A	328	360	1.10
9861	26S proteasome non-ATPase regulatory subunit 6	591	649	1.10
10946	Splicing factor 3A subunit 3	937	1028	1.10
-	-	80	87	1.10
-	Putative lipocalin 1-like protein 1 Precursor	28	31	1.10
6778	Signal transducer and activator of transcription 6	31	34	1.10
8576	Serine/threonine-protein kinase 16	41	45	1.10
83756	Taste receptor type 1 member 3 Precursor	24	27	1.10
79001	Vitamin K epoxide reductase complex subunit 1	1891	2075	1.10
1854	Deoxyuridine 5'-triphosphate nucleotidohydrolase, mitochondrial Precursor	1764	1936	1.10
59344	Epidermis-type lipoxygenase 3	21	23	1.10
79796	Alpha-1,2-mannosyltransferase ALG9	125	137	1.10
91050	Coiled-coil domain-containing protein 149	33	36	1.10
262	S-adenosylmethionine decarboxylase proenzyme	197	217	1.10
1241	Leukotriene B4 receptor 1	40	44	1.10
51493	UPF0027 protein C22orf28	1648	1809	1.10
5498	Protoporphyrinogen oxidase	86	95	1.10
7264	GDP-L-fucose synthetase	622	683	1.10
25807	Rhomboid domain-containing protein 3	81	89	1.10
7832	Protein BTG2	353	387	1.10
10418	Spondin-1 Precursor	13	14	1.10
83693	Hydroxysteroid dehydrogenase-like protein 1	234	256	1.10
11318	G-protein coupled receptor 182	11	12	1.10
57602	Ubiquitin carboxyl-terminal hydrolase 36	34	37	1.10
23245	Astrotactin-2 Precursor	22	24	1.10
7277	Tubulin alpha-4A chain	120	131	1.10
337882	Keratin-associated protein 19-1	9	10	1.10
-	Ras-related protein Rab-28	64	70	1.10
4646	Myosin-VI	189	208	1.10
1196	Dual specificity protein kinase CLK2	77	84	1.10
9617	Peptide chain release factor 1, mitochondrial Precursor	27	30	1.10
84437	Coiled-coil domain-containing protein KIAA1826	108	119	1.10
2584	Galactokinase	615	675	1.10
1112	Forkhead box protein N3	298	328	1.10
64968	28S ribosomal protein S6, mitochondrial	246	270	1.10
9126	Structural maintenance of chromosomes protein 3	112	123	1.10
6498	Ski-like protein	55	61	1.10
-	-	5333	5861	1.10
29982	Nuclear receptor-binding factor 2	197	216	1.10
842	Caspase-9 Precursor	48	53	1.10
64223	Target of rapamycin complex subunit LST8	137	150	1.10
51023	28S ribosomal protein S18c, mitochondrial Precursor	691	760	1.10
8776	Myotubularin-related protein 1	10	11	1.10
731039	-	15	17	1.10
112970	Protein KTI12 homolog	144	158	1.10
348303	Selenoprotein V	13	14	1.10
22858	Serine/threonine-protein kinase ICK	72	79	1.10
100289478	-	8	8	1.10
55422	Zinc finger protein 331	92	101	1.10
55325	Ufm1-specific protease 2	289	318	1.10
-	-	31	34	1.10
117177	RAB3A-interacting protein	43	48	1.10
92675	D-tyrosyl-tRNA(Tyr) deacylase 1	659	725	1.10

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10575	T-complex protein 1 subunit delta	4136	4548	1.10
353135	Late cornified envelope protein 1E	9	10	1.10
150678	Myeloma overexpressed gene 2 protein	6	6	1.10
25998	Inhibitor of Bruton tyrosine kinase	78	86	1.10
415	Arylsulfatase E Precursor	40	44	1.10
65056	Vasculin	510	561	1.10
58191	C-X-C motif chemokine 16 Precursor	34	37	1.10
100132369	-	10	11	1.10
4521	7,8-dihydro-8-oxoguanine triphosphatase	256	282	1.10
10004	N-acetylated-alpha-linked acidic dipeptidase-like protein	37	41	1.10
22920	Kinesin-associated protein 3	182	200	1.10
51163	Lariat debranching enzyme	89	98	1.10
-	Pleiotropic regulator 1	686	755	1.10
7358	UDP-glucose 6-dehydrogenase	197	216	1.10
159013	Uncharacterized protein CXorf38	98	108	1.10
-	Uncharacterized protein C6orf64	33	36	1.10
55183	Telomere-associated protein RIF1	82	90	1.10
152065	Uncharacterized protein C3orf22	23	25	1.10
10025	Mediator of RNA polymerase II transcription subunit 16	80	88	1.10
100127989	-	21	23	1.10
25996	Oligoribonuclease, mitochondrial Precursor	1324	1458	1.10
100292351	-	7	8	1.10
9648	GRIP and coiled-coil domain-containing protein 2	173	190	1.10
-	Transmembrane protein 85	1395	1536	1.10
83451	Abhydrolase domain-containing protein 11	54	59	1.10
7726	Tripartite motif-containing protein 26	210	231	1.10
79736	UPF0629 protein C17orf42	185	204	1.10
5694	Proteasome subunit beta type-6 Precursor	4133	4552	1.10
-	CDK5 regulatory subunit-associated protein 1	132	145	1.10
28998	39S ribosomal protein L13, mitochondrial	424	467	1.10
3077	Hereditary hemochromatosis protein Precursor	5	6	1.10
27085	Mdm2-binding protein	17	19	1.10
727927	Myomegalin	27	30	1.10
1512	Cathepsin H Precursor	33	37	1.10
100290698	-	10	11	1.10
55924	Uncharacterized protein C1orf183	23	25	1.10
5378	PMS1 protein homolog 1	129	142	1.10
55281	Transmembrane protein 140	518	571	1.10
11248	Neurexophilin-3 Precursor	83	92	1.10
51367	Ribonuclease P/MRP protein subunit POP5	245	270	1.10
-	Dual specificity mitogen-activated protein kinase kinase 2	339	374	1.10
220064	Oral cancer overexpressed protein 1	58	64	1.10
344558	SH3 domain-containing RING finger protein 3	23	25	1.10
109	Adenylate cyclase type 3	251	277	1.10
390201	Olfactory receptor 10V1	45	50	1.10
79837	Phosphatidylinositol-5-phosphate 4-kinase type-2 gamma	36	40	1.10
55701	Protein SOLO	28	31	1.10
9941	Nuclease EXOG, mitochondrial Precursor	53	59	1.10
-	-	28	31	1.10
115861	Nucleoredoxin-like protein 1	17	18	1.10
8853	Development and differentiation-enhancing factor 2	801	883	1.10
-	Junctional adhesion molecule B Precursor	10	11	1.10
80119	ATP-dependent DNA helicase PIF1	10	11	1.10
100129700	-	20	22	1.10

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
53828	FXYP domain-containing ion transport regulator 4 Precursor	11	13	1.10
3094	Histidine triad nucleotide-binding protein 1	9928	10947	1.10
123207	UPF0235 protein C15orf40	107	118	1.10
163154	Putative uncharacterized protein MGC24975	20	22	1.10
10019	SH2B adapter protein 3	996	1098	1.10
256364	Echinoderm microtubule-associated protein-like 3	44	49	1.10
22994	5-azacytidine-induced protein 1	36	40	1.10
51239	Ankyrin repeat domain-containing protein 39	73	80	1.10
146562	Uncharacterized protein C16orf71	19	21	1.10
9403	15 kDa selenoprotein Precursor	2288	2524	1.10
152573	Protein shisa-3 homolog Precursor	12	13	1.10
23534	Transportin-3	310	342	1.10
8540	Alkyldihydroxyacetonephosphate synthase, peroxisomal Precursor	91	100	1.10
629	Complement factor B Precursor	26	29	1.10
-	Death-associated protein kinase 1	16	17	1.10
9718	Endothelin-converting enzyme 2	60	66	1.10
23265	Exocyst complex component 7	82	90	1.10
10390	Choline/ethanolaminephosphotransferase 1	203	224	1.10
221613	Histone H2A type 1-A	27	30	1.10
23648	Single-stranded DNA-binding protein 3	35	39	1.10
219931	Two pore calcium channel protein 2	85	93	1.10
3611	Integrin-linked protein kinase	562	621	1.10
100289021	-	16	17	1.10
23536	tRNA-specific adenosine deaminase 1	98	108	1.10
57594	Homeobox and leucine zipper protein Homez	36	39	1.10
3222	Homeobox protein Hox-C5	10	11	1.10
22943	Dickkopf-related protein 1 Precursor	618	682	1.10
54800	Kelch-like protein 24	138	153	1.10
84138	Protein SLC7A6OS	63	70	1.10
27123	Dickkopf-related protein 2 Precursor	10	11	1.10
65109	Regulator of nonsense transcripts 3B	67	74	1.10
80817	Uncharacterized protein KIAA1712	16	18	1.10
-	Calsyntenin-3 Precursor	36	40	1.11
219983	Olfactory receptor 4D6	38	42	1.11
401024	Uncharacterized protein FLJ44048	9	10	1.11
9204	Zinc finger MYM-type protein 6	65	72	1.11
100128895	Putative uncharacterized protein	7	8	1.11
51701	Serine/threonine protein kinase NLK	208	230	1.11
55204	Golgi phosphoprotein 3-like	134	149	1.11
124535	Heat shock factor protein 5	7	7	1.11
4325	Matrix metalloproteinase-16 Precursor	15	17	1.11
1906	Endothelin-1 Precursor	4794	5303	1.11
404550	Uncharacterized protein C16orf74	170	188	1.11
28970	Ester hydrolase C11orf54	114	126	1.11
5728	Phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase and dual-specificity protein phosphatase PTEN	140	154	1.11
91894	Uncharacterized protein C11orf52	16	18	1.11
84701	Cytochrome c oxidase subunit 4 isoform 2, mitochondrial Precursor	13	14	1.11
83594	Peroxisomal NADH pyrophosphatase NUDT12	28	31	1.11
-	UPF0363 protein C7orf20	247	273	1.11
5917	Arginyl-tRNA synthetase, cytoplasmic	1322	1462	1.11

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Probable helicase senataxin	134	148	1.11
-	Rho guanine nucleotide exchange factor 16	7	8	1.11
6160	60S ribosomal protein L31	24700	27331	1.11
553115	Peflin	90	99	1.11
55251	Protein-L-isoaspartate O-methyltransferase domain-containing protein 2	108	120	1.11
64219	E3 ubiquitin-protein ligase Praja1	104	115	1.11
55802	mRNA-decapping enzyme 1A	179	199	1.11
9858	Protein KIAA0649	22	25	1.11
100132016	-	33	36	1.11
-	-	25	28	1.11
7332	Ubiquitin-conjugating enzyme E2 L3	2736	3029	1.11
28966	Sorting nexin-24	59	65	1.11
79414	Leucine-rich repeat and fibronectin type-III domain-containing protein 3 Precursor	135	150	1.11
-	Serine/threonine-protein phosphatase with EF-hands 2	15	16	1.11
285659	Olfactory receptor 2V2	8	9	1.11
339192	-	7	8	1.11
3178	Heterogeneous nuclear ribonucleoprotein A1	5051	5593	1.11
4323	Matrix metalloproteinase-14 Precursor	67	75	1.11
90410	Intraflagellar transport protein 20 homolog	776	860	1.11
23761	Phosphatidylserine decarboxylase proenzyme	170	189	1.11
-	Claspin	34	37	1.11
25806	Ventral anterior homeobox 2	16	18	1.11
643446	RNA-binding protein with serine-rich domain 1	373	413	1.11
131616	Transmembrane protein 42	288	319	1.11
-	Uncharacterized protein ENSP0000033239 Fragment	52	58	1.11
375748	Putative DNA repair and recombination protein RAD26-like	33	36	1.11
63908	Beta-soluble NSF attachment protein	30	33	1.11
55250	Elongator complex protein 2	240	266	1.11
100287360	-	6	7	1.11
23517	Superkiller viralicidic activity 2-like 2	217	241	1.11
9232	Securin	361	400	1.11
7705	Zinc finger protein OZF	472	523	1.11
10090	Uronyl 2-sulfotransferase	19	21	1.11
-	-	4075	4515	1.11
121441	Protein NEDD1	81	90	1.11
6591	Zinc finger protein SNAI2	58	64	1.11
84203	Thioredoxin domain-containing protein 2	28	32	1.11
-	Uncharacterized protein ENSP00000382483	84	93	1.11
2909	Glucocorticoid receptor DNA-binding factor 1	472	523	1.11
7001	Peroxioredoxin-2	1768	1959	1.11
23503	Zinc finger FYVE domain-containing protein 26 (Spastizin)	31	35	1.11
6905	Tubulin-specific chaperone E	74	82	1.11
5862	Ras-related protein Rab-2A	1167	1294	1.11
26958	-	40	45	1.11
81619	Tetraspanin-14	161	179	1.11
337974	Keratin-associated protein 19-7	13	14	1.11
6883	Transcription initiation factor TFIID subunit 12	375	415	1.11
388121	Tumor necrosis factor, alpha-induced protein 8-like protein 3	117	130	1.11
-	BR serine/threonine-protein kinase 2	12	13	1.11
9646	RNA polymerase-associated protein CTR9 homolog	236	262	1.11

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
66036	Myotubularin-related protein 9	100	111	1.11
388962	BolA-like protein 3	673	746	1.11
440567	Cytochrome b-c1 complex subunit 6, mitochondrial Precursor	3393	3763	1.11
100291579	-	23	26	1.11
84240	Zinc finger CCHC domain-containing protein 9	145	161	1.11
643287	Prothymosin alpha	11879	13174	1.11
51639	Pre-mRNA branch site protein p14	1796	1992	1.11
3297	Heat shock factor protein 1	85	95	1.11
80764	THAP domain-containing protein 7	78	86	1.11
26263	F-box only protein 22	293	325	1.11
100289511	-	43	47	1.11
27202	C5a anaphylatoxin chemotactic receptor C5L2	9	10	1.11
79050	Nucleolar complex protein 4 homolog	100	111	1.11
-	-	25	28	1.11
9135	Rab GTPase-binding effector protein 1	125	138	1.11
6009	GTP-binding protein Rheb Precursor	1779	1975	1.11
79752	AN1-type zinc finger protein 1	233	259	1.11
286749	Stonin-1	25	28	1.11
4881	Atrial natriuretic peptide receptor A Precursor	12	14	1.11
-	Synaptotagmin-17	26	28	1.11
1452	Casein kinase I isoform alpha	1505	1670	1.11
-	Transmembrane protein 108 Precursor	9	10	1.11
-	Putative uncharacterized protein C20orf51	8	9	1.11
92691	Transmembrane protein 169	39	44	1.11
-	Protein 4.1	14	16	1.11
-	Disks large homolog 5	17	19	1.11
-	Integrator complex subunit 10	346	384	1.11
8721	Endothelial differentiation-related factor 1	4404	4890	1.11
-	Sodium-coupled neutral amino acid transporter 1	699	776	1.11
55790	Chondroitin sulfate N-acetylgalactosaminyltransferase 1	383	425	1.11
23376	UPF0555 protein KIAA0776	86	96	1.11
123016	Tetratricopeptide repeat protein 8	67	74	1.11
84273	Uncharacterized protein C4orf14	351	389	1.11
-	E3 ubiquitin-protein ligase MARCH6	311	345	1.11
81562	VIP36-like protein Precursor	256	284	1.11
93624	Transcriptional adapter 2-beta	73	81	1.11
50628	Component of gems 4 (Gemin-4) (p97)	12	13	1.11
902	Cyclin-H (p37) (p34)	459	510	1.11
23595	Origin recognition complex subunit 3	164	182	1.11
751867	Regulator of chromosome condensation	51	57	1.11
-	BAI1-associated protein 3	14	16	1.11
-	Hsp90 co-chaperone Cdc37-like 1	85	95	1.11
11224	60S ribosomal protein L35	15868	17627	1.11
94005	GPI transamidase component PIG-S	936	1040	1.11
126069	Zinc finger protein 491	18	20	1.11
126789	tRNA pseudouridine synthase-like 1	203	226	1.11
6257	Retinoic acid receptor RXR-beta	252	280	1.11
200312	RING finger protein 215	31	34	1.11
57535	UPF0577 protein KIAA1324 Precursor	28	31	1.11
11083	Death-inducer obliterator 1	31	34	1.11
51450	Paired mesoderm homeobox protein 2	19	22	1.11
4016	Lysyl oxidase homolog 1 Precursor	160	178	1.11
100291640	-	12	14	1.11

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Ribonucleoprotein PTB-binding 2	12	13	1.11
84667	Transcription factor HES-7	176	196	1.11
100131882	Actin-related protein 3B	136	151	1.11
84283	Transmembrane protein 79	28	31	1.11
64943	5'-nucleotidase domain-containing protein 2	311	345	1.11
80863	Proline-rich transmembrane protein 1	14	16	1.11
117286	Calcium and integrin-binding family member 3	28	31	1.11
4723	NADH dehydrogenase [ubiquinone] flavoprotein 1, mitochondrial Precursor	563	626	1.11
65078	Reticulon-4 receptor Precursor	21	23	1.11
7627	Zinc finger protein 75A	74	82	1.11
6901	Tafazzin	136	151	1.11
54471	Smith-Magenis syndrome chromosome region candidate gene 7 protein-like	139	155	1.11
10625	Influenza virus NS1A-binding protein	273	304	1.11
25789	Transmembrane protein 59-like Precursor	8	9	1.11
150368	Protein FAM109B	101	113	1.11
50512	Podocalyxin-like protein 2 Precursor	19	22	1.11
127534	Gap junction beta-4 protein	11	12	1.11
286053	E3 SUMO-protein ligase NSE2	204	227	1.11
92399	Ribosome-recycling factor, mitochondrial Precursor	142	158	1.11
29079	Mediator of RNA polymerase II transcription subunit 4	296	329	1.11
60314	UPF0160 protein MYG1	245	272	1.11
174	Alpha-fetoprotein Precursor	12	13	1.11
85301	Collagen alpha-1(XVII) chain Precursor	26	29	1.11
286319	Tumor suppressor candidate gene 1 protein	12	14	1.11
116832	60S ribosomal protein L39-like	124	138	1.11
3625	Inhibin beta B chain Precursor	13	14	1.11
157777	Uncharacterized protein C8orf45	41	45	1.11
147965	Protein FAM98C	130	145	1.11
1044	Homeobox protein CDX-1	39	43	1.11
375790	Agrin Precursor	479	533	1.11
729454	-	8	9	1.11
51310	Solute carrier family 22 member 17	22	24	1.11
4152	Methyl-CpG-binding domain protein 1	266	296	1.11
10135	Nicotinamide phosphoribosyltransferase	646	720	1.11
51377	Ubiquitin carboxyl-terminal hydrolase isozyme L5	169	188	1.11
285636	UPF0600 protein C5orf51	241	268	1.11
23028	Lysine-specific histone demethylase 1	242	270	1.11
57623	Zinc finger protein ZFAT	16	17	1.11
-	Williams-Beuren syndrome chromosomal region 14 protein	7	8	1.11
57003	Coiled-coil domain-containing protein 47 Precursor	629	700	1.11
-	rRNA-processing protein UTP23 homolog	247	275	1.11
26472	Protein phosphatase 1 regulatory subunit 14B	2105	2344	1.11
-	Methionine aminopeptidase 2	1310	1459	1.11
90843	Transcription elongation factor A protein-like 8	806	898	1.11
22932	POM121 and ZP3 fusion protein	94	104	1.11
84678	Lysine-specific demethylase 2B	240	267	1.11
-	-	7739	8623	1.11
51350	Keratin, type II cytoskeletal 2 oral	25	28	1.11
272	AMP deaminase 3	41	45	1.11
23016	Exosome complex exonuclease RRP42	307	342	1.11
731957	-	10	11	1.11
285521	Mitochondrial inner membrane protein COX18 Precursor	94	105	1.11

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23484	Leptin receptor overlapping transcript-like 1	450	501	1.11
84131	Centrosomal protein of 78 kDa	27	30	1.11
-	Caspase-8 Precursor	24	27	1.11
152992	Putative methyltransferase UPF0383	23	26	1.11
56913	Glycoprotein-N-acetylgalactosamine 3-beta-galactosyltransferase 1	151	168	1.11
23035	PH domain leucine-rich repeat protein phosphatase-like	22	24	1.11
-	Beta-galactosidase-1-like protein Precursor	27	31	1.11
24146	Claudin-15	19	22	1.11
113878	Protein deltex-2	212	237	1.11
2098	S-formylglutathione hydrolase	1357	1513	1.11
-	Zinc finger MYM-type protein 1	40	45	1.11
51004	Ubiquinone biosynthesis monooxygenase COQ6	71	80	1.11
10465	Peptidyl-prolyl cis-trans isomerase H	332	371	1.12
27032	Calcium-transporting ATPase type 2C member 1	337	376	1.12
51003	Mediator of RNA polymerase II transcription subunit 31	231	258	1.12
-	Short coiled-coil protein	878	979	1.12
6476	Sucrase-isomaltase, intestinal	18	20	1.12
55798	Methyltransferase-like protein 2B	534	596	1.12
10627	Myosin regulatory light chain 12A	7893	8805	1.12
1936	Elongation factor 1-delta	6350	7085	1.12
100287973	-	11	12	1.12
57504	Metastasis-associated protein MTA3	131	147	1.12
57542	Kelch domain-containing protein 5	152	170	1.12
403	ADP-ribosylation factor-like protein 3	706	788	1.12
55007	Protein FAM118A	34	38	1.12
6478	E3 ubiquitin-protein ligase SLAH2	128	143	1.12
10552	Actin-related protein 2/3 complex subunit 1A	2203	2458	1.12
-	E3 ubiquitin-protein ligase RING2	89	100	1.12
23370	Rho guanine nucleotide exchange factor 18	170	190	1.12
84844	PHD finger-like domain-containing protein 5A	174	194	1.12
92565	Fibronectin type 3 and ankyrin repeat domains protein 1	40	45	1.12
283294	Uncharacterized protein C11orf47	17	19	1.12
-	Tetratricopeptide repeat protein 7B	34	38	1.12
-	Coiled-coil domain-containing protein 115	269	300	1.12
78990	Ubiquitin thioesterase OTUB2	21	24	1.12
25813	Sorting and assembly machinery component 50 homolog	556	621	1.12
100293870	-	11	12	1.12
8530	Cystatin-F Precursor	11	12	1.12
-	MAP/microtubule affinity-regulating kinase 3	188	210	1.12
56259	Beta-catenin-like protein 1	222	249	1.12
3623	Inhibin alpha chain Precursor	30	33	1.12
9970	Nuclear receptor subfamily 1 group I member 3	21	23	1.12
3202	Homeobox protein Hox-A5	231	258	1.12
869	Cerebellin-1 Precursor	9	10	1.12
5987	Zinc finger protein RFP	455	508	1.12
59284	Voltage-dependent calcium channel gamma-7 subunit	27	30	1.12
22889	UPF0469 protein KIAA0907	278	310	1.12
23150	FERM domain-containing protein 4B	109	122	1.12
139065	SLIT and NTRK-like protein 4 Precursor	50	56	1.12
55294	F-box/WD repeat-containing protein 7	139	155	1.12
55890	G-protein coupled receptor family C group 5 member C Precursor	10	11	1.12
1267	2',3'-cyclic-nucleotide 3'-phosphodiesterase	681	761	1.12

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2960	General transcription factor IIE subunit 1	105	117	1.12
90324	Coiled-coil domain-containing protein 97	120	134	1.12
968	Macrosialin Precursor	124	139	1.12
54726	OTU domain-containing protein 4	171	191	1.12
9910	RAB GTPase-activating protein 1-like	163	182	1.12
84163	General transcription factor II-I repeat domain-containing protein 2A	15	17	1.12
57150	Uncharacterized protein C6orf162	16	18	1.12
55892	Myoneurin	214	239	1.12
79230	Zinc finger protein 557	70	79	1.12
10081	Programmed cell death protein 7	58	65	1.12
64423	Inverted formin-2	6	7	1.12
23161	Sorting nexin-13	61	68	1.12
653972	Chromobox protein homolog 3	1644	1838	1.12
-	Putative uncharacterized protein C8orf54	16	18	1.12
100290951	-	430	481	1.12
8685	Macrophage receptor MARCO	41	46	1.12
84876	Calcium release-activated calcium channel protein 1	275	308	1.12
23515	MORC family CW-type zinc finger protein 3	86	96	1.12
4673	Nucleosome assembly protein 1-like 1	548	613	1.12
57700	UPF0518 protein FAM160B1	8	9	1.12
84792	STAT3-interacting protein as a repressor	132	148	1.12
100291603	-	11	12	1.12
5425	DNA polymerase delta subunit 2	467	523	1.12
23099	Zinc finger and BTB domain-containing protein 43	103	115	1.12
100287949	-	14	15	1.12
1390	cAMP-responsive element modulator	299	335	1.12
9473	Induced by contact to basement membrane 1 protein	98	109	1.12
64093	SPARC-related modular calcium-binding protein 1 Precursor	28	31	1.12
64332	NF-kappa-B inhibitor zeta	24	27	1.12
114882	Oxysterol-binding protein-related protein 8	177	198	1.12
79770	Thioredoxin domain-containing protein 15 Precursor	234	262	1.12
-	-	1844	2063	1.12
328	DNA-(apurinic or apyrimidinic site) lyase	2512	2812	1.12
644524	Homeobox protein Nkx-2.4	12	14	1.12
126272	EP300-interacting inhibitor of differentiation 2B	32	36	1.12
1781	Cytoplasmic dynein 1 intermediate chain 2	756	847	1.12
-	Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial Precursor	133	148	1.12
7044	Left-right determination factor 2 Precursor	6	7	1.12
-	Leucine-rich repeat serine/threonine-protein kinase 1	32	35	1.12
100293294	-	26	29	1.12
653474	-	24	27	1.12
-	cDNA FLJ34460 fis, clone HLUNG2002942	36	40	1.12
64788	Lipase maturation factor 1	30	34	1.12
113675	Serine dehydratase-like	131	147	1.12
8216	Leucine-zipper-like transcriptional regulator 1	77	87	1.12
53827	FXFD domain-containing ion transport regulator 5 Precursor	826	925	1.12
7090	Transducin-like enhancer protein 3	60	68	1.12
55108	BSD domain-containing protein 1	183	204	1.12
7423	Vascular endothelial growth factor B Precursor	229	256	1.12
11334	Tumor suppressor candidate 2	75	84	1.12

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
60559	Signal peptidase complex subunit 3	768	860	1.12
6856	Synaptophysin-like protein 1	1101	1233	1.12
-	DNA-binding protein SATB1	15	17	1.12
-	Uncharacterized protein C9orf114	65	73	1.12
165324	UBX domain-containing protein 2A	97	108	1.12
8675	Syntaxin-16	188	210	1.12
54955	Uncharacterized protein C1orf109	131	147	1.12
162517	F-box only protein 39	13	15	1.12
2314	Protein flightless-1 homolog	750	840	1.12
10278	Embryonal Fyn-associated substrate	6	7	1.12
375757	Uncharacterized protein C9orf119	323	362	1.12
22894	Exosome complex exonuclease RRP44	132	148	1.12
259236	Transmembrane inner ear expressed protein Precursor	20	23	1.12
3218	Homeobox protein Hox-B8	7	8	1.12
129530	Lysozyme g-like protein 1 Precursor	46	51	1.12
100292378	-	10	12	1.12
7025	COUP transcription factor 1	57	64	1.12
344148	Nck-associated protein 5	12	14	1.12
9895	WD repeat-containing protein KIAA0329/KIAA0297	59	66	1.12
2921	C-X-C motif chemokine 3 Precursor	25	28	1.12
79791	F-box only protein 31	11	12	1.12
643904	RING finger protein 222	45	51	1.12
81931	Zinc finger protein 253	38	42	1.12
387522	Ubiquitin-conjugating enzyme E2 variant 1	758	850	1.12
-	Zinc finger protein 40	143	160	1.12
-	Acyl-protein thioesterase 1	876	982	1.12
29954	Protein O-mannosyl-transferase 2	71	80	1.12
3177	Equilibrative nucleoside transporter 2	46	51	1.12
100289256	-	33	37	1.12
5713	26S proteasome non-ATPase regulatory subunit 7	662	742	1.12
-	-	25	28	1.12
84328	Protein LZIC	210	236	1.12
4224	Meprin A subunit alpha Precursor	6	7	1.12
7763	AN1-type zinc finger protein 5	1043	1169	1.12
55328	Renalase Precursor	41	46	1.12
29882	Anaphase-promoting complex subunit 2	20	22	1.12
5110	Protein-L-isoaspartate(D-aspartate) O-methyltransferase	683	766	1.12
80755	Alanyl-tRNA synthetase domain-containing protein 1	99	111	1.12
2140	Eyes absent homolog 3	13	15	1.12
51002	TP53RK-binding protein	490	549	1.12
51652	RING finger protein 103	685	768	1.12
4988	Mu-type opioid receptor	8	9	1.12
-	SECIS-binding protein 2	142	159	1.12
9962	Solute carrier family 23 member 2	12	14	1.12
2972	Transcription factor IIB 90 kDa subunit	166	186	1.12
5710	26S proteasome non-ATPase regulatory subunit 4	2906	3261	1.12
4838	Nodal homolog Precursor	21	24	1.12
3614	Inosine-5'-monophosphate dehydrogenase 1	380	427	1.12
79649	MAP7 domain-containing protein 3	96	108	1.12
26207	Cytoplasmic phosphatidylinositol transfer protein 1	77	86	1.12
6295	S-arrestin	20	23	1.12
23287	Cytosolic carboxypeptidase 1	115	129	1.12
3133	major histocompatibility complex, class I, E precursor	1074	1206	1.12
9985	Meiotic recombination protein REC8 homolog	180	202	1.12

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5306	Phosphatidylinositol transfer protein alpha isoform	588	660	1.12
56888	E3 ubiquitin-protein ligase KCMF1	326	366	1.12
-	-	5809	6523	1.12
166968	Mesoderm induction early response protein 3	30	34	1.12
-	Putative uncharacterized protein C9orf164	9	10	1.12
732146	-	13	15	1.12
7424	Vascular endothelial growth factor C Precursor	39	44	1.12
-	Putative uncharacterized protein ENSP00000384933	965	1084	1.12
284382	Actin-like protein 7C	8	9	1.12
2331	Fibromodulin Precursor	11	13	1.12
51700	NADH-cytochrome b5 reductase 2	26	29	1.12
-	Coiled-coil domain-containing protein 45	76	85	1.12
114131	Urocortin-3 Precursor	15	17	1.12
100292983	-	22	25	1.12
27315	Post-GPI attachment to proteins factor 2	149	168	1.12
55669	Mitofusin-1	117	132	1.12
196743	Peroxisomal N(1)-acetyl-spermine/spermidine oxidase	30	33	1.12
221154	EF-hand domain-containing family member A1	542	609	1.12
137695	transmembrane protein 68	117	132	1.12
57698	Shootin-1	21	24	1.12
84514	GH3 domain-containing protein Precursor	22	25	1.12
10989	Mitochondrial inner membrane protein	462	519	1.12
-	-	2992	3364	1.12
261734	Nephrocystin-4	7	8	1.12
388677	Notch homolog 2 N-terminal-like protein	93	105	1.12
51715	Ras-related protein Rab-23	72	80	1.12
4163	Colorectal mutant cancer protein	44	49	1.12
4778	Transcription factor NF-E2 45 kDa subunit	11	12	1.12
171017	Zinc finger protein 384	34	39	1.12
80346	Receptor expression-enhancing protein 4	129	145	1.12
146705	Uncharacterized protein C1orf56	75	84	1.12
100131706	-	7	8	1.12
9709	Homocysteine-responsive endoplasmic reticulum-resident ubiquitin-like domain member 1 protein	738	829	1.12
729806	-	23	25	1.12
100293010	-	16	19	1.12
8548	Golgin-45	126	141	1.12
-	cDNA FLJ43791 fis, clone TEST12053526	12	14	1.12
84888	Signal peptide peptidase-like 2A	283	318	1.12
85369	Protein FAM40A	182	205	1.12
-	-	4885	5495	1.12
-	Glutamate [NMDA] receptor subunit epsilon-3 Precursor	22	25	1.12
29777	Activator of basal transcription 1	205	230	1.12
10295	[3-methyl-2-oxobutanoate dehydrogenase [lipoamide]] kinase, mitochondrial Precursor	436	490	1.12
84647	Group XIIB secretory phospholipase A2-like protein Precursor	16	18	1.12
81579	Group XIIB secretory phospholipase A2 Precursor	41	46	1.12
3280	Transcription factor HES-1	267	301	1.12
6001	Regulator of G-protein signaling 10	357	402	1.12
1123	N-chimaerin	102	115	1.12
-	killer cell lectin-like receptor subfamily A, member 1	15	17	1.12
64780	NEDD9-interacting protein with calponin homology and LIM domains	24	26	1.12

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
4860	Purine nucleoside phosphorylase	2594	2919	1.13
5954	Reticulocalbin-1 Precursor	5779	6502	1.13
10075	E3 ubiquitin-protein ligase HUWE1	268	302	1.13
339983	N-acetyltransferase 8-like protein	16	18	1.13
10179	RNA-binding protein 7	405	456	1.13
11091	WD repeat-containing protein 5	62	70	1.13
56897	ATPase WRNIP1	187	210	1.13
-	-	941	1059	1.13
-	-	8336	9381	1.13
84275	Solute carrier family 25 member 33	174	195	1.13
23362	PH and SEC7 domain-containing protein 3	11	12	1.13
11320	Alpha-1,3-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase A	11	12	1.13
130557	Zinc finger protein 513	110	124	1.13
55500	Ethanolamine kinase 1	137	154	1.13
31	Acetyl-CoA carboxylase 1	56	64	1.13
2308	Forkhead box protein O1	818	921	1.13
27163	N-acylthanolamine-hydrolyzing acid amidase Precursor	120	135	1.13
9354	Ubiquitin conjugation factor E4 A	542	610	1.13
23533	Phosphoinositide 3-kinase regulatory subunit 5	14	16	1.13
100292463	-	8	9	1.13
728932	Protein GPR89	12	13	1.13
79033	Prion protein-interacting protein	168	189	1.13
25875	LETM1 domain-containing protein 1	72	81	1.13
5514	Serine/threonine-protein phosphatase 1 regulatory subunit 10	93	105	1.13
51188	SS18-like protein 2	624	703	1.13
27249	Methylmalonic aciduria and homocystinuria type D protein, mitochondrial Precursor	1584	1784	1.13
1762	Dystrophia myotonica WD repeat-containing protein	33	38	1.13
-	H/ACA ribonucleoprotein complex subunit 4	411	462	1.13
5429	DNA polymerase eta	90	101	1.13
112401	Baculoviral IAP repeat-containing protein 8	15	16	1.13
9016	Brain mitochondrial carrier protein 1	149	168	1.13
117246	Putative rRNA methyltransferase 3	551	621	1.13
-	-	5094	5740	1.13
374977	CA175_HUMAN Isoform 2 of Q68CQ1 · Homo sapiens (Human)	8	9	1.13
7587	Zinc finger protein 37A	109	123	1.13
170463	Single-stranded DNA-binding protein 4	390	439	1.13
6737	52 kDa Ro protein	113	128	1.13
6100	Retinitis pigmentosa 9 protein	210	237	1.13
51123	Zinc finger protein 706	1566	1764	1.13
54841	Basic immunoglobulin-like variable motif-containing protein	213	240	1.13
80216	Alpha-protein kinase 1	29	33	1.13
9689	Basic leucine zipper and W2 domain-containing protein 1	1306	1473	1.13
51234	Transmembrane protein 85	1361	1535	1.13
284459	Krueppel-related zinc finger protein 1	57	65	1.13
23276	Kelch-like protein 18	149	168	1.13
80194	Transmembrane protein 134	583	658	1.13
100287000	-	7	8	1.13
100289944	Putative V-set and immunoglobulin domain-containing protein 6 Precursor	11	12	1.13

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55706	Nucleoporin NDC1	49	55	1.13
4697	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 4	5888	6641	1.13
148930	Kinocilin	8	9	1.13
5078	paired box 4	6	7	1.13
341152	Olfactory receptor 2AT4	19	21	1.13
3664	Interferon regulatory factor 6	13	15	1.13
-	Uncharacterized protein C16orf68	90	102	1.13
5865	Ras-related protein Rab-3B	118	133	1.13
55863	Transmembrane protein 126B	588	664	1.13
148254	Zinc finger protein 555	32	36	1.13
8204	Nuclear receptor-interacting protein 1	206	233	1.13
58484	NLR family CARD domain-containing protein 4	18	21	1.13
10400	Phosphatidylethanolamine N-methyltransferase	181	204	1.13
100134134	Peroxidase homolog Precursor	2775	3132	1.13
55616	Development and differentiation-enhancing factor-like 1	42	48	1.13
149371	Exocyst complex component 8	38	43	1.13
338674	Olfactory receptor 5F1	7	8	1.13
9322	Cdc42-interacting protein 4	107	121	1.13
91298	Uncharacterized protein C12orf29	40	46	1.13
255349	Transmembrane protein 211	16	18	1.13
148741	Ankyrin repeat domain-containing protein 35	13	15	1.13
144347	Protein FAM101A	17	19	1.13
-	Palmitoyltransferase ZDHHC17	11	12	1.13
1105	Chromodomain-helicase-DNA-binding protein 1	131	148	1.13
-	THAP domain-containing protein 3	82	92	1.13
100130458	-	11	13	1.13
28976	Acyl-CoA dehydrogenase family member 9, mitochondrial Precursor	97	110	1.13
5478	Peptidyl-prolyl cis-trans isomerase A	554	625	1.13
10877	Complement factor H-related protein 4 Precursor	59	67	1.13
-	Ras-specific guanine nucleotide-releasing factor RalGPS1	7	8	1.13
2161	Coagulation factor XII Precursor	65	73	1.13
-	-	62	70	1.13
-	HEAT repeat-containing protein 1	39	44	1.13
100133875	Leukocyte immunoglobulin-like receptor subfamily A member 3 Precursor	11	12	1.13
-	RNA polymerase II-associated protein 3	182	205	1.13
84293	Uncharacterized protein C10orf58 Precursor	4309	4867	1.13
-	Autophagy-related protein 2 homolog B	33	37	1.13
8767	Receptor-interacting serine/threonine-protein kinase 2	253	286	1.13
5831	Pyrroline-5-carboxylate reductase 1, mitochondrial Precursor	144	163	1.13
346702	-	8	9	1.13
8623	N-acetylserotonin O-methyltransferase-like protein	190	214	1.13
84153	Ribonuclease H2 subunit C	883	998	1.13
115024	Cytosolic 5'-nucleotidase III-like protein	1061	1199	1.13
100291344	-	17	20	1.13
149986	Protein LSM14 homolog B	14	16	1.13
-	-	12	13	1.13
38	Acetyl-CoA acetyltransferase, mitochondrial Precursor	358	405	1.13
80205	Chromodomain-helicase-DNA-binding protein 9	266	301	1.13
949	Scavenger receptor class B member 1	883	998	1.13
2971	Transcription factor IIIA	799	904	1.13

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
56254	E3 ubiquitin-protein ligase BRE1A	68	77	1.13
1327	Cytochrome c oxidase subunit 4 isoform 1, mitochondrial Precursor	5669	6407	1.13
10509	Semaphorin-4B Precursor	12	14	1.13
-	Integrator complex subunit 3	74	84	1.13
7378	Uridine phosphorylase 1	317	358	1.13
6184	Dolichyl-diphosphooligosaccharide-protein glycosyltransferase subunit 1 Precursor	1105	1250	1.13
343173	Olfactory receptor 2T3	42	47	1.13
10633	Ras-like protein family member 10A Precursor	10	11	1.13
57673	Uncharacterized protein KIAA1553	21	23	1.13
2627	Transcription factor GATA-6	174	197	1.13
9669	Eukaryotic translation initiation factor 5B	487	551	1.13
55014	Syntaxin-17	21	23	1.13
-	Dysbindin	292	330	1.13
338821	liver-specific organic anion transporter 3TM12	7	8	1.13
162239	Zinc finger protein 1 homolog	42	48	1.13
80007	Uncharacterized protein C10orf88	85	96	1.13
9821	RB1-inducible coiled-coil protein 1	373	422	1.13
26092	Torsin-1A-interacting protein 1	84	95	1.13
-	Serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit B	24	27	1.13
100289661	-	20	23	1.13
79077	XTP3-transactivated gene A protein	524	593	1.13
79144	Exocrine differentiation and proliferation factor	999	1131	1.13
64641	Transcription factor COE2	18	20	1.13
9851	Uncharacterized protein KIAA0753	93	105	1.13
10014	Histone deacetylase 5	18	21	1.13
347292	60S ribosomal protein L36	5455	6174	1.13
55278	Glutamyl-tRNA(Gln) amidotransferase subunit A homolog	24	27	1.13
51463	Protein GPR89	193	219	1.13
2874	G protein pathway suppressor 2	414	469	1.13
100131342	-	19	22	1.13
9825	Spermatogenesis-associated protein 2	29	33	1.13
378884	NHL repeat-containing protein 1	19	22	1.13
100291336	-	15	16	1.13
759	Carbonic anhydrase 1	9	11	1.13
80036	Transient receptor potential cation channel subfamily M member 3	10	11	1.13
55696	Pre-mRNA-splicing factor RBM22	248	281	1.13
5031	P2Y purinoceptor 6	10	12	1.13
2091	rRNA 2'-O-methyltransferase fibrillarin	2219	2514	1.13
55226	N-acetyltransferase 10	234	266	1.13
-	Mitotic spindle assembly checkpoint protein MAD1	48	55	1.13
90850	Zinc finger protein 598	29	33	1.13
1939	Ligatin	146	165	1.13
25851	UPF0584 protein KIAA1358	203	230	1.13
10782	Zinc finger protein 274	198	225	1.13
10218	Angiotensin-related protein 7 Precursor	14	16	1.13
3304	Heat shock 70 kDa protein 1	199	225	1.13
401258	Ras-related protein Rab-44	14	15	1.13
1615	Aspartyl-tRNA synthetase, cytoplasmic	1582	1792	1.13
293	ADP/ATP translocase 3	10282	11651	1.13
-	-	20	23	1.13

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
7298	Thymidylate synthase	981	1112	1.13
128338	Transmembrane protein 77	446	505	1.13
-	-	15	17	1.13
114897	Complement C1q tumor necrosis factor-related protein 1 Precursor	9	10	1.13
114822	rhophilin 1	15	17	1.13
1375	Carnitine O-palmitoyltransferase 1, muscle isoform	14	16	1.13
-	-	757	858	1.13
60592	Short coiled-coil protein	711	806	1.13
255394	T-complex protein 11-like protein 2	12	14	1.13
26061	2-hydroxyacyl-CoA lyase 1	177	200	1.13
-	Adenylate cyclase type 10	13	14	1.13
3628	Inositol polyphosphate 1-phosphatase	235	266	1.13
11266	Dual specificity protein phosphatase 12	506	574	1.13
153339	Transmembrane protein 167A Precursor	362	411	1.13
9525	Vacuolar protein sorting-associating protein 4B	314	356	1.13
839	Caspase-6 Precursor	568	644	1.13
55219	Macoinlin	126	143	1.13
25909	AT-hook-containing transcription factor 1	44	50	1.13
11272	Proline-rich protein 4 Precursor	20	23	1.13
55647	Ras-related protein Rab-20	7	8	1.13
145438	Putative uncharacterized protein C14orf82	29	33	1.13
11321	GPN-loop GTPase 1	330	375	1.13
441608	Olfactory receptor 5B3	6	7	1.13
646875	60S ribosomal protein L12	11881	13478	1.13
10724	Bifunctional protein NCOAT	526	597	1.13
2908	Glucocorticoid receptor	109	124	1.13
25816	Tumor necrosis factor, alpha-induced protein 8	57	65	1.13
5261	Phosphorylase b kinase gamma catalytic chain, testis/liver isoform	98	112	1.13
6855	Synaptophysin	8	10	1.13
726	Calpain-5	14	16	1.13
440145	UPF0582 protein C13orf37	138	156	1.13
6203	40S ribosomal protein S9	10741	12189	1.13
7263	Thiosulfate sulfurtransferase	879	997	1.13
23360	Formin-binding protein 4	222	252	1.13
644992	-	10	12	1.13
-	Septin-14	7	8	1.13
9667	Scaffold attachment factor B2	116	132	1.14
10138	YY1-associated factor 2	111	126	1.14
100128682	-	22	25	1.14
4714	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 8, mitochondrial Precursor	2040	2316	1.14
-	Zinc finger protein 133	26	30	1.14
5810	Cell cycle checkpoint protein RAD1	167	190	1.14
221443	Uncharacterized protein C6orf130	242	275	1.14
-	Transmembrane protease, serine 4	218	247	1.14
55217	Trimethyllysine dioxygenase, mitochondrial Precursor	79	90	1.14
1819	Developmentally-regulated GTP-binding protein 2	182	207	1.14
-	Septin-10	805	915	1.14
923	T-cell differentiation antigen CD6 Precursor	21	23	1.14
92806	hypothetical protein LOC92806	122	139	1.14
283514	Seven in absentia-like protein FLJ39203	18	20	1.14
8743	Tumor necrosis factor ligand superfamily member 10	465	528	1.14

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23012	Serine/threonine-protein kinase 38-like	13	15	1.14
9421	Heart- and neural crest derivatives-expressed protein 1	28	32	1.14
114026	Zinc finger imprinted 3	13	14	1.14
100288239	-	10	11	1.14
80775	Transmembrane protein 177	240	273	1.14
7884	Histone RNA hairpin-binding protein	698	793	1.14
100131733	-	15	17	1.14
285753	Uncharacterized protein C6orf182	45	51	1.14
8760	Phosphatidate cytidyltransferase 2	236	268	1.14
80025	Pantothenate kinase 2, mitochondrial Precursor	328	373	1.14
-	Transmembrane channel-like protein 8	8	9	1.14
56889	Transmembrane 9 superfamily member 3 Precursor	955	1085	1.14
11020	Putative GTP-binding protein RAY-like	132	151	1.14
-	Coiled-coil domain-containing protein 33	14	16	1.14
201973	Coiled-coil domain-containing protein 111	84	95	1.14
8690	Jerky protein homolog-like	72	82	1.14
220441	RING finger protein 152	18	20	1.14
4698	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 5	1083	1232	1.14
54107	DNA polymerase epsilon subunit 3	274	311	1.14
79725	THAP domain-containing protein 9	10	12	1.14
6834	Surfeit locus protein 1	174	198	1.14
283489	Zinc finger protein 828	25	28	1.14
8115	T-cell leukemia/lymphoma protein 1A	12	13	1.14
54948	39S ribosomal protein L16, mitochondrial Precursor	488	555	1.14
285349	Zinc finger protein 660	11	13	1.14
30837	Suppressor of cytokine signaling 7	11	12	1.14
79169	Multiple myeloma tumor-associated protein 2	302	344	1.14
94101	ORM1-like protein 1 (Adoplin-1)	773	879	1.14
-	Mitochondrial fission factor	715	813	1.14
6202	40S ribosomal protein S8	24494	27866	1.14
-	28S ribosomal protein S35, mitochondrial Precursor	469	534	1.14
7076	Metalloproteinase inhibitor 1 Precursor	1673	1904	1.14
1666	2,4-dienoyl-CoA reductase, mitochondrial Precursor	1435	1633	1.14
64976	39S ribosomal protein L40, mitochondrial Precursor	439	499	1.14
728215	Transmembrane protein FAM155A	206	235	1.14
-	-	1065	1211	1.14
646	Zinc finger protein basonuclin-1	13	15	1.14
27243	Charged multivesicular body protein 2a	2169	2469	1.14
23236	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase beta-1	58	66	1.14
-	-	247	281	1.14
1876	Transcription factor E2F6	166	189	1.14
-	GTP binding protein Fragment	530	604	1.14
22800	Ras-related protein R-Ras2 Precursor	277	315	1.14
339210	Uncharacterized protein C17orf67 Precursor	13	14	1.14
10817	Fibroblast growth factor receptor substrate 3	15	18	1.14
-	Zinc finger protein 649	36	41	1.14
-	Putative beta-glucuronidase-like protein FLJ75429	286	325	1.14
6046	Bromodomain-containing protein 2	326	372	1.14
1833	Epiphycan Precursor	33	38	1.14
5966	C-Rel proto-oncogene protein	34	38	1.14
8504	Peroxisomal biogenesis factor 3	97	111	1.14

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
54996	MOSC domain-containing protein 2, mitochondrial Precursor	171	195	1.14
283989	tRNA-splicing endonuclease subunit Sen54	166	189	1.14
522	ATP synthase-coupling factor 6, mitochondrial Precursor	80	91	1.14
10527	Importin-7	28	32	1.14
51759	Uncharacterized protein C9orf78	381	434	1.14
9833	Maternal embryonic leucine zipper kinase	69	79	1.14
4830	Nucleoside diphosphate kinase A	1801	2052	1.14
163033	Zinc finger protein 579	52	59	1.14
-	-	36	41	1.14
-	-	9692	11040	1.14
1628	D site-binding protein	17	20	1.14
-	Uncharacterized protein ENSP00000383732	22	25	1.14
10775	Ribonuclease P protein subunit p29	358	407	1.14
51307	Protein FAM53C	133	151	1.14
100293438	-	7	7	1.14
23530	NAD(P) transhydrogenase, mitochondrial Precursor	90	102	1.14
142684	Ras-related protein Rab-40A	22	25	1.14
55167	Male-specific lethal 2-like 1	74	84	1.14
139231	Uncharacterized protein CXorf39	162	185	1.14
100288342	-	32	37	1.14
1106	Chromodomain-helicase-DNA-binding protein 2	55	63	1.14
55589	BMP-2-inducible protein kinase	27	31	1.14
728849	Transcriptional regulator ATRX	60	68	1.14
5139	cGMP-inhibited 3',5'-cyclic phosphodiesterase A	19	22	1.14
5534	WD repeat-containing protein 92	51	58	1.14
4625	Myosin-7	9	11	1.14
58489	Abhydrolase domain-containing protein FAM108C1	49	56	1.14
-	Beta-1,4-galactosyltransferase 3	299	341	1.14
2335	Fibronectin Precursor	5093	5809	1.14
2958	Transcription initiation factor IIA subunit 2	1291	1472	1.14
1387	CREB-binding protein	91	104	1.14
-	Signal-induced proliferation-associated 1-like protein 1	45	51	1.14
57515	Serine incorporator 1	780	890	1.14
8541	Liprin-alpha-3	9	11	1.14
6137	60S ribosomal protein L13	4913	5606	1.14
55527	Protein fem-1 homolog A	160	182	1.14
11235	Programmed cell death protein 10	1006	1148	1.14
100292270	V-segment translation product Fragment	9	10	1.14
60401	Tumor necrosis factor receptor superfamily member 27	9	11	1.14
2047	Ephrin type-B receptor 1 Precursor	20	23	1.14
79811	SAFB-like transcription modulator	369	421	1.14
122809	Suppressor of cytokine signaling 4	16	19	1.14
285367	RNA pseudouridylate synthase domain-containing protein 3	139	159	1.14
57085	Type-1 angiotensin II receptor-associated protein	193	220	1.14
9221	Nucleolar phosphoprotein p130	263	300	1.14
29085	14 kDa phosphohistidine phosphatase	2827	3227	1.14
100129882	60S ribosomal protein L31	14633	16704	1.14
7485	Tryptophan-rich protein	833	951	1.14
55201	Microtubule-associated protein 1S	489	558	1.14
644684	-	16	18	1.14
100293073	-	9	10	1.14
25803	SAM pointed domain-containing Ets transcription factor	10	12	1.14
-	MAP/microtubule affinity-regulating kinase 4	10	11	1.14

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
8660	Insulin receptor substrate 2	79	90	1.14
127687	Uncharacterized protein C1orf122	1007	1150	1.14
168850	Zinc finger protein 800	100	115	1.14
100287008	-	8	9	1.14
51567	TRAF and TNF receptor-associated protein	466	532	1.14
91683	Synaptotagmin-12	6	7	1.14
11215	A-kinase anchor protein 11	177	202	1.14
221143	N(6)-adenine-specific DNA methyltransferase 2	179	205	1.14
26608	Transducin beta-like 2 protein	37	42	1.14
51427	Zinc finger protein 107	17	20	1.14
7343	Nucleolar transcription factor 1	78	89	1.14
-	Laminin subunit alpha-1 Precursor	45	52	1.14
-	-	13592	15533	1.14
770	Carbonic anhydrase-related protein 11 Precursor	18	21	1.14
79583	UPF0513 transmembrane protein	21	24	1.14
-	-	8	9	1.14
57665	Cytosolic 5'-nucleotidase 1B	247	282	1.14
8029	Cubilin Precursor	7	8	1.14
57587	UPF0501 protein KIAA1430	31	35	1.14
140735	Dynein light chain 2, cytoplasmic	58	67	1.14
-	-	7175	8203	1.14
7454	Wiskott-Aldrich syndrome protein	18	21	1.14
80023	Neurensin-2	12	14	1.14
-	Poly [ADP-ribose] polymerase 10	29	33	1.14
64285	Rhomboid family member 1	182	208	1.14
-	Brain mitochondrial carrier protein 1	76	87	1.14
54433	H/ACA ribonucleoprotein complex subunit 1	230	263	1.14
84174	Src-like-adaptor 2	27	31	1.14
133308	Mitochondrial sodium/hydrogen exchanger NHA2	56	63	1.14
9637	Fasciculation and elongation protein zeta-2	563	643	1.14
64759	Tensin-3	339	388	1.14
-	Putative beta-glucuronidase-like protein ENSP00000370097	143	163	1.14
-	-	3438	3932	1.14
729242	-	7	8	1.14
100288531	-	17	19	1.14
7159	Apoptosis-stimulating of p53 protein 2	67	77	1.14
23144	Zinc finger CCCH domain-containing protein 3	8	9	1.14
51075	Thioredoxin domain-containing protein 14 Precursor	594	679	1.14
100293087	-	21	24	1.14
79135	Apolipoprotein O Precursor	37	42	1.14
55897	Mesoderm posterior protein 1	24	27	1.14
4715	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 9	1941	2221	1.14
152189	CKLF-like MARVEL transmembrane domain-containing protein 8	104	119	1.14
79447	PAXIP1-associated protein 1	182	208	1.14
51068	60S ribosomal export protein NMD3	307	351	1.14
285282	Rab-like protein 3	102	117	1.14
-	Trem-like transcript 4 protein Precursor	12	14	1.14
692094	microseminoprotein, prostate associated (MSMP), mRNA	185	211	1.14
-	Regulation of nuclear pre-mRNA domain-containing protein 1A	160	183	1.14
-	Substance-K receptor	14	16	1.14
653121	zinc finger and BTB domain containing 8A	29	33	1.14

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
64601	Vacuolar protein sorting-associated protein 16 homolog	167	191	1.14
79847	Transmembrane protein 180	7	8	1.14
122622	Adenylosuccinate synthetase isozyme 1	30	35	1.14
3661	Interferon regulatory factor 3	47	54	1.14
9466	Interleukin-27 receptor subunit alpha Precursor	49	56	1.14
79009	ATP-dependent RNA helicase DDX50	492	564	1.14
56984	Proteasome assembly chaperone 2	718	822	1.14
309	Annexin A6	806	922	1.15
1508	Cathepsin B Precursor	3484	3990	1.15
6194	40S ribosomal protein S6	19023	21785	1.15
10423	CDP-diacylglycerol--inositol 3-phosphatidyltransferase	992	1136	1.15
253832	Probable palmitoyltransferase ZDHHC20	7	8	1.15
-	LETM1 domain-containing protein LETM2, mitochondrial Precursor	7	7	1.15
100294402	-	7	8	1.15
6599	SWI/SNF complex subunit SMARCC1	429	492	1.15
-	Uncharacterized protein ENSP00000244249 Fragment	1950	2234	1.15
84318	Coiled-coil domain-containing protein 77	51	59	1.15
57716	Periaxin	41	46	1.15
3914	Laminin subunit beta-3 Precursor	62	71	1.15
10380	3'(2'),5'-bisphosphate nucleotidase 1	44	51	1.15
-	Pyridoxal phosphate phosphatase	80	91	1.15
-	Cyclin-J-like protein	67	77	1.15
7871	Sarcolemmal membrane-associated protein	42	48	1.15
79897	Ribonuclease P protein subunit p21	472	541	1.15
6513	Solute carrier family 2, facilitated glucose transporter member 1	617	708	1.15
128	Alcohol dehydrogenase class-3	215	246	1.15
145858	Uncharacterized protein C15orf32	15	17	1.15
64429	Probable palmitoyltransferase ZDHHC6	212	243	1.15
8745	ADAM 23 Precursor	130	149	1.15
79568	Uncharacterized protein C2orf47, mitochondrial Precursor	132	151	1.15
-	-	14	16	1.15
-	Lon protease homolog, mitochondrial Precursor	247	283	1.15
1312	Catechol O-methyltransferase	3011	3452	1.15
137964	1-acyl-sn-glycerol-3-phosphate acyltransferase zeta Precursor	270	310	1.15
51385	Zinc finger protein 589	34	39	1.15
9241	Noggin Precursor	46	52	1.15
51079	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 13	1730	1984	1.15
284323	Zinc finger protein 780A	18	21	1.15
148268	Zinc finger protein 570	29	33	1.15
134492	NudC domain-containing protein 2	246	282	1.15
2696	Gastric inhibitory polypeptide receptor Precursor	62	71	1.15
115761	ADP-ribosylation factor-like protein 11	12	13	1.15
220323	Out at first protein homolog Precursor	543	623	1.15
8092	ALX homeobox protein 1	28	33	1.15
7013	Telomeric repeat-binding factor 1	62	71	1.15
51164	Dynactin subunit 4	190	218	1.15
56900	Transmembrane protein 167B Precursor	252	290	1.15
9939	RNA-binding protein 8A	69	80	1.15
10131	Heat shock protein 75 kDa, mitochondrial Precursor	1034	1186	1.15
84626	Protein KRBA1	29	34	1.15

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
51193	Zinc finger protein 639	185	212	1.15
196410	Methyltransferase-like protein 7B Precursor	14	16	1.15
100129954	-	7	9	1.15
64965	28S ribosomal protein S9, mitochondrial Precursor	203	233	1.15
10615	Sperm-associated antigen 5	10	12	1.15
-	Homeobox protein Hox-D13	11	13	1.15
100129193	-	13	15	1.15
2150	Proteinase-activated receptor 2 Precursor	407	467	1.15
729537	-	12	13	1.15
25913	Protection of telomeres protein 1	6	7	1.15
653924	-	23	26	1.15
-	Homeobox protein Hox-B2	302	347	1.15
10810	Wiskott-Aldrich syndrome protein family member 3	158	181	1.15
114885	Oxysterol-binding protein-related protein 11	12	13	1.15
253190	Serine hydrolase-like protein 2	21	24	1.15
414918	Protein FAM116B	18	21	1.15
284904	SEC14-like protein 4	31	36	1.15
90120	chromosome 9 open reading frame 69 (C9orf69), mRNA	396	454	1.15
5373	Phosphomannomutase 2	51	58	1.15
-	Ring finger and transmembrane domain-containing protein 2	7	8	1.15
51654	CDK5 regulatory subunit-associated protein 1	142	163	1.15
171568	DNA-directed RNA polymerase III subunit RPC8	181	208	1.15
55847	CDGSH iron sulfur domain-containing protein 1	1279	1469	1.15
728558	-	8	10	1.15
84925	Disrupted in renal carcinoma protein 2	101	116	1.15
51562	MAP3K12-binding inhibitory protein 1	127	145	1.15
54956	Poly [ADP-ribose] polymerase 16	29	34	1.15
3159	High mobility group protein HMG-I/HMG-Y	1083	1245	1.15
54555	Probable ATP-dependent RNA helicase DDX49	179	206	1.15
6433	Splicing factor, arginine/serine-rich 8	85	98	1.15
64863	Methyltransferase-like protein 4	50	57	1.15
51028	Vacuolar protein-sorting-associated protein 36	112	129	1.15
54850	F-box/LRR-repeat protein 12	145	167	1.15
96764	Trimethylguanosine synthase homolog	69	79	1.15
57215	THAP domain-containing protein 11	194	223	1.15
1132	Muscarinic acetylcholine receptor M4	8	9	1.15
291	ADP/ATP translocase 1	423	486	1.15
160492	Intermediate filament tail domain-containing protein 1	10	11	1.15
-	-	97	111	1.15
10845	ATP-dependent Clp protease ATP-binding subunit clpX-like, mitochondrial Precursor	135	155	1.15
286006	Coiled-coil domain-containing transmembrane protein C7orf53	39	44	1.15
-	Protein FAM171B Precursor	17	19	1.15
100133459	Neuroblastoma breakpoint family member 3	356	410	1.15
6782	Heat shock 70 kDa protein 13 Precursor	151	173	1.15
148932	Mps one binder kinase activator-like 2C	47	54	1.15
2531	3-ketodihydrosphingosine reductase Precursor	214	246	1.15
65251	Zinc finger protein 649	17	19	1.15
81559	Tripartite motif-containing protein 11	36	41	1.15
26098	Erythroid differentiation-related factor 1	24	28	1.15
195827	UPF0308 protein C9orf21	134	154	1.15
23379	Uncharacterized protein KIAA0947	219	252	1.15

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
11258	Dynactin subunit 3	592	681	1.15
80305	TraB domain-containing protein	46	53	1.15
8543	LIM domain transcription factor LMO4	197	227	1.15
-	Tenascin Precursor	20	23	1.15
84954	MPN domain-containing protein	46	53	1.15
8717	Tumor necrosis factor receptor type 1-associated DEATH domain protein	378	435	1.15
6597	Probable global transcription activator SNF2L4	585	673	1.15
8087	Fragile X mental retardation syndrome-related protein 1	283	326	1.15
84057	Meiotic nuclear division protein 1 homolog	25	28	1.15
-	Myelin P0 protein Precursor	11	13	1.15
5284	Polymeric immunoglobulin receptor Precursor	8	9	1.15
130075	Olfactory receptor 9A4	13	15	1.15
7443	Serine/threonine-protein kinase VRK1	268	308	1.15
355	Tumor necrosis factor receptor superfamily member 6 Precursor	153	176	1.15
100287983	-	7	8	1.15
56681	GTP-binding protein SAR1a	202	233	1.15
23660	Zinc finger protein with KRAB and SCAN domains 5	41	48	1.15
100289008	-	18	21	1.15
100131973	-	9	10	1.15
100293043	-	24	28	1.15
57691	Uncharacterized protein KIAA1586	50	58	1.15
-	Zinc finger protein 143	87	100	1.15
7140	Troponin T, fast skeletal muscle	14	16	1.15
83999	Kremen protein 1 Precursor	25	29	1.15
-	Uncharacterized protein ENSP00000381889	6	7	1.15
100128893	-	8	9	1.15
81929	Nucleoporin SEH1-like	89	102	1.15
90196	Protein SYS1 homolog	148	171	1.15
51706	NADH-cytochrome b5 reductase 1	322	370	1.15
55655	NACHT, LRR and PYD domains-containing protein 2	33	38	1.15
3440	Interferon alpha-2 Precursor	15	18	1.15
-	LIM and calponin homology domains-containing protein 1	90	104	1.15
-	-	272	313	1.15
2051	Ephrin type-B receptor 6 Precursor	78	90	1.15
400410	Chorionic somatomammotropin hormone-like 1 Precursor	17	20	1.15
221150	Uncharacterized protein C13orf3	17	20	1.15
58498	Myosin regulatory light chain 2, atrial isoform	7	8	1.15
5158	Rod cGMP-specific 3',5'-cyclic phosphodiesterase subunit beta Precursor	15	17	1.15
-	-	177	204	1.15
-	Uncharacterized protein C20orf27	127	146	1.15
57545	Coiled-coil and C2 domain-containing protein 2A	16	18	1.15
1495	Catenin alpha-1 (	2316	2669	1.15
8820	Homeobox expressed in ES cells 1	34	39	1.15
203427	Solute carrier family 25 member 43	44	51	1.15
26019	Regulator of nonsense transcripts 2	55	64	1.15
8968	Histone H3.1	865	997	1.15
669	Bisphosphoglycerate mutase	273	315	1.15
51293	CD320 antigen Precursor	177	205	1.15
81875	Interferon-stimulated 20 kDa exonuclease-like 2	178	205	1.15
100134372	-	17	20	1.15
401115	Uncharacterized protein C4orf48	727	839	1.15

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100288684	-	17	20	1.15
55954	Zinc finger matrin-type protein 5	131	151	1.15
-	UPF0160 protein MYG1	384	443	1.15
58506	Splicing factor, arginine/serine-rich 19	99	114	1.15
-	-	1288	1485	1.15
3652	Actin-binding protein IPP	86	100	1.15
132	Adenosine kinase	927	1069	1.15
23107	28S ribosomal protein S27, mitochondrial	349	403	1.15
441617	-	13	15	1.15
-	Atrial natriuretic peptide receptor B Precursor	84	97	1.15
200894	ADP-ribosylation factor-like protein 13B	54	62	1.15
387338	Putative methyltransferase NSUN4	22	25	1.15
11315	Protein DJ-1	2758	3181	1.15
83871	Ras-related protein Rab-34	121	140	1.15
9732	Dedicator of cytokinesis protein 4	481	555	1.15
54785	Uncharacterized protein C17orf59	76	87	1.15
8677	Syntaxin-10	247	285	1.15
400713	Zinc finger protein LOC400713	68	79	1.15
-	DNA fragmentation factor subunit beta	13	15	1.15
-	UDP-GalNAc:beta-1,3-N-acetylgalactosaminyltransferase 2	22	26	1.15
79818	Zinc finger protein 552	34	39	1.15
-	Uncharacterized protein C19orf62	706	814	1.15
-	-	1646	1899	1.15
79734	BTB/POZ domain-containing protein KCTD17	139	160	1.15
84896	ATPase family AAA domain-containing protein 1	182	211	1.15
8748	ADAM 20 Precursor	25	29	1.15
84838	Zinc finger protein 496	34	39	1.15
57092	PEST proteolytic signal-containing nuclear protein	1086	1254	1.15
23108	Rap1 GTPase-activating protein 2	7	8	1.15
2920	C-X-C motif chemokine 2 Precursor	53	61	1.15
123	Adipophilin	461	532	1.15
1616	Death domain-associated protein 6	604	697	1.15
51608	Protein unc-84 homolog A	199	229	1.15
56301	Asc-type amino acid transporter 1	15	18	1.15
56156	Testis-expressed sequence 13B protein	10	12	1.15
84231	E3 ubiquitin-protein ligase TRAF7	193	223	1.15
55109	Angiogenic factor with G patch and FHA domains 1	78	90	1.15
729196	-	22	26	1.15
162282	Ankyrin repeat and fibronectin type-III domain-containing protein 1	9	10	1.15
-	-	1013	1170	1.15
-	LAG1 longevity assurance homolog 5	376	435	1.15
100131244	-	10	12	1.15
158297	Protein FAM154A	20	24	1.15
3676	Integrin alpha-4 Precursor	21	25	1.15
-	-	1742	2012	1.16
3632	Type I inositol-1,4,5-trisphosphate 5-phosphatase	351	406	1.16
100289047	-	9	10	1.16
401138	Amelotin Precursor	11	12	1.16
929	Monocyte differentiation antigen CD14 Precursor	8	10	1.16
56899	Ankyrin repeat and sterile alpha motif domain-containing protein 1B	28	32	1.16
51116	28S ribosomal protein S2, mitochondrial	581	672	1.16
-	-	7026	8117	1.16

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1856	Segment polarity protein dishevelled homolog DVL-2	27	32	1.16
146542	Zinc finger protein 785	71	82	1.16
360200	Transmembrane protease, serine 9	16	19	1.16
5271	Serpin B8	154	178	1.16
-	Protein FAM131A Precursor	141	163	1.16
23355	Vacuolar protein sorting-associated protein 8 homolog	195	226	1.16
4493	Metallothionein-1E	31	36	1.16
5603	Mitogen-activated protein kinase 13	33	38	1.16
-	Leucine carboxyl methyltransferase 1	345	399	1.16
100293160	-	113	131	1.16
84064	Haloacid dehalogenase-like hydrolase domain-containing protein 2	128	148	1.16
257313	Urotensin-2B Precursor	14	16	1.16
100292516	-	20	23	1.16
113174	Protein SAAL1	110	127	1.16
-	Uncharacterized protein C9orf102	20	23	1.16
11116	FGFR1 oncogene partner	76	88	1.16
9352	Thioredoxin-like protein 1	1350	1561	1.16
51295	Evolutionarily conserved signaling intermediate in Toll pathway, mitochondrial Precursor	114	131	1.16
339318	Zinc finger protein 181	281	325	1.16
23231	SEL1-like repeat-containing protein KIAA0746	875	1012	1.16
26993	A-kinase anchor protein 8-like	136	158	1.16
5443	Corticotropin-lipotropin Precursor	29	34	1.16
90668	Leucine-rich repeat-containing protein 16B	11	13	1.16
23334	Uncharacterized protein C1orf84	44	51	1.16
-	Neuroblastoma breakpoint family, member 15	554	641	1.16
100292449	-	7	8	1.16
64395	Germ cell-less protein-like 1	59	69	1.16
200186	CREB-regulated transcription coactivator 2	38	44	1.16
140459	Ankyrin repeat and SOCS box protein 6	19	23	1.16
25949	Pre-mRNA-splicing factor SYF2	530	613	1.16
54344	Dolichol-phosphate mannosyltransferase subunit 3	607	702	1.16
175	N(4)-(beta-N-acetylglucosaminy)-L-asparaginase Precursor	159	184	1.16
25805	BMP and activin membrane-bound inhibitor homolog Precursor	37	43	1.16
196403	Protein deltex-3	20	24	1.16
2241	Proto-oncogene tyrosine-protein kinase FER	22	26	1.16
100288716	-	7	8	1.16
10172	Zinc finger protein 256	24	28	1.16
92999	Zinc finger and BTB domain-containing protein 47	95	110	1.16
10926	Protein DBF4 homolog A	73	85	1.16
26528	DAZ-associated protein 1	293	339	1.16
5627	Vitamin K-dependent protein S Precursor	142	164	1.16
79139	Derlin-1	343	397	1.16
85440	Dedicator of cytokinesis protein 7	65	76	1.16
7324	Ubiquitin-conjugating enzyme E2 E1	2744	3177	1.16
3301	DnaJ homolog subfamily A member 1	2466	2856	1.16
79641	Protein rogdi homolog	115	133	1.16
23478	Signal peptidase complex catalytic subunit SEC11A	3564	4129	1.16
-	Short transient receptor potential channel 6	15	17	1.16
9577	Protein BRE	188	217	1.16
3665	Interferon regulatory factor 7	100	115	1.16
-	Olfactory receptor 3A4	7	8	1.16

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
387885	Coiled-coil domain-containing protein 42B	7	8	1.16
54807	Zinc finger protein 586	32	37	1.16
100289547	-	8	10	1.16
8480	mRNA export factor	485	562	1.16
1075	Dipeptidyl-peptidase 1 Precursor	875	1015	1.16
54537	Protein FAM35A	120	139	1.16
84135	U3 small nucleolar RNA-associated protein 15 homolog	29	34	1.16
-	Putative 60S ribosomal protein L37a-like	4329	5018	1.16
57149	LYR motif-containing protein 1	218	253	1.16
80152	Centromere protein T	36	41	1.16
-	CUG-BP ⁺ and ETR-3-like factor 5	11	12	1.16
201501	Zinc finger and BTB domain-containing protein 7C	22	25	1.16
23539	Monocarboxylate transporter 3	34	40	1.16
8728	ADAM 19 Precursor	16	19	1.16
23184	Mesoderm development candidate 2	377	437	1.16
55922	NF-kappa-B-repressing factor	20	23	1.16
6636	Small nuclear ribonucleoprotein F	2335	2708	1.16
29903	Coiled-coil domain-containing protein 106	117	136	1.16
-	Telomerase protein component 1	14	17	1.16
342371	Ataxin-1-like	216	251	1.16
-	Uncharacterized protein C1orf52	360	417	1.16
60386	Mitochondrial deoxynucleotide carrier	71	83	1.16
10059	Dynamin-1-like protein	252	292	1.16
26574	Protein AATF	322	374	1.16
85437	Zinc finger CCHC-type and RNA-binding motif-containing protein 1	1152	1337	1.16
100128916	-	61	71	1.16
23113	Cullin-9	61	70	1.16
255101	Coiled-coil domain-containing protein 108	7	8	1.16
10948	StAR-related lipid transfer protein 3	114	132	1.16
51021	28S ribosomal protein S16, mitochondrial Precursor	89	103	1.16
-	-	63	74	1.16
253143	Uncharacterized protein C22orf30	49	56	1.16
221037	Probable JmjC domain-containing histone demethylation protein 2C	264	307	1.16
154	Beta-2 adrenergic receptor	39	45	1.16
114932	MORF4 family-associated protein 1-like 1	329	382	1.16
22950	Kanadaptin	129	150	1.16
11319	Protein SGT1	355	412	1.16
-	NF-kappa-B inhibitor delta	12	14	1.16
4799	Transcriptional repressor NF-X1	44	51	1.16
100290340	-	39	46	1.16
79156	Pleckstrin homology domain-containing family F member 1	61	71	1.16
-	Putative uncharacterized protein DKFZp434D0617	31	36	1.16
-	Fragment			
100293570	-	8	9	1.16
81790	RING finger protein 170	119	138	1.16
100289713	Bcl-2 homologous antagonist/killer	92	107	1.16
57508	Integrator complex subunit 2	61	70	1.16
-	Isoamyl acetate-hydrolyzing esterase 1 homolog	613	711	1.16
25972	Protein unc-50 homolog	689	801	1.16
-	Zinc finger protein 527	6	7	1.16
222194	Round spermatid basic protein 1-like protein	46	53	1.16
123803	Protein N-terminal asparagine amidohydrolase	658	764	1.16

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
222008	V-set and transmembrane domain-containing protein 2A Precursor	38	44	1.16
100291082	-	16	18	1.16
57461	Ras-related protein Rab-43	484	562	1.16
55177	Regulator of microtubule dynamics protein 3	236	274	1.16
-	Arginine/serine-rich coiled-coil protein 1	157	182	1.16
394	Rho GTPase-activating protein 5	49	57	1.16
161779	PiggyBac transposable element-derived protein 4	8	9	1.16
51081	28S ribosomal protein S7, mitochondrial Precursor	796	926	1.16
100293277	V2-14 protein Fragment	7	9	1.16
100292124	-	25	29	1.16
-	Zinc finger protein 771	51	59	1.16
7165	Tumor protein D54	380	441	1.16
100290215	-	14	17	1.16
-	Protein phosphatase 1 regulatory subunit 3F	13	15	1.16
84069	Pleckstrin homology domain-containing family N member 1	16	19	1.16
56160	Melanoma-associated antigen G1	132	154	1.16
80169	Uncharacterized protein C17orf68	45	52	1.16
1632	3,2-trans-enoyl-CoA isomerase, mitochondrial Precursor	231	269	1.16
6297	Sal-like protein 2	21	25	1.16
57110	HRAS-like suppressor	22	26	1.16
23350	U2-associated protein SR140	174	202	1.16
359948	Interferon regulatory factor 2-binding protein 2	207	241	1.16
6854	Synapsin-2	10	11	1.16
125144	Putative uncharacterized protein C17orf45, mitochondrial Precursor	6010	6992	1.16
29969	MyoD family inhibitor domain-containing protein	92	107	1.16
6837	Mediator of RNA polymerase II transcription subunit 22	30	35	1.16
-	Sec1 family domain-containing protein 1	332	386	1.16
80831	Apolipoprotein L5	6	7	1.16
94234	Forkhead box protein Q1	6	7	1.16
79089	Transmembrane and ubiquitin-like domain-containing protein 2	130	151	1.16
7088	Transducin-like enhancer protein 1	152	177	1.16
9929	Josephin-1	591	687	1.16
56905	Uncharacterized protein C15orf39	12	14	1.16
23399	Serine/threonine-protein phosphatase dullard	763	888	1.16
6138	60S ribosomal protein L15	6731	7834	1.16
5150	High affinity cAMP-specific 3',5'-cyclic phosphodiesterase 7A	24	28	1.16
79954	Nucleolar protein 10	195	227	1.16
8568	Ribosomal RNA processing protein 1 homolog A	176	205	1.16
-	UPF0515 protein C19orf66	97	113	1.16
5197	Platelet factor 4 variant Precursor	42	48	1.16
7711	Zinc finger protein 155	15	17	1.16
23417	Malonyl-CoA decarboxylase, mitochondrial Precursor	64	74	1.16
144983	Heterogeneous nuclear ribonucleoprotein A1-like protein	5890	6857	1.16
9170	Lysophosphatidic acid receptor 2	23	27	1.16
-	5'-nucleotidase domain-containing protein 2	506	589	1.16
1973	Eukaryotic initiation factor 4A-1	2436	2836	1.16
23170	Tubulin-tyrosine ligase-like protein 12	29	34	1.16
-	Ligatin	331	385	1.16
84936	Zinc finger FYVE domain-containing protein 19	118	137	1.16
-	Putative uncharacterized protein LOC441108	31	36	1.16

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
113802	UPF0486 protein C1orf59	39	45	1.16
129831	RNA-binding protein 45	179	208	1.16
221927	HEAT repeat-containing protein C7orf27 Precursor	36	42	1.16
60370	Arginine vasopressin-induced protein 1	48	56	1.16
3840	Importin subunit alpha-4	89	104	1.16
100293375	-	12	14	1.16
5464	Inorganic pyrophosphatase	2176	2534	1.16
154064	Retinoic acid early transcript 1L protein Precursor	23	27	1.16
-	SH3 and multiple ankyrin repeat domains protein 1	10	11	1.16
100293485	-	57	66	1.16
57226	LYR motif-containing protein 2	284	331	1.16
2109	Electron transfer flavoprotein subunit beta	638	744	1.16
7957	Laforin	19	22	1.16
23636	Nuclear pore glycoprotein p62	19	22	1.16
-	cDNA FLJ42393 fis, clone ADRGL2003329	9	11	1.16
79746	Enoyl-CoA hydratase domain-containing protein 3, mitochondrial Precursor	18	21	1.16
5870	Ras-related protein Rab-6A	706	822	1.16
10556	Ribonuclease P protein subunit p30	233	271	1.16
29886	Sorting nexin-8	62	72	1.17
4644	Myosin-Va	120	140	1.17
652191	-	229	267	1.17
-	Activating signal cointegrator 1 complex subunit 1	163	190	1.17
55509	Basic leucine zipper transcriptional factor ATF-like 3	11	13	1.17
1374	Carnitine O-palmitoyltransferase 1, liver isoform	67	78	1.17
83938	Leucine-rich repeat-containing protein C10orf11	105	123	1.17
23075	Switch-associated protein 70	1596	1861	1.17
134957	Syntaxin-binding protein 5	78	91	1.17
-	FAST kinase domain-containing protein 3	79	92	1.17
51082	DNA-directed RNA polymerases I and III subunit RPAC2	1350	1573	1.17
100293055	Collagen alpha-1(XXII) chain Precursor	6	8	1.17
3087	Hematopoietically-expressed homeobox protein HHEX	1292	1506	1.17
-	-	10778	12562	1.17
10051	Structural maintenance of chromosomes protein 4	380	443	1.17
9331	Beta-1,4-galactosyltransferase 6	7	9	1.17
5784	Tyrosine-protein phosphatase non-receptor type 14	34	40	1.17
54535	Coiled-coil alpha-helical rod protein 1	87	101	1.17
80222	Threonyl-tRNA synthetase, mitochondrial Precursor	20	24	1.17
-	-	2763	3221	1.17
5037	Phosphatidylethanolamine-binding protein 1	2319	2704	1.17
54456	Putative helicase Mov10l1	59	69	1.17
11129	Splicing factor, arginine/serine-rich 16	105	123	1.17
-	28S ribosomal protein S18a, mitochondrial Precursor	186	217	1.17
84769	Mpv17-like protein 2	122	142	1.17
-	Goliath homolog Precursor	589	687	1.17
-	Neuron navigator 2	22	25	1.17
6141	60S ribosomal protein L18	16010	18675	1.17
8621	Cell division cycle 2-like protein kinase 5	148	172	1.17
83640	Protein FAM103A1	378	440	1.17
8607	RuvB-like 1	530	618	1.17
5331	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase beta-3	46	54	1.17
2180	Long-chain-fatty-acid-CoA ligase 1	79	92	1.17
3635	Phosphatidylinositol-3,4,5-trisphosphate 5-phosphatase 1	12	14	1.17

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9400	ATP-dependent DNA helicase Q5	17	19	1.17
51106	Dimethyladenosine transferase 1, mitochondrial Precursor	73	86	1.17
10300	Katanin p80 WD40-containing subunit B1	64	75	1.17
-	-	1227	1432	1.17
493856	CDGSH iron sulfur domain-containing protein 2	178	208	1.17
100288436	-	157	183	1.17
2110	Electron transfer flavoprotein-ubiquinone oxidoreductase, mitochondrial Precursor	100	117	1.17
51128	GTP-binding protein SAR1b	231	270	1.17
10732	Transcription factor-like 5 protein	88	103	1.17
4793	NF-kappa-B inhibitor beta	57	66	1.17
-	Bcl-2 homologous antagonist/killer	92	107	1.17
29950	SERTA domain-containing protein 1	246	287	1.17
9364	Ras-related protein Rab-28	64	75	1.17
100129362	-	19	22	1.17
146225	CKLF-like MARVEL transmembrane domain-containing protein 2	7	8	1.17
10781	Zinc finger protein 266	80	93	1.17
79888	1-acylglycerophosphocholine O-acyltransferase 1	615	719	1.17
2975	General transcription factor 3C polypeptide 1	39	46	1.17
100133065	-	9	10	1.17
6621	snRNA-activating protein complex subunit 4	151	176	1.17
8019	Bromodomain-containing protein 3	185	216	1.17
3429	Interferon alpha-inducible protein 27 (p27)	4384	5122	1.17
1802	Diphthamide biosynthesis protein 2	140	164	1.17
57647	Probable ATP-dependent RNA helicase DHX37	62	72	1.17
7188	TNF receptor-associated factor 5	78	91	1.17
131965	Methyltransferase-like protein 6	97	113	1.17
7297	Non-receptor tyrosine-protein kinase TYK2	249	291	1.17
57763	Ankyrin repeat family A protein 2	182	212	1.17
-	-	2514	2938	1.17
-	UPF0465 protein C5orf33	63	74	1.17
9277	WD repeat domain 46 (WDR46), mRNA	225	263	1.17
728458	Green-sensitive opsin	9	10	1.17
5125	Proprotein convertase subtilisin/kexin type 5 Precursor	32	37	1.17
6596	Helicase-like transcription factor	66	78	1.17
10576	T-complex protein 1 subunit beta	1510	1766	1.17
-	-	2855	3339	1.17
146852	Outer dense fiber protein 4	12	14	1.17
6732	Serine/threonine-protein kinase SRPK1	464	543	1.17
3761	Inward rectifier potassium channel 4	14	17	1.17
85358	SH3 and multiple ankyrin repeat domains protein 3	20	23	1.17
53371	Nucleoporin p54	210	246	1.17
8471	Insulin receptor substrate 4	10	12	1.17
-	-	377	441	1.17
26073	Polymerase delta-interacting protein 2	520	608	1.17
7105	Tetraspanin-6	426	498	1.17
150379	Patatin-like phospholipase domain-containing protein 5	16	18	1.17
79064	Transmembrane protein MGC3196	263	308	1.17
100294440	-	36	42	1.17
55245	Ubiquinol-cytochrome c reductase complex chaperone CBP3 homolog	102	120	1.17
643866	Cerebellin-3 Precursor	10	12	1.17
116151	Transmembrane protein C20orf108	1424	1666	1.17

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
165140	Oxoecosanoid receptor 1	17	20	1.17
10302	snRNA-activating protein complex subunit 5	163	191	1.17
51668	Heat shock protein beta-11	479	561	1.17
28231	Solute carrier organic anion transporter family member 4A1	7	8	1.17
632	Osteocalcin Precursor	43	50	1.17
4239	Microfibril-associated glycoprotein 4 Precursor	26	30	1.17
6045	E3 ubiquitin-protein ligase RING2	54	63	1.17
-	Uncharacterized protein C1orf56 Precursor	19	22	1.17
-	Retinoic acid receptor responder protein 3	57	67	1.17
2618	Trifunctional purine biosynthetic protein adenosine-3	233	273	1.17
100129500	-	60	71	1.17
7479	Protein Wnt-8b Precursor	8	9	1.17
100133580	-	187	219	1.17
-	-	2752	3222	1.17
100134138	-	7	9	1.17
226	Fructose-bisphosphate aldolase A	6283	7357	1.17
-	RILP-like protein 1	341	399	1.17
3612	Inositol monophosphatase	426	498	1.17
55816	Docking protein 5	48	57	1.17
10699	Atrial natriuretic peptide-converting enzyme	6	7	1.17
23307	FK506-binding protein 15	190	222	1.17
60343	Protein FAM3A Precursor	117	137	1.17
23111	Spartin	426	498	1.17
5920	Retinoic acid receptor responder protein 3	24	28	1.17
55502	Transcription cofactor HES-6	21	25	1.17
84694	Gap junction alpha-10 protein	5	6	1.17
51102	Trans-2-enoyl-CoA reductase, mitochondrial Precursor	222	260	1.17
11047	Proteasomal ubiquitin receptor ADRM1	595	698	1.17
10180	RNA-binding protein 6	377	441	1.17
84892	Uncharacterized glycosyltransferase AGO61 Precursor	106	124	1.17
123872	Leucine-rich repeat-containing protein 50	9	10	1.17
390036	Olfactory receptor 52K1	21	25	1.17
-	Progesterin and adipoQ receptor family member 4	27	32	1.17
1007	Cadherin-9 Precursor	28	33	1.17
50	Aconitate hydratase, mitochondrial Precursor	153	179	1.17
-	Probable global transcription activator SNF2L2	72	85	1.17
57655	GRAM domain-containing protein 1A	371	435	1.17
51637	UPF0568 protein C14orf166	1658	1944	1.17
100129608	Mitochondrial import receptor subunit TOM7 homolog	4464	5234	1.17
7080	Homeobox protein Nkx-2.1	16	19	1.17
83692	CD99 antigen-like protein 2 Precursor	18	21	1.17
93323	Sarcoma antigen NY-SAR-48	73	86	1.17
5210	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4	17	21	1.17
5283	Phosphatidylinositol N-acetylglucosaminyltransferase subunit H	72	85	1.17
23759	Peptidyl-prolyl cis-trans isomerase-like 2	8	10	1.17
5616	Serine/threonine-protein kinase PRKY	137	161	1.17
5950	Retinol-binding protein 4 Precursor	7	8	1.17
84148	Probable histone acetyltransferase MYST1	148	173	1.17
28514	Delta-like protein 1 Precursor	9	11	1.17
94039	Zinc finger protein 101	32	38	1.17
2812	Platelet glycoprotein Ib beta chain Precursor	180	211	1.17
85476	Elongation factor G 1, mitochondrial Precursor	293	344	1.17

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Acetyl-CoA carboxylase 2	15	17	1.17
23505	Transmembrane protein 131	47	55	1.17
667	Bullous pemphigoid antigen 1, isoforms 1/2/3/4/5/8 Fragment	344	404	1.17
-	Pre-mRNA-splicing factor 38A	230	270	1.17
9295	Splicing factor, arginine/serine-rich 11	651	764	1.17
29945	Anaphase-promoting complex subunit 4	139	163	1.17
112752	Uncharacterized protein C14orf179	165	194	1.17
85456	182 kDa tankyrase-1-binding protein	7	8	1.17
8897	Myotubularin-related protein 3	29	34	1.17
64326	E3 ubiquitin-protein ligase RFWF2	230	270	1.17
9146	Hepatocyte growth factor-regulated tyrosine kinase substrate	359	422	1.17
55208	DCN1-like protein 2	7	8	1.17
92342	UPF0558 protein C1orf156	79	93	1.17
1108	Chromodomain-helicase-DNA-binding protein 4	302	355	1.17
86	Actin-like protein 6A	646	758	1.17
6717	Sorcin	1840	2162	1.17
4761	Neurogenic differentiation factor 2	7	9	1.17
79002	Uncharacterized protein C19orf43	322	378	1.17
2339	Protein farnesyltransferase/geranylgeranyltransferase type-1 subunit alpha	563	662	1.18
6133	60S ribosomal protein L9	10427	12254	1.18
643853	Putative metallophosphoesterase FLJ45032	9	11	1.18
8834	Transmembrane protein 11	221	260	1.18
79944	L-2-hydroxyglutarate dehydrogenase, mitochondrial Precursor	23	27	1.18
-	Interferon-alpha/beta receptor beta chain Precursor	319	375	1.18
201266	Zinc transporter ZIP11	62	73	1.18
100291645	-	7	8	1.18
79363	Miro domain-containing protein C1orf89	23	27	1.18
116519	Apolipoprotein A-V Precursor	8	10	1.18
-	Ral guanine nucleotide dissociation stimulator-like 1	227	267	1.18
84448	Actin-binding LIM protein 2	7	9	1.18
10146	Ras GTPase-activating protein-binding protein 1	834	981	1.18
84919	Protein phosphatase 1 regulatory subunit 15B	52	62	1.18
100289045	Putative uncharacterized protein Fragment	16	19	1.18
221504	Zinc finger and BTB domain-containing protein 9	34	40	1.18
3705	Inositol-tetrakisphosphate 1-kinase	8	9	1.18
9391	Protein CIAO1	183	215	1.18
91746	YTH domain-containing protein 1	308	363	1.18
116729	Dysferlin-interacting protein 1	29	34	1.18
1193	Chloride intracellular channel protein 2	27	32	1.18
51182	Heat shock 70 kDa protein 14	137	161	1.18
92	Activin receptor type-2A Precursor	23	27	1.18
140801	60S ribosomal protein L10-like	1034	1216	1.18
84191	UPF0195 protein FAM96A	681	802	1.18
26973	Cysteine and histidine-rich domain-containing protein 1	285	335	1.18
100290557	-	51	60	1.18
79670	Zinc finger CCHC domain-containing protein 6	30	35	1.18
57192	Mucolipin-1	41	48	1.18
5423	DNA polymerase beta	232	273	1.18
219348	Placenta-specific protein 9 Precursor	33	39	1.18
80067	Protein C2orf37	13	16	1.18

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
53342	Interleukin-17D Precursor	111	130	1.18
521	ATP synthase subunit e, mitochondrial	2649	3118	1.18
10199	U3 small nucleolar ribonucleoprotein protein MPP10	579	682	1.18
23469	PHD finger protein 3	171	202	1.18
-	Uncharacterized protein LOC283932	9	10	1.18
-	Troponin T, cardiac muscle	18	21	1.18
10915	Transcription elongation regulator 1	179	211	1.18
7804	Low-density lipoprotein receptor-related protein 8 Precursor	92	108	1.18
148523	Uncharacterized protein C1orf51	19	22	1.18
80781	Collagen alpha-1(XVIII) chain Precursor	2280	2685	1.18
-	Phospholipase A-2-activating protein	175	206	1.18
-	Ankyrin repeat and MYND domain-containing protein 1	18	21	1.18
10691	Glucocorticoid modulatory element-binding protein 1	93	109	1.18
11179	Zinc finger protein 277	434	511	1.18
-	-	25	29	1.18
9796	Phytanoyl-CoA hydroxylase-interacting protein	11	13	1.18
121536	Zinc finger protein AEBP2	40	47	1.18
5912	Ras-related protein Rap-2b Precursor	540	636	1.18
4522	C-1-tetrahydrofolate synthase, cytoplasmic	278	328	1.18
23408	NAD-dependent deacetylase sirtuin-5	52	61	1.18
90480	Growth arrest and DNA-damage-inducible proteins-interacting protein 1	817	962	1.18
100290383	-	19	23	1.18
28960	Scavenger mRNA-decapping enzyme DcpS	77	91	1.18
10526	Importin-8	34	40	1.18
57210	solute carrier family 45, member 4	7	8	1.18
1352	Protoheme IX farnesyltransferase, mitochondrial Precursor	28	34	1.18
75050	Something about silencing protein 10	374	441	1.18
56985	Uncharacterized protein C17orf48	111	131	1.18
23708	Eukaryotic peptide chain release factor GTP-binding subunit ERF3B	68	80	1.18
-	-	12111	14278	1.18
-	Spermatogenesis-associated protein 13	45	53	1.18
440482	Putative ankyrin repeat domain-containing protein 20A-like protein MGC26718	16	19	1.18
84826	Vesicle transport protein SFT2C	49	57	1.18
-	Endoplasmic reticulum-Golgi intermediate compartment protein 2	455	536	1.18
168451	THAP domain-containing protein 5	42	49	1.18
11142	cAMP-dependent protein kinase inhibitor gamma	2312	2726	1.18
63893	Ubiquitin-conjugating enzyme E2 O	25	29	1.18
-	Transforming growth factor-beta-induced protein ig-h3 Precursor	343	405	1.18
390038	Olfactory receptor 51D1	15	18	1.18
388885	Uncharacterized protein ENSP00000383249 Fragment	5674	6692	1.18
79912	Pyridine nucleotide-disulfide oxidoreductase domain-containing protein 1	62	73	1.18
100290025	-	25	30	1.18
8968	Histone H3.1	8	9	1.18
26259	F-box/WD repeat-containing protein 8	15	17	1.18
79571	GRIP and coiled-coil domain-containing protein 1	118	139	1.18
3053	Heparin cofactor 2 Precursor	21	24	1.18
100292687	-	9	11	1.18
81553	Protein FAM49A	127	150	1.18

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10514	Myb-binding protein 1A	33	39	1.18
171392	Zinc finger protein 675	66	78	1.18
-	Cytochrome P450 2D6	17	20	1.18
167227	mRNA-decapping enzyme 2	11	12	1.18
100133021	Protein FAM74A3	15	17	1.18
23048	Formin-binding protein 1	153	181	1.18
427	Acid ceramidase Precursor	73	87	1.18
5682	Proteasome subunit alpha type-1	1424	1681	1.18
-	CWF19-like protein 2	40	47	1.18
6598	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily B member 1	140	165	1.18
3977	Leukemia inhibitory factor receptor Precursor	24	29	1.18
1861	Torsin-1A Precursor	539	637	1.18
28974	Leydig cell tumor 10 kDa protein homolog	1201	1418	1.18
439	Arsenical pump-driving ATPase	467	551	1.18
100130506	-	572	675	1.18
27177	Interleukin-1 family member 8	20	24	1.18
387849	Rab15 effector protein	18	21	1.18
5720	Proteasome activator complex subunit 1	610	721	1.18
2752	Glutamine synthetase	507	599	1.18
80279	CDK5 regulatory subunit-associated protein 3	293	346	1.18
26505	Metal transporter CNNM3 (Cyclin-M3)	34	40	1.18
5438	DNA-directed RNA polymerase II subunit RPB9	480	566	1.18
57178	Zinc finger MIZ domain-containing protein 1	33	39	1.18
100291693	-	8	10	1.18
651771	Serine/threonine-protein kinase LMTK1	10	12	1.18
837	Caspase-4 Precursor	544	643	1.18
81539	Sodium-coupled neutral amino acid transporter 1	134	158	1.18
6714	Proto-oncogene tyrosine-protein kinase Src	109	129	1.18
51118	Probable U3 small nucleolar RNA-associated protein 11	756	893	1.18
54872	GPI ethanolamine phosphate transferase 2	101	119	1.18
6171	Rab-like protein 2B	1955	2310	1.18
-	Sorting nexin-25	67	79	1.18
56942	UPF0287 protein C16orf61	615	726	1.18
9043	C-jun-amino-terminal kinase-interacting protein 4	7	8	1.18
56261	Putative glycerophosphodiester phosphodiesterase 5	85	100	1.18
245812	Protein canopy homolog 4 Precursor	145	172	1.18
119391	Glutathione S-transferase omega-2	19	23	1.18
144363	LYR motif-containing protein 5	157	185	1.18
54455	F-box only protein 42	108	128	1.18
9638	Fasciculation and elongation protein zeta-1	789	933	1.18
51703	Long-chain-fatty-acid--CoA ligase 5	26	31	1.18
91574	Uncharacterized protein C12orf65	132	157	1.18
100133958	Small conductance calcium-activated potassium channel protein 3	76	90	1.18
6122	60S ribosomal protein L3	16848	19921	1.18
-	Transcriptional enhancer factor TEF-5	21	25	1.18
64210	MMS19 nucleotide excision repair protein homolog	17	21	1.18
64771	Uncharacterized protein C6orf106	23	27	1.18
219927	39S ribosomal protein L21, mitochondrial Precursor	872	1031	1.18
79159	Nucleolar protein 12	7	8	1.18
8934	Ras-related protein Rab-7L1	172	204	1.18
5289	Phosphatidylinositol 3-kinase catalytic subunit type 3	278	328	1.18
100134000	Mannosyl-oligosaccharide 1,2-alpha-mannosidase IC	14	17	1.18

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
134505	-	489	579	1.18
55196	Uncharacterized protein C12orf35	325	385	1.18
9253	Numb-like protein	22	26	1.18
29889	Nucleolar GTP-binding protein 2	300	355	1.18
1511	Cathepsin G Precursor	6	7	1.18
5922	Ras GTPase-activating protein 2	71	84	1.18
7037	Transferrin receptor protein 1	655	775	1.18
51699	Vacuolar protein sorting-associated protein 29	1074	1271	1.18
8613	Lipid phosphate phosphohydrolase 3	444	525	1.18
4736	ribosomal protein L10a (RPL10A), mRNA	8458	10010	1.18
10641	Tumor suppressor candidate 4	134	158	1.18
27102	Eukaryotic translation initiation factor 2'-alpha kinase 1	18	21	1.18
29800	Probable palmitoyltransferase ZDHHC1	67	79	1.18
84280	BTB/POZ domain-containing protein 10	362	428	1.18
-	MARVEL domain-containing protein 1	816	966	1.18
84062	Dysbindin	157	186	1.18
100130691	Putative uncharacterized protein FLJ44553	6	7	1.18
7003	Transcriptional enhancer factor TEF-1	16	19	1.18
221302	Zinc finger with UFM1-specific peptidase domain protein	51	60	1.18
65977	Pleckstrin homology domain-containing family A member 3	133	157	1.18
3624	Inhibin beta A chain Precursor	472	559	1.18
-	RNA-binding protein 12B	27	32	1.18
51249	Transmembrane protein 69	203	240	1.18
2980	Guanylin Precursor	9	11	1.18
57480	Pleckstrin homology domain-containing family G member 1	108	128	1.18
2992	Glycogenin-1	865	1024	1.18
-	-	1113	1319	1.18
163882	Uncharacterized protein C1orf71	16	19	1.18
9255	Multisynthetase complex auxiliary component p43	614	727	1.18
5564	5'-AMP-activated protein kinase subunit beta-1	108	128	1.18
-	Mitochondrial ornithine transporter 1	39	46	1.18
55780	Transmembrane protein C6orf70	52	62	1.18
643246	Microtubule-associated proteins 1A/1B light chain 3 beta 2 Precursor	1576	1867	1.18
4320	Stromelysin-3 Precursor	187	222	1.18
123904	Neuritin-like protein Precursor	9	11	1.18
200035	Putative nucleoside diphosphate-linked moiety X motif 17, mitochondrial Precursor	30	36	1.18
-	Myotubularin-related protein 7	7	9	1.19
54964	Uncharacterized protein C1orf56 Precursor	44	53	1.19
22907	Putative ATP-dependent RNA helicase DHX30	425	503	1.19
5813	Transcriptional activator protein Pur-alpha	122	145	1.19
11104	Katanin p60 ATPase-containing subunit A1	117	139	1.19
80198	Crossover junction endonuclease MUS81	337	399	1.19
6231	40S ribosomal protein S26	97	115	1.19
130535	BTB/POZ domain-containing protein KCTD18	27	32	1.19
-	Tetratricopeptide repeat protein 24	18	22	1.19
55351	Serine/threonine-protein kinase 32B	59	70	1.19
8491	Mitogen-activated protein kinase kinase kinase kinase 3	106	126	1.19
9743	Rho/Cdc42/Rac GTPase-activating protein RICS	46	54	1.19
6617	snRNA-activating protein complex subunit 1	287	340	1.19
3419	Isocitrate dehydrogenase [NAD] subunit alpha, mitochondrial Precursor	339	401	1.19

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
8800	Peroxisomal membrane protein 11A	27	31	1.19
-	Endoplasmic reticulum metallopeptidase 1	20	23	1.19
26589	39S ribosomal protein L46, mitochondrial Precursor	246	292	1.19
-	Probable tubulin polyglutamylase TTL1	95	113	1.19
338699	Ankyrin repeat domain-containing protein 42	14	16	1.19
340204	Colipase-like protein C6orf127 Precursor	11	13	1.19
54920	tRNA-dihydrouridine synthase 2-like	466	553	1.19
84331	Uncharacterized protein C16orf14	167	199	1.19
51312	Mitoferrin-1	221	262	1.19
-	Receptor expression-enhancing protein 3	249	295	1.19
-	Kelch domain-containing protein 4	84	100	1.19
57670	UPF0606 protein KIAA1549	62	74	1.19
10015	Programmed cell death 6-interacting protein	147	174	1.19
80328	NKG2D ligand 2 Precursor	99	118	1.19
5371	Probable transcription factor PML	14	17	1.19
100289676	-	15	18	1.19
125875	Claudin domain-containing protein 2	16	19	1.19
55544	RNA-binding protein 38	105	125	1.19
708	Complement component 1 Q subcomponent-binding protein, mitochondrial Precursor	2829	3356	1.19
29763	Protein kinase C and casein kinase substrate in neurons protein 3	106	125	1.19
11331	Prohibitin-2	1637	1942	1.19
9791	Phosphatidylserine synthase 1	577	684	1.19
56658	Tripartite motif-containing protein 39	24	29	1.19
22928	Selenide, water dikinase 2	313	371	1.19
10677	Advillin (p92)	9	11	1.19
-	Actin-related protein 2/3 complex subunit 3	3909	4640	1.19
51228	Glycolipid transfer protein	533	633	1.19
79675	FAST kinase domain-containing protein 1	164	195	1.19
-	Methyltransferase-like protein 6	108	128	1.19
9404	Leupaxin	153	181	1.19
4015	Protein-lysine 6-oxidase Precursor	251	299	1.19
6182	39S ribosomal protein L12, mitochondrial Precursor	443	527	1.19
-	-	9267	11005	1.19
4092	Mothers against decapentaplegic homolog 7	8	9	1.19
51661	FK506-binding protein 7 Precursor	623	740	1.19
23549	Aspartyl aminopeptidase	34	40	1.19
79716	Probable aminopeptidase NPEPL1	141	167	1.19
-	Myomesin-3	24	28	1.19
10198	M-phase phosphoprotein 9	60	71	1.19
22938	SNW domain-containing protein 1	732	870	1.19
57103	Uncharacterized protein C12orf5	816	970	1.19
23052	Endonuclease domain-containing 1	63	74	1.19
100293533	-	36	43	1.19
163786	Spindle assembly abnormal protein 6 homolog	39	46	1.19
2821	Glucose-6-phosphate isomerase	530	630	1.19
7546	Zinc finger protein ZIC 2	7	9	1.19
5303	Peptidyl-prolyl cis-trans isomerase NIMA-interacting 4	33	39	1.19
27351	UPF0326 protein FAM152B	339	403	1.19
10016	Programmed cell death protein 6	1685	2002	1.19
84206	RNA-binding protein MEX3B	148	176	1.19
126917	Intermediate filament family orphan 2	387	460	1.19
57692	Melanoma-associated antigen E1	6	7	1.19

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2674	GDNF family receptor alpha-1 Precursor	18	21	1.19
29923	Hypoxia-inducible gene 2 protein	99	118	1.19
-	-	1523	1811	1.19
36	Short/branched chain specific acyl-CoA dehydrogenase, mitochondrial Precursor	17	21	1.19
84295	PHD finger protein 6	71	84	1.19
-	Tumor necrosis factor ligand superfamily member 18	718	854	1.19
9244	Cytokine receptor-like factor 1 Precursor	28	34	1.19
-	Zinc finger protein 43	49	58	1.19
26064	Ankyrin	831	989	1.19
284996	E3 ubiquitin-protein ligase RNF149 Precursor	399	474	1.19
11342	RING finger protein 13	80	95	1.19
24145	Pannexin-1	101	120	1.19
3964	Galectin-8	164	196	1.19
80254	Centrosomal protein of 63 kDa	138	164	1.19
10809	PCTP-like protein	51	61	1.19
55819	Goliath homolog Precursor	468	557	1.19
57221	Brefeldin A-inhibited guanine nucleotide-exchange protein 3	62	74	1.19
-	Xylosyltransferase 2	44	53	1.19
283600	Hepatocellular carcinoma down-regulated mitochondrial carrier protein	7	8	1.19
4285	Mitochondrial intermediate peptidase Precursor	113	135	1.19
55364	Protein IMPACT	75	90	1.19
100128881	-	12	15	1.19
468	Cyclic AMP-dependent transcription factor ATF-4	113	134	1.19
4097	Transcription factor MafG	53	64	1.19
-	-	373	444	1.19
286257	Uncharacterized protein C9orf142	208	248	1.19
80757	Transmembrane protein 121	57	68	1.19
9654	Tubulin polyglutamylase TTLL4	36	43	1.19
85366	Myosin light chain kinase 2, skeletal/cardiac muscle	9	11	1.19
57704	Non-lysosomal glucosylceramidase	68	81	1.19
84957	Tumor necrosis factor receptor superfamily member 19L Precursor	22	26	1.19
-	SLAM family member 9 Precursor	7	9	1.19
3981	DNA ligase 4	35	42	1.19
64981	39S ribosomal protein L34, mitochondrial Precursor	488	581	1.19
57715	Semaphorin-4G Precursor	20	24	1.19
55813	U3 small nucleolar RNA-associated protein 6 homolog	628	748	1.19
-	Putative nuclear receptor corepressor 1-like protein C20orf191	95	113	1.19
25959	KN motif and ankyrin repeat domain-containing protein 2	101	120	1.19
83606	Uncharacterized protein C22orf13	630	751	1.19
283638	Protein KIAA0284	321	382	1.19
4430	Myosin-Ib	180	215	1.19
84124	Zinc finger protein 394	68	81	1.19
9097	Ubiquitin carboxyl-terminal hydrolase 14	863	1028	1.19
4359	Myelin P0 protein Precursor	10	12	1.19
100290029	-	33	39	1.19
100293534	Complement C4-B Precursor	13	15	1.19
9786	Uncharacterized protein KIAA0586	24	28	1.19
9570	Golgi SNAP receptor complex member 2	387	461	1.19
341	Apolipoprotein C-I Precursor	28	33	1.19

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10393	Anaphase-promoting complex subunit 10	36	43	1.19
84895	Protein FAM73B	338	403	1.19
8001	Glycine receptor subunit alpha-3 Precursor	14	16	1.19
84305	Protein wibg homolog	163	194	1.19
129685	Transcription initiation factor TFIID subunit 8	20	24	1.19
51571	Protein FAM49B	372	443	1.19
113510	ATP-dependent DNA helicase HEL308	51	61	1.19
-	-	1179	1407	1.19
9329	General transcription factor 3C polypeptide 4	40	47	1.19
7284	Elongation factor Tu, mitochondrial Precursor	1390	1658	1.19
58527	Uncharacterized protein C6orf115	1297	1547	1.19
51650	28S ribosomal protein S33, mitochondrial	354	423	1.19
83416	Fc receptor-like protein 5 Precursor	16	19	1.19
147945	NACHT, LRR and PYD domains-containing protein 4	24	29	1.19
-	Coiled-coil-helix-coiled-coil-helix domain-containing protein 1	1332	1589	1.19
644815	Protein FAM83G	12	15	1.19
280636	Selenoprotein H	2276	2715	1.19
11218	Probable ATP-dependent RNA helicase DDX20	200	239	1.19
100288336	Putative uncharacterized protein ENSP00000383251	6	8	1.19
100293333	-	7	8	1.19
9854	C2 domain-containing protein 2-like	85	101	1.19
-	Tripartite motif-containing protein 45	9	11	1.19
6462	Sex hormone-binding globulin Precursor	6	7	1.19
448835	Late cornified envelope protein 6A	12	15	1.19
1410	Alpha-crystallin B chain	7	8	1.19
2670	Glial fibrillary acidic protein	8	10	1.19
30000	Transportin-2	13	15	1.19
9419	Cysteine-rich PDZ-binding protein	267	319	1.19
11103	KRR1 small subunit processome component homolog	301	359	1.19
26015	RNA polymerase II-associated protein 1	113	135	1.19
100288207	-	11	14	1.19
100292295	-	15	18	1.19
-	Protein Wiz	119	142	1.19
2800	Golgin subfamily A member 1	19	23	1.19
54969	UPF0609 protein C4orf27	448	535	1.19
51027	BolA-like protein 1	112	134	1.19
57415	Uncharacterized protein C3orf14	154	184	1.19
-	Methylglutaconyl-CoA hydratase, mitochondrial Precursor	48	58	1.19
10489	Leucine-rich repeat-containing protein 41	237	283	1.19
10195	Dolichyl-P-Man:Man(5)GlcNAc(2)-PP-dolichyl mannosyltransferase	293	351	1.19
8924	Probable E3 ubiquitin-protein ligase HERC2	156	186	1.19
-	Hepatocyte growth factor-like protein Precursor	14	17	1.19
55139	Ankyrin repeat and zinc finger domain-containing protein 1	28	33	1.19
-	Butyrophilin subfamily 2 member A1 Precursor	22	26	1.19
1145	Acetylcholine receptor subunit epsilon Precursor	14	16	1.19
65008	39S ribosomal protein L1, mitochondrial Precursor	469	561	1.20
22879	Vacuolar fusion protein MON1 homolog B	150	179	1.20
23479	Iron-sulfur cluster assembly enzyme ISCU, mitochondrial Precursor	984	1176	1.20
10422	Ubiquitin-associated domain-containing protein 1	275	328	1.20
219844	Hydrolethalus syndrome protein 1	111	133	1.20
51773	Remodeling and spacing factor 1	137	164	1.20

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
57132	-	658	787	1.20
100289586	-	17	20	1.20
307	Annexin A4	1044	1249	1.20
645321	-	14	17	1.20
26999	Cytoplasmic FMR1-interacting protein 2	12	15	1.20
2558	Gamma-aminobutyric acid receptor subunit alpha-5 Precursor	15	18	1.20
3992	Fatty acid desaturase 1	275	329	1.20
56893	Ubiquilin-4	155	185	1.20
50674	Neurogenin-3	44	53	1.20
9976	C-type lectin domain family 2 member B	90	108	1.20
8559	Pre-mRNA-splicing factor 18	295	353	1.20
100129365	-	7	8	1.20
5195	Peroxisomal membrane protein PEX14	16	19	1.20
10924	Acid sphingomyelinase-like phosphodiesterase 3a Precursor	83	99	1.20
471	Bifunctional purine biosynthesis protein PURH	452	540	1.20
23002	Disheveled-associated activator of morphogenesis 1	186	222	1.20
115509	Zinc finger protein 689	58	69	1.20
22916	Nuclear cap-binding protein subunit 2	1761	2108	1.20
339803	-	98	117	1.20
56894	1-acyl-sn-glycerol-3-phosphate acyltransferase gamma	35	42	1.20
10401	E3 SUMO-protein ligase PIAS3	60	72	1.20
10459	Mitotic spindle assembly checkpoint protein MAD2B	315	377	1.20
339230	Coiled-coil domain-containing protein 137	174	209	1.20
6604	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 3	18	22	1.20
8050	Pyruvate dehydrogenase protein X component, mitochondrial Precursor	103	123	1.20
57117	Integrator complex subunit 12	199	239	1.20
8065	Cullin-5	27	32	1.20
27133	Potassium voltage-gated channel subfamily H member 5	9	11	1.20
5292	Proto-oncogene serine/threonine-protein kinase Pim-1	32	38	1.20
6018	Zinc finger protein Rlf	25	30	1.20
664	BCL2/adenovirus E1B 19 kDa protein-interacting protein 3	1061	1271	1.20
3198	Homeobox protein Hox-A1	9	11	1.20
43849	Kallikrein-12 Precursor	20	24	1.20
2950	Glutathione S-transferase P	5544	6645	1.20
55187	Vacuolar protein sorting-associated protein 13D	30	36	1.20
55023	PH-interacting protein	173	208	1.20
200845	BTB/POZ domain-containing protein KCTD6	51	61	1.20
11043	Midline-2	45	53	1.20
-	Runt-related transcription factor 2	9	10	1.20
-	Zinc finger protein 135	17	21	1.20
55630	Zinc transporter ZIP4 Precursor	34	41	1.20
254170	F-box only protein 33	36	44	1.20
3449	Interferon alpha-16 Precursor	9	10	1.20
79587	Probable cysteinyl-tRNA synthetase, mitochondrial Precursor	285	342	1.20
50943	Forkhead box protein P3 (Scurfin)	9	10	1.20
253959	GTPase-activating Rap/Ran-GAP domain-like 1	16	19	1.20
5826	ATP-binding cassette sub-family D member 4	358	429	1.20
27291	Growth inhibition and differentiation-related protein 88	97	117	1.20
8646	Chordin Precursor	15	18	1.20
30850	Cerebellar degeneration-related protein 2-like	337	404	1.20

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1192	Chloride intracellular channel protein 1	3840	4608	1.20
3021	Histone H3.3	123	148	1.20
27106	Arrestin domain-containing protein 2	62	74	1.20
51574	Lar-related protein 7	262	315	1.20
144535	Uncharacterized protein C12orf55	68	82	1.20
4055	Tumor necrosis factor receptor superfamily member 3 Precursor	244	293	1.20
26	Amiloride-sensitive amine oxidase [copper-containing] Precursor	6	7	1.20
10981	Ras-related protein Rab-32	394	473	1.20
-	-	1694	2033	1.20
1411	Beta-crystallin A3	12	15	1.20
-	Nuclear receptor subfamily 1 group I member 3	8	9	1.20
653275	cripto, FRL-1, cryptic family 1B	29	35	1.20
90871	Transmembrane protein C9orf123	898	1079	1.20
51206	Platelet glycoprotein VI Precursor	10	12	1.20
-	-	118	142	1.20
11226	Polypeptide N-acetylgalactosaminyltransferase 6	155	186	1.20
57539	WD repeat-containing protein 35	28	34	1.20
23011	Ras-related protein Rab-21	206	248	1.20
-	Protein BANP	43	52	1.20
55968	NSFL1 cofactor p47	802	964	1.20
9110	Myotubularin-related protein 4	436	524	1.20
29086	BRCA1-A complex subunit MERIT40	582	699	1.20
51335	Neugrin	656	789	1.20
51594	Neuroblastoma-amplified gene protein	152	182	1.20
3204	Homeobox protein Hox-A7	253	304	1.20
9306	Suppressor of cytokine signaling 6	42	51	1.20
10026	GPI-anchor transamidase Precursor	187	225	1.20
-	-	8	10	1.20
-	Methylcrotonoyl-CoA carboxylase subunit alpha, mitochondrial Precursor	88	106	1.20
6655	Son of sevenless homolog 2	88	106	1.20
219654	Zinc finger CCHC domain-containing protein 24	40	48	1.20
1810	Protein Dr1	169	204	1.20
220134	Spindle and kinetochore-associated protein 1	21	26	1.20
723805	Interleukin-like Fragment	13	16	1.20
4689	Neutrophil cytosol factor 4	7	8	1.20
23436	Elastase-3B Precursor	20	24	1.20
11136	B(0,+)-type amino acid transporter 1	70	84	1.20
79797	Zinc finger protein 408	80	97	1.20
51073	39S ribosomal protein L4, mitochondrial	156	188	1.20
-	Actin-binding protein IPP	44	53	1.20
140032	40S ribosomal protein S4, Y isoform 2	1540	1852	1.20
54625	Poly [ADP-ribose] polymerase 14	50	60	1.20
57703	Pre-mRNA-splicing factor CWC22 homolog	88	106	1.20
79101	Protein JSD3	96	115	1.20
78991	Prenylcysteine oxidase-like Precursor	140	168	1.20
642443	Alcohol dehydrogenase class-3	986	1186	1.20
-	N-acetylglucosaminyl-phosphatidylinositol de-N-acetylase	29	35	1.20
83592	Aldo-keto reductase family 1 member C-like protein 2	22	26	1.20
134359	Uncharacterized protein C5orf37	34	41	1.20
652522	Werner syndrome ATP-dependent helicase	50	60	1.20
976	CD97 antigen Precursor	38	45	1.20

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
6608	Smoothed homolog Precursor	20	24	1.20
55071	Uncharacterized protein C9orf40	18	22	1.20
-	Smith-Magenis syndrome chromosomal region candidate gene 8 protein	7	8	1.20
10617	STAM-binding protein	333	401	1.20
27043	Proline-, glutamic acid- and leucine-rich protein 1	170	204	1.20
7372	Uridine 5'-monophosphate synthase	351	422	1.20
83696	Trafficking protein particle complex subunit 9	7	8	1.20
101	ADAM 8 Precursor	9	11	1.20
23421	Centromere protein R	143	172	1.20
201158	Protein FAM18B2	6	8	1.20
11247	Neurexophilin-4 Precursor	17	20	1.20
-	ATP-binding cassette sub-family B member 7, mitochondrial Precursor	189	227	1.20
729645	-	13	15	1.20
440995	-	18	22	1.20
-	-	9329	11233	1.20
79685	Histone deacetylase complex subunit SAP30L	263	316	1.20
100129238	-	8	10	1.20
51696	Headcase protein homolog	292	351	1.20
-	-	32	39	1.20
28227	Serine/threonine-protein phosphatase 2A regulatory subunit B' subunit beta	54	65	1.20
27286	Sushi repeat-containing protein SRPX2 Precursor	790	951	1.20
9071	Suppressor of tumorigenicity protein 20	11	14	1.20
-	Zinc finger protein 695	32	39	1.20
64783	Putative RNA-binding protein 15	52	63	1.20
-	-	6	7	1.20
10539	Glutaredoxin-3	1239	1493	1.20
27074	Lysosome-associated membrane glycoprotein 3 Precursor	22	26	1.20
123169	RNA polymerase-associated protein LEO1	197	237	1.20
10629	TAF6-like RNA polymerase II p300/CBP-associated factor-associated factor 65 kDa subunit 6L	24	28	1.20
2657	Embryonic growth/differentiation factor 1 Precursor	28	33	1.20
79913	Actin-related protein 5	55	66	1.20
652634	Protein fem-1 homolog A	116	140	1.20
56987	HMG box transcription factor BBX	54	65	1.20
-	Protein SET	2430	2928	1.20
10466	Conserved oligomeric Golgi complex subunit 5	74	90	1.21
22976	PAX-interacting protein 1	41	49	1.21
-	ZZ-type zinc finger-containing protein 3	122	147	1.21
9997	Protein SCO2 homolog, mitochondrial Precursor	400	483	1.21
-	-	2502	3017	1.21
120534	Uncharacterized protein C11orf46	235	284	1.21
55773	TBC1 domain family member 23	134	162	1.21
55296	TBC1 domain family member 19	33	40	1.21
132320	Sodium channel and clathrin linker 1	64	78	1.21
3104	Zinc finger and BTB domain-containing protein 48	23	27	1.21
22868	FAST kinase domain-containing protein 2	218	263	1.21
374868	Probable phospholipid-transporting ATPase IIB	37	45	1.21
84263	Hydroxysteroid dehydrogenase-like protein 2	124	150	1.21
375484	Uncharacterized protein C5orf25	30	36	1.21
8648	Nuclear receptor coactivator 1	42	51	1.21
26190	F-box/WD repeat-containing protein 2	13	16	1.21

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23466	Chromobox protein homolog 6	1390	1677	1.21
-	-	372	448	1.21
219557	Uncharacterized protein C7orf82	6	7	1.21
55065	Porcine endogenous retrovirus A receptor 2 Precursor	22	26	1.21
-	Uncharacterized protein C6orf82	526	635	1.21
56915	Exosome complex exonuclease RRP46	93	113	1.21
79869	Cleavage and polyadenylation specificity factor subunit 7	59	72	1.21
9360	Peptidyl-prolyl cis-trans isomerase G	160	193	1.21
-	Mucin and cadherin-like protein Precursor	9	11	1.21
3945	L-lactate dehydrogenase B chain	4347	5250	1.21
64963	28S ribosomal protein S11, mitochondrial Precursor	355	429	1.21
7994	Histone acetyltransferase MYST3	30	36	1.21
60494	coiled-coil domain containing 81	8	9	1.21
147372	Collagen and calcium-binding EGF domain-containing protein 1 Precursor	29	35	1.21
9612	Nuclear receptor corepressor 2	1300	1571	1.21
55138	Protein FAM90A1	15	18	1.21
51099	Abhydrolase domain-containing protein 5	88	106	1.21
100130453	-	10	12	1.21
27229	Gamma-tubulin complex component 4	106	129	1.21
11011	Serine/threonine-protein kinase tousled-like 2	39	47	1.21
23262	Inositol hexakisphosphate and diphosphoinositol-pentakisphosphate kinase 2	54	65	1.21
127731	von Willebrand factor A domain-containing protein 5B1 Precursor	163	197	1.21
1427	Beta-crystallin S	15	18	1.21
1434	Exportin-2	619	748	1.21
26751	SH3 domain-containing YSC84-like protein 1	67	81	1.21
-	Protein aurora borealis	69	83	1.21
6935	Zinc finger E-box-binding homeobox 1	401	485	1.21
64324	Histone-lysine N-methyltransferase, H3 lysine-36 and H4 lysine-20 specific	62	75	1.21
10640	Exocyst complex component 5	22	27	1.21
27153	Zinc finger protein 777	31	38	1.21
6990	Dynein light chain Tctex-type 3	486	588	1.21
4201	Male-enhanced antigen 1	587	709	1.21
7699	Zinc finger protein 140	56	68	1.21
93210	Post-GPI attachment to proteins factor 3 Precursor	45	55	1.21
51660	Brain protein 44-like protein	516	624	1.21
9904	Probable RNA-binding protein 19	101	122	1.21
79029	Spermatogenesis-associated protein 5-like protein 1	65	79	1.21
23076	Ribosomal RNA processing protein 1 homolog B	14	17	1.21
9181	Rho guanine nucleotide exchange factor 2	18	22	1.21
5018	Mitochondrial inner membrane protein OXA1L Precursor	2158	2609	1.21
898	G1/S-specific cyclin-E1	65	78	1.21
404093	CUE domain-containing protein 1	67	82	1.21
973	B-cell antigen receptor complex-associated protein alpha-chain Precursor	169	204	1.21
5734	Prostaglandin E2 receptor EP4 subtype	87	105	1.21
-	Acylphosphatase-1	282	341	1.21
-	THAP domain-containing protein 6	47	57	1.21
-	Uncharacterized protein KIAA0319-like	134	162	1.21
3795	Ketohexokinase	6	8	1.21
4253	Cutaneous T-cell lymphoma-associated antigen 5	46	55	1.21

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
79581	Porcine endogenous retrovirus A receptor 1 Precursor	511	619	1.21
116092	Deoxynucleotidyltransferase terminal-interacting protein 1	317	383	1.21
-	Ferric-chelate reductase 1	15	18	1.21
284618	chromosome 1 open reading frame 104 (C1orf104), mRNA	8	9	1.21
27349	Malonyl CoA-acyl carrier protein transacylase, mitochondrial Precursor	152	184	1.21
26001	E3 ubiquitin-protein ligase RNF167 Precursor	30	36	1.21
122706	Proteasome subunit beta type-11 Precursor	10	12	1.21
221016	Coiled-coil domain-containing protein 7	12	15	1.21
9960	Ubiquitin carboxyl-terminal hydrolase 3	313	379	1.21
92715	WD repeat-containing protein 85	160	194	1.21
1629	Lipoamide acyltransferase component of branched-chain alpha-keto acid dehydrogenase complex, mitochondrial Precursor	43	52	1.21
-	A/G-specific adenine DNA glycosylase	101	122	1.21
-	Putative uncharacterized protein DKFZp686E10196	15	18	1.21
79739	Tubulin polyglutamylase TTLL7	30	36	1.21
100293557	-	26	32	1.21
55290	Transcription factor IIIB 50 kDa subunit	116	140	1.21
-	Ubiquitin carboxyl-terminal hydrolase 25	208	253	1.21
3673	Integrin alpha-2 Precursor	593	719	1.21
6919	Transcription elongation factor A protein 2	279	339	1.21
260425	Membrane-associated guanylate kinase, WW and PDZ domain-containing protein 3	14	17	1.21
79570	Sodium/potassium-transporting ATPase subunit beta-1-interacting protein 1	5	6	1.21
-	Probable ubiquitin carboxyl-terminal hydrolase FAF-X	535	648	1.21
49856	WD repeat-containing protein 8	115	140	1.21
-	Ankyrin repeat domain-containing protein 6	11	13	1.21
-	-	2809	3406	1.21
2742	Glycine receptor subunit alpha-2 Precursor	40	49	1.21
5087	Pre-B-cell leukemia transcription factor 1	12	14	1.21
22918	Complement component C1q receptor Precursor	2723	3302	1.21
55640	Feline leukemia virus subgroup C receptor-related protein 2	6	7	1.21
5252	PHD finger protein 1	63	76	1.21
5494	Protein phosphatase 1A	71	86	1.21
51103	Complex I intermediate-associated protein 30, mitochondrial Precursor	358	434	1.21
134728	Interleukin-1 receptor-associated kinase 1-binding protein 1	53	65	1.21
10849	DNA-directed RNA polymerase I subunit RPA34	179	217	1.21
27254	Cold shock domain-containing protein C2	8	10	1.21
91893	Ferredoxin-fold anticodon-binding domain-containing protein LOC91893	19	23	1.21
-	Multiple epidermal growth factor-like domains 9 Precursor	51	62	1.21
-	Bystin	232	282	1.21
51062	Atlastin-1	21	25	1.21
1345	Cytochrome c oxidase polypeptide VIc Precursor	1973	2395	1.21
100290652	-	12	14	1.21
162993	Zinc finger protein 846	18	22	1.21
-	Calcium-independent phospholipase A2-gamma	139	168	1.21
-	Muskelin	110	134	1.21
7441	Immunoglobulin iota chain Precursor	31	38	1.21
-	Fanconi anemia group D2 protein	15	18	1.21
54664	Transmembrane protein 106B	124	151	1.21

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
57563	Kelch-like protein 8	30	36	1.21
-	Tumor protein p63-regulated gene 1-like protein	632	767	1.21
11236	RING finger protein 139	154	187	1.21
23373	CREB-regulated transcription coactivator 1	12	14	1.21
79714	Coiled-coil domain-containing protein 51	100	121	1.21
340277	Uncharacterized protein C7orf46	44	54	1.21
27430	Methionine adenosyltransferase 2 subunit beta	921	1118	1.21
5645	Trypsin-2 Precursor	184	224	1.21
203260	Coiled-coil domain-containing protein 107 Precursor	143	174	1.21
9953	Heparan sulfate glucosamine 3-O-sulfotransferase 3B1	11	13	1.21
144348	Zinc finger protein 664	786	954	1.21
5172	Pendrin	31	38	1.21
9093	DnaJ homolog subfamily A member 3, mitochondrial Precursor	353	428	1.21
51160	Vacuolar protein sorting-associated protein 28 homolog	481	584	1.21
56474	CTP synthase 2	93	113	1.21
169166	Sorting nexin-31	7	8	1.21
5510	Protein phosphatase 1 regulatory subunit 7	762	926	1.21
-	-	2820	3426	1.21
5714	26S proteasome non-ATPase regulatory subunit 8	3072	3732	1.21
55239	2-oxoglutarate and iron-dependent oxygenase domain-containing protein 1	156	189	1.22
26128	KIF1-binding protein	298	362	1.22
90485	Zinc finger protein 835	8	10	1.22
1659	ATP-dependent RNA helicase DHX8	117	143	1.22
-	Serine/threonine-protein kinase 32B	63	77	1.22
10254	Signal transducing adapter molecule 2	68	83	1.22
728661	Solute carrier family 35 member E2 x	29	35	1.22
25974	Methylmalonic aciduria and homocystinuria type C protein	23	29	1.22
117854	Tripartite motif-containing protein 34	30	36	1.22
1983	Eukaryotic translation initiation factor 5	695	846	1.22
6862	Brachyury protein	7	9	1.22
339287	Male-specific lethal 1-like 1	216	262	1.22
8663	Eukaryotic translation initiation factor 3 subunit C	400	487	1.22
9847	Uncharacterized protein KIAA0528	29	36	1.22
92259	28S ribosomal protein S36, mitochondrial	532	647	1.22
27247	NFU1 iron-sulfur cluster scaffold homolog, mitochondrial Precursor	309	376	1.22
-	RRP15-like protein	239	290	1.22
80317	Zinc finger protein with KRAB and SCAN domains 3	29	36	1.22
6615	Zinc finger protein SNAI1	22	27	1.22
1347	Cytochrome c oxidase polypeptide 7A2, mitochondrial Precursor	4863	5917	1.22
-	-	1140	1387	1.22
84787	Histone-lysine N-methyltransferase SUV420H2	6	7	1.22
-	Peroxisome proliferator-activated receptor delta	13	16	1.22
3621	Inhibitor of growth protein 1	122	148	1.22
7697	Zinc finger protein 138	51	62	1.22
79023	Nucleoporin Nup37 (p37)	261	318	1.22
9318	COP9 signalosome complex subunit 2	667	812	1.22
9317	Phosphotriesterase-related protein	30	37	1.22
30968	Stomatin-like protein 2	430	523	1.22
9575	Circadian locomotor output cycles protein kaput	19	23	1.22

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
652725	Neuron navigator 3	148	180	1.22
-	C-Rel proto-oncogene protein	34	41	1.22
-	-	8857	10786	1.22
9166	Receptor-binding cancer antigen expressed on SiSo cells	142	173	1.22
9770	Ras association domain-containing protein 2	89	109	1.22
79078	Uncharacterized protein C1orf50	135	165	1.22
51499	TP53-regulated inhibitor of apoptosis 1	1228	1496	1.22
8649	Mitogen-activated protein kinase scaffold protein 1	322	392	1.22
55661	Probable ATP-dependent RNA helicase DDX27	282	343	1.22
408263	Fibronectin type-III domain-containing protein C5orf40	6	7	1.22
55032	Probable UDP-sugar transporter protein SLC35A5	196	239	1.22
441722	-	7	9	1.22
261726	TIP41-like protein	380	463	1.22
141	[Protein ADP-ribosylarginine] hydrolase	28	34	1.22
645	Flavin reductase	284	346	1.22
-	-	30	36	1.22
151313	Fumarylacetoacetate hydrolase domain-containing protein 2B	336	409	1.22
4149	Protein max	522	636	1.22
4711	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 5, mitochondrial Precursor	1018	1241	1.22
83642	Selenoprotein O	352	429	1.22
10950	Protein BTG3	345	421	1.22
147381	Cerebellin-2	12	15	1.22
54148	39S ribosomal protein L39, mitochondrial	320	390	1.22
-	Ankyrin repeat domain-containing protein 32	14	17	1.22
8737	Receptor-interacting serine/threonine-protein kinase 1	46	57	1.22
92935	Methionyl-tRNA synthetase, mitochondrial Precursor	27	33	1.22
-	Uncharacterized protein C9orf78	260	317	1.22
55664	Hsp90 co-chaperone Cdc37-like 1	69	85	1.22
-	-	2490	3038	1.22
55778	Zinc finger protein 839	29	36	1.22
79650	UPF0406 protein C16orf57	44	53	1.22
-	Pleckstrin homology domain-containing family M member 4	67	82	1.22
5957	Recoverin	5	7	1.22
84775	Zinc finger protein 607	113	138	1.22
-	Putative uncharacterized protein ENSP00000315669 Fragment	8	10	1.22
91056	DKFZp761E198 protein (DKFZp761E198), mRNA	54	66	1.22
643155	UPF0542 protein C5orf43	513	626	1.22
6134	60S ribosomal protein L10	15068	18395	1.22
9389	Solute carrier family 22 member 14	13	16	1.22
79411	Beta-galactosidase-1-like protein Precursor	18	22	1.22
90407	Transmembrane protein 41A Precursor	19	24	1.22
10330	Protein canopy homolog 2 Precursor	1185	1447	1.22
731139	-	19	23	1.22
339344	Myb-related protein p42POP	16	19	1.22
-	Tripartite motif-containing protein 9	8	10	1.22
160418	Transmembrane and TPR repeat-containing protein 3	30	37	1.22
2957	Transcription initiation factor IIA subunit 1	26	31	1.22
8881	Cell division cycle protein 16 homolog	593	725	1.22
-	Poly(A) polymerase gamma	16	19	1.22
100128823	-	20	25	1.22

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10857	Membrane-associated progesterone receptor component 1	964	1177	1.22
51324	Maspardin	723	883	1.22
10542	Hepatitis B virus X-interacting protein	2166	2647	1.22
79863	Putative ribosome-binding factor A, mitochondrial Precursor	210	256	1.22
11137	Periodic tryptophan protein 1 homolog	558	682	1.22
10057	Multidrug resistance-associated protein 5	108	132	1.22
55327	Lin-7 homolog C	17	21	1.22
11213	Interleukin-1 receptor-associated kinase 3	18	21	1.22
441670	Olfactory receptor 4M1	11	14	1.22
-	-	16	19	1.22
9197	Acetyl-coenzyme A transporter 1	143	175	1.22
124808	Coiled-coil domain-containing protein 43	171	209	1.22
79710	MORC family CW-type zinc finger protein 4	41	50	1.22
22925	Secretory phospholipase A2 receptor Precursor	9	11	1.22
56965	Poly [ADP-ribose] polymerase 6	30	36	1.22
4331	CDK-activating kinase assembly factor MAT1	145	178	1.22
112724	Retinol dehydrogenase 13	88	108	1.22
100287778	-	25	31	1.22
-	SP140 nuclear body protein-like	96	118	1.22
1460	Casein kinase II subunit beta	2012	2460	1.22
654364	Nucleoside diphosphate kinase A	4079	4989	1.22
4916	NT-3 growth factor receptor Precursor	6	8	1.22
100134387	Probable ATP-dependent RNA helicase DHX40	196	239	1.22
346606	2-acylglycerol O-acyltransferase 3	10	12	1.22
84247	Protein LDOC1L	36	44	1.22
2968	General transcription factor IIH subunit 4	130	159	1.22
55186	Solute carrier family 25 member 36	427	522	1.22
1104	Regulator of chromosome condensation	74	90	1.22
100131727	-	7	8	1.22
9569	General transcription factor II-I repeat domain-containing protein 1	138	169	1.22
90441	Zinc finger protein 622	361	442	1.22
6132	60S ribosomal protein L8	10790	13206	1.22
55759	WD repeat-containing protein 12	307	376	1.22
-	-	286	350	1.22
129401	Nucleoporin NUP53	84	102	1.22
-	-	38	47	1.22
64431	Actin-related protein 6	117	144	1.22
133957	Coiled-coil domain-containing protein 127	288	353	1.22
58492	Zinc finger protein 77	25	30	1.22
6541	High affinity cationic amino acid transporter 1	174	213	1.22
51690	U6 snRNA-associated Sm-like protein LSm7	2082	2549	1.22
-	Retinoic acid receptor RXR-beta	58	71	1.22
84627	Zinc finger protein 469	58	72	1.22
91147	Meckelin	16	20	1.22
100288092	-	8	10	1.22
573	BAG family molecular chaperone regulator 1	76	93	1.22
-	Uncharacterized protein C7orf63	6	7	1.22
100292169	-	15	18	1.22
378708	Centromere protein S	157	192	1.23
8266	Ubiquitin-like protein 4A	72	89	1.23
55845	chromosome 3 open reading frame 10 (C3orf10), mRNA	681	834	1.23
55105	G patch domain-containing protein 2	40	49	1.23

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1954	Multiple epidermal growth factor-like domains 8 Precursor	117	143	1.23
126231	Zinc finger protein 573	74	90	1.23
23031	Microtubule-associated serine/threonine-protein kinase 3	51	62	1.23
100287514	-	22	27	1.23
79366	Nucleosome-binding protein 1	8	10	1.23
57732	Zinc finger FYVE domain-containing protein 28	85	105	1.23
114926	Uncharacterized protein C8orf40	405	497	1.23
79753	Smad nuclear-interacting protein 1	92	113	1.23
100289053	-	8	9	1.23
25821	Protein MTO1 homolog, mitochondrial Precursor	122	150	1.23
51308	Receptor expression-enhancing protein 2	22	27	1.23
51503	Protein CWC15 homolog	626	768	1.23
55164	Protein SHQ1 homolog	103	126	1.23
347733	Tubulin beta-2B chain	24	29	1.23
80758	Proline-rich protein 7	33	40	1.23
10011	Steroid receptor RNA activator 1	357	438	1.23
1581	Cytochrome P450 7A1	5	7	1.23
1995	ELAV-like protein 3	11	14	1.23
1968	Eukaryotic translation initiation factor 2 subunit 3	1484	1820	1.23
1716	Deoxyguanosine kinase, mitochondrial Precursor	928	1139	1.23
100294416	-	14	17	1.23
219854	Transmembrane protein 218	146	179	1.23
100287039	-	6	7	1.23
132671	Spermatogenesis-associated protein 18	49	60	1.23
6222	40S ribosomal protein S18	22953	28172	1.23
7226	Transient receptor potential cation channel subfamily M member 2	16	19	1.23
164592	Coiled-coil domain-containing protein 116	16	19	1.23
55182	RING finger protein 220	184	225	1.23
1580	Cytochrome P450 4B1	12	15	1.23
729627	UPF0572 protein FLJ46116	12	15	1.23
55425	Uncharacterized protein KIAA1704	180	221	1.23
7681	Makorin-3	10	12	1.23
202018	Transmembrane anterior posterior transformation protein 1 homolog	63	77	1.23
5311	Polycystin-2	94	115	1.23
11243	Polyamine-modulated factor 1	416	510	1.23
84939	Mutated melanoma-associated antigen 1	162	198	1.23
-	Immunoglobulin heavy chain C gene segment	8	10	1.23
7564	Zinc finger protein 16	29	35	1.23
-	Putative protein FAM86B-like 1	103	127	1.23
79866	Protein aurora borealis	62	76	1.23
-	cDNA FLJ32955 fis, clone TESTI2008144Putative uncharacterized protein FLJ32955	17	21	1.23
85508	Transcriptional repressor scratch 2	8	10	1.23
79036	UPF0459 protein C19orf50	230	283	1.23
203	Adenylate kinase isoenzyme 1	1050	1291	1.23
-	UPF0452 protein C7orf41	267	328	1.23
-	WD repeat-containing protein 51A	12	15	1.23
79612	NMDA receptor-regulated 1-like protein	45	55	1.23
151531	Uridine phosphorylase 2	11	13	1.23
90416	Uncharacterized protein C15orf57	134	165	1.23
648605	Trimethyllysine dioxygenase, mitochondrial Precursor	81	100	1.23
51184	GPN-loop GTPase 3	291	358	1.23

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
51741	WW domain-containing oxidoreductase	30	37	1.23
54859	UPF0405 protein C3orf75	235	289	1.23
11335	Chromobox protein homolog 3	1742	2143	1.23
9980	Protein dopey-2	37	45	1.23
741	Zinc finger HIT domain-containing protein 2	51	62	1.23
112703	Protein FAM71E1	21	25	1.23
-	-	4710	5794	1.23
8273	P3 protein	218	268	1.23
100287129	-	11	14	1.23
85460	Zinc finger protein 518B	20	25	1.23
6419	Histone-lysine N-methyltransferase SETMAR	41	50	1.23
255061	Tachykinin-4 Precursor	15	18	1.23
79814	Agmatinase, mitochondrial Precursor	11	14	1.23
84878	Zinc finger and BTB domain-containing protein 45	100	123	1.23
-	Integrator complex subunit 11	243	299	1.23
55831	Transmembrane protein 111	884	1088	1.23
100292096	-	9	12	1.23
64747	Major facilitator superfamily domain-containing protein 1	509	627	1.23
51559	5'-nucleotidase domain-containing protein 3	52	65	1.23
100128386	-	8	10	1.23
57479	Proline-rich protein 12	13	17	1.23
-	Protein LAP4	488	601	1.23
55703	DNA-directed RNA polymerase III subunit RPC2	59	72	1.23
29970	Schwannomin-interacting protein 1	758	934	1.23
9869	Histone-lysine N-methyltransferase SETDB1	149	184	1.23
-	-	5759	7097	1.23
4691	Nucleolin	1480	1824	1.23
-	YY1-associated protein 1	44	54	1.23
11154	AP-4 complex subunit sigma-1	44	54	1.23
55022	PTB-containing, cubilin and LRP1-interacting protein	10	13	1.23
57628	Inactive dipeptidyl peptidase 10	6	7	1.23
22	ATP-binding cassette sub-family B member 7, mitochondrial Precursor	196	241	1.23
-	-	43	53	1.23
-	Immunoglobulin Lambda light chain V gene segment	9	11	1.23
29901	SAC3 domain-containing protein 1	152	187	1.23
55777	Methyl-CpG-binding domain protein 5	16	19	1.23
-	Tubulin delta chain	64	79	1.23
-	-	816	1006	1.23
100291696	-	21	26	1.23
-	Eukaryotic translation initiation factor 2A	592	731	1.23
55168	28S ribosomal protein S18a, mitochondrial Precursor	235	289	1.23
-	BCoR-like protein 1	8	10	1.23
23097	Cell division cycle 2-like protein kinase 6	26	32	1.23
10171	RNA 3'-terminal phosphate cyclase-like protein	153	189	1.23
84547	PiggyBac transposable element-derived protein 1	38	47	1.23
819	Calcium signal-modulating cyclophilin ligand	862	1064	1.23
92126	Dermatan-sulfate epimerase-like protein Precursor	35	44	1.23
54680	Zinc finger HIT domain-containing protein 6	288	356	1.23
55252	Putative Polycomb group protein ASXL2	186	230	1.23
51287	Coiled-coil-helix-coiled-coil-helix domain-containing protein 8	885	1092	1.23
217	Aldehyde dehydrogenase, mitochondrial Precursor	920	1137	1.23
10569	Pre-mRNA-splicing factor SLU7	137	169	1.23

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9797	Putative deoxyribonuclease TATDN2	166	206	1.23
2888	Growth factor receptor-bound protein 14	58	72	1.24
64149	Protein Njmu-R1	194	240	1.24
11171	Serine-threonine kinase receptor-associated protein	2466	3047	1.24
1198	Dual specificity protein kinase CLK3	343	423	1.24
-	-	1160	1433	1.24
-	Apoptosis-associated speck-like protein containing a CARD	586	724	1.24
57466	Splicing factor, arginine/serine-rich 15	14	17	1.24
54439	RNA-binding protein 27	38	47	1.24
55039	tRNA wybutosine-synthesizing protein 2 homolog	35	43	1.24
-	LOC541472 protein	7	8	1.24
100130561	High mobility group protein B1	879	1086	1.24
-	Tubulin polyglutamylase TTLL11	16	20	1.24
9626	Guanylyl cyclase-activating protein 3	7	9	1.24
25886	WD repeat-containing protein 51A	30	37	1.24
55222	Leucine-rich repeat-containing protein 20	20	24	1.24
1209	Cleft lip and palate transmembrane protein 1	350	432	1.24
10428	Craniofacial development protein 1	387	479	1.24
22891	Talanin	15	18	1.24
166815	Tigger transposable element-derived protein 2	39	48	1.24
81932	Haloacid dehalogenase-like hydrolase domain-containing protein 3	29	36	1.24
647188	-	19	24	1.24
57758	Signal peptide, CUB and EGF-like domain-containing protein 2 Precursor	11	13	1.24
80018	TPR repeat-containing protein C12orf30 (p120)	187	231	1.24
7566	Zinc finger protein 18	71	87	1.24
7260	Protein TSSC1	92	114	1.24
977	CD151 antigen	846	1046	1.24
168374	Zinc finger protein 92	45	56	1.24
29063	Zinc finger CCHC domain-containing protein 4	47	58	1.24
51227	Phosphatidylinositol N-acetylglucosaminyltransferase subunit P	288	356	1.24
140467	Zinc finger protein 358	21	26	1.24
-	UPF0671 protein C14orf153	433	536	1.24
10169	Small EDRK-rich factor 2	36	45	1.24
10432	RNA-binding protein 14	118	146	1.24
-	Inactive Ufm1-specific protease 1	12	14	1.24
23306	Transmembrane protein 194A	63	78	1.24
-	Dual specificity protein phosphatase 13	12	15	1.24
-	BRCA2 and CDKN1A-interacting protein	1023	1266	1.24
57418	WD repeat-containing protein 18	518	641	1.24
-	15 kDa selenoprotein Precursor	1516	1877	1.24
54926	Ubiquitin-conjugating enzyme E2 R2	925	1145	1.24
2882	Glutathione peroxidase 7 Precursor	120	148	1.24
171482	Protein FAM9A	97	120	1.24
643619	-	11	14	1.24
9694	Tetratricopeptide repeat protein 35	311	385	1.24
100291301	-	30	37	1.24
85007	Alanine--glyoxylate aminotransferase 2-like 2	117	145	1.24
79590	39S ribosomal protein L24, mitochondrial Precursor	608	753	1.24
2121	Ellis-van Creveld syndrome protein	12	14	1.24
200933	F-box/SPRY domain-containing protein 1	79	98	1.24
4301	Afadin	700	868	1.24
51259	Transmembrane protein 216	86	107	1.24

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100129028	-	21809	27028	1.24
79637	Armadillo repeat-containing protein 7	24	29	1.24
79890	Ras and Rab interactor 3	29	36	1.24
55905	RING finger protein 114	323	400	1.24
-	Uncharacterized protein C12orf29	89	110	1.24
84991	Splicing factor 45	604	749	1.24
7410	Guanine nucleotide exchange factor VAV2	11	14	1.24
642517	ArfGAP, GTPase, ANK repeat and PH domain-containing protein 11	8	9	1.24
387263	UPF0669 protein C6orf120 Precursor	50	62	1.24
27065	Neuron-specific protein family member 1	91	113	1.24
402055	SRR1-like protein	181	224	1.24
84911	Zinc finger protein 382	16	20	1.24
4052	Latent-transforming growth factor beta-binding protein, isoform 1L Precursor	330	410	1.24
121642	Alpha-ketoglutarate-dependent dioxygenase alkB homolog 2	73	90	1.24
51117	Ubiquinone biosynthesis protein COQ4 homolog, mitochondrial Precursor	261	324	1.24
3239	Homeobox protein Hox-D13	9	12	1.24
79603	LAG1 longevity assurance homolog 4	26	32	1.24
7266	DnaJ homolog subfamily C member 7	176	219	1.24
-	-	7	8	1.24
222229	Leucine-rich repeat and WD repeat-containing protein 1	143	177	1.24
23705	Cell adhesion molecule 1 Precursor	7	9	1.24
55622	Tetratricopeptide repeat protein 27	232	289	1.24
6991	Tctex1 domain-containing protein 3	24	30	1.24
144608	Uncharacterized protein C12orf60	15	18	1.24
-	Fibroblast growth factor 22 Precursor	10	12	1.24
730755	Keratin-associated protein 2-4	6	7	1.24
100129255	-	15	19	1.24
-	-	10	12	1.24
-	Glutamate carboxypeptidase 2	14	17	1.24
140625	Actin-related protein T2	16	20	1.24
-	Low-density lipoprotein receptor-related protein 4 Precursor	13	16	1.24
1909	Endothelin-1 receptor Precursor	7	8	1.24
-	Centromeric protein E	30	37	1.24
25871	Uncharacterized protein C3orf17	162	201	1.24
-	-	781	971	1.24
3980	DNA ligase 3	57	71	1.24
5442	DNA-directed RNA polymerase, mitochondrial Precursor	121	151	1.24
10238	WD repeat-containing protein 68	253	314	1.24
389084	Uncharacterized protein C2orf82 Precursor	26	32	1.24
63892	Thyroid adenoma-associated protein	27	34	1.24
79027	Zinc finger protein 655	24	30	1.24
51067	Tyrosyl-tRNA synthetase, mitochondrial Precursor	553	688	1.24
147912	Homeobox protein SIX5	34	42	1.24
196	Aryl hydrocarbon receptor Precursor	19	23	1.24
55225	Ribonucleoprotein PTB-binding 2	38	48	1.24
5876	Geranylgeranyl transferase type-2 subunit beta	1532	1904	1.24
51390	Androgen-induced protein 1	160	199	1.24
93650	Testicular acid phosphatase Precursor	9	12	1.24
100292510	Putative uncharacterized protein C16orf47	9	11	1.24
7169	Tyropomycin beta chain	1408	1751	1.24
25896	Integrator complex subunit 7	64	79	1.24

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3352	5-hydroxytryptamine receptor 1D	15	18	1.24
988	Cell division cycle 5-like protein	13	16	1.24
84552	Partitioning defective 6 homolog gamma	35	44	1.24
643509	Dihydrofolate reductase	131	164	1.24
-	-	3448	4289	1.24
9128	U4/U6 small nuclear ribonucleoprotein Prp4	96	120	1.24
55319	UPF0534 protein C4orf43	98	122	1.24
56978	PR domain zinc finger protein 8	61	76	1.24
-	Zinc finger protein 337	22	27	1.24
-	-	9278	11541	1.24
126792	Beta-1,3-galactosyltransferase 6	340	423	1.24
144360	Transmembrane protein C12orf87	14	17	1.24
8894	Eukaryotic translation initiation factor 2 subunit 2	2592	3225	1.24
731282	-	11	14	1.24
-	CUB and sushi domain-containing protein 3 Precursor	15	19	1.24
57819	U6 snRNA-associated Sm-like protein LSm2	904	1125	1.24
23274	Protein CLEC16A	7	9	1.24
84333	Polycomb group RING finger protein 5	14	18	1.24
285267	Zinc finger protein 619	6	8	1.24
389549	Fez family zinc finger protein 1	5	6	1.24
51337	UPF0670 protein C8orf55 Precursor	262	326	1.24
-	-	1657	2063	1.24
80212	Coiled-coil domain-containing protein 92	369	459	1.24
2272	Bis(5'-adenosyl)-triphosphatase	14	17	1.24
84916	Cirhin	202	252	1.24
-	Guanine nucleotide exchange factor VAV2	7	9	1.24
285429	WD repeat-containing protein 21B	10	12	1.24
10998	Bile acyl-CoA synthetase	46	57	1.25
-	Leucine-rich repeat-containing protein 23	30	38	1.25
10464	Progesterone-induced-blocking factor 1	83	104	1.25
79684	Uncharacterized protein C11orf61	70	88	1.25
1506	Chymotrypsin-like protease CTRL-1 Precursor	9	12	1.25
55080	Tapasin-related protein Precursor	41	51	1.25
9325	Activating signal cointegrator 1	193	240	1.25
126014	Osteoclast associated immunoglobulin-like receptor Precursor	20	25	1.25
100127983	-	16	20	1.25
10713	U4/U6.U5 tri-snRNP-associated protein 2	261	325	1.25
-	E3 SUMO-protein ligase CBX4	16	20	1.25
151354	Protein FAM84A	6	8	1.25
-	-	110	137	1.25
54108	Chromatin accessibility complex protein 1	44	55	1.25
7597	Zinc finger and BTB domain-containing protein 25	40	50	1.25
8458	Transcription termination factor 2	27	34	1.25
4783	Nuclear factor interleukin-3-regulated protein	99	123	1.25
654	Bone morphogenetic protein 6 Precursor	1702	2121	1.25
8074	Fibroblast growth factor 23 Precursor	53	67	1.25
64320	E3 ubiquitin-protein ligase RNF25	132	165	1.25
22915	Multimerin-1 Precursor	2814	3508	1.25
-	-	88	109	1.25
64098	Gamma-parvin	8	10	1.25
100290282	-	35	43	1.25
55329	Meiosis-specific nuclear structural protein 1	8	10	1.25
-	Dynactin subunit 1	35	43	1.25

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
150572	SET and MYND domain-containing protein 1	11	13	1.25
51614	Endoplasmic reticulum-Golgi intermediate compartment protein 3	1255	1565	1.25
134145	Protein FAM173B	67	84	1.25
1337	Cytochrome c oxidase polypeptide 6A1, mitochondrial Precursor	3611	4504	1.25
56979	Histone-lysine N-methyltransferase PRDM9	12	16	1.25
7465	Wee1-like protein kinase	81	101	1.25
54617	Putative DNA helicase INO80 complex homolog 1	113	140	1.25
51256	TBC1 domain family member 7	504	628	1.25
10028845	-	7	8	1.25
5700	26S protease regulatory subunit 4	1528	1907	1.25
672	Breast cancer type 1 susceptibility protein	11	14	1.25
100293553	-	6	8	1.25
-	Protein GTLF3B	56	70	1.25
79731	Probable asparaginyl-tRNA synthetase, mitochondrial Precursor	81	102	1.25
55856	Thioesterase superfamily member 2	229	285	1.25
-	-	16123	20124	1.25
651868	-	14	17	1.25
23609	Makorin-2	102	128	1.25
55667	DENN domain-containing protein 4C	68	85	1.25
25796	6-phosphogluconolactonase	1206	1505	1.25
-	cDNA FLJ34785 fis, clone NT2NE2004519HCG1744836, isoform CRA_a	11	13	1.25
22852	Ankyrin repeat domain-containing protein 26	73	91	1.25
154881	BTB/POZ domain-containing protein KCTD7	15	18	1.25
2907	Glutamate [NMDA] receptor-associated protein 1	137	171	1.25
85414	Solute carrier family 45 member 3	6	8	1.25
8945	F-box/WD repeat-containing protein 1A	28	35	1.25
8028	Protein AF-10	36	45	1.25
124842	Transmembrane protein 132E Precursor	15	19	1.25
1303	Collagen alpha-1(XII) chain Precursor	28	35	1.25
401505	Mitochondrial import receptor subunit TOM5 homolog	1344	1678	1.25
6181	60S acidic ribosomal protein P2	11870	14826	1.25
100293706	-	9	11	1.25
7249	Tuberin	15	19	1.25
1955	Multiple epidermal growth factor-like domains 9 Precursor	27	34	1.25
81622	Protein unc-93 homolog B1	41	51	1.25
-	Hemicentin-2, Fragment	13	16	1.25
6890	Antigen peptide transporter 1	230	288	1.25
201931	Transmembrane protein 192	108	135	1.25
257415	Protein FAM133B	32	41	1.25
124961	Zinc finger protein 3 homolog	10	13	1.25
11232	DNA polymerase subunit gamma-2, mitochondrial Precursor	59	74	1.25
55352	Uncharacterized protein C17orf79	929	1161	1.25
100130958	Meiosis-related protein	120	150	1.25
114805	Polypeptide N-acetylgalactosaminyltransferase 13	8	10	1.25
28982	Feline leukemia virus subgroup C receptor-related protein 1	42	52	1.25
127428	Uncharacterized protein C1orf83	14	18	1.25
387509	Probable G-protein coupled receptor 153	17	21	1.25
80742	Proline-rich protein 3	31	39	1.25
-	-	3936	4920	1.25

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
50632	Neuron-specific vesicular protein calcyon	7	9	1.25
1280	Collagen alpha-1(I) chain Precursor	15	19	1.25
10283	Peptidyl-prolyl cis-trans isomerase SDCCAG10	105	131	1.25
-	Uncharacterized protein KIAA0528	70	87	1.25
4995	Olfactory receptor 3A2	5	7	1.25
23433	Rho-related GTP-binding protein RhoQ Precursor	31	39	1.25
4833	Nucleoside diphosphate kinase, mitochondrial Precursor	1007	1260	1.25
-	Beta-soluble NSF attachment protein	23	29	1.25
7520	ATP-dependent DNA helicase 2 subunit 2	1294	1618	1.25
-	Putative ATP-binding cassette sub-family A member 11	18	22	1.25
-	-	172	215	1.25
23456	ATP-binding cassette sub-family B member 10, mitochondrial Precursor	129	161	1.25
7539	Zinc finger protein 37 homolog	14	17	1.25
100291964	Oocyte-secreted protein 1 homolog Precursor	5	7	1.25
100288108	-	6	8	1.25
100291029	-	10	13	1.25
5704	26S protease regulatory subunit 6B	870	1089	1.25
-	Uncharacterized protein ENSP00000339052	45	56	1.25
55054	Autophagy-related protein 16-1	21	27	1.25
5214	6-phosphofructokinase type C	2180	2729	1.25
-	Thymus-specific serine protease Precursor	12	15	1.25
100131354	-	5	7	1.25
256957	Uncharacterized protein C17orf66	6	7	1.25
6171	Prorelaxin H2 Precursor	48	60	1.25
59283	Voltage-dependent calcium channel gamma-8 subunit	6	7	1.25
5202	Prefoldin subunit 2	1776	2223	1.25
-	-	3909	4894	1.25
55128	Tripartite motif-containing protein 68	81	102	1.25
55720	Pre-rRNA processing protein TSR1 homolog	150	188	1.25
51260	UPF0368 protein Cxorf26	460	576	1.25
65005	39S ribosomal protein L9, mitochondrial Precursor	850	1064	1.25
219749	Zinc finger protein 25	73	91	1.25
5893	DNA repair protein RAD52 homolog	33	41	1.25
128710	UPF0492 protein C20orf94	31	38	1.25
23329	TBC1 domain family member 30	12	15	1.25
1519	Cathepsin O Precursor	88	110	1.25
6813	Syntaxin-binding protein 2	28	35	1.25
-	Probable G-protein coupled receptor 97 Precursor	9	12	1.25
1791	DNA nucleotidyltransferase	34	43	1.25
7789	Zinc finger X-linked protein ZXDA	12	15	1.25
51497	Negative elongation factor C/D	390	488	1.25
221710	-	35	44	1.25
55733	Protein-cysteine N-palmitoyltransferase HHAT	30	37	1.25
5900	Ral guanine nucleotide dissociation stimulator	227	284	1.25
831	Calpastatin	938	1176	1.25
50650	Rho guanine nucleotide exchange factor 3	72	90	1.25
55718	DNA-directed RNA polymerase III subunit RPC5	89	112	1.25
-	Tumor susceptibility gene 101 protein	398	498	1.25
161742	Sprouty-related, EVH1 domain-containing protein 1	41	51	1.25
65981	Caprin-2	44	56	1.25
23580	Cdc42 effector protein 4	29	36	1.25
-	HLA class II histocompatibility antigen, DRB5 beta chain Precursor	6	7	1.25

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5757	Prothymosin alpha	9635	12082	1.25
11054	Opioid growth factor receptor	44	55	1.25
9435	Carbohydrate sulfotransferase 2	177	222	1.25
51602	Nucleolar protein 5	968	1214	1.25
-	Coiled-coil domain-containing protein 28A	214	268	1.25
51433	Anaphase-promoting complex subunit 5	851	1067	1.25
10668	Cell growth regulator with RING finger domain protein 1	149	187	1.25
29767	Tropomodulin-2	5	7	1.25
29087	Thymocyte nuclear protein 1	594	746	1.25
2639	Glutaryl-CoA dehydrogenase, mitochondrial Precursor	162	204	1.25
60560	Protein MAK10 homolog	214	269	1.26
53834	Fibroblast growth factor receptor-like 1 Precursor	154	193	1.26
64412	GDNF-inducible zinc finger protein 1	91	114	1.26
140460	Ankyrin repeat and SOCS box protein 7	26	32	1.26
79742	UPF0672 protein Cxorf36 Precursor	155	195	1.26
22891	Talanin	8	11	1.26
24	Retinal-specific ATP-binding cassette transporter	71	89	1.26
22832	Protein QN1 homolog	47	59	1.26
-	E3 ubiquitin-protein ligase Itchy homolog	40	50	1.26
54758	Kelch domain-containing protein 4	101	127	1.26
4724	NADH dehydrogenase [ubiquinone] iron-sulfur protein 4, mitochondrial Precursor	697	875	1.26
-	-	7	9	1.26
79697	chromosome 14 open reading frame 169 (C14orf169), mRNA	70	87	1.26
-	Transcription factor COE4	20	25	1.26
1000	Cadherin-2 Precursor	256	321	1.26
8193	Zinc finger protein neuro-d4	12	15	1.26
65991	FUN14 domain-containing protein 2	21	26	1.26
57798	GATA zinc finger domain-containing protein 1	274	344	1.26
11336	Exocyst complex component 3	142	178	1.26
91283	UPF0439 protein C9orf30	860	1080	1.26
13	Arylacetamide deacetylase	32	40	1.26
5584	protein kinase C, iota (PRKCI), mRNA	91	114	1.26
8030	Coiled-coil domain-containing protein 6	39	49	1.26
84317	Coiled-coil domain-containing protein 115	344	433	1.26
25778	Dual serine/threonine and tyrosine protein kinase	15	19	1.26
100294270	-	8	10	1.26
284325	UPF0692 protein C19orf54	15	19	1.26
55314	Transmembrane protein 144	12	16	1.26
5236	Phosphoglucomutase-1	180	226	1.26
2731	Glycine dehydrogenase [decarboxylating], mitochondrial Precursor	35	44	1.26
90204	Zinc finger SWIM domain-containing protein 1	97	122	1.26
4801	Nuclear transcription factor Y subunit beta	273	344	1.26
9069	Claudin-12	36	46	1.26
150465	Tubulin-tyrosine ligase	14	18	1.26
64376	Zinc finger protein Pegasus	12	15	1.26
5134	Programmed cell death protein 2	555	699	1.26
27107	Zinc finger and BTB domain-containing protein 11	15	19	1.26
6925	Transcription factor 4	4504	5669	1.26
55466	DnaJ homolog subfamily A member 4	88	111	1.26
6123	60S ribosomal protein L3-like	6	8	1.26
63906	G patch domain-containing protein 3	68	86	1.26
728965	-	11	14	1.26

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
377711	HEAT repeat-containing protein 7A	9	11	1.26
-	Kit ligand Precursor	40	50	1.26
2230	Adrenodoxin, mitochondrial Precursor	91	115	1.26
10612	Tripartite motif-containing protein 3	10	13	1.26
171586	Abhydrolase domain-containing protein 3	34	43	1.26
2186	Nucleosome-remodeling factor subunit BPTF	62	79	1.26
201456	F-box only protein 15	15	19	1.26
127343	Diencephalon/mesencephalon homeobox protein 1	12	15	1.26
90693	Coiled-coil domain-containing protein 126 Precursor	72	91	1.26
64708	COP9 signalosome complex subunit 7b	20	26	1.26
26355	UPF0389 protein FAM162A	869	1095	1.26
-	-	7064	8903	1.26
100292292	-	6	8	1.26
9830	Tripartite motif-containing protein 14	26	33	1.26
100133885	-	6	8	1.26
345645	-	15	18	1.26
5587	Serine/threonine-protein kinase D1	77	97	1.26
3205	Homeobox protein Hox-A9	498	628	1.26
100290944	-	8	10	1.26
100289202	-	14	17	1.26
147694	Zinc finger protein 548	32	40	1.26
-	28S ribosomal protein S6, mitochondrial	254	320	1.26
3476	Immunoglobulin-binding protein 1	1209	1526	1.26
5393	Exosome complex exonuclease RRP45	303	383	1.26
6017	Retinaldehyde-binding protein 1	17	21	1.26
253635	Coiled-coil domain-containing protein 75	40	51	1.26
80127	Uncharacterized protein C14orf45	36	46	1.26
26354	Guanine nucleotide-binding protein-like 3	1002	1265	1.26
-	Coiled-coil domain-containing protein 132	29	37	1.26
79998	Ankyrin repeat domain-containing protein 53	30	38	1.26
143884	CWF19-like protein 2	19	24	1.26
-	Proteasome subunit beta type-8 Precursor	366	461	1.26
-	Golgin subfamily A member 4	227	286	1.26
-	-	10496	13250	1.26
-	-	378	478	1.26
25841	Ankyrin repeat and BTB/POZ domain-containing protein 2	9	11	1.26
9880	Zinc finger and BTB domain-containing protein 39	20	25	1.26
79896	Threonine synthase-like 1	34	42	1.26
27340	Small subunit processome component 20 homolog	7	8	1.26
1503	CTP synthase 1	148	187	1.26
130120	Regenerating islet-derived protein 3 gamma Precursor	10	12	1.26
84865	Coiled-coil domain-containing protein 142	17	22	1.26
54707	GPN-loop GTPase 2	190	239	1.26
1211	Clathrin light chain A	3424	4325	1.26
9897	Strumpellin	280	354	1.26
84343	Hermansky-Pudlak syndrome 3 protein	52	66	1.26
55850	Vesicle transport protein USE1	128	161	1.26
84498	Constitutive coactivator of peroxisome proliferator-activated receptor gamma	58	74	1.26
222487	Probable G-protein coupled receptor 97 Precursor	45	57	1.26
-	Di-N-acetylchitinase Precursor	121	153	1.26
8233	U2 small nuclear ribonucleoprotein auxiliary factor 35 kDa subunit-related protein 2	216	273	1.26
145389	Probable sodium-coupled neutral amino acid transporter 6	145	183	1.26

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55212	Bardet-Biedl syndrome 7 protein	69	88	1.26
128866	Charged multivesicular body protein 4b	716	904	1.26
5569	cAMP-dependent protein kinase inhibitor alpha	425	537	1.26
5154	Platelet-derived growth factor subunit A Precursor	19	24	1.26
400236	-	26	33	1.26
51634	RNA-binding motif protein, X-linked 2	229	289	1.26
6710	Spectrin beta chain, erythrocyte	122	154	1.26
84303	Coiled-coil-helix-coiled-coil-helix domain-containing protein 6	35	44	1.26
-	Transmembrane protein 201	8	10	1.26
4303	Forkhead box protein O4	16	21	1.26
22927	Intracellular hyaluronan-binding protein 4	77	98	1.26
-	Liprin-alpha-3	30	38	1.26
55794	Probable ATP-dependent RNA helicase DDX28	61	77	1.26
-	Dolichyl-P-Man:Man(7)GlcNAc(2)-PP-dolichyl-alpha-1,6-mannosyltransferase	35	44	1.26
5660	Proactivator polypeptide Precursor	4409	5577	1.26
2332	Fragile X mental retardation 1 protein	81	102	1.26
56063	UPF0546 membrane protein C1orf91	121	153	1.27
84268	RPA-interacting protein	1269	1605	1.27
400	ADP-ribosylation factor-like protein 1	368	466	1.27
10228	Syntaxin-6	101	128	1.27
9761	Malectin Precursor	116	147	1.27
80745	THUMP domain-containing protein 2	120	152	1.27
4133	Microtubule-associated protein 2	5	7	1.27
3475	Interferon-related developmental regulator 1	298	377	1.27
-	DnaJ homolog subfamily C member 4	379	480	1.27
6092	Roundabout homolog 2 Precursor	7	9	1.27
84890	2-aminoethanethiol dioxygenase	199	252	1.27
7290	Protein HIRA	31	39	1.27
-	Sarcoplasmic/endoplasmic reticulum calcium ATPase 3	9	11	1.27
8228	Patatin-like phospholipase domain-containing protein 4	395	499	1.27
130617	AN1-type zinc finger protein 2B	59	75	1.27
57509	Mitochondrial tumor suppressor 1	858	1086	1.27
9704	Probable ATP-dependent RNA helicase DHX34	10	12	1.27
-	Putative protein FAM86A-like 1	74	94	1.27
56605	ERO1-like protein beta Precursor	9	12	1.27
5142	cAMP-specific 3',5'-cyclic phosphodiesterase 4B	227	288	1.27
-	TRAF and TNF receptor-associated protein	710	899	1.27
54977	Solute carrier family 25 member 38	193	244	1.27
100129791	-	5	7	1.27
342926	Zinc finger protein 677	88	112	1.27
23410	NAD-dependent deacetylase sirtuin-3, mitochondrial Precursor	96	121	1.27
4194	Protein Mdm4	24	30	1.27
-	Glycogenin-1	477	604	1.27
9202	Zinc finger MYM-type protein 4	107	135	1.27
-	Ubiquitin carboxyl-terminal hydrolase isozyme L1	5865	7428	1.27
25771	TBC1 domain family member 22A	114	145	1.27
162394	Schlafen family member 5	100	126	1.27
221491	Uncharacterized protein C6orf1 Precursor	54	69	1.27
-	V-set and immunoglobulin domain-containing protein 2 Precursor	11	14	1.27
728577	Contactin-associated protein-like 3 Precursor	56	71	1.27

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55170	Protein arginine N-methyltransferase 6	102	129	1.27
153572	Iroquois-class homeodomain protein IRX-2	13	16	1.27
6403	P-selectin Precursor	9	12	1.27
55624	Protein O-linked-mannose beta-1,2-N-acetylglucosaminyltransferase 1	91	116	1.27
337968	Keratin-associated protein 6-3	66	83	1.27
51585	PremRNA cleavage complex 2 protein Pcf11	10	12	1.27
9361	Lon protease homolog, mitochondrial Precursor	101	129	1.27
6228	40S ribosomal protein S23	337	427	1.27
83547	Rab-interacting lysosomal protein	91	115	1.27
283948	Uncharacterized NHL-repeat-containing protein C16orf11	32	40	1.27
84942	WD repeat-containing protein 73	123	156	1.27
7171	Tropomyosin alpha-4 chain	1156	1466	1.27
7920	Protein BAT5	201	255	1.27
93621	MORF4 family-associated protein 1	3309	4198	1.27
10424	Membrane-associated progesterone receptor component 2	861	1092	1.27
-	General transcription factor IIF subunit 2	392	497	1.27
-	Leptin receptor Precursor	12	16	1.27
-	Novel protein similar to 40S ribosomal protein S17 RPS17	4174	5298	1.27
8464	Transcription initiation protein SPT3 homolog	63	80	1.27
-	Transmembrane protein FLJ78588	6	8	1.27
7776	Zinc finger protein 236	11	14	1.27
7471	Proto-oncogene protein Wnt-1 Precursor	7	9	1.27
-	Long-chain fatty acid transport protein 3	308	392	1.27
8602	Nucleolar protein 14	123	156	1.27
9656	Mediator of DNA damage checkpoint protein 1	68	86	1.27
2257	Fibroblast growth factor 12	28	36	1.27
7746	Zinc finger protein 193	56	71	1.27
54972	Transmembrane protein 132A Precursor	533	677	1.27
10610	Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 2	6	7	1.27
54811	Zinc finger protein 562	54	68	1.27
79767	Engulfment and cell motility protein 3	17	22	1.27
3815	Mast/stem cell growth factor receptor Precursor	450	572	1.27
9476	Napsin-A Precursor	28	36	1.27
729832	-	8	10	1.27
29098	Ran guanine nucleotide release factor	418	531	1.27
-	Putative uncharacterized protein LOC400499	8	10	1.27
2035	Protein 4.1	55	70	1.27
283459	GatC-like protein	214	273	1.27
-	Uncharacterized protein C1orf194	314	399	1.27
2057	Erythropoietin receptor Precursor	140	178	1.27
637	BH3-interacting domain death agonist	531	676	1.27
84433	Caspase recruitment domain-containing protein 11	10	12	1.27
10039	Poly [ADP-ribose] polymerase 3	45	57	1.27
54795	Transient receptor potential cation channel subfamily M member 4	7	9	1.27
51057	WD repeat-containing protein C2orf86	14	18	1.27
84513	Phosphatidic acid phosphatase type 2 domain-containing protein 1B	481	612	1.27
9512	Mitochondrial-processing peptidase subunit beta Precursor	357	455	1.27
3394	Interferon regulatory factor 8	8	10	1.27
100129794	-	5	7	1.27
55659	Zinc finger protein 416	14	18	1.27
273	Amphiphysin	15	19	1.27

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
91663	Myeloid-associated differentiation marker	366	466	1.27
29097	Protein cornichon homolog 4	1513	1926	1.27
134266	GrpE protein homolog 2, mitochondrial Precursor	256	326	1.27
-	-	5590	7116	1.27
151011	Septin-10	360	458	1.27
1477	Cleavage stimulation factor 50 kDa subunit	293	374	1.27
91433	RCC1 domain-containing protein 1	44	57	1.27
84947	Protein SERAC1	15	19	1.27
-	-	2451	3122	1.27
4953	Ornithine decarboxylase	859	1095	1.27
57801	Transcription factor HES-4	379	483	1.27
26297	Secretion-regulating guanine nucleotide exchange factor	39	50	1.27
545	Serine/threonine-protein kinase ATR	19	24	1.27
55751	Transmembrane protein 184C	36	46	1.27
57554	Leucine-rich repeat-containing protein 7	6	8	1.27
22834	Zinc finger protein 652	17	22	1.27
286097	EF-hand domain-containing family member A2	18	23	1.27
-	Uncharacterized protein ENSP00000344726	18	23	1.27
-	Integrin alpha-E Precursor	571	727	1.27
137886	UBX domain-containing protein 2B	42	53	1.27
7347	Ubiquitin carboxyl-terminal hydrolase isozyme L3	423	539	1.27
91603	Zinc finger protein 830	115	146	1.27
-	Trypsin-3 Precursor	200	255	1.27
64782	Apoptosis-enhancing nuclease	435	554	1.27
5356	Pleiotropic regulator 1	473	603	1.27
-	-	7	9	1.27
90806	Protein angel homolog 2	11	14	1.27
51231	Serine/threonine-protein kinase VRK3	337	430	1.27
127700	Protein OSCP1	96	122	1.27
9984	THO complex subunit 1	180	230	1.27
5536	Serine/threonine-protein phosphatase 5	183	234	1.28
29104	N(6)-adenine-specific DNA methyltransferase 1	112	143	1.28
729911	-	9	12	1.28
127396	Zinc finger protein 684	16	21	1.28
7991	Tumor suppressor candidate 3	372	475	1.28
8738	Death domain-containing protein CRADD	233	297	1.28
-	LOC93622 protein	95	121	1.28
57406	Abhydrolase domain-containing protein 6	39	50	1.28
30836	Deoxynucleotidyltransferase terminal-interacting protein 2	388	495	1.28
29107	NTF2-related export protein 1 (p15)	238	303	1.28
2859	Probable G-protein coupled receptor 35	9	11	1.28
728568	Uncharacterized protein LOC728568 Precursor	228	290	1.28
79187	Fibronectin type III and SPRY domain-containing protein 1	48	61	1.28
78999	Leucine-rich repeat and fibronectin type-III domain-containing protein 4 Precursor	94	120	1.28
57232	Zinc finger protein 630	12	15	1.28
27309	Zinc finger protein 330	258	330	1.28
22850	ADNP homeobox protein 2	45	57	1.28
55860	Actin-related protein 10	1578	2014	1.28
1070	Centrin-3	306	390	1.28
8666	Eukaryotic translation initiation factor 3 subunit G	1320	1685	1.28
29893	Homologous-pairing protein 2 homolog	57	72	1.28
1069	Centrin-2	445	568	1.28
-	Hexosaminidase domain-containing protein	90	115	1.28

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
89927	Uncharacterized protein C16orf45	231	294	1.28
9738	Centrosomal protein of 110 kDa	63	81	1.28
84162	Uncharacterized protein KIAA1109	18	24	1.28
11164	ADP-sugar pyrophosphatase	915	1169	1.28
23461	ATP-binding cassette sub-family A member 5	8	11	1.28
79711	Importin-4	32	41	1.28
83932	Zinc finger RAD18 domain-containing protein C1orf124	36	45	1.28
79096	Uncharacterized protein C11orf49	235	301	1.28
-	Putative protein FAM86A-like 3	48	62	1.28
-	Voltage-dependent T-type calcium channel subunit alpha-1I	7	9	1.28
23383	Uncharacterized protein KIAA0892 Precursor	13	17	1.28
29078	Protein HRPAP20	402	514	1.28
51741	WW domain-containing oxidoreductase	11	13	1.28
-	Zinc finger protein 224	48	61	1.28
1024	Cell division protein kinase 8	106	136	1.28
205327	UPF0565 protein C2orf69 Precursor	49	63	1.28
7390	Uroporphyrinogen-III synthase	429	548	1.28
4712	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 6	573	732	1.28
9839	Zinc finger E-box-binding homeobox 2	41	53	1.28
4116	Protein mago nashi homolog	185	237	1.28
-	Integrin alpha-4 Precursor	7	9	1.28
-	LOC401431 protein	14	17	1.28
8813	Dolichol-phosphate mannosyltransferase	622	794	1.28
84945	Abhydrolase domain-containing protein 13	89	114	1.28
29956	LAG1 longevity assurance homolog 2	713	912	1.28
55266	Transmembrane protein 19	22	28	1.28
375704	Uncharacterized protein C9orf165	15	19	1.28
388849	-	15	19	1.28
-	Centromere protein R	87	112	1.28
85415	Rhophilin-2	22	28	1.28
89978	ATP-binding domain-containing protein 4	101	129	1.28
400224	UPF0639 protein	13	16	1.28
1161	DNA excision repair protein ERCC-8	38	49	1.28
4507	S-methyl-5'-thioadenosine phosphorylase	199	254	1.28
63897	HEAT repeat-containing protein 6	73	93	1.28
0	Small EDRK-rich factor 1	598	765	1.28
51545	Zinc finger protein 581	328	420	1.28
283254	Putative nuclease HARB1	38	49	1.28
619208	Uncharacterized protein C6orf225	208	266	1.28
100131436	-	6	8	1.28
9477	Mediator of RNA polymerase II transcription subunit 20	148	189	1.28
440387	Chymotrypsinogen B Precursor	46	59	1.28
27258	U6 snRNA-associated Sm-like protein LSM3	297	380	1.28
728489	DNL-type zinc finger protein	247	316	1.28
4357	3-mercaptopyruvate sulfurtransferase	23	29	1.28
868	E3 ubiquitin-protein ligase CBL-B	109	139	1.28
56890	Nuclear protein MDM1	12	15	1.28
2778	Neuroendocrine secretory protein 55	7	9	1.28
5580	Protein kinase C delta type	91	117	1.28
-	Transmembrane protein 131-like Precursor	62	80	1.28
28973	28S ribosomal protein S18b, mitochondrial Precursor	399	510	1.28
11118	Butyrophilin subfamily 3 member A2 Precursor	49	63	1.28
5721	Proteasome activator complex subunit 2	957	1225	1.28

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
7469	Negative elongation factor A	240	307	1.28
2052	Epoxide hydrolase 1	77	98	1.28
9150	RNA polymerase II subunit A C-terminal domain phosphatase	24	31	1.28
957	Ectonucleoside triphosphate diphosphohydrolase 5 Precursor	12	16	1.28
10598	Activator of 90 kDa heat shock protein ATPase homolog 1 (p38)	1068	1368	1.28
26123	Tectonic-3 Precursor	486	622	1.28
9563	GDH/6PGL endoplasmic bifunctional protein Precursor	10	13	1.28
374920	Uncharacterized protein C19orf68	112	143	1.28
2353	Proto-oncogene protein c-fos	7	9	1.28
347252	Insulin-like growth factor-binding protein-like 1 Precursor	6	8	1.28
317649	Eukaryotic translation initiation factor 4E type 3	32	41	1.28
729421	-	14	18	1.28
-	Caspase recruitment domain-containing protein 8	209	268	1.28
11276	AP1 subunit gamma-binding protein 1	16	21	1.28
11056	Probable ATP-dependent RNA helicase DDX52	50	65	1.28
7036	Transferrin receptor protein 2	18	24	1.28
8664	Eukaryotic translation initiation factor 3 subunit D	4440	5695	1.28
100291910	-	6	8	1.28
3895	Kinectin	238	305	1.28
4297	Histone-lysine N-methyltransferase HRX	7	8	1.28
6495	Homeobox protein SIX1	13	16	1.28
211	5-aminolevulinate synthase, nonspecific, mitochondrial Precursor	74	95	1.28
6804	Syntaxin-1A	40	51	1.28
-	Guanine nucleotide-binding protein-like 3-like protein	18	23	1.28
284451	Outer dense fiber protein 3-like protein 2	10	13	1.28
-	Zinc finger protein 280C	10	13	1.28
79007	Dysbindin domain-containing protein 1	118	151	1.28
1687	Non-syndromic hearing impairment protein 5	400	514	1.28
10023	Proto-oncogene FRAT1	11	14	1.28
9644	SH3 and PX domain-containing protein 2A	7	9	1.28
6016	GTP-binding protein Rit1	484	622	1.28
-	Zinc finger protein 441	10	12	1.28
199221	Zinc finger protein DZIP1L	6	7	1.28
7156	DNA topoisomerase 3-alpha	26	33	1.29
-	UPF0587 protein C1orf123	540	694	1.29
55471	Protein midA homolog, mitochondrial Precursor	155	199	1.29
9519	TATA box-binding protein-like protein 1	262	336	1.29
404281	Transcription factor YY2	19	24	1.29
51251	Cytosolic 5'-nucleotidase 3	204	263	1.29
23413	Neuronal calcium sensor 1	152	195	1.29
10579	Transforming acidic coiled-coil-containing protein 2	176	226	1.29
8930	Methyl-CpG-binding domain protein 4	259	333	1.29
8534	Carbohydrate sulfotransferase 1	176	227	1.29
7341	Small ubiquitin-related modifier 1 Precursor	92	118	1.29
6877	Transcription initiation factor TFIID subunit 5	26	33	1.29
9188	Nucleolar RNA helicase 2	924	1188	1.29
55020	Tetratricopeptide repeat protein 38	91	118	1.29
4814	Ninjurin-1	504	648	1.29
4088	Mothers against decapentaplegic homolog 3	181	233	1.29
-	Synembryn-B	75	96	1.29

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
9673	Solute carrier family 25 member 44	744	958	1.29
409	Beta-arrestin-2	373	481	1.29
9696	Rootletin	148	191	1.29
-	Immunoglobulin superfamily member 1 Precursor	17	21	1.29
9111	N-myc-interactor	426	549	1.29
-	Collagen triple helix repeat-containing protein 1 Precursor	453	583	1.29
23029	RNA-binding protein 34	396	509	1.29
-	Ubiquitin-conjugating enzyme E2 D1	521	671	1.29
55070	s	133	171	1.29
10286	PremRNA-splicing factor SPF27	229	295	1.29
-	-	33	43	1.29
5000	Origin recognition complex subunit 4	56	73	1.29
387707	Protein CC2D2B	6	8	1.29
100133063	-	10	13	1.29
132112	Receptor-transporting protein 1	10	13	1.29
-	-	108	139	1.29
51371	Proteasome maturation protein	3261	4201	1.29
389170	Leucine-, glutamate- and lysine-rich protein 1	8	10	1.29
-	Protein C2orf25, mitochondrial Precursor	870	1122	1.29
26231	Leucine-rich repeat-containing protein 29	18	23	1.29
28981	Intraflagellar transport protein 81 homolog	33	42	1.29
10006	Abl interactor 1	221	285	1.29
29942	Purine-rich element-binding protein gamma	9	12	1.29
9425	Chromodomain Y-like protein	126	163	1.29
55194	Protein FAM176B	926	1194	1.29
27131	Sorting nexin-5	618	797	1.29
134510	Ubiquitin-like domain-containing CTD phosphatase 1	310	400	1.29
284069	Protein FAM171A2 Precursor	10	13	1.29
-	Lymphocyte function-associated antigen 3 Precursor	146	188	1.29
8315	BRCA1-associated protein	75	97	1.29
55144	Leucine-rich repeat-containing protein 8D	95	123	1.29
55127	HEAT repeat-containing protein 1	11	14	1.29
54558	Spermatogenesis-associated protein 6 Precursor	6	7	1.29
64231	Membrane-spanning 4-domains subfamily A member 6A	6	8	1.29
55357	TBC1 domain family member 2A	45	58	1.29
283991	Protein FAM100B	1219	1573	1.29
256691	MAM domain-containing protein 2 Precursor	19	25	1.29
284114	Transmembrane protein 102	35	46	1.29
23506	Uncharacterized protein KIAA0240	44	57	1.29
151987	Serine/threonine-protein phosphatase 4 regulatory subunit 2	154	199	1.29
79836	LON peptidase N-terminal domain and RING finger protein 3	337	435	1.29
7803	Protein tyrosine phosphatase type IVA 1	1786	2308	1.29
-	INO80 complex subunit C	331	428	1.29
79663	HSPB1-associated protein 1	28	37	1.29
5867	Ras-related protein Rab-4A	118	153	1.29
-	Calcium/calmodulin-dependent 3',5'-cyclic nucleotide phosphodiesterase 1C	29	37	1.29
653184	-	7	9	1.29
-	-	69	90	1.29
23480	Protein transport protein Sec61 subunit gamma	4367	5645	1.29
8550	MAP kinase-activated protein kinase 5	137	177	1.29
100133264	-	10	13	1.29

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
57697	Fanconi anemia group M protein	8	11	1.29
-	Olfactory receptor 6J1	7	8	1.29
80142	Prostaglandin E synthase 2	240	310	1.29
100137047	JmjC domain-containing protein 7	25	32	1.29
3150	Non-histone chromosomal protein HMG-14	3613	4673	1.29
100293763	-	55	71	1.29
8555	Dual specificity protein phosphatase CDC14B	6	8	1.29
124790	Protein HEXIM2	35	45	1.29
2033	Histone acetyltransferase p300	74	96	1.29
23531	Monocyte to macrophage differentiation protein	29	38	1.29
494514	Putative uncharacterized protein C18orf56	44	57	1.29
388722	Uncharacterized protein C1orf53	64	82	1.30
201475	Putative Ras-related protein Rab-12	111	144	1.30
3189	Heterogeneous nuclear ribonucleoprotein H3	1607	2082	1.30
57449	Pleckstrin homology domain-containing family G member 5	268	348	1.30
57402	Protein S100-A14	12	15	1.30
56980	PR domain zinc finger protein 10	20	26	1.30
3746	Potassium voltage-gated channel subfamily C member 1	7	10	1.30
200504	Gastrophilin-2 Precursor	6	8	1.30
51642	39S ribosomal protein L48, mitochondrial Precursor	409	530	1.30
2665	Rab GDP dissociation inhibitor beta	2334	3025	1.30
4107	Melanoma-associated antigen 8	7	9	1.30
3607	Forkhead box protein K2	68	89	1.30
114625	Erythroid membrane-associated protein Precursor	17	22	1.30
8575	Interferon-inducible double stranded RNA-dependent protein kinase activator A	153	198	1.30
6150	39S ribosomal protein L23, mitochondrial	1586	2056	1.30
9585	M-phase phosphoprotein 1	24	31	1.30
51124	Immediate early response 3-interacting protein 1	668	867	1.30
55558	Plexin-A3 Precursor	10	12	1.30
-	-	2132	2764	1.30
170622	COMM domain-containing protein 6	2692	3490	1.30
7580	Zinc finger protein 32	165	213	1.30
4683	Nibrin	106	138	1.30
85457	Uncharacterized protein KIAA1737	105	136	1.30
2803	Golgin subfamily A member 4	402	521	1.30
79080	Coiled-coil domain-containing protein 86	173	225	1.30
5990	DNA-binding protein RFX2	22	28	1.30
148898	Putative uncharacterized protein C1orf213	17	22	1.30
9887	Protein SMG7	17	22	1.30
338657	Coiled-coil domain-containing protein 84	164	212	1.30
54828	Breast carcinoma-amplified sequence 3	32	42	1.30
8792	Tumor necrosis factor receptor superfamily member 11A Precursor	8	10	1.30
100131088	-	13	17	1.30
90864	SPRY domain-containing SOCS box protein 3	349	452	1.30
-	Highly divergent homeobox	31	40	1.30
8665	Eukaryotic translation initiation factor 3 subunit F	5766	7482	1.30
196415	hypothetical protein LOC196415	6	8	1.30
79364	Zinc finger protein ZXDC	9	12	1.30
57472	CCR4-NOT transcription complex subunit 6	44	57	1.30
339324	zinc finger protein 260 (ZNF260), mRNA	41	53	1.30
8439	Protein FAN	232	302	1.30
23255	Uncharacterized protein KIAA0802	80	104	1.30

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3572	Interleukin-6 receptor subunit beta Precursor	614	797	1.30
401335	Putative uncharacterized protein FLJ44108	8	10	1.30
146760	Reticulon-4 receptor-like 1 Precursor	22	28	1.30
28969	Basic leucine zipper and W2 domain-containing protein 2	444	577	1.30
6230	40S ribosomal protein S25	15039	19526	1.30
-	NMDA receptor-regulated protein 1	66	85	1.30
344387	Cyclin-dependent kinase-like 4	6	8	1.30
221908	Putative uncharacterized protein C7orf47	771	1001	1.30
1777	Deoxyribonuclease-2-alpha Precursor	109	141	1.30
645225	-	31	41	1.30
79589	E3 ubiquitin-protein ligase RNF128 Precursor	9	12	1.30
25926	Nucleolar protein 11	323	420	1.30
64422	Autophagy-related protein 3	364	473	1.30
55090	Mediator of RNA polymerase II transcription subunit 9	110	143	1.30
3601	Interleukin-15 receptor subunit alpha Precursor	19	25	1.30
26022	Transmembrane protein 98	663	862	1.30
3615	Inosine-5'-monophosphate dehydrogenase 2	1421	1847	1.30
254065	Bromodomain and WD repeat-containing protein 3	15	20	1.30
57505	Probable alanyl-tRNA synthetase, mitochondrial Precursor	88	115	1.30
-	CH059_HUMAN Isoform 2 of Q8N0T1 - Homo sapiens (Human)	694	902	1.30
2637	Homeobox protein GBX-2	11	15	1.30
1958	Early growth response protein 1	88	114	1.30
4909	Neurotrophin-4 Precursor	8	11	1.30
54823	Uncharacterized protein C1orf26	46	60	1.30
143187	Vesicle transport through interaction with t-SNAREs homolog 1A	19	24	1.30
541578	Protein CXorf40B	29	38	1.30
414328	Probable gluconokinase	50	66	1.30
80004	Epithelial splicing regulatory protein 2	6	7	1.30
100291661	-	94	122	1.30
-	-	67	87	1.30
26974	Zinc finger protein 285A	17	22	1.30
1164	Cyclin-dependent kinases regulatory subunit 2	449	584	1.30
56342	Suppressor of SWI4 1 homolog	149	194	1.30
-	-	52	67	1.30
95681	Centrosomal protein of 41 kDa	31	41	1.30
8312	Axin-1	186	243	1.30
339175	Methyltransferase-like protein 2A	71	93	1.30
4150	Myc-associated zinc finger protein	10	13	1.30
51663	Zinc finger RNA-binding protein	191	248	1.30
79576	NF-kappa-B-activating protein	140	182	1.30
7481	Protein Wnt-11 Precursor	13	17	1.30
84330	Zinc finger protein 414	29	38	1.30
7771	Zinc finger protein 112 homolog	25	32	1.30
140685	Zinc finger and BTB domain-containing protein 46	12	16	1.30
-	Protein phosphatase 1 regulatory subunit 11	48	63	1.30
9521	Eukaryotic translation elongation factor 1 epsilon-1	723	942	1.30
25912	Uncharacterized protein C1orf43	2135	2782	1.30
-	Suppressor of tumorigenicity protein 7	45	59	1.30
-	-	88	115	1.30
100290425	-	8	10	1.30
115827	Ras-related protein Rab-3C	7	10	1.30
83902	Keratin-associated protein 17-1	29	37	1.30

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-	194	253	1.30
51805	Hexaprenyldihydroxybenzoate methyltransferase, mitochondrial Precursor	56	73	1.30
-	-	18	24	1.30
163081	Zinc finger protein 567	39	50	1.30
10322	SET and MYND domain-containing protein 5	17	22	1.30
85235	Histone H2A type 1	58	75	1.30
705	Bystin	488	637	1.30
10244	Rab9 effector protein with Kelch motifs	229	299	1.30
2762	GDP-mannose 4,6 dehydratase	123	160	1.30
64770	Coiled-coil domain-containing protein 14	173	225	1.30
1849	Dual specificity protein phosphatase 7	12	16	1.30
131474	Mitochondrial intermembrane space import and assembly protein 40	130	169	1.30
-	Protein SDA1 homolog	82	107	1.30
494470	RING finger protein 165	7	9	1.30
339451	Kelch-like protein 17 (Actinfilin)	42	54	1.30
6198	Ribosomal protein S6 kinase beta-1	78	102	1.31
-	Angiotensin-related protein 2 Precursor	18	23	1.31
-	-	550	718	1.31
51693	Trafficking protein particle complex subunit 2-like protein	714	933	1.31
51204	Coiled-coil domain-containing protein 44	196	256	1.31
30011	SH3 domain-containing kinase-binding protein 1	93	122	1.31
6418	Protein SET	1417	1850	1.31
100290344	cDNA FLJ44107 fis, clone TEST14044296	9	11	1.31
337879	Keratin-associated protein 8-1	11	14	1.31
1464	Chondroitin sulfate proteoglycan 4 Precursor	9	12	1.31
64901	Ran-binding protein 17	53	69	1.31
84961	F-box/LRR-repeat protein 20	21	27	1.31
83444	INO80 complex subunit B	81	106	1.31
4140	MAP/microtubule affinity-regulating kinase 3	281	367	1.31
346157	Zinc finger protein 391	10	13	1.31
153443	Serum response factor-binding protein 1	163	212	1.31
29966	Striatin-3	16	22	1.31
8563	THO complex subunit 5 homolog	212	276	1.31
-	GTP-binding protein 10	91	119	1.31
64841	Glucosamine 6-phosphate N-acetyltransferase	491	642	1.31
-	-	23	30	1.31
729515	UPF0463 transmembrane protein C6orf35	11	14	1.31
-	MICAL-like protein 1	715	935	1.31
402198	-	17	22	1.31
100291544	-	7	9	1.31
81037	Cleft lip and palate transmembrane protein 1-like protein	1239	1621	1.31
51388	60S ribosome subunit biogenesis protein NIP7 homolog	450	589	1.31
8321	Frizzled-1 Precursor	12	16	1.31
29880	Dolichyl-phosphate beta-glucosyltransferase	429	561	1.31
22990	Pecanex-like protein 1	51	67	1.31
22909	Coiled-coil domain-containing protein MTMR15	49	64	1.31
-	Uncharacterized protein C6orf141	87	114	1.31
94086	Heat shock protein beta-9	10	13	1.31
2048	Ephrin type-B receptor 2 Precursor	207	271	1.31
148327	cAMP-responsive element-binding protein 3-like protein 4	46	61	1.31
133686	UPF0465 protein C5orf33	55	72	1.31
10210	E3 ubiquitin-protein ligase Topors	147	192	1.31

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
345462	hypothetical protein LOC345462	23	30	1.31
-	Protein ARV1	191	250	1.31
-	5'(3')-deoxyribonucleotidase, mitochondrial Precursor	69	91	1.31
-	Inactive phospholipase C-like protein 2	34	45	1.31
-	Protein FAM179B	42	55	1.31
100131082	Cell migration-inducing protein 20Migration-inducing gene 16 protein	203	265	1.31
-	-	6841	8960	1.31
146956	Crossover junction endonuclease EME1	18	24	1.31
6944	Vacuolar protein sorting-associated protein 72 homolog	429	562	1.31
116225	Zinc finger MYND domain-containing protein 19	173	227	1.31
4780	Nuclear factor erythroid 2-related factor 2	635	832	1.31
-	Kelch-like protein 21	39	51	1.31
23254	Kazrin	17	23	1.31
7554	Zinc finger protein 8	18	24	1.31
129531	MIT domain-containing protein 1	314	411	1.31
694	Protein BTG1	2127	2787	1.31
60492	Coiled-coil domain-containing protein 90B, mitochondrial Precursor	671	880	1.31
-	Probable ATP-dependent RNA helicase DDX59	81	106	1.31
50484	Ribonucleoside-diphosphate reductase subunit M2 B	118	155	1.31
7905	Receptor expression-enhancing protein 5	293	384	1.31
554313	Histone H4	8	11	1.31
10262	Splicing factor 3B subunit 4	19	25	1.31
64062	RNA-binding protein 26	41	54	1.31
57017	Ubiquinone biosynthesis protein COQ9, mitochondrial Precursor	317	416	1.31
643563	-	4654	6106	1.31
114327	EF-hand domain-containing protein 1	98	128	1.31
9411	Rho GTPase-activating protein 29	1404	1842	1.31
100291209	-	12	16	1.31
11222	39S ribosomal protein L3, mitochondrial	696	913	1.31
100293863	-	9	12	1.31
22998	LIM and calponin homology domains-containing protein 1	39	52	1.31
-	Fibronectin type III domain-containing protein 7 Precursor	6	7	1.31
55739	carbohydrate kinase domain containing	180	236	1.31
2122	Ecotropic virus integration site 1 protein homolog	447	587	1.31
-	-	1542	2025	1.31
23608	Makorin-1	272	357	1.31
7881	Voltage-gated potassium channel subunit beta-1	8	10	1.31
2118	ETS translocation variant 4	110	145	1.31
40	Amiloride-sensitive cation channel 1, neuronal	10	13	1.31
134637	tRNA-specific adenosine deaminase 2	47	62	1.31
130888	F-box only protein 36	12	15	1.31
8913	Voltage-dependent T-type calcium channel subunit alpha-1G	6	8	1.31
401494	Protein tyrosine phosphatase-like protein PTPLAD2	12	15	1.31
6907	F-box-like/WD repeat-containing protein TBL1X	49	65	1.31
79054	Transient receptor potential cation channel subfamily M member 8	6	8	1.31
-	Low molecular weight phosphotyrosine protein phosphatase	993	1304	1.31
83478	Rho GTPase-activating protein 24	236	310	1.31
9816	Uncharacterized protein KIAA0133	29	37	1.31
90317	Zinc finger protein 616	20	27	1.31

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55083	Kinesin-like protein KIF26B	7	9	1.31
1195	Dual specificity protein kinase CLK1	528	694	1.31
51678	MAGUK p55 subfamily member 6	141	186	1.31
-	Neurolysin, mitochondrial Precursor	177	233	1.31
57343	Zinc finger protein 304	36	48	1.31
10293	TRAF-interacting protein	18	23	1.31
100288820	-	7	9	1.31
84881	RNA pseudouridylate synthase domain-containing protein 4	267	351	1.31
5108	Pericentriolar material 1 protein	119	156	1.31
-	Probable E3 ubiquitin-protein ligase RNF217	29	38	1.32
10105	Peptidyl-prolyl cis-trans isomerase, mitochondrial Precursor	447	587	1.32
128367	Olfactory receptor 10X1	6	8	1.32
7265	Tetratricopeptide repeat protein 1	658	866	1.32
368	Multidrug resistance-associated protein 6	16	22	1.32
64766	S100P-binding protein	87	114	1.32
463	Zinc finger homeobox protein 3	31	41	1.32
-	E3 ubiquitin-protein ligase ZNRF2	7	9	1.32
7247	Translin	107	141	1.32
81889	Fumarylacetoacetate hydrolase domain-containing protein 1	503	662	1.32
10241	Calcium-binding and coiled-coil domain-containing protein 2	124	163	1.32
728492	Hamartin	18	24	1.32
140680	Uncharacterized protein C20orf96	10	13	1.32
81550	Tudor domain-containing protein 3	29	39	1.32
-	Protein FAM175A	122	161	1.32
-	PC4 and SFRS1-interacting protein	142	187	1.32
112487	Probable D-tyrosyl-tRNA(Tyr) deacylase 2	49	65	1.32
-	High affinity immunoglobulin alpha and immunoglobulin mu Fc receptor Precursor	7	9	1.32
63899	Putative methyltransferase NSUN3	57	75	1.32
54468	WD repeat-containing protein mio	51	68	1.32
-	T-box transcription factor TBX18	21	28	1.32
25929	Gem-associated protein 5	78	103	1.32
51205	Lysophosphatidic acid phosphatase type 6 Precursor	33	43	1.32
57128	LYR motif-containing protein 4	324	427	1.32
8816	WD repeat-containing protein 22	335	442	1.32
8106	Polyadenylate-binding protein 2	1163	1534	1.32
57026	SH3 domain-binding protein 1	70	92	1.32
4828	Neuromedin-B Precursor	123	162	1.32
29922	Nucleoside diphosphate kinase 7	234	308	1.32
57496	MKL/myocardin-like protein 2	49	65	1.32
5896	VDJ recombination-activating protein 1	10	13	1.32
79006	Meteorin Precursor	98	130	1.32
-	Uncharacterized protein C12orf11	165	217	1.32
7692	Zinc finger protein 133	21	28	1.32
51691	U6 snRNA-associated Sm-like protein LSm8	983	1298	1.32
201627	Protein FAM116A	41	53	1.32
55253	tRNA wybutosine-synthesizing protein 1 homolog	26	35	1.32
5187	Period circadian protein homolog 1	32	42	1.32
253260	Rapamycin-insensitive companion of mTOR	29	38	1.32
6722	Serum response factor	227	299	1.32
100294364	-	7	9	1.32
51808	RNA U small nuclear RNA export adapter protein	231	305	1.32
1609	Diacylglycerol kinase theta	11	15	1.32

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-	16	22	1.32
84629	Trinucleotide repeat-containing gene 18 protein	7	9	1.32
3845	GTPase KRas Precursor	219	289	1.32
5001	Origin recognition complex subunit 5	223	295	1.32
4193	E3 ubiquitin-protein ligase Mdm2	1563	2064	1.32
22864	R3H domain-containing protein 2	207	273	1.32
80013	Protein CARP	211	279	1.32
125893	Zinc finger protein 816A	16	21	1.32
-	Neogenin Precursor	17	22	1.32
7011	Telomerase protein component 1	31	41	1.32
23545	V-type proton ATPase 116 kDa subunit a isoform 2	42	56	1.32
-	NIPA-like protein 3	19	25	1.32
-	tRNA isopentenyltransferase, mitochondrial Precursor	124	164	1.32
64216	Dimethyladenosine transferase 2, mitochondrial Precursor	205	271	1.32
9465	A-kinase anchor protein 7 isoform gamma	15	19	1.32
57862	Zinc finger protein 410	122	161	1.32
170506	Probable ATP-dependent RNA helicase DHX36	155	205	1.32
-	ZN271_HUMAN Isoform 2 of Q14591 · Homo sapiens (Human)	300	396	1.32
4361	Double-strand break repair protein MRE11A	65	86	1.32
-	Eukaryotic translation initiation factor 2 subunit 2-like protein	1203	1590	1.32
6414	Selenoprotein P Precursor	9	12	1.32
9972	Nuclear pore complex protein Nup153	148	196	1.32
2120	Transcription factor ETV6	137	181	1.32
80765	StAR-related lipid transfer protein 5	10	14	1.32
2701	Gap junction alpha-4 protein	54	72	1.32
79898	Zinc finger protein 613	38	50	1.32
56848	Sphingosine kinase 2	146	194	1.32
51409	HemK methyltransferase family member 1	11	14	1.32
23195	Midasin	77	101	1.32
-	Interleukin-7 receptor subunit alpha Precursor	7	9	1.32
83758	Retinol-binding protein 5	79	105	1.32
2893	Glutamate receptor 4 Precursor	15	20	1.32
57494	ribosomal modification protein rimK-like family member B (RIMKLB), mRNA	46	61	1.32
158983	Histone H2B type W-T	7	9	1.32
125061	Probable arylformamidase	10	13	1.32
26065	Protein LSM14 homolog A	611	809	1.32
54940	OCIA domain-containing protein 1	780	1033	1.32
100291718	-	9	12	1.32
79047	BTB/POZ domain-containing protein KCTD15	74	98	1.32
65244	Spermatogenesis-associated serine-rich protein 2	449	594	1.32
-	Excitatory amino acid transporter 5	8	11	1.32
25930	Tyrosine-protein phosphatase non-receptor type 23	11	15	1.32
23527	ARFGAP with coiled-coil, ANK repeat and PH domain-containing protein 2	12	16	1.32
829	F-actin-capping protein subunit alpha-1	2906	3849	1.32
51250	Uncharacterized protein C6orf203	234	310	1.32
7528	Transcriptional repressor protein YY1	721	955	1.32
163049	Zinc finger protein 791	149	197	1.32
26009	ZZ-type zinc finger-containing protein 3	23	31	1.32
-	Uncharacterized protein C17orf39	21	27	1.33
-	Zinc finger RNA-binding protein	230	305	1.33

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
8100	Intraflagellar transport protein 88 homolog	42	56	1.33
8636	Sjogren syndrome nuclear autoantigen 1	592	784	1.33
7352	Mitochondrial uncoupling protein 3	11	14	1.33
84311	39S ribosomal protein L45, mitochondrial Precursor	588	780	1.33
166647	Probable G-protein coupled receptor 125 Precursor	87	115	1.33
145748	LysM and putative peptidoglycan-binding domain-containing protein 4	23	30	1.33
118672	L-seryl-tRNA(Sec) kinase	20	27	1.33
6432	Splicing factor, arginine/serine-rich 7	173	230	1.33
154214	Probable E3 ubiquitin-protein ligase RNF217	6	8	1.33
89780	Protein Wnt-3a Precursor	7	9	1.33
57223	Serine/threonine-protein phosphatase 4 regulatory subunit 3B	28	36	1.33
-	-	16750	22209	1.33
-	-	598	793	1.33
3292	Estradiol 17-beta-dehydrogenase 1	10	14	1.33
79669	TPA-induced transmembrane protein	10	13	1.33
338667	-	7	9	1.33
642406	Contactin-associated protein-like 3B Precursor	107	142	1.33
116236	Abhydrolase domain-containing protein UNQ6510/PRO21435 Precursor	59	78	1.33
-	Odontogenic ameloblast-associated protein Precursor	9	12	1.33
27091	Voltage-dependent calcium channel gamma-5 subunit	12	16	1.33
90203	Sorting nexin-21	19	25	1.33
152687	Zinc finger protein 595	15	19	1.33
27246	RING finger protein 115	249	331	1.33
10346	Tripartite motif-containing protein 22	553	734	1.33
57335	zinc finger protein 286A (ZNF286A), transcript variant 1, mRNA	40	52	1.33
100290045	-	6	8	1.33
8624	Proteasome assembly chaperone 1	450	598	1.33
441308	Olfactory receptor 4F21	14	19	1.33
100288261	-	16	21	1.33
5372	Phosphomannomutase 1	89	119	1.33
-	-	821	1089	1.33
9827	Retrograde Golgi transport protein RGP1 homolog	16	21	1.33
7993	UBX domain-containing protein 8	131	174	1.33
57161	Protein pellino homolog 2	46	62	1.33
653052	Homeodomain-interacting protein kinase 2	24	32	1.33
55367	Leucine-rich repeat and death domain-containing protein	97	128	1.33
6811	Syntaxin-5	68	91	1.33
-	Protein DPCD	240	318	1.33
-	U1 small nuclear ribonucleoprotein C	1890	2511	1.33
100289268	-	5	7	1.33
100130880	-	6	7	1.33
5075	Paired box protein Pax-1	11	14	1.33
578	Bcl-2 homologous antagonist/killer	178	237	1.33
2021	Endonuclease G, mitochondrial Precursor	271	360	1.33
339345	Nanos homolog 2	52	69	1.33
7094	Talin-1	67	89	1.33
-	Coronin-2B	11	15	1.33
22841	Rab11 family-interacting protein 2	21	28	1.33
-	zinc finger protein 124	27	36	1.33
100132798	-	25	33	1.33

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
84984	UPF0709 protein C3orf34	13	18	1.33
5329	Urokinase plasminogen activator surface receptor Precursor	742	986	1.33
6442	Alpha-sarcoglycan Precursor	24	32	1.33
55599	RNA-binding protein 40	101	134	1.33
58477	Signal recognition particle receptor subunit beta	489	651	1.33
100294362	HCG2045502cDNA FLJ43351 fis, clone NT2RP7005846	12	17	1.33
5191	Peroxisomal targeting signal 2 receptor	45	60	1.33
7322	Ubiquitin-conjugating enzyme E2 D2	33	43	1.33
56994	Cholinephosphotransferase 1	245	326	1.33
54432	Protein YIPF1	186	247	1.33
10018	Bcl-2-like protein 11	21	28	1.33
6229	40S ribosomal protein S24	13232	17608	1.33
115273	Putative Ras-related protein Rab-42	17	23	1.33
284184	Uncharacterized protein C17orf89	2406	3202	1.33
54861	SNF-related serine/threonine-protein kinase	566	754	1.33
166	Amino-terminal enhancer of split	1598	2126	1.33
115548	FCH domain only protein 2	17	22	1.33
219402	Translation initiation factor IF-3, mitochondrial Precursor	271	361	1.33
144233	Probable methyltransferase BCDIN3D	83	111	1.33
7391	Upstream stimulatory factor 1	8	11	1.33
729492	-	8	10	1.33
6867	Transforming acidic coiled-coil-containing protein 1	404	538	1.33
1466	Cysteine and glycine-rich protein 2	166	221	1.33
-	TRAF3-interacting protein 1	30	40	1.33
51233	Putative uncharacterized protein LOC51233	115	153	1.33
9143	Synaptogyrin-3	12	16	1.33
221786	Uncharacterized protein C7orf38	29	39	1.33
9725	Transmembrane protein 63A	18	25	1.33
30833	5(3')-deoxyribonucleotidase, cytosolic type	172	229	1.33
79934	Uncharacterized aarF domain-containing protein kinase 4	27	35	1.33
4535	NADH-ubiquinone oxidoreductase chain 1	966	1288	1.33
54930	HAUS augmin-like complex, subunit 4 (HAUS4), mRNA	160	214	1.33
91975	Zinc finger protein 300	16	21	1.33
-	Dystrobrevin beta	23	30	1.33
5711	26S proteasome non-ATPase regulatory subunit 5	273	363	1.33
10289	Eukaryotic translation initiation factor 1b	893	1190	1.33
57820	E3 ubiquitin-protein ligase CCNB1IP1	475	633	1.33
9668	Zinc finger protein 615	24	32	1.33
729769	-	802	1069	1.33
23512	Polycomb protein SUZ12	200	267	1.33
-	Atlastin-1	73	97	1.33
26353	Heat shock protein beta-8	231	308	1.33
49855	S phase cyclin A-associated protein in the endoplasmic reticulum	23	30	1.33
7162	Trophoblast glycoprotein Precursor	212	282	1.33
-	Leucine-rich repeat-containing protein 43	22	30	1.33
8741	Tumor necrosis factor ligand superfamily member 13 Precursor	24	32	1.33
11212	Proline synthetase co-transcribed bacterial homolog protein	224	299	1.33
974	B-cell antigen receptor complex-associated protein beta-chain Precursor	19	25	1.33
-	Uncharacterized protein C1orf131	114	152	1.33
4294	Mitogen-activated protein kinase kinase kinase 10	9	12	1.33

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23412	COMM domain-containing protein 3	484	645	1.33
84650	Emopamil-binding protein-like	1048	1398	1.33
8972	Maltase-glucoamylase, intestinal [Includes Maltase	9	12	1.33
252969	Endonuclease VIII-like 2	145	193	1.33
94235	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-8 Precursor	8	11	1.33
22936	RNA polymerase II elongation factor ELL2	222	297	1.34
51010	Exosome complex exonuclease RRP40	269	360	1.34
5334	Inactive phospholipase C-like protein 1	13	17	1.34
-	Sialic acid-binding Ig-like lectin 16 Precursor	21	28	1.34
729920	2-C-methyl-D-erythritol 4-phosphate cytidyltransferase-like protein	11	15	1.34
-	Small nuclear ribonucleoprotein-associated proteins B and B'	1296	1731	1.34
9550	V-type proton ATPase subunit G 1	1381	1845	1.34
6838	Surfeit locus protein 6	317	423	1.34
-	cDNA: FLJ22686 fis, clone HSI10987	16	21	1.34
197322	Acyl-CoA synthetase family member 3, mitochondrial Precursor	40	54	1.34
92906	Heterogeneous nuclear ribonucleoprotein L-like	299	400	1.34
138428	Probable peptidyl-tRNA hydrolase	238	318	1.34
7775	Zinc finger protein 232	11	15	1.34
5971	Transcription factor RelB	68	92	1.34
8940	Phosphatidylinositol 4-kinase alpha	22	29	1.34
4124	Alpha-mannosidase 2	369	493	1.34
-	-	26	34	1.34
87769	AIG2-like domain-containing protein 1	38	51	1.34
-	-	95	126	1.34
2086	HERV-R_7q21.2 provirus ancestral Env polyprotein Precursor	94	126	1.34
389792	Immediate early response gene 5-like protein	19	25	1.34
91775	Protein FAM55C Precursor	25	34	1.34
23135	Histone demethylase JMJD3	11	15	1.34
84833	Upregulated during skeletal muscle growth protein 5	3087	4129	1.34
4585	Mucin-4 Precursor	16	22	1.34
23589	Calcium-regulated heat stable protein 1	410	549	1.34
8797	Tumor necrosis factor receptor superfamily member 10A Precursor	156	208	1.34
219437	Olfactory receptor 5L1	8	11	1.34
374877	Uncharacterized protein C19orf45	6	8	1.34
6902	Tubulin-specific chaperone A	1406	1881	1.34
81627	TRM1-like protein	39	53	1.34
10476	ATP synthase subunit d, mitochondrial	1325	1774	1.34
100131389	-	8	11	1.34
57711	Zinc finger protein 529	52	70	1.34
1046	Homeobox protein CDX-4	6	8	1.34
4485	Hepatocyte growth factor-like protein Precursor	14	19	1.34
11119	Butyrophilin subfamily 3 member A1 Precursor	15	20	1.34
100292370	-	11	14	1.34
25976	TCDD-inducible poly [ADP-ribose] polymerase	250	335	1.34
55052	39S ribosomal protein L20, mitochondrial Precursor	975	1306	1.34
8502	Plakophilin-4 (p0071)	39	52	1.34
5101	Protocadherin-9 Precursor	98	131	1.34
5099	Protocadherin-7 Precursor	13	18	1.34

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Putative 3-beta-HSD family protein ENSP00000330812	8	11	1.34
7571	Zinc finger protein 23	46	62	1.34
10240	28S ribosomal protein S31, mitochondrial Precursor	232	311	1.34
-	Protein prenyltransferase alpha subunit repeat-containing protein 1	6	7	1.34
84645	UPF0193 protein EVG1	15	20	1.34
55967	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 12	1466	1964	1.34
-	Ankyrin repeat and SOCS box protein 1	25	33	1.34
439996	Interferon-induced protein with tetratricopeptide repeats 1-like protein	11	15	1.34
-	Uncharacterized protein C13orf27	238	319	1.34
90637	AN1-type zinc finger protein 2A	197	265	1.34
57669	Band 4.1-like protein 5	19	26	1.34
92595	Zinc finger protein 764	46	62	1.34
8487	Survival of motor neuron protein-interacting protein 1	107	143	1.34
7030	Transcription factor E3	179	240	1.34
-	-	2066	2770	1.34
5269	Serpin B6	584	783	1.34
26507	Metal transporter CNNM1 (Cyclin-M1)	14	19	1.34
100291744	-	8	10	1.34
404672	General transcription factor IIH subunit 5	722	968	1.34
10656	KH domain-containing, RNA-binding, signal transduction-associated protein 3	170	228	1.34
402117	von Willebrand factor C domain-containing protein 2-like Precursor	7	9	1.34
7336	Ubiquitin-conjugating enzyme E2 variant 2	568	762	1.34
-	-	53	71	1.34
7633	Zinc finger protein 79	70	94	1.34
116068	LysM and putative peptidoglycan-binding domain-containing protein 3	42	56	1.34
26152	Zinc finger protein 337	147	197	1.34
-	Zinc finger protein 117	1038	1394	1.34
9013	TATA box-binding protein-associated factor RNA polymerase I subunit C	197	264	1.34
2873	COP9 signalosome complex subunit 1	480	645	1.34
85015	Ubiquitin carboxyl-terminal hydrolase 45	6	8	1.34
-	DNA excision repair protein ERCC-6	9	13	1.34
79868	UDP-N-acetylglucosamine transferase subunit ALG13 homolog	57	77	1.34
55316	Radical S-adenosyl methionine domain-containing protein 1, mitochondrial Precursor	254	341	1.34
55216	Uncharacterized protein C11orf57	36	48	1.34
8239	Probable ubiquitin carboxyl-terminal hydrolase FAF-X	45	61	1.34
100289096	-	13	17	1.34
1353	Cytochrome c oxidase assembly protein COX11, mitochondrial Precursor	402	540	1.34
653882	Mast/stem cell growth factor receptor Precursor	326	438	1.34
5203	Prefoldin subunit 4 (Protein C-1)	730	981	1.34
10741	Retinoblastoma-binding protein 9	21	28	1.34
79666	Pleckstrin homology domain-containing family F member 2	43	58	1.34
100130135	-	16	22	1.34
115196	Zinc finger protein 554	5	7	1.34
-	-	4694	6309	1.34
157680	Vacuolar protein sorting-associated protein 13B	11	15	1.34

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
130916	mTERF domain-containing protein 2	53	72	1.34
283871	Phosphoglycolate phosphatase	691	929	1.34
57654	Uncharacterized protein KIAA1530	14	19	1.34
23328	SAM and SH3 domain-containing protein 1	241	324	1.34
26083	Putative TBC1 domain family member 29	10	13	1.34
-	Uncharacterized protein C21orf67	10	14	1.34
59348	Zinc finger protein 350	63	85	1.34
11157	U6 snRNA-associated Sm-like protein LSm6	292	393	1.34
100291043	Keratin associated protein	10	13	1.34
134111	Probable ubiquitin-conjugating enzyme E2 FLJ25076	10	13	1.34
643783	-	10	13	1.34
4489	Metallothionein-1A	24	32	1.35
23460	ATP-binding cassette sub-family A member 6	21	29	1.35
29761	Ubiquitin carboxyl-terminal hydrolase 25	131	176	1.35
-	Peptidyl-prolyl cis-trans isomerase NIMA-interacting 4	38	51	1.35
11097	Nucleoporin-like 2	133	179	1.35
92521	Sperm antigen with calponin homology and coiled-coil domains 1	23	31	1.35
-	Leukocyte antigen CD37	9	13	1.35
6857	Synaptotagmin-1	50	68	1.35
654483	BolA-like protein 2	1304	1756	1.35
83849	Synaptotagmin-15	15	21	1.35
9649	Ras-specific guanine nucleotide-releasing factor RalGPS1	6	8	1.35
10123	ADP-ribosylation factor-like protein 4C	82	111	1.35
1915	Elongation factor 1-alpha 1	398	535	1.35
100287807	-	13	18	1.35
56052	Chitobiosyldiphosphodolichol beta-mannosyltransferase	171	230	1.35
9836	Leucine carboxyl methyltransferase 2	26	35	1.35
23382	Putative adenosylhomocysteinase 3	8	10	1.35
79780	Coiled-coil domain-containing protein 82	187	252	1.35
80143	Suppressor of IKK-epsilon	30	40	1.35
84918	Low-density lipoprotein receptor-related protein 11 Precursor	60	81	1.35
51098	Intraflagellar transport protein 52 homolog	310	418	1.35
84260	Trichoplein keratin filament-binding protein	78	106	1.35
10043	Target of Myb protein 1	339	457	1.35
-	Uncharacterized protein C9orf75	100	135	1.35
10555	1-acyl-sn-glycerol-3-phosphate acyltransferase beta	177	239	1.35
29081	Methyltransferase-like protein 5	869	1172	1.35
-	Pumilio domain-containing protein KIAA0020	231	311	1.35
353	Adenine phosphoribosyltransferase	2510	3386	1.35
7703	Polycomb group RING finger protein 2	77	104	1.35
84179	Major facilitator superfamily domain-containing protein 7	15	21	1.35
9136	U3 small nucleolar RNA-interacting protein 2	103	139	1.35
-	Serine/threonine-protein phosphatase 2A 56 kDa regulatory subunit gamma isoform	283	382	1.35
84992	Protein preY, mitochondrial Precursor	886	1195	1.35
10884	28S ribosomal protein S30, mitochondrial	263	355	1.35
285855	60S ribosomal protein L7-like 1	876	1182	1.35
2317	Filamin-B	6315	8522	1.35
10419	Protein arginine N-methyltransferase 5	126	170	1.35
-	Heat shock 70 kDa protein 1L	15	20	1.35
-	Interleukin-15 Precursor	19	25	1.35
3613	Inositol monophosphatase 2	147	199	1.35

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
79005	Sodium channel modifier 1	518	699	1.35
30834	DNA-directed RNA polymerase I subunit RPA12	211	285	1.35
84798	Uncharacterized protein C19orf48	307	415	1.35
84519	Acrosin-binding protein Precursor	7	10	1.35
375189	Profilin-4	13	18	1.35
117145	Thioesterase superfamily member 4	180	243	1.35
89845	Multidrug resistance-associated protein 7	12	16	1.35
-	Uncharacterized protein ENSP00000352682	7584	10244	1.35
51626	Cytoplasmic dynein 2 light intermediate chain 1	137	185	1.35
728153	Protein FAM133B	184	249	1.35
79018	Uncharacterized protein C17orf39	40	54	1.35
138151	BTB/POZ domain-containing protein 14A	41	55	1.35
-	Uncharacterized protein C14orf138	55	74	1.35
221294	5'-nucleotidase domain-containing protein 1	43	58	1.35
100128252	MGC9913 protein	99	134	1.35
79034	Uncharacterized protein C7orf26	340	460	1.35
5931	Histone-binding protein RBBP7	1414	1911	1.35
100130245	-	10	13	1.35
284542	-	6	8	1.35
57111	Ras-related protein Rab-25	10	13	1.35
5991	Transcription factor RFX3	12	16	1.35
11101	Arginyl-tRNA-protein transferase 1	11	15	1.35
90957	Putative ATP-dependent RNA helicase DHX57	40	55	1.35
3049	Hemoglobin subunit theta-1	12	16	1.35
10903	Myotubularin-related protein 11	6	9	1.35
64773	Protein FAM113A	11	15	1.35
120224	Transmembrane protein 45B	7	9	1.35
-	COMM domain-containing protein 6	3617	4893	1.35
389328	-	6	8	1.35
-	A-kinase anchor protein 11	22	30	1.35
100287820	Hypothetical gene supported by BC066547	7	9	1.35
-	Putative uncharacterized protein ENSP00000352053	23	31	1.35
64940	STAG3-like protein 4	91	123	1.35
8347	Histone H2B type 1-C/E/F/G/I	41	56	1.35
9778	Uncharacterized protein KIAA0232	25	34	1.35
80324	tRNA pseudouridine synthase A	116	157	1.35
54799	MBT domain-containing protein 1	51	69	1.35
57007	C-X-C chemokine receptor type 7	163	221	1.35
440275	Eukaryotic translation initiation factor 2'-alpha kinase 4	193	261	1.35
64333	Rho GTPase-activating protein 9	15	20	1.35
54980	Uncharacterized protein C2orf42	68	92	1.35
2281	Peptidyl-prolyl cis-trans isomerase FKBP1B	117	159	1.35
54919	HEAT repeat-containing protein 2	167	227	1.35
-	Protein delta homolog 1 Precursor	21	29	1.35
2235	Ferrochelatase, mitochondrial Precursor	65	88	1.35
255104	Transmembrane and coiled-coil domain-containing protein 4	49	66	1.35
-	Putative LRRC37B-like protein 2	93	126	1.35
3090	Hypermethylated in cancer 1 protein	11	16	1.36
30812	Transcription factor SOX-8	13	18	1.36
6118	Replication protein A 32 kDa subunit	398	540	1.36
84520	Uncharacterized protein C14orf142	151	205	1.36
163059	Zinc finger protein 433	12	16	1.36
100128528	CDNA FLJ26814 fis, clone PRS06344	343	465	1.36

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
84282	RING finger protein 135	241	327	1.36
83734	Autophagy-related protein 10	40	54	1.36
4542	Myosin-Ib (Myosin-Ie)	8	10	1.36
9522	Secretory carrier-associated membrane protein 1	107	145	1.36
3659	Interferon regulatory factor 1	142	192	1.36
-	UPF0428 protein CXorf56	33	45	1.36
-	Peptidyl-prolyl cis-trans isomerase, mitochondrial Precursor	108	146	1.36
65993	28S ribosomal protein S34, mitochondrial	489	664	1.36
7748	Zinc finger protein 195	159	216	1.36
-	Prominin-2 Precursor	8	10	1.36
571	Transcription regulator protein BACH1	224	304	1.36
-	-	3557	4830	1.36
51166	Kynurenine/alpha-aminoadipate aminotransferase mitochondrial Precursor	61	83	1.36
126969	Choline transporter-like protein 3	6	8	1.36
3995	Fatty acid desaturase 3	1291	1753	1.36
54737	M-phase phosphoprotein 8	79	107	1.36
100130943	-	8	11	1.36
8879	Sphingosine-1-phosphate lyase 1	44	60	1.36
163126	EP300-interacting inhibitor of differentiation 2	166	226	1.36
100287771	-	14	19	1.36
55012	Serine/threonine-protein phosphatase 2A regulatory subunit B'' subunit gamma	252	342	1.36
-	Serine/threonine-protein kinase D1	8	11	1.36
-	Annexin A4	1008	1369	1.36
23301	EH domain-binding protein 1	84	115	1.36
-	Protein arginine N-methyltransferase 3	77	105	1.36
84056	Katanin p60 ATPase-containing subunit A-like 1	42	58	1.36
728953	40S ribosomal protein S19	11	15	1.36
57570	tRNA (guanine-N(1))-methyltransferase	12	16	1.36
8452	Cullin-3	181	246	1.36
9446	Glutathione S-transferase omega-1	5018	6822	1.36
2729	Glutamate-cysteine ligase catalytic subunit	62	84	1.36
3313	Stress-70 protein, mitochondrial Precursor	548	745	1.36
8869	Lactosylceramide alpha-2,3-sialyltransferase	1127	1533	1.36
55100	WD repeat-containing protein 70	137	186	1.36
6147	60S ribosomal protein L23a	861	1171	1.36
10111	DNA repair protein RAD50	20	27	1.36
27345	Calcium-activated potassium channel subunit beta-4	48	65	1.36
-	Pescadillo homolog 1	85	115	1.36
27076	Ly6/PLAUR domain-containing protein 3 Precursor	6	8	1.36
199834	Late cornified envelope protein 4A	7	9	1.36
91687	Centromere protein L	16	21	1.36
100288201	-	5	7	1.36
54460	28S ribosomal protein S21, mitochondrial	1538	2094	1.36
81614	Non-imprinted in Prader-Willi/Angelman syndrome region protein 2	693	944	1.36
5228	Placenta growth factor Precursor	968	1317	1.36
5695	Proteasome subunit beta type-7 Precursor	3120	4248	1.36
-	Integral membrane protein 2B	1485	2022	1.36
63939	Uncharacterized protein C20orf177	30	40	1.36
285148	Isoamyl acetate-hydrolyzing esterase 1 homolog	467	636	1.36
83448	Pseudouridylate synthase 7 homolog-like protein	19	25	1.36

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	WD repeat-containing protein LOC51057	13	18	1.36
55695	Putative methyltransferase NSUN5	22	30	1.36
388730	Transmembrane protein 81 Precursor	13	18	1.36
-	Gem-associated protein 6	150	204	1.36
2936	Glutathione reductase, mitochondrial Precursor	142	194	1.36
55326	1-acyl-sn-glycerol-3-phosphate acyltransferase epsilon	255	347	1.36
-	SLC26A1 protein	12	16	1.36
5684	Proteasome subunit alpha type-3	1433	1953	1.36
3682	Integrin alpha-E Precursor	473	645	1.36
-	Putative uncharacterized protein LOC100009676	19	26	1.36
84830	Uncharacterized protein C6orf105	126	172	1.36
2058	Bifunctional aminoacyl-tRNA synthetase	933	1271	1.36
164284	Protein APCDD1-like Precursor	12	16	1.36
64112	Modulator of apoptosis 1	68	93	1.36
6671	Transcription factor Sp4	10	14	1.36
23008	Kelch repeat domain-containing protein 10	63	87	1.36
65124	Ankyrin repeat domain-containing protein 57	37	51	1.36
28977	28S ribosomal protein S32, mitochondrial Precursor	781	1066	1.36
84455	EF-hand calcium-binding domain-containing protein 7	56	76	1.36
2963	General transcription factor IIF subunit 2	337	460	1.36
5903	E3 SUMO-protein ligase RanBP2	742	1013	1.36
145376	Uncharacterized protein C14orf50	10	13	1.36
178	Glycogen debranching enzyme	66	91	1.37
5217	Profilin-2	473	646	1.37
9969	Mediator of RNA polymerase II transcription subunit 13	39	54	1.37
51136	RING finger and transmembrane domain-containing protein 1	108	148	1.37
-	Uncharacterized protein ENSP00000240349	1961	2679	1.37
54543	Mitochondrial import receptor subunit TOM7 homolog	3908	5340	1.37
10549	Peroxisome oxidoreductin-4	1422	1943	1.37
7005	Transcriptional enhancer factor TEF-5	14	19	1.37
26548	Integrin beta-1-binding protein 2	6	8	1.37
-	Uncharacterized protein C17orf99 Precursor	6	8	1.37
836	Caspase-3 Precursor	447	612	1.37
2965	General transcription factor IIF subunit 1	249	340	1.37
116064	Leucine-rich repeat-containing protein 58	32	44	1.37
4126	Beta-mannosidase Precursor	90	123	1.37
401251	MutS protein homolog 5	12	17	1.37
23347	Structural maintenance of chromosomes flexible hinge domain-containing protein 1	8	11	1.37
10694	T-complex protein 1 subunit theta	1987	2718	1.37
56954	Nitrilase homolog 2	203	278	1.37
7138	Troponin T, slow skeletal muscle	39	54	1.37
23492	Chromobox protein homolog 7	47	65	1.37
-	Olfactory receptor 2AP1	11	15	1.37
27292	Probable dimethyladenosine transferase	135	185	1.37
-	Rho GTPase-activating protein 22	21	28	1.37
-	E3 ubiquitin-protein ligase UBR1	22	29	1.37
1855	Segment polarity protein dishevelled homolog DVL-1	603	825	1.37
965	Lymphocyte function-associated antigen 3 Precursor	226	309	1.37
100293737	Protein phosphatase 1 regulatory subunit 14B	1176	1610	1.37
472	Serine-protein kinase ATM	12	16	1.37
-	-	54	73	1.37

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
8659	Delta-1-pyrroline-5-carboxylate dehydrogenase, mitochondrial Precursor	14	19	1.37
134285	Transmembrane protein 171	69	94	1.37
117584	E3 ubiquitin-protein ligase riflylin	14	20	1.37
100289572	-	7	9	1.37
165215	Protein FAM171B Precursor	24	33	1.37
9014	TATA box-binding protein-associated factor RNA polymerase I subunit B	83	113	1.37
-	-	6371	8732	1.37
284129	Sodium-independent sulfate anion transporter	199	273	1.37
25791	Ephexin-1	72	98	1.37
57666	Fibrosin-1-like protein	58	80	1.37
79635	Coiled-coil domain-containing protein 121	10	14	1.37
617	Mitochondrial chaperone BCS1	238	326	1.37
54902	Tetratricopeptide repeat protein 19	159	218	1.37
10404	Plasma glutamate carboxypeptidase Precursor	139	191	1.37
6629	U2 small nuclear ribonucleoprotein B"	1236	1695	1.37
-	Ribosomal L1 domain-containing protein 1	855	1172	1.37
-	Nucleobindin-2 Precursor	839	1151	1.37
-	Vav-like protein C9orf100	9	13	1.37
7518	DNA repair protein XRCC4	72	98	1.37
23367	La-related protein 1	101	138	1.37
10436	Probable ribosome biogenesis protein NEP1	180	247	1.37
283377	SPRY domain-containing protein 4	84	115	1.37
151556	Integral membrane protein GPR155	11	16	1.37
-	Calmodulin-binding transcription activator 2	377	518	1.37
4141	Methionyl-tRNA synthetase, cytoplasmic	337	463	1.37
-	Zinc finger protein 347	17	23	1.37
23513	Protein LAP4	6	8	1.37
9100	Ubiquitin carboxyl-terminal hydrolase 10	264	363	1.37
54361	Protein Wnt-4 Precursor	12	17	1.37
115416	Uncharacterized protein C7orf30	928	1274	1.37
284123	Protein FAM27L	12	16	1.37
6310	Ataxin-1	6	9	1.37
83706	Fermitin family homolog 3	137	188	1.37
100289702	-	200	275	1.37
5582	Protein kinase C gamma type	11	15	1.37
202051	Testis protein T6441 homolog	22	31	1.37
5771	Tyrosine-protein phosphatase non-receptor type 2	108	149	1.37
6584	Solute carrier family 22 member 5	15	20	1.37
7220	Short transient receptor potential channel 1	51	70	1.37
54802	tRNA isopentenyltransferase, mitochondrial Precursor	73	101	1.37
-	Apical endosomal glycoprotein Precursor	14	20	1.37
8943	AP-3 complex subunit delta-1	1384	1903	1.37
203523	Zinc finger protein 449	51	69	1.37
30	3-ketoacyl-CoA thiolase, peroxisomal Precursor	456	627	1.37
-	Loss of heterozygosity 12 chromosomal region 1 protein	32	43	1.38
55909	Bridging integrator 3	131	180	1.38
23358	Ubiquitin carboxyl-terminal hydrolase 24	9	12	1.38
5053	Phenylalanine-4-hydroxylase	5	7	1.38
-	Nuclear migration protein nudC	353	485	1.38
7730	Zinc finger protein 177	19	26	1.38
79707	Nucleolar protein 9	35	48	1.38
25895	Protein FAM119B	33	45	1.38

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
162417	N-acetylglutamate synthase, mitochondrial Precursor	16	22	1.38
10137	Copine-1	44	60	1.38
5457	POU domain, class 4, transcription factor 1	7	10	1.38
-	Zinc finger SWIM domain-containing protein 6 Fragment	357	491	1.38
55699	Isoleucyl-tRNA synthetase, mitochondrial Precursor	452	622	1.38
89782	Leishmanolysin-like peptidase	13	17	1.38
113402	Vesicle transport protein SFT2A	616	847	1.38
51101	UPF0418 protein FAM164A	244	336	1.38
64960	28S ribosomal protein S15, mitochondrial Precursor	1146	1578	1.38
116442	Ras-related protein Rab-39B	8	12	1.38
26235	F-box/LRR-repeat protein 4	74	102	1.38
-	Zinc finger CCHC domain-containing protein 10	46	63	1.38
55684	Putative GTP-binding protein Parf	87	120	1.38
9532	BAG family molecular chaperone regulator 2	55	75	1.38
-	Protein MICAL-2	12	16	1.38
-	Putative olfactory receptor 51H1	6	8	1.38
64425	DNA-directed RNA polymerase I subunit RPA49	67	92	1.38
9572	Nuclear receptor subfamily 1 group D member 1	12	16	1.38
6840	Supervillin (Archvillin) (p205/p250)	470	648	1.38
26160	Intraflagellar transport protein 172 homolog	45	63	1.38
5051	Platelet-activating factor acetylhydrolase 2, cytoplasmic	27	37	1.38
-	Putative uncharacterized protein	8	10	1.38
6447	Neuroendocrine protein 7B2 Precursor	35	48	1.38
4041	Low-density lipoprotein receptor-related protein 5 Precursor	7	10	1.38
57562	Uncharacterized protein KIAA1377	23	32	1.38
3351	5-hydroxytryptamine receptor 1B	7	10	1.38
26531	Olfactory receptor 11A1	13	18	1.38
100128691	-	6	8	1.38
3622	Inhibitor of growth protein 2 (p33ING2)	77	106	1.38
10153	CCAAT/enhancer-binding protein zeta	624	860	1.38
-	Exonuclease domain-containing protein 1	29	39	1.38
80167	Uncharacterized protein C4orf29 Precursor	41	57	1.38
9	Arylamine N-acetyltransferase 1	25	34	1.38
9742	Intraflagellar transport protein 140 homolog	10	14	1.38
126433	F-box only protein 27	43	60	1.38
7562	Zinc finger protein 708	566	781	1.38
22995	Centrosomal protein of 152 kDa	19	27	1.38
79864	Uncharacterized protein C11orf63	27	38	1.38
9423	Netrin-1 Precursor	7	9	1.38
84298	Protein LLP homolog	242	334	1.38
56521	DnaJ homolog subfamily C member 12	9	13	1.38
153129	Putative sodium-coupled neutral amino acid transporter 9	146	202	1.38
83699	SH3 domain-binding glutamic acid-rich-like protein 2	16	23	1.38
-	-	279	385	1.38
8479	HIRA-interacting protein 3	14	19	1.38
9249	Short-chain dehydrogenase/reductase 3	313	433	1.38
23645	Protein phosphatase 1 regulatory subunit 15A	137	190	1.38
51058	Zinc finger protein 691	18	25	1.38
100291353	-	6	8	1.38
79809	Tetratricopeptide repeat protein 21B	9	13	1.38
-	Putative RNA methyltransferase NOL1	170	235	1.38
53340	Sperm surface protein Sp17	102	142	1.38
-	Seipin	221	306	1.38
55508	Solute carrier family 35 member E3	115	159	1.38

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
93594	WD repeat-containing protein 67	10	13	1.38
91624	Nexilin	152	211	1.38
25799	Zinc finger protein 324A	19	26	1.38
1363	Carboxypeptidase E Precursor	167	232	1.38
1730	Protein diaphanous homolog 2	133	184	1.38
97	Acylphosphatase-1	203	280	1.38
84306	Programmed cell death protein 2-like	109	151	1.38
3376	Isoleucyl-tRNA synthetase, cytoplasmic	552	764	1.38
57567	Zinc finger protein 319	18	25	1.38
79591	UPF0668 protein C10orf76	10	13	1.38
84081	Coiled-coil domain-containing protein 55	114	158	1.38
729420	cDNA FLJ35379 fis, clone SKMUS2006481	7	10	1.38
-	Uncharacterized protein ENSP00000354148 Fragment	163	225	1.38
115207	BTB/POZ domain-containing protein KCTD12	687	951	1.39
79929	MAP6 domain-containing protein 1	19	27	1.39
9308	CD83 antigen Precursor	8	12	1.39
54465	Ewing's tumor-associated antigen 1	103	143	1.39
11040	Serine/threonine-protein kinase Pim-2	14	20	1.39
57568	Signal-induced proliferation-associated 1-like protein 2	87	121	1.39
-	Protein FAM44B	667	925	1.39
140832	WAP four-disulfide core domain protein 10A Precursor	20	28	1.39
267002	PiggyBac transposable element-derived protein 2	9	12	1.39
56477	C-C motif chemokine 28 Precursor	8	11	1.39
4775	Nuclear factor of activated T-cells, cytoplasmic 3	24	34	1.39
-	Phenylethanolamine N-methyltransferase	10	13	1.39
54206	ERBB receptor feedback inhibitor 1	43	59	1.39
23179	Ral guanine nucleotide dissociation stimulator-like 1	153	212	1.39
641339	Zinc finger protein 674	45	63	1.39
6361	C-C motif chemokine 17 Precursor	35	49	1.39
87178	Polyribonucleotide nucleotidyltransferase 1, mitochondrial Precursor	241	334	1.39
100133506	p53-regulated apoptosis-inducing protein 1 (p53AIP1)	13	17	1.39
10742	Retinoic acid-induced protein 2	14	19	1.39
3225	Homeobox protein Hox-C9	25	35	1.39
100132108	-	39	55	1.39
135112	Nuclear receptor coactivator 7	31	43	1.39
-	Tudor domain-containing protein PHF20L1	221	306	1.39
9589	Pre-mRNA-splicing regulator WTAP	349	485	1.39
55585	Ubiquitin-conjugating enzyme E2 Q1	492	684	1.39
119764	Olfactory receptor 4X2	15	21	1.39
4613	N-myc proto-oncogene protein	53	73	1.39
100290917	-	17	24	1.39
145567	Tetratricopeptide repeat protein 7B	143	199	1.39
80003	Pecanex-like protein 2	15	20	1.39
112483	Diamine acetyltransferase 2	566	786	1.39
5959	11-cis retinol dehydrogenase	10	14	1.39
-	-	1117	1552	1.39
55342	Spermatid perinuclear RNA-binding protein	30	41	1.39
1875	Transcription factor E2F5	68	95	1.39
100129361	-	437	608	1.39
84436	Zinc finger protein 528	7	10	1.39
112802	Keratin, type II cytoskeletal 71	157	218	1.39
169270	Zinc finger protein 596	19	27	1.39
-	-	225	313	1.39

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
92335	STE20-related kinase adapter protein alpha	38	53	1.39
9568	Gamma-aminobutyric acid type B receptor subunit 2 Precursor	82	114	1.39
642393	39S ribosomal protein L20, mitochondrial Precursor	529	735	1.39
200895	Dihydrofolate reductase-like protein 1	7	9	1.39
54585	Leucine zipper transcription factor-like protein 1	67	93	1.39
55274	PHD finger protein 10	418	581	1.39
7203	T-complex protein 1 subunit gamma	1806	2515	1.39
645840	Putative protein TR2IT1	45	63	1.39
63035	BCoR-like protein 1	10	14	1.39
51340	Crooked neck-like protein 1	192	267	1.39
6742	Single-stranded DNA-binding protein, mitochondrial Precursor	1148	1600	1.39
29895	Myosin regulatory light chain 2, skeletal muscle isoform	2323	3236	1.39
64949	28S ribosomal protein S26, mitochondrial Precursor	439	611	1.39
4189	DnaJ homolog subfamily B member 9	232	324	1.39
64077	Phospholysine phosphohistidine inorganic pyrophosphate phosphatase	18	25	1.39
100292959	-	7	10	1.39
7096	Toll-like receptor 1 Precursor	8	11	1.39
79609	Uncharacterized protein C14orf138	82	115	1.39
-	L-2-hydroxyglutarate dehydrogenase, mitochondrial Precursor	16	22	1.39
79074	Ashwin	82	114	1.39
728944	THAP domain-containing protein 4	366	511	1.39
22862	Fibronectin type-III domain-containing protein 3a	317	442	1.39
23500	Disheveled-associated activator of morphogenesis 2	10	14	1.39
23764	Transcription factor MafF	193	270	1.39
-	Cell division cycle protein 16 homolog	789	1099	1.39
7752	Zinc finger protein 200	42	59	1.39
5552	Serglycin Precursor	5502	7672	1.39
5778	Tyrosine-protein phosphatase non-receptor type 7	8	11	1.39
80321	Centrosomal protein of 70 kDa	28	40	1.39
6248	Regulatory solute carrier protein family 1 member 1	31	43	1.39
10406	WAP four-disulfide core domain protein 2 Precursor	11	15	1.39
7251	Tumor susceptibility gene 101 protein	350	488	1.39
115352	Fc receptor-like protein 3 Precursor	12	17	1.39
256643	Uncharacterized protein CXorf23	59	83	1.40
100129417	-	26	37	1.40
90321	Zinc finger protein 766	66	92	1.40
231	Aldose reductase	1483	2069	1.40
9875	Nucleolar pre-ribosomal-associated protein 1	53	74	1.40
6158	60S ribosomal protein L28	88	123	1.40
401562	lipocalin-like 1 protein	16	23	1.40
-	G1/S-specific cyclin-E1	47	65	1.40
100293435	-	17	24	1.40
5698	Proteasome subunit beta type-9 Precursor	69	97	1.40
1947	Ephrin-B1 Precursor	38	53	1.40
148137	Uncharacterized protein C19orf55	5	7	1.40
-	Limkain-b1	134	188	1.40
4319	Stromelysin-2 Precursor	494	690	1.40
84100	ADP-ribosylation factor-like protein 6	15	21	1.40
23145	SCO-spondin Precursor	6	9	1.40
-	Uncharacterized protein C20orf199	1982	2769	1.40

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
22984	Protein RRP5 homolog	150	209	1.40
10541	NKG2-E type II integral membrane protein	2924	4084	1.40
51406	Nucleolar protein 7	759	1060	1.40
729549	-	44	61	1.40
83856	FSD1-like protein	15	22	1.40
8431	Nuclear receptor subfamily 0 group B member 2	5	7	1.40
-	-	12712	17774	1.40
-	Recombining binding protein suppressor of hairless-like protein	20	28	1.40
400624	cDNA FLJ46474 fis, clone THYMU3024164	8	11	1.40
8724	Sorting nexin-3	703	983	1.40
345757	Membrane protein FAM174A Precursor	142	199	1.40
2628	Glycine amidinotransferase, mitochondrial Precursor	5	7	1.40
387328	Zinc finger protein 322B	16	23	1.40
10586	Protein mab-21-like 2	7	9	1.40
28968	Orphan sodium- and chloride-dependent neurotransmitter transporter NTT5	6	8	1.40
26291	Fibroblast growth factor 21 Precursor	15	21	1.40
64598	Motile sperm domain-containing protein 3	17	23	1.40
-	-	229	321	1.40
5818	Poliovirus receptor-related protein 1 Precursor	19	27	1.40
51666	Ankyrin repeat and SOCS box protein 4	6	9	1.40
-	-	6	8	1.40
3739	Potassium voltage-gated channel subfamily A member 4	14	20	1.40
64417	Transmembrane protein C5orf28	49	68	1.40
-	LOC388906 proteinHCG2038564 Fragment	8	11	1.40
-	-	68	95	1.40
6538	Sodium- and chloride-dependent GABA transporter 3	10	13	1.40
84070	Uncharacterized protein C12orf25	7	10	1.40
284266	Sialic acid-binding Ig-like lectin 15 Precursor	10	14	1.40
223082	E3 ubiquitin-protein ligase ZNRF2	15	20	1.40
3912	Laminin subunit beta-1 Precursor	2482	3477	1.40
100292553	-	20	28	1.40
100287665	-	6	9	1.40
-	Thioesterase superfamily member 4	150	210	1.40
-	Alpha-(1,6)-fucosyltransferase	78	109	1.40
387990	TOMM20-like protein 1	16	22	1.40
-	Cysteine desulfurase, mitochondrial Precursor	31	43	1.40
1022	Cell division protein kinase 7	528	740	1.40
10929	splicing factor, arginine/serine-rich 2B	71	99	1.40
4155	Myelin basic protein	10	14	1.40
653877	Small subunit processome component 20 homolog	128	179	1.40
-	-	189	265	1.40
4716	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 10	812	1138	1.40
-	Homeobox protein MSX-1	66	93	1.40
64769	Uncharacterized protein C1orf149	234	328	1.40
-	Zinc finger protein 343	15	20	1.40
25870	Sulfatase-modifying factor 2 Precursor	381	535	1.40
84259	DCN1-like protein 5	419	587	1.40
4710	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 4	26	37	1.40
197370	Non-structural maintenance of chromosomes element 1 homolog	586	821	1.40

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
54865	G patch domain-containing protein 4	254	356	1.40
673	B-Raf proto-oncogene serine/threonine-protein kinase	10	15	1.40
3431	Sp110 nuclear body protein	71	100	1.40
-	Zinc finger protein 77	9	12	1.40
-	-	16	22	1.40
64801	Protein ARV1	138	194	1.40
116540	39S ribosomal protein L53, mitochondrial Precursor	1094	1536	1.40
55248	Transmembrane protein 206	165	232	1.40
54942	UPF0436 protein C9orf6	104	146	1.40
79630	Uncharacterized protein C1orf54 Precursor	1020	1432	1.40
9618	TNF receptor-associated factor 4	165	232	1.40
84928	Transmembrane protein 209	43	61	1.40
127018	Lysophospholipase-like protein 1	354	497	1.40
91179	Scavenger receptor class F member 2 Precursor	9	12	1.40
55665	Protein URG4	27	37	1.40
26136	Testin	236	331	1.41
148867	Zinc transporter 7	41	58	1.41
100288082	-	244	343	1.41
399473	Sprouty-related, EVH1 domain-containing protein 3	9	13	1.41
11237	RING finger protein 24	109	153	1.41
9913	STAGA complex 65 subunit gamma	50	71	1.41
221078	Putative methyltransferase NSUN6	30	42	1.41
2117	ETS translocation variant 3	22	31	1.41
10975	Cytochrome b-c1 complex subunit 10	1574	2214	1.41
3396	Immature colon carcinoma transcript 1 protein Precursor	326	459	1.41
55586	Inositol oxygenase	9	13	1.41
-	Probable saccharopine dehydrogenase	612	861	1.41
8654	cGMP-specific 3',5'-cyclic phosphodiesterase	11	16	1.41
-	Zinc finger protein RFP	81	114	1.41
7555	Cellular nucleic acid-binding protein	2583	3635	1.41
54509	Rho-related GTP-binding protein RhoF Precursor	17	24	1.41
6146	60S ribosomal protein L22	1644	2314	1.41
55554	Kallikrein-15 Precursor	11	16	1.41
22822	Pleckstrin homology-like domain family A member 1	57	80	1.41
54627	Uncharacterized protein KIAA1383	17	24	1.41
25989	Serine/threonine-protein kinase ULK3	162	228	1.41
56127	Protocadherin beta-10 Precursor	6	9	1.41
7041	Transforming growth factor beta-1-induced transcript 1 protein	500	705	1.41
9467	SH3 domain-binding protein 5	752	1059	1.41
-	Putative quinone oxidoreductase	470	662	1.41
100292543	-	12	17	1.41
84246	Mediator of RNA polymerase II transcription subunit 10	561	790	1.41
84307	Zinc finger protein 397	17	24	1.41
7071	Krueppel-like factor 10	169	238	1.41
100132552	Homogentisate 1,2-dioxygenase	6	8	1.41
790955	Uncharacterized protein C11orf83 Precursor	137	193	1.41
6880	Adenylate kinase isoenzyme 6	368	519	1.41
100130996	-	6	8	1.41
5796	Receptor-type tyrosine-protein phosphatase kappa Precursor	60	84	1.41
285550	hypothetical protein LOC285550	19	27	1.41
143686	Sestrin-3	10	15	1.41
1053	CCAAT/enhancer-binding protein epsilon	14	20	1.41

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
8565	Tyrosyl-tRNA synthetase, cytoplasmic	525	740	1.41
56271	Protein BEX4	716	1010	1.41
6346	C-C motif chemokine 1 Precursor	23	32	1.41
-	-	598	844	1.41
7589	Zinc finger and SCAN domain-containing protein 21	27	38	1.41
-	Metalloendopeptidase OMA1, mitochondrial Precursor	52	74	1.41
182	Protein jagged-1 Precursor	62	88	1.41
639	PR domain zinc finger protein 1	61	86	1.41
55610	Coiled-coil domain-containing protein 132	28	39	1.41
57205	Probable phospholipid-transporting ATPase VD	45	63	1.41
720	Complement C4-B Precursor	9	13	1.41
5361	Plexin-A1 Precursor	233	330	1.41
202459	oligosaccharyltransferase complex subunit-like	419	592	1.41
57643	Zinc finger SWIM domain-containing protein 5	10	14	1.41
51022	Glutaredoxin-2, mitochondrial Precursor	205	290	1.41
23020	U5 small nuclear ribonucleoprotein 200 kDa helicase	11	15	1.41
51122	COMM domain-containing protein 2	198	280	1.41
2919	Growth-regulated alpha protein Precursor	80	113	1.41
284352	Putative uncharacterized protein ENSP00000221462	9	13	1.41
9487	N-acetylglucosaminyl-phosphatidylinositol de-N-acetylase	57	81	1.41
9092	U4/U6.U5 tri-snRNP-associated protein 1	245	346	1.41
112869	SAGA-associated factor 29 homolog	58	82	1.41
55835	Centromere protein J	57	81	1.41
16	Alanyl-tRNA synthetase, cytoplasmic	1005	1421	1.41
55529	Transmembrane protein 55A	24	34	1.41
196513	mRNA-decapping enzyme 1B	138	195	1.41
-	Matrix-remodeling-associated protein 8 Precursor (Limitrin)	11	16	1.41
100293177	-	10	14	1.41
3575	Interleukin-7 receptor subunit alpha Precursor	7	10	1.41
-	-	18	25	1.41
-	UPF0384 protein CGI-117	302	427	1.41
-	CDNA: FLJ22294 fis, clone HRC04426	126	179	1.42
24138	Interferon-induced protein with tetratricopeptide repeats 5	19	26	1.42
3915	Laminin subunit gamma-1 Precursor	158	223	1.42
2632	1,4-alpha-glucan-branching enzyme	2173	3075	1.42
285172	Protein FAM126B	99	140	1.42
63877	Uncharacterized protein C10orf84 wiss-Prot:Acc:Q9H8W3]	229	324	1.42
-	Nucleoporin p54	178	252	1.42
2114	Protein C-ets-2	265	375	1.42
-	Leucine-rich repeat-containing protein C10orf11	56	79	1.42
10892	Mucosa-associated lymphoid tissue lymphoma translocation protein 1	20	28	1.42
254973	Olfactory receptor 1L4	11	16	1.42
100293826	-	6	8	1.42
8882	Zinc finger protein ZPR1	401	569	1.42
4636	Myosin light chain 5	69	97	1.42
10588	5-formyltetrahydrofolate cyclo-ligase	111	157	1.42
80741	Lymphocyte antigen 6 complex locus protein G5c Precursor	41	58	1.42
2184	Fumarylacetoacetase	122	172	1.42
64768	Inositol-pentakisphosphate 2-kinase	53	76	1.42
84639	Interleukin-1 family member 10	8	11	1.42
92086	Gamma-glutamyltransferase light chain 1	5	8	1.42
84897	Transforming growth factor beta regulator 1	85	120	1.42

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55246	Coiled-coil domain-containing protein 25	70	100	1.42
-	Zinc finger protein 501	22	31	1.42
7117	Thymosin beta-4-like protein 3	19324	27420	1.42
-	Cytochrome P450 20A1	91	129	1.42
57143	Uncharacterized aarF domain-containing protein kinase 1 Precursor	13	18	1.42
10723	Solute carrier family 12 member 7	113	160	1.42
119710	Uncharacterized protein C11orf74	230	326	1.42
-	-	1119	1589	1.42
8822	Fibroblast growth factor 17 Precursor	6	9	1.42
-	Protein lin-54 homolog	18	26	1.42
114884	Oxysterol-binding protein-related protein 10	213	303	1.42
100289954	-	305	434	1.42
57616	Teashirt homolog 3	9	13	1.42
56983	KTEL motif-containing protein 1 Precursor	231	329	1.42
347731	Leucine-rich repeat transmembrane neuronal protein 3 Precursor	6	8	1.42
55721	IQ domain-containing protein C	10	15	1.42
-	Uncharacterized protein FLJ35848	9	12	1.42
51096	U3 small nucleolar RNA-associated protein 18 homolog	433	616	1.42
1297	Collagen alpha-1(I) chain Precursor	6	8	1.42
11000	Long-chain fatty acid transport protein 3	231	329	1.42
100132701	-	12	17	1.42
64983	39S ribosomal protein L32, mitochondrial Precursor	486	691	1.42
-	-	10	15	1.42
4671	Baculoviral IAP repeat-containing protein 1	10	15	1.42
5481	40 kDa peptidyl-prolyl cis-trans isomerase	246	350	1.42
100128319	Putative uncharacterized protein STRF7	6	9	1.42
320	Amyloid beta A4 precursor protein-binding family A member 1	7	10	1.42
-	Protection of telomeres protein 1	49	70	1.42
-	Dihydropyrimidinase-related protein 4	76	109	1.42
55668	Uncharacterized protein C14orf118	45	65	1.42
-	Cyclin-related protein FAM58A (Cyclin-M)	280	398	1.42
27000	DnaJ homolog subfamily C member 2	228	325	1.42
-	-	34	49	1.42
353332	Keratin-associated protein 12-1	13	19	1.42
51441	YTH domain family protein 2	831	1184	1.43
7976	Frizzled-3 Precursor	19	27	1.43
9258	Malignant fibrous histiocytoma-amplified sequence 1	42	59	1.43
4609	Myc proto-oncogene protein	323	460	1.43
-	AT-rich interactive domain-containing protein 3B	11	16	1.43
3781	Small conductance calcium-activated potassium channel protein 2	23	33	1.43
84681	Histidine triad nucleotide-binding protein 2 Precursor	320	455	1.43
10650	Protein slowmo homolog 1	33	47	1.43
100289853	-	6	8	1.43
55907	N-acetylneuraminate cytidylyltransferase	403	575	1.43
8784	Tumor necrosis factor receptor superfamily member 18 Precursor	83	118	1.43
55315	Equilibrative nucleoside transporter 3	83	119	1.43
5918	Retinoic acid receptor responder protein 1	20	29	1.43
51665	Ankyrin repeat and SOCS box protein 1	152	217	1.43
285672	Protein SFRS12IP1	563	804	1.43

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Aldehyde dehydrogenase, dimeric NADP-preferring	5	7	1.43
100290929	-	12	17	1.43
-	-	9	12	1.43
6917	Transcription elongation factor A protein 1	278	398	1.43
-	Dachshund homolog 1	195	278	1.43
51720	BRCA1-A complex subunit RAP80	151	216	1.43
7762	Zinc finger protein 215	14	20	1.43
219	Aldehyde dehydrogenase X, mitochondrial Precursor	108	154	1.43
100290027	-	9	12	1.43
65992	DDRCK domain-containing protein 1 Precursor	391	560	1.43
162979	Zinc finger protein 296	17	25	1.43
22873	Zinc finger protein DZIP1	58	83	1.43
29914	UbiA prenyltransferase domain-containing protein 1	56	81	1.43
55003	p21-activated protein kinase-interacting protein 1	230	329	1.43
25888	Zinc finger protein 473	22	31	1.43
-	Structural maintenance of chromosomes protein 1B	7	11	1.43
317781	ATP-dependent RNA helicase DDX51	90	129	1.43
1877	Transcription factor E4F1	271	387	1.43
55237	Uncharacterized protein C14orf115	7	10	1.43
-	U3 small nucleolar ribonucleoprotein protein IMP4	172	247	1.43
79582	Sperm-associated antigen 16 protein	73	104	1.43
-	Seryl-tRNA synthetase, cytoplasmic	972	1393	1.43
8503	Phosphatidylinositol 3-kinase regulatory subunit gamma	6	9	1.43
9518	Growth/differentiation factor 15 Precursor	3442	4932	1.43
23291	F-box/WD repeat-containing protein 11	20	29	1.43
763	Carbonic anhydrase 5A, mitochondrial Precursor	8	11	1.43
51018	RRP15-like protein	16	23	1.43
7559	Zinc finger protein 12	105	151	1.43
1036	Cysteine dioxygenase type 1	15	22	1.43
-	Zinc finger protein 257	41	59	1.43
201254	Stimulated by retinoic acid gene 13 protein homolog	429	615	1.43
5803	Receptor-type tyrosine-protein phosphatase zeta Precursor	9	14	1.43
4718	NADH dehydrogenase [ubiquinone] 1 subunit C2	69	99	1.43
80149	Zinc finger CCCH domain-containing protein 12A	12	18	1.43
51154	mRNA turnover protein 4 homolog	580	831	1.43
10973	Activating signal cointegrator 1 complex subunit 3	57	82	1.43
55663	Zinc finger protein 446	60	86	1.43
-	Rab11 family-interacting protein 2	70	100	1.44
-	PHD finger protein 11	150	215	1.44
64288	Zinc finger protein 323	39	56	1.44
55788	Probable lysosomal cobalamin transporter	217	312	1.44
5613	Serine/threonine-protein kinase PRKX	146	209	1.44
145853	Uncharacterized protein C15orf61 Precursor	179	257	1.44
-	B9 domain-containing protein 1	143	206	1.44
60509	Cytosolic carboxypeptidase-like protein 5	100	143	1.44
1052	CCAAT/enhancer-binding protein delta	6	9	1.44
55142	Centrosomal protein of 27 kDa	128	183	1.44
9497	Sodium bicarbonate cotransporter 3	7	10	1.44
100128737	-	5	8	1.44
4935	G-protein coupled receptor 143	39	56	1.44
8676	Syntaxin-11	40	57	1.44
10808	Heat shock protein 105 kDa	1312	1887	1.44
292	ADP/ATP translocase 2	2232	3209	1.44
284716	Ribosomal protein S6 modification-like protein A	10	14	1.44

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
24140	Putative ribosomal RNA methyltransferase 1	95	137	1.44
-	-	52	74	1.44
117581	Twist-related protein 2	29	42	1.44
22837	Cordon-bleu protein-like 1	13	19	1.44
286205	Protein SCAI	8	11	1.44
7345	Ubiquitin carboxyl-terminal hydrolase isozyme L1	9506	13689	1.44
1497	Cystinosin	167	241	1.44
219793	Protein SPATIAL	7	10	1.44
6338	Amiloride-sensitive sodium channel subunit beta	5	8	1.44
11036	TFIIA-alpha and beta-like factor	12	17	1.44
135114	Histidine triad nucleotide-binding protein 3	82	119	1.44
5610	Interferon-induced, double-stranded RNA-activated protein kinase	239	344	1.44
4884	Neuronal pentraxin-1 Precursor	16	23	1.44
54541	DNA-damage-inducible transcript 4 protein	327	471	1.44
-	-	40	57	1.44
-	-	180	259	1.44
-	G patch domain-containing protein 2	113	163	1.44
55312	Riboflavin kinase	353	509	1.44
6697	Sepiapterin reductase	185	267	1.44
-	-	3731	5384	1.44
100291078	-	342	494	1.44
100132483	-	8	11	1.44
29802	Pre-B lymphocyte protein 3 Precursor	6	8	1.44
6125	60S ribosomal protein L5x	13243	19120	1.44
5413	Septin-5	10	15	1.44
-	Uncharacterized protein C17orf79	769	1111	1.44
27294	Trans-1,2-dihydrobenzene-1,2-diol dehydrogenase	7	10	1.44
730036	-	6	9	1.44
649169	WD repeat-containing protein 74	239	345	1.44
3219	Homeobox protein Hox-B9	14	20	1.44
57099	Cell death regulator Aven	106	154	1.44
5141	cAMP-specific 3',5'-cyclic phosphodiesterase 4A	7	10	1.44
3484	Insulin-like growth factor-binding protein 1 Precursor	7	10	1.44
27079	RNA pseudouridylyl synthase domain-containing protein 2	79	114	1.44
7579	Zinc finger and SCAN domain-containing protein 20	7	11	1.45
89891	WD repeat-containing protein 34	426	616	1.45
10818	Fibroblast growth factor receptor substrate 2	6	9	1.45
65260	Hcp beta-lactamase-like protein C1orf163	128	184	1.45
116447	DNA topoisomerase I, mitochondrial Precursor	132	190	1.45
23272	Uncharacterized protein C3orf63	43	62	1.45
-	-	1280	1850	1.45
1514	Cathepsin L1 Precursor	798	1154	1.45
56648	Eukaryotic translation initiation factor 5A-2	39	56	1.45
-	Matrilin-2 Precursor	24	35	1.45
-	Acidic leucine-rich nuclear phosphoprotein 32 family member A	46	67	1.45
122525	Uncharacterized protein C14orf28	28	41	1.45
6431	Splicing factor, arginine/serine-rich 6	84	122	1.45
23621	Beta-secretase 1 Precursor	62	90	1.45
148213	Zinc finger protein 681	212	307	1.45
-	-	7	9	1.45
51373	28S ribosomal protein S17, mitochondrial Precursor	400	579	1.45
55795	PCI domain-containing protein 2	225	326	1.45

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
57325	Cysteine-rich protein 2-binding protein	62	89	1.45
367	Androgen receptor	24	35	1.45
3842	Transportin-1	1842	2666	1.45
-	RING finger protein 32	18	26	1.45
-	Splicing factor 45	578	837	1.45
27300	Zinc finger protein 544	91	132	1.45
4037	Low-density lipoprotein receptor-related protein 3 Precursor	171	248	1.45
9817	Kelch-like ECH-associated protein 1	518	750	1.45
-	Adipocyte adhesion molecule Precursor	9	13	1.45
7798	Leucine zipper protein 1	7	10	1.45
7874	Ubiquitin carboxyl-terminal hydrolase 7	60	88	1.45
79598	Centrosomal protein of 97 kDa	67	96	1.45
64180	Dipeptidase 3 Precursor	5	8	1.45
6810	Syntaxin-4	301	436	1.45
-	Multiple inositol polyphosphate phosphatase 1 Precursor	107	155	1.45
100128533	UPF0446 protein C12orf31	156	226	1.45
124045	Uncharacterized protein C16orf55	16	24	1.45
123283	Probable threonyl-tRNA synthetase 2, cytoplasmic	45	65	1.45
727894	-	8	12	1.45
55119	Pre-mRNA-splicing factor 38B	159	231	1.45
100291605	-	5	8	1.45
347169	Olfactory receptor 1B1	13	19	1.45
8445	Dual specificity tyrosine-phosphorylation-regulated kinase 2	79	115	1.45
84549	Protein MAK16 homolog	148	214	1.45
165055	Coiled-coil domain-containing protein 138	11	16	1.45
23094	Signal-induced proliferation-associated 1-like protein 3	7	10	1.45
80237	RNA polymerase II elongation factor ELL3	14	20	1.45
-	Zinc finger protein 573	32	46	1.45
257236	Coiled-coil domain-containing protein 96	10	14	1.45
5621	Major prion protein Precursor	2400	3485	1.45
54987	UPF0587 protein C1orf123	541	786	1.45
7050	Homeobox protein TGIF1	457	664	1.45
6318	Serpin B4	20	29	1.45
25764	Small EDRK-rich factor 2	718	1042	1.45
-	Pericentriolar material 1 protein	294	428	1.45
401351	-	5	8	1.45
202781	-	22	32	1.45
92979	E3 ubiquitin-protein ligase MARCH9	20	29	1.45
84216	Transmembrane protein 117	29	42	1.45
56947	Mitochondrial fission factor	252	366	1.45
645955	-	5	8	1.45
201163	Folliculin	12	18	1.45
84128	WD repeat-containing protein 75	95	138	1.45
-	Transmembrane protein 116	10	14	1.45
7675	Zinc finger protein 121	97	141	1.45
64225	Atlastin-2	78	114	1.45
49860	Cornulin	34	49	1.45
21	ATP-binding cassette sub-family A member 3	298	433	1.45
57696	ATP-dependent RNA helicase DDX55	132	191	1.45
339559	Zinc finger protein 642	9	14	1.45
-	-	4235	6162	1.46
54842	Macrophage MHC class I receptor 2 homolog	11	16	1.46
84542	Uncharacterized protein KIAA1841	75	110	1.46
135295	35 kDa SR repressor protein	6	9	1.46

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
7016	Dual specificity testis-specific protein kinase 1	64	93	1.46
23277	Putative eukaryotic translation initiation factor 3 subunit	26	37	1.46
26338	Olfactory receptor 5L2	7	10	1.46
5836	Glycogen phosphorylase, liver form	174	254	1.46
-	Zinc finger protein 222	48	70	1.46
310	Annexin A7	838	1221	1.46
-	Tetratricopeptide repeat protein 17	198	288	1.46
5310	Polycystin-1 Precursor	14	21	1.46
158234	RNA (guanine-9'->methyltransferase domain-containing protein 3	31	46	1.46
128308	39S ribosomal protein L55, mitochondrial Precursor	387	564	1.46
29789	Obg-like ATPase 1	120	175	1.46
27178	Interleukin-1 family member 7 Precursor	6	9	1.46
116154	Phosphatase and actin regulator 3	13	20	1.46
9262	Serine/threonine-protein kinase 17B	20	29	1.46
-	-	9	13	1.46
-	RNA (guanine-9'->methyltransferase domain-containing protein 3	66	96	1.46
9533	DNA-directed RNA polymerases I and III subunit RPAC1	344	502	1.46
729970	-	9	13	1.46
9027	Probable N-acetyltransferase 8	12	17	1.46
135154	UPF0369 protein C6orf57 Precursor	112	163	1.46
-	Ras-related GTP-binding protein D	27	40	1.46
100129046	-	9	13	1.46
56267	Kynurenine-oxoglutarate transaminase 3	219	319	1.46
399665	Protein FAM102A	122	178	1.46
10440	Mitochondrial import inner membrane translocase subunit Tim17-A	1001	1462	1.46
26156	Ribosomal L1 domain-containing protein 1	744	1087	1.46
2171	Fatty acid-binding protein, epidermal	3321	4850	1.46
-	Hexaprenyldihydroxybenzoate methyltransferase, mitochondrial Precursor	56	82	1.46
115825	WD repeat and FYVE domain-containing protein 2	21	31	1.46
51816	Cat eye syndrome critical region protein 1 Precursor	59	86	1.46
8900	Cyclin-A1	28	40	1.46
128387	Putative deoxyribonuclease TATDN3	151	221	1.46
55686	Melanoregulin	24	35	1.46
-	Putative uncharacterized protein C17orf69 Precursor	12	17	1.46
7464	Coronin-2A	10	15	1.46
27069	Growth hormone-inducible transmembrane protein	867	1267	1.46
64421	Protein artemis	30	44	1.46
5273	Serpin B10 (Bomapin)	7	11	1.46
8912	Voltage-dependent T-type calcium channel subunit alpha-1H	14	21	1.46
-	Putative uncharacterized protein CXorf52B	9	13	1.46
399829	-	7	10	1.46
118442	Probable G-protein coupled receptor 62	5	8	1.46
-	-	23	34	1.46
55206	Protein strawberry notch homolog 1	607	888	1.46
-	Uncharacterized protein ENSP00000309186 Fragment	13	19	1.46
5994	Regulatory factor X-associated protein	40	59	1.46
55153	Protein SDA1 homolog	529	775	1.46
7576	Zinc finger protein 28	12	17	1.46
51078	THAP domain-containing protein 4	89	130	1.46

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
145258	Homeobox protein goosecoid	7	11	1.46
57109	RNA exonuclease 4	62	91	1.46
54801	HAUS augmin-like complex subunit 6	102	149	1.46
3312	Heat shock cognate 71 kDa protein	9014	13207	1.47
100292632	Late cornified envelope protein 1E	10	14	1.47
55081	Intraflagellar transport protein 57 homolog	7	11	1.47
283518	Putative potassium channel regulatory protein	11	16	1.47
23138	NEDD4-binding protein 3	32	47	1.47
-	Proline-serine-threonine phosphatase-interacting protein 2	40	58	1.47
-	Protein FAM10A5	662	971	1.47
-	HSPB1-associated protein 1	27	40	1.47
-	CAP-Gly domain-containing linker protein 4	46	67	1.47
100289526	-	7	10	1.47
-	GC-rich sequence DNA-binding factor	74	108	1.47
55222	Leucine-rich repeat-containing protein 20	9	13	1.47
8131	UPF0171 protein C16orf35	83	122	1.47
126295	Zinc finger protein 57	30	45	1.47
10570	Dihydropyrimidinase-related protein 4	492	722	1.47
139411	Patched domain-containing protein 1	7	10	1.47
60488	28S ribosomal protein S35, mitochondrial Precursor	248	364	1.47
-	Transmembrane protein C2orf37	11	16	1.47
64132	Xylosyltransferase 2	163	239	1.47
79744	Zinc finger protein 419	24	36	1.47
7837	Peroxidasin homolog Precursor	2550	3746	1.47
84981	Putative uncharacterized protein C17orf91	280	411	1.47
-	-	12	18	1.47
63932	UPF0428 protein CXorf56	34	49	1.47
3364	Checkpoint protein HUS1	29	43	1.47
84312	Breast cancer metastasis-suppressor 1-like protein	49	72	1.47
55151	Trimeric intracellular cation channel type B	39	57	1.47
84319	Uncharacterized protein C3orf26	227	334	1.47
64840	Probable protein-cysteine N-palmitoyltransferase porcupine	53	77	1.47
22808	Ras-related protein M-Ras Precursor	77	113	1.47
100289195	-	5	8	1.47
170394	PWWP domain-containing protein 2B	84	124	1.47
10061	ATP-binding cassette sub-family F member 2	325	479	1.47
5293	Phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit delta isoform	133	195	1.47
57546	[Pyruvate dehydrogenase [acetyl-transferring]]-phosphatase 2, mitochondrial Precursor	7	10	1.47
644246	LOC644246 protein Fragment	30	45	1.47
160777	Coiled-coil domain-containing protein 60	6	9	1.47
6164	60S ribosomal protein L34	235	347	1.47
54623	RNA polymerase II-associated factor 1 homolog	5	8	1.47
56952	Phosphoribosyltransferase domain-containing protein 1	140	206	1.47
56902	RNA-binding protein PNO1	128	189	1.47
50515	Carbohydrate sulfotransferase 11	49	73	1.47
466	Cyclic AMP-dependent transcription factor ATF-1	52	77	1.47
1812	D(1A) dopamine receptor	5	8	1.47
-	PWWP domain-containing protein 2B	20	29	1.47
23169	UDP-glucuronic acid/UDP-N-acetylgalactosamine transporter	17	24	1.47
83608	Uncharacterized protein C18orf21	408	601	1.47
91942	Mimitin, mitochondrial Precursor	406	597	1.47

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
128229	Uncharacterized protein C1orf182	5	8	1.47
91392	Zinc finger protein 502	51	75	1.47
-	-	206	303	1.47
6233	Ubiquitin	10759	15859	1.47
284110	Gasdermin-A	7	10	1.47
4677	Asparaginyl-tRNA synthetase, cytoplasmic	1171	1726	1.47
4139	Serine/threonine-protein kinase MARK1	13	18	1.47
221527	Zinc finger and BTB domain-containing protein 12	43	64	1.47
339804	Uncharacterized protein C2orf74	53	78	1.47
8446	RNA/RNP complex-1-interacting phosphatase	440	649	1.47
7769	Zinc finger protein 226	143	211	1.47
4520	Metal regulatory transcription factor 1	47	69	1.47
10473	High mobility group nucleosome-binding domain-containing protein 4	223	328	1.47
100290115	Putative uncharacterized protein ENSP00000375011	11	16	1.47
54482	tRNA guanosine-2'-O-methyltransferase TRM13 homolog	39	57	1.48
123811	LisH domain-containing protein C16orf63	92	136	1.48
23160	WD repeat-containing protein 43	116	171	1.48
59269	Transcription factor HIVP3	6	8	1.48
253152	Abhydrolase domain-containing protein 7	359	530	1.48
203228	Uncharacterized protein C9orf72	18	26	1.48
29116	E3 ubiquitin-protein ligase MYLIP	88	131	1.48
7132	Tumor necrosis factor receptor superfamily member 1A Precursor (p60)	623	920	1.48
-	Sideroflexin-4	128	189	1.48
100293094	-	6	9	1.48
90701	Signal peptidase complex catalytic subunit SEC11C	272	401	1.48
652251	G-protein-signaling modulator 1	38	56	1.48
646644	Protein LLP homolog	406	600	1.48
9950	Golgin subfamily A member 5	157	232	1.48
54434	Protein phosphatase Slingshot homolog 1	22	33	1.48
10468	Follistatin Precursor	7	11	1.48
254263	Protein cornichon homolog 2	666	984	1.48
2271	Fumarate hydratase, mitochondrial Precursor	81	119	1.48
98	Acylphosphatase-2	203	300	1.48
-	-	6263	9262	1.48
4957	Outer dense fiber protein 2	98	145	1.48
3743	Potassium voltage-gated channel subfamily A member 7	8	11	1.48
255520	ELMO domain-containing protein 2	42	62	1.48
-	-	978	1447	1.48
79865	Trem-like transcript 2 protein Precursor	16	24	1.48
60678	Selenocysteine-specific elongation factor	29	43	1.48
-	-	704	1043	1.48
100291422	Equilibrative nucleoside transporter 4	9	14	1.48
80224	Nucleotide-binding protein-like	56	82	1.48
6835	Surfeit locus protein 2	117	174	1.48
8812	Cyclin-K	20	29	1.48
-	-	731	1083	1.48
126070	Zinc finger protein 440	12	18	1.48
80271	Inositol-trisphosphate 3-kinase C	120	178	1.48
6583	Solute carrier family 22 member 4	74	109	1.48
-	Uncharacterized protein C7orf34 Precursor	6	9	1.48
6997	Teratocarcinoma-derived growth factor 1 Precursor	8	11	1.48
51095	tRNA-nucleotidyltransferase 1, mitochondrial Precursor	32	48	1.48

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
89890	Kelch repeat and BTB domain-containing protein 6	35	52	1.48
-	Phytanoyl-CoA dioxygenase, peroxisomal Precursor	142	210	1.48
2695	Gastric inhibitory polypeptide Precursor	9	13	1.48
64172	Probable O-sialoglycoprotein endopeptidase 2	24	36	1.48
100129480	-	8	12	1.48
100287250	-	5	8	1.48
400745	SH2 domain-containing protein 5	9	13	1.48
9147	Serologically defined colon cancer antigen 1	262	388	1.48
353143	Late cornified envelope protein 3B	7	10	1.48
2539	Glucose-6-phosphate 1-dehydrogenase	393	584	1.48
153241	Centrosomal protein of 120 kDa	42	62	1.48
9054	Copine-1	96	143	1.48
400830	Beta-defensin 132 Precursor	8	11	1.48
9486	Carbohydrate sulfotransferase 10	9	13	1.48
56172	Progressive ankylosis protein homolog	126	187	1.48
375190	hypothetical protein LOC375190	46	69	1.48
441024	Probable bifunctional methylenetetrahydrofolate dehydrogenase/cyclohydrolase 2	11	16	1.48
100292305	-	15	22	1.49
221120	Alpha-ketoglutarate-dependent dioxygenase alkB homolog 3	171	254	1.49
-	-	775	1151	1.49
5649	Reelin Precursor	7	10	1.49
55171	TBCC domain-containing protein 1	41	61	1.49
25917	THUMP domain-containing protein 3	119	176	1.49
4839	Putative ribosomal RNA methyltransferase NOP2	246	366	1.49
100287429	Zinc finger protein 84	55	81	1.49
4885	Neuronal pentraxin-2 Precursor	8	11	1.49
201633	V-set and transmembrane domain-containing protein 3 Precursor	11	17	1.49
8601	Regulator of G-protein signaling 20	249	371	1.49
10623	DNA-directed RNA polymerase III subunit RPC3	208	309	1.49
100288156	-	8	12	1.49
10443	Calcitonin Precursor	28	41	1.49
-	Uncharacterized protein C17orf44	7	11	1.49
389362	Proteasome assembly chaperone 4	379	564	1.49
-	-	91	135	1.49
79828	Methyltransferase-like protein 8	143	213	1.49
2483	Protein FRG1	610	908	1.49
93134	Zinc finger protein 561	47	70	1.49
29906	Alpha-2,8-sialyltransferase 8E	9	13	1.49
-	-	26	39	1.49
85455	Protein dispatched homolog 2	16	24	1.49
222389	BEN domain-containing protein 7	23	34	1.49
100134504	Uncharacterized protein ENSP00000381447 Fragment	13605	20267	1.49
90070	Extracellular glycoprotein lacritin Precursor	5	8	1.49
-	Lin-7 homolog B	22	33	1.49
26212	Olfactory receptor 2B6	7	10	1.49
644	Biliverdin reductase A Precursor	592	882	1.49
730314	Anaphase-promoting complex subunit CDC26	284	423	1.49
-	Biogenesis of lysosome-related organelles complex 1 subunit 2	1340	1998	1.49
10560	Thiamine transporter 1	29	43	1.49
25902	Monofunctional C1-tetrahydrofolate synthase, mitochondrial Precursor	293	438	1.49

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-	4170	6221	1.49
22849	Cytoplasmic polyadenylation element-binding protein 3	8	11	1.49
4661	Myelin transcription factor 1	6	9	1.49
84804	Major facilitator superfamily domain-containing protein 9	6	8	1.49
55760	Putative pre-mRNA-splicing factor ATP-dependent RNA helicase DHX32	352	525	1.49
64116	Zinc transporter ZIP8	29	43	1.49
9236	Cell cycle progression protein 1	595	888	1.49
84315	Vacuolar fusion protein MON1 homolog A	53	79	1.49
5799	Receptor-type tyrosine-protein phosphatase N2 Precursor	75	111	1.49
80024	Sodium/potassium/calcium exchanger 6 Precursor	147	219	1.49
3033	Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial Precursor	246	367	1.49
-	Oviduct-specific glycoprotein Precursor	11	17	1.49
26270	F-box only protein 6	41	61	1.49
6505	Excitatory amino acid transporter 3	78	116	1.49
154313	Uncharacterized protein C6orf165	19	28	1.49
84518	Cornifelin	7	10	1.49
84875	Poly [ADP-ribose] polymerase 10	86	129	1.49
11281	POU domain, class 6, transcription factor 2	8	12	1.50
54984	Pin2-interacting protein X1	87	130	1.50
57817	Hepcidin Precursor	14	21	1.50
9191	Death effector domain-containing protein	104	156	1.50
51520	Leucyl-tRNA synthetase, cytoplasmic	172	258	1.50
2264	Fibroblast growth factor receptor 4 Precursor	53	80	1.50
84033	Obscurin	8	12	1.50
349565	Nicotinamide mononucleotide adenylyltransferase 3	19	29	1.50
2804	Golgin subfamily B member 1	46	69	1.50
5209	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3	436	652	1.50
55704	Girdin	65	98	1.50
53358	SHC-transforming protein 3	10	14	1.50
3709	Inositol 1,4,5-trisphosphate receptor type 2	6	9	1.50
222236	N-acyl-phosphatidylethanolamine-hydrolyzing phospholipase D	19	29	1.50
26266	Solute carrier family 13 member 4	7	10	1.50
80345	Zinc finger and SCAN domain-containing protein 16	41	62	1.50
26206	Sperm-associated antigen 8	10	16	1.50
604	B-cell lymphoma 6 protein	93	139	1.50
284293	Serpin-like protein HMSD Precursor	10	16	1.50
83939	Eukaryotic translation initiation factor 2A	13	19	1.50
55844	Serine/threonine-protein phosphatase 2A 55 kDa regulatory subunit	88	132	1.50
	B delta isoform			
54834	Ganglioside-induced differentiation-associated protein 2	27	40	1.50
7768	Zinc finger protein 230	10	15	1.50
84908	Protein FAM136A	239	359	1.50
10528	Nucleolar protein 5A	372	559	1.50
387032	Zinc finger protein with KRAB and SCAN domains 4	25	37	1.50
91133	Lethal(3)malignant brain tumor-like 4 protein	7	10	1.50

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-	7	11	1.50
7422	Vascular endothelial growth factor A Precursor	71	107	1.50
54822	Transient receptor potential cation channel subfamily M member 7	116	175	1.50
125150	Zinc finger SWIM domain-containing protein 7	203	306	1.51
-	Twinkle protein, mitochondrial Precursor	97	147	1.51
-	CAD protein	288	434	1.51
25983	Neuroguidin	382	576	1.51
-	-	69	103	1.51
79087	Dolichyl-P-Man:Man(7)GlcNAc(2)-PP-dolichyl-alpha-1,6-mannosyltransferase	17	26	1.51
114876	Oxysterol-binding protein-related protein 1	97	146	1.51
493911	Pyridoxal phosphate phosphatase PHOSPHO2	35	52	1.51
5308	Pituitary homeobox 2	7	10	1.51
-	GTP:AMP phosphotransferase mitochondrial	217	328	1.51
7753	Zinc finger protein 202	46	70	1.51
6382	Syndecan-1 Precursor	33	49	1.51
-	-	39	59	1.51
11010	Glioma pathogenesis-related protein 1 Precursor	766	1156	1.51
90025	Ubiquitin-conjugating enzyme E2C-binding protein	19	29	1.51
9230	Ras-related protein Rab-11B	12	18	1.51
23102	TBC1 domain family member 2B	7	11	1.51
79017	Gamma-glutamylcyclotransferase	229	346	1.51
144406	WD repeat-containing protein 66	16	24	1.51
55814	Transcription factor TFIIIB component B" homolog	28	42	1.51
440503	Lipid storage droplet protein 5	10	15	1.51
-	Septin	150	226	1.51
6868	ADAM 17 Precursor	120	181	1.51
4601	MAX-interacting protein 1	31	47	1.51
84058	WD repeat-containing protein 54	178	269	1.51
80195	Transmembrane protein C10orf57	73	110	1.51
23322	Protein fantom	15	23	1.51
-	Zinc finger protein 486	53	80	1.51
-	Tetratricopeptide repeat protein 12	12	19	1.51
135892	Tripartite motif-containing protein 50	10	16	1.51
29088	39S ribosomal protein L15, mitochondrial Precursor	946	1431	1.51
-	Zinc finger protein 593	244	369	1.51
23463	Protein-S-isoprenylcysteine O-methyltransferase	428	647	1.51
283578	Protein TMED8	8	12	1.51
133022	Translocation-associated membrane protein 1-like 1	29	45	1.51
730078	-	15	23	1.51
56929	Protein fem-1 homolog C	33	50	1.51
145645	Uncharacterized protein C15orf43	9	13	1.51
64946	Centromere protein H	39	59	1.51
390154	Olfactory receptor 5T3	12	18	1.51
-	-	330	500	1.51
7417	Voltage-dependent anion-selective channel protein 2	958	1451	1.51
54596	LINE-1 type transposase domain-containing protein 1	13	20	1.52
8556	Dual specificity protein phosphatase CDC14A	16	24	1.52

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
114799	N-acetyltransferase ESCO1	25	38	1.52
64131	Xylosyltransferase 1	7	11	1.52
-	E3 ubiquitin-protein ligase RFW2	318	482	1.52
100289097	-	5	8	1.52
3221	Homeobox protein Hox-C4	13	20	1.52
10102	Elongation factor Ts, mitochondrial Precursor	252	382	1.52
-	ATP-dependent RNA helicase DDX54	215	326	1.52
642776	-	8	12	1.52
29887	Sorting nexin-10	16	24	1.52
-	Zinc finger protein LOC730087	106	160	1.52
26012	Nasal embryonic luteinizing hormone-releasing hormone factor	66	100	1.52
55702	Coiled-coil domain-containing protein 94	117	177	1.52
-	Uncharacterized protein C21orf81	7	10	1.52
91272	Protein FAM44B	582	884	1.52
135924	Olfactory receptor 9A2	28	43	1.52
4693	Norrin Precursor	10	15	1.52
5129	Serine/threonine-protein kinase PCTAIRE-3	6	9	1.52
4659	Protein phosphatase 1 regulatory subunit 12A	120	183	1.52
55255	WD repeat-containing protein 41	41	62	1.52
-	-	86	130	1.52
51115	Regulator of microtubule dynamics protein 1	172	261	1.52
51542	Vacuolar protein sorting-associated protein 54	47	71	1.52
55837	E2F-associated phosphoprotein	231	351	1.52
100129488	cDNA FLJ34659 fis, clone KIDNE2018863	5	8	1.52
191	Adenosylhomocysteinase	933	1419	1.52
-	Putative ribosomal RNA methyltransferase 2	113	172	1.52
8996	nucleolar protein 3	156	237	1.52
128486	Fat-inducing protein 2	8	13	1.52
55035	Nucleolar protein 8	125	190	1.52
10435	Cdc42 effector protein 2	263	401	1.52
4744	Neurofilament heavy polypeptide	11	17	1.52
51265	Cyclin-dependent kinase-like 3	18	27	1.52
10943	Male-specific lethal-3 protein-like 1	113	172	1.52
84166	Protein NLRC5	9	14	1.52
11260	Exportin-T (tRNA exportin)	96	146	1.52
10280	Sigma 1-type opioid receptor	248	378	1.52
-	ATP-dependent RNA helicase SUPV3L1, mitochondrial Precursor	122	186	1.52
9246	Ubiquitin/ISG15-conjugating enzyme E2 L6	557	848	1.52
5163	[Pyruvate dehydrogenase (lipoamide)] kinase isozyme 1, mitochondrial Precursor	8	12	1.52
100291408	-	10	15	1.52
-	Riboflavin kinase	237	361	1.52
54487	Protein DGCR8	14	22	1.52
127002	Ataxin-7-like protein 2	12	18	1.52
54875	Centlein	23	35	1.53
83940	Putative deoxyribonuclease TATDN1	141	214	1.53
6846	Cytokine SCM-1 beta Precursor	12	18	1.53
118812	MORN repeat-containing protein 4	46	71	1.53
7321	Ubiquitin-conjugating enzyme E2 D1	506	773	1.53
57489	Outer dense fiber protein 2-like	251	384	1.53
-	Tyrosine-protein phosphatase non-receptor type 2	125	191	1.53

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
405	Aryl hydrocarbon receptor nuclear translocator (Hypoxia-inducible factor 1 beta)	28	42	1.53
387923	Stress-associated endoplasmic reticulum protein 2	13	20	1.53
27154	Bromodomain and PHD finger-containing protein 3	44	68	1.53
126075	Coiled-coil domain-containing protein LOC126075	51	78	1.53
780	Epithelial discoidin domain-containing receptor 1 Precursor	89	137	1.53
57547	Zinc finger protein 624	17	26	1.53
7381	Cytochrome b-c1 complex subunit 7	21	32	1.53
10333	Toll-like receptor 6 Precursor	10	15	1.53
100131699	-	8	12	1.53
155435	RNA-binding protein 33	24	36	1.53
10054	SUMO-activating enzyme subunit 2	675	1032	1.53
26175	Transmembrane protein C14orf109	232	354	1.53
134218	DnaJ homolog subfamily C member 21	162	247	1.53
23264	Zinc finger CCCH domain-containing protein 7B	7	11	1.53
-	Required for meiotic nuclear division protein 1 homolog	133	204	1.53
6898	Tyrosine aminotransferase	9	14	1.53
133	ADM Precursor	365	559	1.53
10329	Transmembrane protein 5	209	321	1.53
84527	Zinc finger protein 559	44	68	1.53
585	Bardet-Biedl syndrome 4 protein	34	52	1.53
23524	Serine/arginine repetitive matrix protein 2	10	15	1.53
3790	Potassium voltage-gated channel subfamily S member 3	9	13	1.53
10600	Ubiquitin carboxyl-terminal hydrolase 16	217	332	1.53
64837	Kinesin light chain 2	86	132	1.53
51129	Angiopoietin-related protein 4 Precursor	98	150	1.53
-	Ribonuclease P protein subunit p40	143	219	1.53
63925	Zinc finger protein 335	5	8	1.53
344595	-	16	24	1.53
245937	Beta-defensin 124 Precursor	7	11	1.53
-	Uncharacterized protein C14orf145	11	17	1.54
79616	Cyclin-J-like protein	9	14	1.54
-	Protein FAM71E1	9	13	1.54
84870	R-spondin-3 Precursor	23	35	1.54
122616	Uncharacterized protein C14orf79	29	45	1.54
2805	Aspartate aminotransferase, cytoplasmic	130	199	1.54
93081	Uncharacterized protein C13orf27	108	166	1.54
1647	Growth arrest and DNA-damage-inducible protein GADD45 alpha	1725	2650	1.54
93587	RNA (guanine-9'-methyltransferase domain-containing protein 2	18	28	1.54
-	Uncharacterized protein LOC389203	256	394	1.54
54059	Putative metalloprotease C21orf57	73	112	1.54
255809	Protein HIDE1 Precursor	6	9	1.54
81786	Calcitonin Precursor	30	47	1.54
23426	Glutamate receptor-interacting protein 1	10	16	1.54
-	Calmodulin-binding transcription activator 1	9	14	1.54
-	Transcriptional-regulating factor 1	10	16	1.54
138162	Uncharacterized protein C9orf116	28	43	1.54
100130274	-	6	10	1.54
10531	Presequence protease, mitochondrial Precursor	146	224	1.54

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Uncharacterized protein C14orf93 Precursor	23	36	1.54
26284	GTP-binding protein era homolog	12	19	1.54
64744	Stromal membrane-associated protein 2	13	21	1.54
-	-	1986	3059	1.54
728175	MGC24125 protein	10	15	1.54
55243	Kin of IRRE-like protein 1 Precursor	25	39	1.54
343099	Coiled-coil domain-containing protein 18	23	36	1.54
127253	tRNA wybutosine-synthesizing protein 3 homolog	63	97	1.54
1486	Di-N-acetylchitobiase Precursor	39	61	1.54
55768	Peptide-N(4)-(N-acetyl-beta-glucosaminyI) asparagine amidase	105	162	1.54
10166	Mitochondrial ornithine transporter 1	38	58	1.54
10622	DNA-directed RNA polymerase III subunit RPC7	37	57	1.54
29083	GTP-binding protein 8	231	356	1.54
115677	Nostrin	5	8	1.54
84864	MYC-induced nuclear antigen	149	229	1.54
338321	NACHT, LRR and PYD domains-containing protein 9	8	13	1.54
5501	Serine/threonine-protein phosphatase PP1-gamma catalytic subunit	1015	1567	1.54
6832	ATP-dependent RNA helicase SUPV3L1, mitochondrial Precursor	47	72	1.54
27006	Fibroblast growth factor 22 Precursor	5	8	1.54
53938	Peptidyl-prolyl cis-trans isomerase-like 3	317	489	1.54
6167	60S ribosomal protein L37	87	135	1.54
-	Protein FAM124A	6	9	1.54
199964	Transmembrane protein 61	6	9	1.54
100287204	-	7	10	1.54
9064	Mitogen-activated protein kinase kinase kinase 6	112	173	1.55
7371	Uridine-cytidine kinase 2	418	645	1.55
-	Zinc finger CW-type PWWP domain protein 1	13	20	1.55
201161	Proline-rich protein 6	116	179	1.55
10993	L-serine dehydratase	8	12	1.55
4857	RNA-binding protein Nova-1	10	16	1.55
84966	Immunoglobulin superfamily member 21 Precursor	6	9	1.55
8661	Eukaryotic translation initiation factor 3 subunit A	2222	3436	1.55
79922	rRNA methyltransferase 1, mitochondrial Precursor	12	18	1.55
23682	Ras-related protein Rab-38	46	71	1.55
8443	Dihydroxyacetone phosphate acyltransferase	309	479	1.55
56946	Protein EMSY	59	92	1.55
28990	Protein asteroid homolog 1	31	47	1.55
55188	Synembryn-B	20	30	1.55
729967	MORN repeat-containing protein 2	125	194	1.55
-	Zinc finger protein 318	8	12	1.55
-	High affinity immunoglobulin epsilon receptor subunit gamma Precursor	8	12	1.55
64115	Platelet receptor Gi24 Precursor	5	8	1.55
7086	Transketolase	2017	3127	1.55
2688	Somatotropin Precursor	11	17	1.55
220081	Putative uncharacterized protein FLJ32682	6	9	1.55
10430	Transmembrane protein 147	777	1206	1.55
200916	60S ribosomal protein L22-like 1	762	1183	1.55

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
27350	Probable DNA dC->dU-editing enzyme APOBEC-3C	87	136	1.55
3141	Biotin-protein ligase	15	23	1.55
55277	FGGY carbohydrate kinase domain-containing protein	57	89	1.55
-	-	8814	13686	1.55
54475	Notchless protein homolog 1	69	107	1.55
57180	Actin-related protein 3B	50	77	1.55
219873	Olfactory receptor 10S1	12	19	1.55
-	-	49	77	1.55
3437	Interferon-induced protein with tetratricopeptide repeats 3	25	39	1.55
159371	Transmembrane protein 20	10	15	1.55
7054	Tyrosine 3-monooxygenase	10	15	1.55
8877	Sphingosine kinase 1	768	1194	1.55
10221	Tribbles homolog 1	77	119	1.55
340252	NOL1/NOP2/Sun domain family member 5B	5	8	1.56
100287413	cDNA FLJ60524	9	14	1.56
4589	Mucin-7 Precursor	9	15	1.56
11146	Glomulin	97	151	1.56
-	-	9	14	1.56
8091	High mobility group protein HMGI-C	41	64	1.56
57538	Alpha-protein kinase 3	9	14	1.56
100292412	-	7	11	1.56
10855	Heparanase Precursor	35	54	1.56
56849	Transcription elongation factor A protein-like 7	203	315	1.56
-	Tumor necrosis factor ligand superfamily member 4	815	1268	1.56
79613	Transmembrane and coiled-coil domain-containing protein 7	12	18	1.56
3646	Eukaryotic translation initiation factor 3 subunit E	2723	4240	1.56
9789	Signal peptidase complex subunit 2	7	11	1.56
1149	Cell death activator CIDE-A	15	24	1.56
602	B-cell lymphoma 3-encoded protein	185	289	1.56
56919	Putative ATP-dependent RNA helicase DHX33	6	9	1.56
10591	c-Myc-responsive protein Rcl	454	708	1.56
202243	Coiled-coil domain-containing protein 125	15	24	1.56
-	Gypsy retrotransposon integrase-like protein 1	23	36	1.56
729289	-	6	9	1.56
-	-	2177	3393	1.56
220108	Protein FAM124A	17	27	1.56
27030	DNA mismatch repair protein Mlh3	33	52	1.56
8468	FK506-binding protein 6	7	11	1.56
-	Protein phosphatase Slingshot homolog 2	18	27	1.56
-	Long-chain fatty acid transport protein 1	6	9	1.56
54512	Exosome complex exonuclease RRP41	103	160	1.56
2819	Glycerol-3-phosphate dehydrogenase [NAD+], cytoplasmic	11	17	1.56
-	Homer protein homolog 1	37	58	1.56
-	GPS, PLAT and transmembrane domain-containing protein FLJ00285	185	289	1.56
114905	Complement C1q tumor necrosis factor-related protein 7 Precursor	14	21	1.56
-	-	13	21	1.56
148223	UPF0449 protein C19orf25	13	21	1.56

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
27324	TOX high mobility group box family member 3	6	10	1.56
2671	FAD-linked sulfhydryl oxidase ALR	12	18	1.56
-	ATP-binding cassette sub-family A member 3	40	62	1.56
-	Zinc finger protein 600	30	46	1.56
4009	LIM homeobox transcription factor 1-alpha	7	11	1.56
54557	Small glutamine-rich tetratricopeptide repeat-containing protein beta	32	50	1.56
51143	Cytoplasmic dynein 1 light intermediate chain 1	199	310	1.56
84759	Polycomb group RING finger protein 1	8	12	1.56
3725	Transcription factor AP-1	424	663	1.56
8851	Cyclin-dependent kinase 5 activator 1 Precursor	7	11	1.56
147007	Transmembrane protein 199	203	318	1.56
79088	Zinc finger protein 426	43	67	1.56
256435	Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 3	72	113	1.56
9113	Serine/threonine-protein kinase LATS1	8	12	1.56
83861	Radial spoke head protein 3 homolog	14	23	1.57
-	MUC20_HUMAN Isoform 6 of Q8N307 - Homo sapiens	12	19	1.57
-	MAGUK p55 subfamily member 6	58	90	1.57
9657	IQ calmodulin-binding motif-containing protein 1	73	115	1.57
2697	Gap junction alpha-1 protein	3965	6210	1.57
4674	Nucleosome assembly protein 1-like 2	9	13	1.57
55486	Presenilins-associated rhomboid-like protein, mitochondrial Precursor	224	352	1.57
4254	Kit ligand Precursor	156	244	1.57
64847	Spermatogenesis-associated protein 20 Precursor	20	31	1.57
1723	Dihydroorotate dehydrogenase, mitochondrial Precursor	55	85	1.57
57621	Zinc finger and BTB domain-containing protein 2	57	89	1.57
-	Zinc finger protein 542	8	13	1.57
84750	Alpha-(1,3)-fucosyltransferase 10	11	17	1.57
126549	Ankyrin repeat and LEM domain-containing protein 1	8	12	1.57
27037	tRNA (uracil-5)-methyltransferase homolog A	109	171	1.57
22835	Zinc finger protein 30 homolog	47	74	1.57
8476	Serine/threonine-protein kinase MRCK alpha	24	37	1.57
4807	Helix-loop-helix protein 1	9	15	1.57
27022	Forkhead box protein D3	8	12	1.57
83479	Probable ATP-dependent RNA helicase DDX59	62	98	1.57
169841	Zinc finger protein 169	14	21	1.57
92104	Tetratricopeptide repeat protein 30A	20	31	1.57
54093	SET domain-containing protein 4	71	112	1.57
80028	F-box/LRR-repeat protein 18	72	113	1.57
-	Phenylalanyl-tRNA synthetase, mitochondrial Precursor	87	137	1.57
55015	Pre-mRNA-processing factor 39	93	146	1.57
91355	Low-density lipoprotein receptor-related protein 5-like protein	20	31	1.57
2944	Glutathione S-transferase Mu 1	21	34	1.57
2717	Alpha-galactosidase A Precursor	327	514	1.57
54832	Vacuolar protein sorting-associated protein 13C	6	10	1.57
11172	Insulin-like peptide INSL6 Precursor	10	16	1.57
199953	Transmembrane protein 201	15	24	1.57

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
139431	-	23	36	1.57
6620	Beta-synuclein	6	9	1.57
100293694	-	19	29	1.57
23309	Paired amphipathic helix protein Sin3b	76	120	1.57
79657	RNA polymerase II-associated protein 3	54	85	1.57
51052	Prolactin-releasing peptide Precursor	13	21	1.57
-	E3 ubiquitin-protein ligase MIB2	6	10	1.57
389203	Uncharacterized protein LOC389203	165	259	1.57
-	OSGP2_HUMAN Isoform 3 of Q9H4B0 - Homo sapiens	20	31	1.57
-	Prefoldin subunit 6	162	255	1.57
57685	VWFA and cache domain-containing protein 1 Precursor	6	9	1.57
317662	Protein FAM149B1	72	114	1.57
6161	60S ribosomal protein L32	91	144	1.57
7802	Axonemal dynein light intermediate polypeptide 1	45	71	1.57
284695	Zinc finger protein 326	155	244	1.57
11046	UDP-N-acetylglucosamine/UDP-glucose/GDP-mannose transporter	98	154	1.57
100290231	-	6	9	1.58
3263	Hemopexin Precursor	6	9	1.58
56931	tRNA-dihydrouridine synthase 3-like	41	65	1.58
-	Hydroxyindole O-methyltransferase	10	15	1.58
81035	Collectin-12	324	511	1.58
388558	Zinc finger protein 808	79	124	1.58
1515	Cathepsin L2 Precursor	7	11	1.58
148789	UDP-GalNAc:beta-1,3-N-acetylgalactosaminyl transferase 2	40	63	1.58
126306	Junctional sarcoplasmic reticulum protein 1	10	15	1.58
10712	Protein COTE1	377	594	1.58
10257	Multidrug resistance-associated protein 4	54	85	1.58
54974	Probable tRNA(His) guanylyltransferase	70	110	1.58
6741	Lupus La protein	814	1284	1.58
1739	Disks large homolog 1	156	245	1.58
55172	Protein kintoun	90	141	1.58
55755	CDK5 regulatory subunit-associated protein 2	30	47	1.58
57336	Zinc finger protein 287	47	74	1.58
23341	DnaJ homolog subfamily C member 16 Precursor	18	28	1.58
50508	NADPH oxidase 3	8	13	1.58
51619	Ubiquitin-conjugating enzyme E2 D4	77	122	1.58
9611	Nuclear receptor corepressor 1	12	20	1.58
-	-	13	20	1.58
27185	Disrupted in schizophrenia 1 protein	12	20	1.58
55734	Zinc finger protein 64 homolog, isoforms 3 and 4	23	36	1.58
9270	Integrin beta-1-binding protein 1	67	106	1.58
10412	Ribosome biogenesis protein NSA2 homolog	576	912	1.58
644116	-	42	66	1.58
93474	Zinc finger protein 670	38	61	1.58
10669	Cell growth regulator with EF hand domain protein 1	15	23	1.58
26024	Pentatricopeptide repeat-containing protein 1	14	21	1.58
58504	Rho GTPase-activating protein 22	18	28	1.58
57678	Glycerol-3-phosphate acyltransferase 1, mitochondrial Precursor	8	12	1.58

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10056	Phenylalanyl-tRNA synthetase beta chain	233	369	1.58
55609	Zinc finger protein 280C	8	13	1.59
-	Olfactory receptor 13A1	51	81	1.59
58528	Ras-related GTP-binding protein D	21	33	1.59
29080	Thyroid transcription factor 1-associated protein 26	330	523	1.59
100129907	-	12	19	1.59
-	Mono-ADP-ribosyltransferase sirtuin-6	6	10	1.59
55854	Zinc finger CCCH domain-containing protein 15	393	623	1.59
115939	UPF0293 protein C16orf42	594	943	1.59
57631	Leucine-rich repeat and calponin homology domain-containing protein 2	6	9	1.59
80184	Centrosomal protein of 290 kDa	15	24	1.59
205	Adenylate kinase isoenzyme 4, mitochondrial	174	276	1.59
54989	Zinc finger protein 770	18	29	1.59
8739	Activator of apoptosis harakiri	12	18	1.59
84515	DNA replication licensing factor MCM8	10	16	1.59
333	Amyloid-like protein 1 Precursor	13	21	1.59
55228	PNMA-like protein 1	9	15	1.59
284371	Zinc finger protein 841	12	20	1.59
9271	Piwi-like protein 1	6	10	1.59
257397	Mitogen-activated protein kinase kinase kinase 7-interacting protein 3	14	23	1.59
-	Peptide chain release factor 1, mitochondrial Precursor	44	70	1.59
55131	RNA-binding protein 28	105	166	1.59
650	Bone morphogenetic protein 2 Precursor	429	683	1.59
9840	Uncharacterized protein KIAA0748	18	29	1.59
-	-	530	844	1.59
10919	Histone-lysine N-methyltransferase, H3 lysine-9 specific 3	5	9	1.59
10880	Actin-like protein 7B	7	11	1.59
-	Neurologin-1 Precursor	20	32	1.59
100132346	-	659	1051	1.59
-	-	47	74	1.60
730144	Eukaryotic translation initiation factor 1	2766	4414	1.60
79745	CAP-Gly domain-containing linker protein 4	31	49	1.60
93661	F-actin-capping protein subunit alpha-3	10	15	1.60
6286	Protein S100-P	6	10	1.60
346288	Septin-14	6	9	1.60
6833	ATP-binding cassette transporter sub-family C member 8	12	20	1.60
-	Proteasome subunit beta type-11 Precursor	10	16	1.60
9678	PHD finger protein 14	139	223	1.60
57579	Protein FAM135A	13	21	1.60
66035	Solute carrier family 2, facilitated glucose transporter member 11	15	24	1.60
283248	REST corepressor 2	8	14	1.60
155382	Vacuolar protein sorting-associated protein 37D	13	21	1.60
731075	-	9	14	1.60
833	CysteinyI-tRNA synthetase, cytoplasmic	398	637	1.60
126661	hypothetical protein LOC126661	7	11	1.60
11016	Cyclic AMP-dependent transcription factor ATF-7	8	13	1.60
541468	Uncharacterized protein C1orf190	18	29	1.60
4291	Myeloid leukemia factor 1	78	126	1.60
11227	Polypeptide N-acetylgalactosaminyltransferase 5	11	17	1.60

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Hexokinase-2	13	21	1.60
79810	Pentatricopeptide repeat-containing protein 2	50	80	1.60
22824	Heat shock 70 kDa protein 4L	93	149	1.60
51651	Peptidyl-tRNA hydrolase 2, mitochondrial Precursor	555	889	1.60
-	Zinc finger protein 252	7	12	1.60
55556	Mitochondrial enolase superfamily member 1	132	212	1.60
5137	Calcium/calmodulin-dependent 3',5'-cyclic nucleotide phosphodiesterase 1C	38	61	1.60
144108	Protein SPT2 homolog	9	15	1.60
10265	Iroquois-class homeodomain protein IRX-5	8	12	1.60
493	Plasma membrane calcium-transporting ATPase 4	6	9	1.60
-	Methyltransferase-like protein 9 Precursor	27	43	1.60
6383	Syndecan-2 Precursor	9	15	1.60
8941	Cyclin-dependent kinase 5 activator 2 Precursor	9	14	1.60
7637	Zinc finger protein 84	350	561	1.60
-	Receptor-type tyrosine-protein phosphatase N2 Precursor	9	14	1.60
100288744	-	16	25	1.60
151295	Solute carrier family 23 member 3	6	10	1.60
-	Diamine acetyltransferase 2	416	666	1.60
132001	MMP37-like protein, mitochondrial Precursor	178	286	1.60
1678	Mitochondrial import inner membrane translocase subunit Tim8 A	19	31	1.60
56997	Chaperone activity of bc1 complex-like, mitochondrial Precursor	46	75	1.60
55031	Ubiquitin carboxyl-terminal hydrolase 47	153	246	1.61
6674	Sperm-associated antigen 1	11	18	1.61
-	Uncharacterized protein C3orf19	33	53	1.61
1893	Extracellular matrix protein 1 Precursor	19	31	1.61
-	-	3364	5406	1.61
113235	Proton-coupled folate transporter	9	15	1.61
91120	Zinc finger protein 682	15	23	1.61
5058	Serine/threonine-protein kinase PAK 1	20	32	1.61
219699	Netrin receptor UNC5B Precursor	21	34	1.61
83732	Serine/threonine-protein kinase RIO1	114	183	1.61
79677	Structural maintenance of chromosomes protein 6	112	180	1.61
-	Actin, alpha skeletal muscle	8	14	1.61
100292154	-	9	14	1.61
90736	Protein FAM104B	8	13	1.61
7852	C-X-C chemokine receptor type 4	1679	2702	1.61
10361	Nucleoplasmin-2	6	10	1.61
342538	Nascent polypeptide-associated complex subunit alpha-2	1016	1636	1.61
-	Inositol 1,4,5-trisphosphate receptor type 1	27	43	1.61
257194	Neuronal growth regulator 1 Precursor	9	14	1.61
284004	Hexosaminidase domain-containing protein	25	40	1.61
28987	RNA-binding protein NOB1	592	955	1.61
80145	THO complex subunit 7 homolog	577	931	1.61
-	-	19	31	1.61
140825	Neuralized-like protein 2	11	17	1.61
54962	TIMELESS-interacting protein	39	63	1.61
51347	Serine/threonine-protein kinase TAO3	85	137	1.61
219287	hypothetical protein LOC219287 isoform 2	18	28	1.62

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Immediate early response gene 5-like protein	28	45	1.62
6672	Nuclear autoantigen Sp-100	16	26	1.62
51020	HD domain-containing protein 2	114	185	1.62
-	-	12	20	1.62
23022	Palladin	208	336	1.62
64599	PERQ amino acid-rich with GYF domain-containing protein 1	10	16	1.62
4920	Tyrosine-protein kinase transmembrane receptor ROR2 Precursor	8	13	1.62
645359	PRAME family member 4	5	9	1.62
23434	Protein GR6	16	26	1.62
56925	Latexin	1188	1922	1.62
90799	Coiled-coil domain-containing protein 45	75	121	1.62
6894	Probable methyltransferase TARBP1	29	47	1.62
160851	Diacylglycerol kinase eta	9	15	1.62
388886	Leucine-rich repeat-containing protein C22orf36	107	173	1.62
202151	Ran-binding protein 3-like	6	9	1.62
-	Zinc finger protein 569	21	34	1.62
134147	Carboxymethylenebutenolidase homolog	771	1248	1.62
132660	Protein lin-54 homolog	10	16	1.62
79871	RNA polymerase II-associated protein 2	83	134	1.62
158747	Motile sperm domain-containing protein 2	23	37	1.62
9590	A-kinase anchor protein 12	886	1436	1.62
199870	Protein FAM76A	21	34	1.62
55005	Required for meiotic nuclear division protein 1 homolog	273	442	1.62
136332	Leucine-rich repeat and guanylate kinase domain-containing protein	6	9	1.62
51374	Apoptosis-related protein 3 Precursor	1090	1767	1.62
54440	SAM and SH3 domain-containing protein 3	7	11	1.62
100287879	cDNA FLJ43791 fis, clone TEST12053526	6	9	1.62
432	Asialoglycoprotein receptor 1	33	53	1.62
27152	PDZ domain-containing protein 6	13	21	1.62
170692	A disintegrin and metalloproteinase with thrombospondin motifs 18 Precursor	56	90	1.62
56950	SET and MYND domain-containing protein 2	192	311	1.62
81575	Apolipoprotein L domain-containing protein 1	10	15	1.62
56922	Methylcrotonoyl-CoA carboxylase subunit alpha, mitochondrial Precursor	43	69	1.62
-	FAST kinase domain-containing protein 1	93	150	1.62
51531	Nef-associated protein 1	35	57	1.62
92483	L-lactate dehydrogenase A-like 6B	8	13	1.62
-	ATP synthase subunit epsilon-like protein, mitochondrial	1480	2404	1.62
-	BTB/POZ domain-containing protein KCTD2	14	23	1.63
55971	Brain-specific angiogenesis inhibitor 1-associated protein 2-like protein 1	9	15	1.63
6093	Rho-associated protein kinase 1	408	663	1.63
-	-	895	1456	1.63
57456	Uncharacterized protein KIAA1143	174	283	1.63
79039	ATP-dependent RNA helicase DDX54	11	18	1.63
246269	Lactation elevated protein 1	19	31	1.63
-	-	7	11	1.63
-	Putative uncharacterized protein MGC39545	7	11	1.63

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
400258	Transmembrane protein C14orf180	6	10	1.63
284383	Olfactory receptor 2Z1	7	12	1.63
51161	Uncharacterized protein C3orf18	8	13	1.63
677	Butyrate response factor 1	917	1493	1.63
90874	Zinc finger protein 697	89	144	1.63
121457	Inhibitor of nuclear factor kappa-B kinase-interacting protein	437	711	1.63
9457	Four and a half LIM domains protein 5	15	25	1.63
8725	Unconventional prefoldin RPB5 interactor	150	244	1.63
-	Histone deacetylase 2	589	959	1.63
8566	Pyridoxal kinase	17	28	1.63
8995	Tumor necrosis factor ligand superfamily member 18	942	1534	1.63
284443	Zinc finger protein 493	11	18	1.63
387763	Protein Ag2 homolog	89	146	1.63
80146	UDP-glucuronic acid decarboxylase 1	198	323	1.63
10799	Ribonuclease P protein subunit p40	139	226	1.63
26234	F-box/LRR-repeat protein 5	426	695	1.63
63941	N-terminal EF-hand calcium-binding protein 3	29	47	1.63
51213	Leucine zipper protein 4	6	9	1.63
51110	Beta-lactamase-like protein 2	140	228	1.63
23089	-	6	10	1.63
200014	Coiled-coil and C2 domain-containing protein 1B	6	11	1.63
92856	U3 small nucleolar ribonucleoprotein protein IMP4	467	763	1.63
133015	Uncharacterized protein C4orf28	53	87	1.63
5546	Proline-rich protein PRCC	43	71	1.63
91369	Ankyrin repeat domain-containing protein 40	9	15	1.63
7015	Telomerase reverse transcriptase	7	12	1.63
3667	Insulin receptor substrate 1	15	25	1.63
26960	Neurobeachin	67	110	1.63
118924	Protein FRA10AC1	365	596	1.63
9543	Putative neuronal cell adhesion molecule Precursor	8	12	1.63
23074	UHRF1-binding protein 1-like	22	36	1.63
10885	WD repeat-containing protein 3	38	63	1.63
6940	Zinc finger protein 354A	73	120	1.63
257160	RING finger protein 214	27	44	1.63
-	Transmembrane protein 209	14	22	1.63
9045	60S ribosomal protein L14	11853	19373	1.63
60385	Testis-specific serine kinase substrate	9	14	1.63
55749	Cell division cycle and apoptosis regulator protein 1	110	180	1.64
8464	Transcription initiation protein SPT3 homolog	16	26	1.64
100293905	Gastrin-releasing peptide receptor	5	9	1.64
79856	Sorting nexin-22	6	9	1.64
25809	Probable tubulin polyglutamylase TTL1	86	140	1.64
83480	tRNA pseudouridine synthase 3	84	138	1.64
9841	Zinc finger and BTB domain-containing protein 24	16	26	1.64
131118	Mitochondrial import inner membrane translocase subunit TIM14	437	716	1.64
83667	Sestrin-2	374	613	1.64
-	MORN repeat-containing protein 2	75	123	1.64
80111	Uncharacterized protein C3orf36	7	12	1.64
3084	Pro-neuregulin-1, membrane-bound isoform Precursor	102	168	1.64

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1736	H/ACA ribonucleoprotein complex subunit 4	197	323	1.64
84265	DNA-directed RNA polymerase III subunit RPC7-like	195	320	1.64
79621	Ribonuclease H2 subunit B	180	295	1.64
10456	HCLS1-associated protein X-1	844	1385	1.64
83903	Serine/threonine-protein kinase haspin	8	14	1.64
51131	PHD finger protein 11	123	201	1.64
92002	Cyclin-related protein FAM58A (Cyclin-M)	255	419	1.64
5046	Proprotein convertase subtilisin/kexin type 6 Precursor	7	11	1.64
57486	Neurolysin, mitochondrial Precursor	62	102	1.64
6920	Transcription elongation factor A protein 3	39	65	1.64
8544	Pirin	822	1349	1.64
10516	Fibulin-5 Precursor	10	16	1.64
-	Coiled-coil domain-containing protein C6orf204	23	37	1.64
55520	Zinc phosphodiesterase ELAC protein 1	68	112	1.64
60491	NIF3-like protein 1	79	130	1.64
219670	Enkurin	7	12	1.64
253714	Uncharacterized protein C6orf167	8	14	1.64
84946	Protein LTV1 homolog	197	323	1.64
254013	UPF0516 protein C12orf72	11	18	1.64
26146	TRAF3-interacting protein 1	31	52	1.64
112849	Probable proline racemase	141	232	1.65
-	Cytosolic carboxypeptidase 3	7	11	1.65
-	Putative uncharacterized protein PRO0461	7	11	1.65
390265	Olfactory receptor 10G7	14	23	1.65
7690	Zinc finger protein 131	54	88	1.65
10190	Thioredoxin domain-containing protein 9	501	825	1.65
51196	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase epsilon-1	8	14	1.65
201229	UPF0631 protein HSD24	28	45	1.65
729440	Coiled-coil domain-containing protein 61	26	44	1.65
84329	Voltage-gated hydrogen channel 1	23	37	1.65
257106	Rho GTPase-activating protein 30	9	15	1.65
147184	Transmembrane protein 99 Precursor	67	110	1.65
-	Valacyclovir hydrolase Precursor	91	150	1.65
79831	JmjC domain-containing protein 5	6	10	1.65
286336	Protein FAM78A	86	143	1.65
84327	Zinc finger BED domain-containing protein 3	157	260	1.65
4708	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 2, mitochondrial Precursor	1513	2500	1.65
122060	SLAIN motif-containing protein 1	16	27	1.65
-	RING finger and transmembrane domain- containing protein 1	114	189	1.65
51315	Lysine-rich coiled-coil protein 1	359	594	1.66
23308	ICOS ligand Precursor	32	52	1.66
79628	SH3 domain and tetratricopeptide repeats- containing protein 2	12	20	1.66
1903	Sphingosine 1-phosphate receptor 3	181	299	1.66
283687	Putative uncharacterized protein C15orf37	14	23	1.66
222698	NKAP-like protein	20	33	1.66
100131172	Putative uncharacterized protein ENSP00000387291	6	11	1.66

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
123263	Methionyl-tRNA formyltransferase, mitochondrial Precursor	80	133	1.66
23354	Uncharacterized protein KIAA0841	7	12	1.66
5806	Pentraxin-related protein PTX3 Precursor	1307	2171	1.66
284433	Olfactory receptor 10H5	6	9	1.66
8878	Sequestosome-1	1764	2932	1.66
152100	COX assembly mitochondrial protein homolog	420	697	1.66
10780	Zinc finger protein 234	15	25	1.66
644283	-	24	39	1.66
4867	Nephrocystin-1	24	41	1.66
92949	ADAMTS-like protein 1 Precursor	17	28	1.66
85481	Serine/threonine-protein kinase H2	6	10	1.66
130162	Uncharacterized protein C2orf63	6	11	1.66
201255	Leucine-rich repeat-containing protein 45	21	35	1.66
26520	Mitochondrial import inner membrane translocase subunit Tim9	159	265	1.66
10621	DNA-directed RNA polymerase III subunit RPC6	40	66	1.67
-	PH and SEC7 domain-containing protein 3	24	39	1.67
80223	Rab11 family-interacting protein 1	5	9	1.67
22917	Zona pellucida sperm-binding protein 1 Precursor	8	13	1.67
122704	39S ribosomal protein L52, mitochondrial Precursor	1095	1826	1.67
58525	Protein Wiz	50	83	1.67
-	-	780	1302	1.67
11341	Scrapie-responsive protein 1 Precursor	8	13	1.67
11200	Serine/threonine-protein kinase Chk2	17	28	1.67
9546	Amyloid beta A4 precursor protein-binding family A member 3	56	93	1.67
8310	Peroxisomal acyl-coenzyme A oxidase 3	29	49	1.67
3742	Potassium voltage-gated channel subfamily A member 6	9	14	1.67
6897	Threonyl-tRNA synthetase, cytoplasmic	489	816	1.67
-	Transcription factor EC	159	266	1.67
100134161	Protein unc-93 homolog B1	57	96	1.67
152185	Coiled-coil domain-containing protein 52	25	43	1.67
4147	Matrilin-2 Precursor	25	41	1.67
145407	Uncharacterized protein C14orf37 Precursor	13	22	1.67
100288152	cDNA FLJ60648	7	12	1.67
84219	WD repeat-containing protein 24	12	20	1.67
157773	Uncharacterized protein C8orf48	24	40	1.67
63973	Neurogenin-2	8	13	1.67
51019	Coiled-coil domain-containing protein 53	367	614	1.67
51806	Calmodulin-like protein 5	13	22	1.67
-	Laminin subunit beta-4 Precursor	8	13	1.68
388335	Transmembrane protein 220	105	176	1.68
54826	Gypsy retrotransposon integrase-like protein 1	50	84	1.68
26054	Sentrin-specific protease 6	244	409	1.68
7561	Zinc finger protein 14	35	59	1.68
23087	Tripartite motif-containing protein 35	124	208	1.68
51611	Diphthine synthase	277	464	1.68
-	Glycerol-3-phosphate acyltransferase-like protein 1	12	20	1.68
-	Coiled-coil domain-containing protein 69	6	10	1.68
51076	Copper homeostasis protein cutC homolog	96	162	1.68
596	Apoptosis regulator Bcl-2	16	26	1.68

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	RRP12-like protein	132	221	1.68
26256	Calcium-binding tyrosine phosphorylation-regulated protein	27	45	1.68
220963	Monocarboxylate transporter 9	31	53	1.68
285908	Uncharacterized protein FLJ35306	6	10	1.68
3217	Homeobox protein Hox-B7	654	1099	1.68
23288	IQ domain-containing protein E	8	14	1.68
-	-	826	1388	1.68
730107	Glycine cleavage system H protein, mitochondrial Precursor	474	796	1.68
-	Serine/threonine-protein phosphatase 2A 55 kDa regulatory subunit B gamma isoform	7	12	1.68
-	Oxysterols receptor LXR-alpha	15	25	1.68
4069	Lysozyme C Precursor	7	11	1.68
4928	Nuclear pore complex protein Nup98-Nup96 Precursor	88	147	1.68
118472	Zinc finger protein 511	113	190	1.68
3155	Hydroxymethylglutaryl-CoA lyase, mitochondrial Precursor	189	318	1.68
-	Protein FRA10AC1	391	658	1.68
650794	-	7	12	1.68
93550	AN1-type zinc finger and ubiquitin domain-containing protein 1	7	12	1.68
55800	Sodium channel subunit beta-3 Precursor	8	14	1.68
54853	WD repeat-containing protein 55	158	266	1.68
79706	PRKR-interacting protein 1	53	90	1.68
23467	Neuronal pentraxin receptor	5	9	1.68
100293500	-	22	37	1.68
116228	family with sequence similarity 36, member A (FAM36A), mRNA	355	598	1.69
-	-	4882	8231	1.69
100131989	Putative uncharacterized protein	26	43	1.69
1307	Collagen alpha-1(XVI) chain Precursor	11	18	1.69
51303	-	523	884	1.69
11189	CUG-BP- and ETR-3-like factor 3	7	11	1.69
815	Calcium/calmodulin-dependent protein kinase type II alpha chain	12	20	1.69
-	Rho-related GTP-binding protein RhoE Precursor	721	1218	1.69
27109	ATP synthase subunit s, mitochondrial Precursor	61	104	1.69
5077	Paired box protein Pax-3	10	17	1.69
-	Kinesin-like protein KIF21A	17	28	1.69
4084	MAD protein	48	81	1.69
1360	Carboxypeptidase B Precursor	10	17	1.69
80135	Ribosome production factor 1	328	554	1.69
84152	Protein phosphatase 1 regulatory subunit 1B	6	11	1.69
-	-	448	759	1.69
343637	R-spondin-4 Precursor	10	17	1.69
5914	Retinoic acid receptor alpha	9	16	1.69
-	-	10	16	1.69
-	-	159	270	1.69
203245	Nuclear apoptosis-inducing factor 1	8	13	1.70
5189	Peroxisome biogenesis factor 1	28	47	1.70
29920	Left-right determination factor 1 Precursor	547	927	1.70
-	CMRF35-like molecule 9 Precursor	9	15	1.70
55179	Fas apoptotic inhibitory molecule 1	81	137	1.70

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Putative glycerol kinase 5	9	15	1.70
57532	Nuclear fragile X mental retardation-interacting protein 2	6	11	1.70
54103	Protein pigeon homolog	6	10	1.70
89874	Mitochondrial 2-oxodicarboxylate carrier	8	14	1.70
83852	Histone-lysine N-methyltransferase SETDB2	11	19	1.70
166379	Bardet-Biedl syndrome 12 protein	29	50	1.70
140883	Zinc finger protein 280B	9	16	1.70
100291961	-	6	9	1.70
84524	Zinc finger CCCH domain-containing protein 8	48	82	1.70
100132502	cDNA FLJ36032 fis, clone TESTI2017069	8	13	1.70
374875	short-chain dehydrogenase/reductase 10 isoform a	20	34	1.70
730883	-	10	16	1.70
11062	tRNA-dihydrouridine synthase 4-like	57	98	1.70
84142	BRCA1-A complex subunit Abraxas	111	189	1.70
55621	N(2),N(2)-dimethylguanosine tRNA methyltransferase	237	403	1.70
6450	SH3 domain-binding glutamic acid-rich protein	20	34	1.70
80746	tRNA-splicing endonuclease subunit Sen2	43	74	1.70
11185	Indolethylamine N-methyltransferase	6	11	1.70
136	Adenosine receptor A2b	86	146	1.70
64718	RING finger protein unkempt-like	70	120	1.70
205564	Sentrin-specific protease 5	19	32	1.70
-	Coiled-coil domain-containing protein 86	62	105	1.70
728622	-	263	449	1.71
-	Azurocidin Precursor	16	27	1.71
55791	Uncharacterized protein C1orf103	66	113	1.71
6904	Tubulin-specific chaperone D	82	141	1.71
80821	Phospholipase DDHD1	25	43	1.71
64215	DnaJ homolog subfamily C member 1 Precursor	89	152	1.71
2644	GTP cyclohydrolase 1 feedback regulatory protein	143	244	1.71
-	-	5	9	1.71
84765	Zinc finger protein 577	13	22	1.71
-	Zinc finger protein 701	18	30	1.71
65110	Regulator of nonsense transcripts 3A	176	301	1.71
51605	tRNA	47	81	1.71
6390	Succinate dehydrogenase [ubiquinone] iron-sulfur subunit, mitochondrial Precursor	1297	2219	1.71
203859	Anoctamin-5	6	10	1.71
873	Carbonyl reductase [NADPH] 1	313	536	1.71
58496	Casein kinase II subunit beta	7	12	1.71
646698	Putative uncharacterized protein ENSP00000384482 Fragment	22	38	1.71
9480	One cut domain family member 2	8	13	1.72
-	Tyrosine-protein phosphatase non-receptor type 22	5	9	1.72
54806	Joubertin	125	214	1.72
54331	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-2 Precursor	10	17	1.72
-	Cyclin-dependent kinase-like 1	11	19	1.72
114803	Protein MYSM1	9	16	1.72
29070	Coiled-coil domain-containing protein 113	15	26	1.72
-	Putative octanoyltransferase, mitochondrial Precursor	5	9	1.72

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3543	Immunoglobulin lambda-like polypeptide 1 Precursor	8	14	1.72
-	-	3575	6140	1.72
10746	Mitogen-activated protein kinase kinase kinase 2	13	22	1.72
2274	Four and a half LIM domains protein 2	5477	9418	1.72
-	IQ domain-containing protein E	9	16	1.72
140886	Polyadenylate-binding protein 5	8	13	1.72
197320	Zinc finger protein 778	6	10	1.72
54522	Ankyrin repeat domain-containing protein 16	24	41	1.72
9015	TATA box-binding protein-associated factor RNA polymerase I subunit A	20	35	1.72
-	Pantothenate kinase 1	46	79	1.72
126823	Kelch domain-containing protein 9	16	28	1.72
51635	Dehydrogenase/reductase SDR family member 7 Precursor	552	952	1.72
79903	N-acetyltransferase UNQ2771/PRO7155	7	13	1.72
11105	PR domain containing 7 isoform 2	18	30	1.72
-	Nuclear receptor corepressor 1	455	785	1.73
51776	Mitogen-activated protein kinase kinase kinase MLT	53	91	1.73
1573	Cytochrome P450 2J2	5	9	1.73
25911	Protein DPCD	224	387	1.73
10142	A-kinase anchor protein 9	189	327	1.73
1138	Neuronal acetylcholine receptor subunit alpha-5 Precursor	28	49	1.73
80210	LisH domain-containing protein ARMC9	149	258	1.73
79081	Uncharacterized protein C11orf48	11	20	1.73
54507	ADAMTS-like protein 4 Precursor	9	15	1.73
79813	Histone-lysine N-methyltransferase, H3 lysine-9 specific 5	43	74	1.73
120526	DnaJ homolog subfamily C member 24	42	72	1.73
283385	MORN repeat-containing protein 3	8	14	1.73
6301	Seryl-tRNA synthetase, cytoplasmic	967	1673	1.73
54862	Coiled-coil and C2 domain-containing protein 1A	9	16	1.73
2218	Fukutin	24	41	1.73
158293	Putative FAM120A opposite strand protein	205	355	1.73
90268	Protein FAM105B	28	48	1.73
10480	Eukaryotic translation initiation factor 3 subunit M	2540	4403	1.73
8819	Histone deacetylase complex subunit SAP30	360	623	1.73
100292993	-	12	21	1.73
688	Krueppel-like factor 5	37	64	1.73
5555	Salivary acidic proline-rich phosphoprotein 1/2 Precursor	6	10	1.74
2846	Lysophosphatidic acid receptor 4	8	14	1.74
80174	Protein DBF4 homolog B	8	13	1.74
-	Neuronal acetylcholine receptor subunit alpha-5 Precursor	20	34	1.74
4316	Matrilysin Precursor	1633	2834	1.74
8399	Group 10 secretory phospholipase A2 Precursor	8	13	1.74
390259	Brain-specific homeobox protein homolog	9	15	1.74
53942	Contactin-5 Precursor	11	19	1.74
100129461	-	9	16	1.74
27240	Signaling threshold-regulating transmembrane adapter 1 Precursor	9	16	1.74

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Olfactory receptor 11H7	7	12	1.74
100288786	-	11	19	1.74
50853	Villin-like protein	7	12	1.74
27232	Glycine N-methyltransferase	6	10	1.74
22993	Protein SMF	9	16	1.74
9541	CBF1-interacting corepressor (Recepin)	116	202	1.74
55240	Metalloreductase STEAP3	71	123	1.74
23269	MAX gene-associated protein	15	27	1.74
222950	Uncharacterized protein C7orf51	8	14	1.74
3268	Arf-GAP domain and FG repeats-containing protein 2	5	9	1.75
55787	Gamma-taxilin	28	48	1.75
138199	UPF0586 protein C9orf41	20	36	1.75
-	-	169	295	1.75
100293989	Putative uncharacterized protein C14orf144 Precursor	5	10	1.75
337	apolipoprotein A-IV precursor	10	17	1.75
-	-	217	380	1.75
5332	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase beta-4	13	23	1.75
-	-	204	357	1.75
344022	Homeobox protein notochord	8	14	1.75
441168	Protein FAM26F	6	11	1.75
-	C-type lectin domain family 4 member D	5	9	1.75
661	DNA-directed RNA polymerase III subunit RPC4	151	265	1.75
201514	Zinc finger protein 584	24	43	1.75
734	Oxidative stress-induced growth inhibitor 2	85	149	1.76
10469	Mitochondrial import inner membrane translocase subunit TIM44 Precursor	220	387	1.76
8120	AP-3 complex subunit beta-2	7	12	1.76
55857	Uncharacterized protein C20orf19	26	46	1.76
283284	Immunoglobulin superfamily member 22	6	10	1.76
80308	FAD synthetase	15	27	1.76
59271	Uncharacterized protein C21orf63 Precursor	149	262	1.76
6891	Antigen peptide transporter 2	11	20	1.76
441549	ARMET-like protein 1 Precursor	8	14	1.76
85865	GTP-binding protein 10	13	23	1.76
-	-	655	1154	1.76
7058	Thrombospondin-2 Precursor	7	12	1.76
4925	Nucleobindin-2 Precursor	547	963	1.76
285704	RGM domain family member B Precursor	37	65	1.76
11340	Exosome complex exonuclease RRP43	362	638	1.76
406	Aryl hydrocarbon receptor nuclear translocator-like protein 1	17	30	1.76
84902	Coiled-coil domain-containing protein 123, mitochondrial Precursor	58	102	1.76
-	Zinc finger X-chromosomal protein	40	71	1.76
114659	Leucine-rich repeat-containing protein 37B Precursor	8	13	1.77
84365	MKI67 FHA domain-interacting nucleolar phosphoprotein	630	1112	1.77
64089	Sorting nexin-16	5	9	1.77
23212	Ribosome biogenesis regulatory protein homolog	184	325	1.77

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
79789	Calmin	6	11	1.77
170082	Transcription elongation factor A N-terminal and central domain-containing protein	13	24	1.77
64779	Methenyltetrahydrofolate synthetase domain-containing protein	20	35	1.77
7738	Zinc finger protein 184	26	46	1.77
147699	Probable protein phosphatase 1B-like	10	17	1.77
4487	Homeobox protein MSX-1	45	80	1.77
-	Proline-serine-threonine phosphatase-interacting protein 1	8	15	1.77
730033	-	5	10	1.77
730112	UPF0605 protein FAM166B	15	26	1.77
-	DNA-directed RNA polymerase I subunit RPA2	77	136	1.77
64072	Cadherin-23 Precursor (Otocadherin)	6	11	1.77
57492	AT-rich interactive domain-containing protein 1B	12	21	1.77
150274	Co-chaperone protein HscB, mitochondrial Precursor	94	166	1.77
27097	TAF5-like RNA polymerase II p300/CBP-associated factor-associated factor 65 kDa subunit 5L	6	11	1.77
100292503	-	8	15	1.77
201175	RHG27_HUMAN Isoform 4 of Q6ZUM4 · Homo sapiens	46	82	1.77
155006	Transmembrane protein 213	8	15	1.78
131076	Coiled-coil domain-containing protein 58	127	225	1.78
-	-	420	746	1.78
-	-	1747	3105	1.78
63933	Coiled-coil domain-containing protein 90A, mitochondrial Precursor	114	202	1.78
10437	Gamma-interferon-inducible lysosomal thiol reductase Precursor	18	33	1.78
166793	Zinc finger protein 509	6	11	1.78
63951	Doublesex- and mab-3-related transcription factor A1	13	23	1.78
133383	Uncharacterized protein C5orf35	50	90	1.78
65095	Protein KRI1 homolog	24	42	1.78
4750	Serine/threonine-protein kinase Nek1	16	28	1.78
196463	Putative phospholipase B-like 2 Precursor	7	13	1.78
-	Protein FAM78A	38	68	1.78
2638	Vitamin D-binding protein Precursor	5	9	1.78
670	Valacyclovir hydrolase Precursor	94	167	1.78
90362	Protein FAM110B	8	15	1.78
84261	F-box/WD repeat-containing protein 9	35	63	1.78
286826	Lin-9 homolog	18	33	1.78
-	Neighbor of punc e11 Precursor	5	9	1.78
825	Calpain-3	8	14	1.79
145508	Uncharacterized protein C14orf145	7	12	1.79
-	Spermatogenesis-associated protein 6 Precursor	6	10	1.79
7772	Zinc finger protein 229	6	11	1.79
-	Radial spoke head protein 3 homolog	21	38	1.79
9933	Pumilio domain-containing protein KIAA0020	193	346	1.79
8553	Class B basic helix-loop-helix protein 2	293	524	1.79
84883	Apoptosis-inducing factor 2	63	113	1.79
23404	Exosome complex exonuclease RRP4	132	236	1.79

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
360023	Zinc finger and BTB domain-containing protein 41	7	12	1.79
100131107	Putative UPF0607 protein ENSP00000383783	7	12	1.79
6936	GC-rich sequence DNA-binding factor	14	26	1.79
55299	Brix domain-containing protein 2	288	515	1.79
-	-	397	711	1.79
56114	Protocadherin gamma-A1 Precursor	5	10	1.79
63898	SH2 domain-containing protein 4A	6	10	1.79
29103	DnaJ homolog subfamily C member 15	28	51	1.79
192670	Protein argonaute-4	10	17	1.79
100130363	-	7	13	1.79
113540	chemokine-like factor superfamily 1 isoform 4	8	15	1.79
9068	Angiopoietin-related protein 1 Precursor	8	15	1.80
79918	SET domain-containing protein 6	40	71	1.80
84707	Protein BEX2	52	93	1.80
84334	Kinesin light chain 1	355	638	1.80
6236	GTP-binding protein RAD	21	37	1.80
389493	-	14	25	1.80
9507	A disintegrin and metalloproteinase with thrombospondin motifs 4 Precursor	11	19	1.80
8639	Membrane primary amine oxidase	5	10	1.80
4902	Neurturin Precursor	20	36	1.80
100134103	Sodium/hydrogen exchanger-like domain-containing protein 1	7	13	1.80
157697	Glutamate-rich protein 1	151	273	1.80
219578	Zinc finger protein 804B	42	76	1.80
100293588	-	5	10	1.81
147929	Zinc finger protein 565	11	19	1.81
-	Dedicator of cytokinesis protein 11 (Zizimin-2)	11	21	1.81
9141	Programmed cell death protein 5	1263	2281	1.81
57455	RNA exonuclease 1 homolog	8	15	1.81
55728	NEDD4-binding protein	14	26	1.81
51244	Uncharacterized protein C3orf19	155	280	1.81
8635	Ribonuclease T2 Precursor	79	143	1.81
-	FLYWCH-type zinc finger-containing protein 1	35	64	1.81
23590	Decaprenyl-diphosphate synthase subunit 1	27	49	1.81
158135	Tubulin polyglutamylase TTL11	7	13	1.81
55779	WD repeat-containing protein 52	9	16	1.81
4595	A/G-specific adenine DNA glycosylase	17	30	1.81
728071	HSPC188	9	17	1.81
22801	Integrin alpha-11 Precursor	5	10	1.81
222166	UPF0452 protein C7orf41 (Protein Ells1)	55	99	1.81
100129407	Putative uncharacterized protein ENSP00000362624	6	11	1.82
-	Transcription factor ETV7	16	29	1.82
10357	Putative high mobility group protein 1-like 1	476	864	1.82
100133941	Signal transducer CD24 Precursor	38	70	1.82
140707	BRI3-binding protein	18	33	1.82
-	Transcription initiation factor TFIID subunit 4	6	10	1.82
3329	60 kDa heat shock protein, mitochondrial Precursor	2333	4245	1.82
10969	Probable rRNA-processing protein EBP2	954	1736	1.82
-	Retinoblastoma-binding protein 8	28	51	1.82
8688	Keratin, type I cuticular Ha7	6	10	1.82
-	Solute carrier family 12 member 7	9	17	1.82
26257	Homeobox protein Nkx-2.8	6	10	1.82

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55006	Potential tRNA	57	104	1.82
120071	Glycosyltransferase-like protein LARGE2	6	11	1.82
147948	Zinc finger protein 582	6	11	1.82
-	Tumor necrosis factor ligand superfamily member 15	34	61	1.83
169714	Sulfhydryl oxidase 2 Precursor	42	77	1.83
10626	CMT1A duplicated region transcript 1 protein	31	57	1.83
54899	PX domain-containing protein kinase-like protein	46	84	1.83
81490	Phosphatidylserine synthase 2	117	214	1.83
5333	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase delta-1	17	31	1.83
344167	Putative forkhead box protein ENSP00000381211	8	14	1.83
5226	6-phosphogluconate dehydrogenase, decarboxylating	3431	6295	1.83
51108	Methyltransferase-like protein 9 Precursor	33	61	1.84
171425	Citrate lyase subunit beta-like protein, mitochondrial Precursor	14	25	1.84
548645	DnaJ homolog subfamily C member 25	49	90	1.84
7625	Zinc finger protein 74	33	60	1.84
83990	Fanconi anemia group J protein	7	13	1.84
43	Acetylcholinesterase Precursor	6	11	1.84
-	Interferon-induced very large GTPase 1	7	12	1.84
26298	ETS homologous factor	9	17	1.84
54943	DnaJ homolog subfamily C member 28	6	10	1.84
6368	C-C motif chemokine 23 Precursor	10	18	1.84
10420	Dual specificity testis-specific protein kinase 2	10	18	1.84
57688	Zinc finger SWIM domain-containing protein 6	123	227	1.84
54839	Leucine-rich repeat-containing protein 49	34	64	1.84
115209	Metalloendopeptidase OMA1, mitochondrial Precursor	51	95	1.84
-	CaiB/baiF CoA-transferase family protein C7orf10	8	14	1.84
389136	Transcription cofactor vestigial-like protein 3	11	21	1.84
11019	Lipoyl synthase, mitochondrial Precursor	82	151	1.84
167555	Protein FAM151B	7	13	1.84
167691	Lebercilin	11	20	1.85
10457	Transmembrane glycoprotein NMB Precursor	8	15	1.85
152815	THAP domain-containing protein 6	13	24	1.85
-	MAGUK p55 subfamily member 2	102	188	1.85
3467	Interferon omega-1 Precursor	6	11	1.85
9047	SH2 domain-containing protein 2A	9	16	1.85
5318	Plakophilin-2	13	24	1.85
10807	Serologically defined colon cancer antigen 3	107	199	1.85
23547	Leukocyte immunoglobulin-like receptor subfamily A member 4 Precursor	5	10	1.85
255758	Tctex1 domain-containing protein 2	218	403	1.85
148266	Zinc finger protein 569	14	25	1.85
100291171	-	6	11	1.85
467	Cyclic AMP-dependent transcription factor ATF-3	36	68	1.86
7568	Zinc finger protein 20	14	25	1.86
386678	Keratin-associated protein 10-11	5	10	1.86
287015	Tripartite motif-containing protein 42	8	14	1.86
89894	Transmembrane protein 116	13	25	1.86
-	-	4324	8052	1.86
7770	Zinc finger protein 227	34	63	1.86

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
4337	Molybdenum cofactor biosynthesis protein 1	22	41	1.86
-	EMILIN-2 Precursor	44	81	1.86
246176	GAS2-like protein 2	14	27	1.86
100130887	-	14	27	1.86
439949	-	19	35	1.86
4312	Interstitial collagenase Precursor	20511	38253	1.86
6472	Serine hydroxymethyltransferase, mitochondrial Precursor	494	922	1.87
27295	PDZ and LIM domain protein 3	33	62	1.87
64792	Rab-like protein 5	224	418	1.87
1991	Leukocyte elastase Precursor	13	24	1.87
-	LisH domain-containing protein ARMC9	135	253	1.87
79862	Zinc finger protein 669	42	79	1.87
79783	-	13	24	1.87
55719	Protein FAM178A	6	12	1.87
11035	Receptor-interacting serine/threonine-protein kinase 3	11	21	1.87
56916	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily A containing DEAD/H box 1	98	183	1.87
-	Unconventional prefoldin RPB5 interactor	123	231	1.88
57584	Rho GTPase-activating protein 21	8	15	1.88
-	Zinc finger protein 2	14	26	1.88
2617	Glycyl-tRNA synthetase	2135	4010	1.88
56242	zinc finger protein 253	14	26	1.88
56906	THAP domain-containing protein 10	23	42	1.88
646377	-	6	11	1.88
57001	Protein ACN9 homolog, mitochondrial Precursor	91	171	1.88
51097	Probable saccharopine dehydrogenase	786	1478	1.88
92270	V-type proton ATPase subunit S1-like protein	6	11	1.88
122970	Acyl-coenzyme A thioesterase 4	10	18	1.88
84102	Solute carrier family 41 member 2	10	19	1.88
90355	Uncharacterized protein C5orf30	72	137	1.88
144577	UPF0536 protein C12orf66	8	14	1.88
-	-	77	144	1.88
100289282	-	8	15	1.88
85016	Uncharacterized protein C11orf70	6	11	1.88
126626	GA-binding protein subunit beta-2	5	10	1.89
59349	Kelch-like protein 12	89	168	1.89
23141	Ankyrin repeat and LEM domain-containing protein 2	80	152	1.89
5680	Pregnancy-specific beta-1-glycoprotein 11 Precursor	6	11	1.89
-	Putative zinc finger protein 725	11	22	1.89
84924	Zinc finger protein 566	24	46	1.89
66004	Ly-6/neurotoxin-like protein 1 Precursor	13	25	1.89
646871	-	7	13	1.89
8651	Suppressor of cytokine signaling 1	6	12	1.90
100292887	-	6	12	1.90
7295	Thioredoxin	3100	5885	1.90
387119	Coiled-coil domain-containing protein C6orf204	11	21	1.90
9293	Probable G-protein coupled receptor 52	7	13	1.90
7270	Transcription termination factor 1	31	59	1.90
728297	-	6	11	1.90
100291647	-	8	15	1.90

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
84267	UPF0553 protein C9orf64	51	97	1.90
84223	IQ domain-containing protein G	15	29	1.90
4835	Ribosylidihyronicotinamide dehydrogenase [quinone]	72	137	1.90
55132	La-related protein 2	40	76	1.91
23116	Protein FAM179B	10	19	1.91
5366	Phorbol-12-myristate-13-acetate-induced protein 1	240	458	1.91
22797	Transcription factor EC	38	72	1.91
-	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3	11	21	1.91
112942	Coiled-coil domain-containing protein 104	334	638	1.91
5891	MAPK/MAK/MRK overlapping kinase	17	32	1.91
55363	Hemogen	8	16	1.91
57717	Protocadherin beta-16 Precursor	14	26	1.91
-	Coiled-coil domain-containing protein 64A	5	10	1.91
79833	Gem-associated protein 6	97	186	1.91
23498	3-hydroxyanthranilate 3,4-dioxygenase	6	12	1.92
-	Coiled-coil domain-containing protein 34	128	246	1.92
84225	Zinc finger MYND domain-containing protein 15	6	12	1.92
285381	DPH3 homolog	9	17	1.92
54960	Gem-associated protein 8	21	40	1.92
55646	Cell growth-regulating nucleolar protein	133	255	1.92
10557	Ribonuclease P protein subunit p38	74	142	1.92
55722	Centrosomal protein of 72 kDa	14	27	1.92
144455	Transcription factor E2F7	6	12	1.93
51230	PHD finger protein 20	85	164	1.93
127	Alcohol dehydrogenase 4	7	13	1.93
64714	Protein disulfide-isomerase A2 Precursor	5	11	1.93
60558	GTP-binding protein GUF1 homolog	19	36	1.93
23392	Proteasome-associated protein ECM29 homolog	7	14	1.93
93973	Actin-related protein 8	22	42	1.93
51435	Scavenger receptor class A member 3	25	48	1.93
161823	Adenosine deaminase-like protein	8	16	1.93
-	P protein (Pink-eyed dilution protein homolog)	8	16	1.94
2151	Proteinase-activated receptor 3 Precursor	17	32	1.94
2346	Glutamate carboxypeptidase 2	11	22	1.94
-	-	29	57	1.94
-	SL cytokine Precursor	7	13	1.94
51170	Estradiol 17-beta-dehydrogenase 11 Precursor	209	405	1.94
-	-	20	38	1.94
10110	Serine/threonine-protein kinase Sgk2	6	12	1.94
3592	Interleukin-12 subunit alpha Precursor	12	23	1.94
91614	DEP domain-containing protein 7	7	13	1.94
1392	Corticosteroid-binding globulin Precursor	5	10	1.95
200728	Transmembrane protein 17	12	23	1.95
51529	Anaphase-promoting complex subunit 11	28	55	1.95
11092	Uncharacterized protein C9orf9	25	49	1.95
51001	mTERF domain-containing protein 1, mitochondrial Precursor	110	215	1.95
-	Integrin alpha-D Precursor	7	14	1.95
401492	-	10	20	1.95
100131303	-	6	12	1.95
-	Protein FAM19A2 Precursor	7	13	1.95
7292	Tumor necrosis factor ligand superfamily member 4	313	612	1.96

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
54360	Cytokine-like protein 1 Precursor	787	1539	1.96
100130809	Sex-determining region Y protein	6	12	1.96
5744	Parathyroid hormone-related protein Precursor	7	14	1.96
170685	Diphosphoinositol polyphosphate phosphohydrolase 3-alpha	11	21	1.96
84766	EF-hand calcium-binding domain-containing protein 4B	6	12	1.96
148423	UPF0690 protein C1orf52	13	26	1.96
164091	Membrane progesterin receptor alpha	5	11	1.96
100133665	Transaldolase	2272	4458	1.96
1649	DNA damage-inducible transcript 3	195	382	1.96
283078	Homeobox protein Mohawk	8	16	1.96
26030	Pleckstrin homology domain-containing family G member 3	13	25	1.96
1054	CCAAT/enhancer-binding protein gamma	162	317	1.96
-	Protein JOSD3	299	586	1.96
401541	Centromere protein P	14	27	1.97
-	-	22	44	1.97
79600	Tectonic-1 Precursor	83	164	1.97
56953	5'(3')-deoxyribonucleotidase, mitochondrial Precursor	14	28	1.97
115752	DIS3-like exonuclease 1	61	121	1.97
10912	Growth arrest and DNA-damage-inducible protein GADD45 gamma	13	26	1.97
83882	Tetraspanin-10	6	12	1.97
29765	Tropomodulin-4	10	19	1.97
254879	Olfactory receptor 2T6	16	32	1.97
-	-	14	28	1.97
7268	Tetrapeptide repeat protein 4	90	177	1.97
2256	Fibroblast growth factor 11	10	21	1.98
2294	Forkhead box protein F1	36	71	1.98
-	Zinc finger protein 137	6	12	1.98
7019	Transcription factor A, mitochondrial Precursor	134	265	1.98
1846	Dual specificity protein phosphatase 4	115	227	1.98
3398	DNA-binding protein inhibitor ID-2	32	63	1.98
84253	GTPase-activating Rap/Ran-GAP domain-like protein 3	12	24	1.98
-	-	61	120	1.98
9831	Zinc finger protein 623	9	18	1.99
90379	DDB1- and CUL4-associated factor 15	5	10	1.99
78997	Ganglioside-induced differentiation-associated protein 1-like 1	6	13	1.99
341276	Olfactory receptor 10A2	6	11	2.00
11064	Centriolin	9	19	2.00
56986	DTW domain-containing protein 1	71	142	2.00
4234	tRNA	69	137	2.00
84085	F-box only protein 30	149	298	2.00
55698	Ras-associating and dilute domain-containing protein	12	24	2.00
135138	Parkin coregulated gene protein	7	14	2.00
-	Short transient receptor potential channel 1	11	21	2.00
-	-	1534	3075	2.00
-	-	1699	3405	2.00
25961	Nucleoside diphosphate-linked moiety X motif 13	12	24	2.01

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-	494	991	2.01
728013	COBW domain-containing protein 5	6	12	2.01
55848	Transmembrane protein C9orf46	78	157	2.01
-	Mirror-image polydactyly gene 1 protein	19	37	2.01
11279	Krueppel-like factor 8	8	16	2.01
-	-	25	49	2.01
-	-	193	387	2.01
196951	Uncharacterized protein C15orf33	11	23	2.01
6510	Neutral amino acid transporter B(0)	281	566	2.01
729505	Non-histone chromosomal protein HMG-17	9	19	2.01
84186	Zinc finger CCHC domain-containing protein 7	38	77	2.01
-	rRNA/tRNA 2'-O-methyltransferase fibrillarin-like	10	21	2.01
10683	Delta-like protein 3 Precursor	14	27	2.02
64859	Oligonucleotide/oligosaccharide-binding fold-containing protein 2A	55	110	2.02
84858	Zinc finger protein 503	59	119	2.02
-	Voltage-dependent L-type calcium channel subunit beta-1	5	11	2.02
-	MAGUK p55 subfamily member 3	10	20	2.02
90853	SPOC domain-containing protein 1	54	110	2.02
119559	Sideroflexin-4	77	155	2.02
147166	Tripartite motif-containing protein 16-like protein	10	20	2.02
23593	Heme-binding protein 2	107	216	2.02
-	Olfactory receptor 5H14.	5	11	2.02
-	InaD-like protein	6	12	2.02
57661	PHD and RING finger domain-containing protein 1	6	13	2.02
100290812	-	3807	7709	2.02
646780	Phosphorylase b kinase regulatory subunit alpha, skeletal muscle isoform	6	12	2.03
8444	Dual specificity tyrosine-phosphorylation-regulated kinase 3	63	127	2.03
5989	MHC class II regulatory factor RFX1	7	14	2.03
3232	Homeobox protein Hox-D3	7	14	2.03
84256	FLYWCH-type zinc finger-containing protein 1	41	83	2.03
79634	Secernin-3	43	87	2.03
29907	Sorting nexin-15	29	60	2.03
126068	Zinc finger protein 441	32	66	2.04
285	Angiopoietin-2 Precursor	698	1422	2.04
80173	Intraflagellar transport protein 74 homolog	101	206	2.04
79989	Tetratricopeptide repeat protein 26	16	33	2.04
5565	5'-AMP-activated protein kinase subunit beta-2	6	12	2.04
10058	ATP-binding cassette sub-family B member 6, mitochondrial	52	105	2.04
10209	Eukaryotic translation initiation factor 1	3458	7059	2.04
-	Zinc finger protein 425	11	23	2.04
51760	Synaptotagmin-17	10	21	2.04
83853	Ropporin-1-like protein	9	18	2.05
10763	Nestin	22	45	2.05
6509	Neutral amino acid transporter A	42	86	2.05
399669	zinc finger protein 321	6	13	2.05
-	Corticotropin-releasing factor receptor 1 Precursor	6	11	2.05
85444	Leucine-rich repeat and coiled-coil domain-containing protein 1	15	30	2.05
-	CREB-binding protein	1127	2311	2.05

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1013	Cadherin-15 Precursor	5	11	2.05
-	-	240	493	2.06
6511	Excitatory amino acid transporter 4	6	13	2.06
60489	DNA dC->dU-editing enzyme APOBEC-3G	13	26	2.06
4038	Low-density lipoprotein receptor-related protein 4 Precursor	18	36	2.06
51491	Nucleolar protein 16	288	593	2.06
8871	Synaptojanin-2	385	797	2.07
782	Voltage-dependent L-type calcium channel subunit beta-1	6	12	2.07
605	B-cell CLL/lymphoma 7 protein family member A	11	22	2.07
1822	Atrophin-1	9	18	2.08
2797	Progonadoliberin-2 Precursor	7	14	2.08
54457	Transcription initiation factor TFIID subunit 7-like	23	49	2.08
100133486	Heat shock 70 kDa protein 6	16	33	2.08
84461	NHR domain-containing protein KIAA1787	6	12	2.08
-	-	16233	33783	2.08
84000	Transmembrane protease, serine 13	6	12	2.08
653583	Pleckstrin homology-like domain family B member 3	60	126	2.08
129880	Bardet-Biedl syndrome 5 protein	11	23	2.09
26575	Regulator of G-protein signaling 17	18	37	2.09
285268	Zinc finger protein 621	6	12	2.09
-	Nucleoside diphosphate-linked moiety X motif 13	7	15	2.09
57593	Transcription factor COE4	8	17	2.09
26995	Probable tRNA pseudouridine synthase 2	189	395	2.10
9050	Proline-serine-threonine phosphatase-interacting protein 2	21	45	2.10
56683	T-complex protein 10A homolog 2	184	386	2.10
10232	Mesothelin Precursor	6	12	2.10
55223	Tripartite motif-containing protein 62	7	14	2.10
-	-	13	26	2.10
-	G kinase-anchoring protein 1	16	34	2.10
286887	Keratin, type II cytoskeletal 6C	6	12	2.10
643159	Cyclic AMP-dependent transcription factor ATF-4	1556	3270	2.10
83591	THAP domain-containing protein 2	13	28	2.10
155054	Zinc finger protein 425	13	27	2.10
147923	Kalirin	7	14	2.11
554313	Histone H4	6	12	2.11
55605	Kinesin-like protein KIF21A	37	79	2.11
-	Peroxisome proliferator-activated receptor gamma coactivator 1-beta	14	30	2.11
1978	Eukaryotic translation initiation factor 4E-binding protein 1	448	949	2.12
63904	Dual specificity protein phosphatase 21	7	15	2.12
388753	Uncharacterized protein C1orf31	265	561	2.12
3782	Small conductance calcium-activated potassium channel protein 3	5	11	2.12
63934	Zinc finger protein 667	11	23	2.12
203062	t-SNARE domain-containing protein 1	8	17	2.12
9266	Cytohesin-2	11	23	2.12
874	Carbonyl reductase [NADPH] 3	114	243	2.13
9314	Krueppel-like factor 4	7	15	2.13
-	-	191	407	2.13

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-	845	1800	2.13
10930	Probable C->U-editing enzyme APOBEC-2	8	17	2.13
79149	Zinc finger and SCAN domain-containing protein 5A	11	24	2.14
-	Pin2-interacting protein X1	65	139	2.14
79879	Coiled-coil domain-containing protein 134 Precursor	6	13	2.14
5264	Phytanoyl-CoA dioxygenase, peroxisomal Precursor	223	478	2.14
284161	Glycerophosphodiester phosphodiesterase domain-containing protein 1	25	54	2.14
80139	Zinc finger protein 703	6	13	2.14
6888	Transaldolase	2325	4982	2.14
285346	Zinc finger protein 167	7	15	2.14
7047	Protein-glutamine gamma-glutamyltransferase 4	6	13	2.14
51655	Dexamethasone-induced Ras-related protein 1 Precursor	61	131	2.14
653380	-	7	14	2.15
9021	suppressor of cytokine signaling 3	40	86	2.15
92014	Mitochondrial carrier triple repeat protein 1	10	21	2.15
6224	40S ribosomal protein S20	17	37	2.15
26747	Nuclear fragile X mental retardation-interacting protein 1	22	47	2.16
390212	Probable G-protein coupled receptor 152	6	13	2.17
2710	Glycerol kinase	29	64	2.17
654085	Glycine cleavage system H protein, mitochondrial Precursor	233	505	2.17
5932	Retinoblastoma-binding protein 8	52	113	2.17
387082	Small ubiquitin-related modifier 4 Precursor	48	104	2.17
121053	Uncharacterized protein C12orf45	393	855	2.17
54749	Mammalian ependymin-related protein 1 Precursor	11	23	2.17
4528	Translation initiation factor IF-2, mitochondrial Precursor	168	365	2.17
29948	Oxidative stress-induced growth inhibitor 1	42	91	2.17
2495	Ferritin heavy chain	14891	32406	2.18
3736	Potassium voltage-gated channel subfamily A member 1	5	12	2.18
3569	Interleukin-6 Precursor	31	69	2.18
153642	Arylsulfatase K Precursor	17	37	2.18
6535	Sodium- and chloride-dependent creatine transporter 1	97	212	2.18
54014	Bromodomain and WD repeat-containing protein 1	5	12	2.18
4824	Homeobox protein Nkx-3.1	8	17	2.18
9002	Proteinase-activated receptor 4 Precursor	37	81	2.18
-	-	20	45	2.19
203197	Transmembrane protein C9orf91	25	56	2.19
-	-	9	19	2.19
9609	Ras-related protein Rab-36	8	18	2.19
9185	RalBP1-associated Eps domain-containing protein 2	5	11	2.20
4072	Tumor-associated calcium signal transducer 1 Precursor	6	13	2.20
63974	Neurogenic differentiation factor 6	7	15	2.20
-	StAR-related lipid transfer protein 5	7	15	2.20
150864	Protein FAM117B	9	20	2.20

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
26130	GTPase-activating protein and VPS9 domain-containing protein 1	8	17	2.20
84154	Brix domain-containing protein 1	330	728	2.20
130589	Aldose 1-epimerase	29	63	2.21
63895	Protein FAM38B	11	25	2.21
222537	Heparan sulfate glucosamine 3-O-sulfotransferase 5	5	12	2.21
147657	Zinc finger protein 480	15	34	2.21
-	-	5662	12528	2.21
124997	-	33	73	2.22
117608	Zinc finger protein 354B	7	15	2.22
-	NAD-dependent deacetylase sirtuin-5	94	209	2.22
55812	Spermatogenesis-associated protein 7	61	135	2.22
79056	Transmembrane gamma-carboxyglutamic acid protein 4 Precursor	18	39	2.23
57605	Membrane-associated phosphatidylinositol transfer protein 2	14	30	2.23
84460	Zinc finger matrix-type protein 1	22	49	2.23
144811	UPF0124 protein C13orf31	12	27	2.23
8165	A kinase anchor protein 1, mitochondrial Precursor	14	31	2.23
22871	Neuroigin-1 Precursor	8	17	2.23
151525	WD repeat, SAM and U-box domain-containing protein 1	39	88	2.23
120379	PIH1 domain-containing protein 2	7	15	2.24
-	-	81	181	2.24
115560	Zinc finger protein 501	6	14	2.24
9283	Endothelin B receptor-like protein 2 Precursor	19	42	2.24
-	-	418	940	2.25
90835	Coiled-coil domain-containing protein MGC104706	8	17	2.25
79754	Ankyrin repeat and SOCS box protein 13	11	25	2.25
10444	Protein zer-1 homolog	8	17	2.25
-	Ras association domain-containing protein 5	42	95	2.25
2941	Glutathione S-transferase A4	142	321	2.26
257218	E3 ubiquitin-protein ligase SHPRH	5	12	2.26
147339	Uncharacterized protein C18orf25	9	21	2.26
-	Uncharacterized protein KIAA0802	11	24	2.26
-	Xin actin-binding repeat-containing protein 2	7	16	2.26
-	-	1223	2773	2.27
7102	Tetraspanin-7	20	45	2.27
5789	Receptor-type tyrosine-protein phosphatase delta Precursor	16	37	2.28
3982	lens intrinsic membrane protein 2, 19kDa	6	14	2.28
5723	Phosphoserine phosphatase	175	401	2.29
23155	Chloride channel CLIC-like protein 1 Precursor	63	144	2.29
-	Glutaredoxin-like protein YDR286C homolog	8	18	2.29
53940	Ferritin heavy polypeptide-like 17	1528	3505	2.29
27190	Interleukin-17B Precursor	6	14	2.30
161582	Dyslexia susceptibility 1 candidate gene 1 protein	18	42	2.30
-	-	12	27	2.30
4199	NADP-dependent malic enzyme	370	853	2.31
54879	Suppressor of tumorigenicity protein 7-like protein	17	40	2.31
55190	Diphosphoinositol polyphosphate phosphohydrolase 3-beta	34	78	2.31
28996	Homeodomain-interacting protein kinase 2	6	14	2.31

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
25842	Histone chaperone ASF1A	230	534	2.32
644890	Meiosis expressed gene 1 protein homolog	8	19	2.32
147685	Uncharacterized protein C19orf18 Precursor	9	20	2.32
660	Cytoplasmic tyrosine-protein kinase BMX	494	1150	2.32
80318	G kinase-anchoring protein 1	8	19	2.33
285331	Coiled-coil domain-containing protein 66	30	71	2.34
84803	1-acyl-sn-glycerol-3-phosphate acyltransferase theta	12	29	2.34
4685	Neural cell adhesion molecule 2 Precursor	6	13	2.34
4747	Neurofilament light polypeptide	6	15	2.35
23078	Uncharacterized protein KIAA0564 Precursor	5	13	2.35
285600	Uncharacterized protein C5orf36	5	12	2.35
9903	Kelch-like protein 21	40	94	2.35
-	Zinc finger protein 215	7	17	2.36
114987	WD repeat-containing protein 31	11	26	2.36
-	Nebulin-related-anchoring protein	8	18	2.36
84898	Plexin domain-containing protein 2 Precursor	22	51	2.37
51575	ESF1 homolog	195	463	2.37
-	-	2984	7076	2.37
2669	GTP-binding protein GEM	8	20	2.38
84985	Protein FAM83A	8	19	2.39
57531	E3 ubiquitin-protein ligase HACE1	19	46	2.39
-	Uncharacterized protein C3orf33	15	37	2.39
49854	Zinc finger protein 295	26	61	2.39
79695	Polypeptide N-acetylgalactosaminyltransferase 12	12	28	2.40
340526	-	6	14	2.41
2152	Tissue factor Precursor	28	68	2.41
26094	WD repeat-containing protein 21A	14	34	2.41
80144	Extracellular matrix protein FRAS1 Precursor	8	19	2.41
50863	Neurotrimin Precursor	6	15	2.42
339456	Transmembrane protein 52 Precursor	18	43	2.42
-	Major histocompatibility complex, class II, DM beta	5	13	2.43
-	-	6	14	2.43
-	Zinc finger protein 555	11	27	2.44
9966	Tumor necrosis factor ligand superfamily member 15	71	172	2.44
51673	Tubulin polymerization-promoting protein family member 3	7	18	2.44
138241	Uncharacterized protein C9orf85	15	36	2.45
28232	Solute carrier organic anion transporter family member 3A1	6	14	2.45
146050	Zinc finger and SCAN domain-containing protein 29	6	16	2.45
80110	Zinc finger protein 614	9	22	2.46
5321	Cytosolic phospholipase A2	208	512	2.46
8681	JmjC domain-containing protein 7	6	14	2.48
153733	Coiled-coil domain-containing protein 112	44	109	2.48
7549	Zinc finger protein 2	6	14	2.48
4122	mannosidase, alpha, class 2A, member 2	9	23	2.48
9915	Aryl hydrocarbon receptor nuclear translocator 2	6	14	2.48
84441	Mastermind-like protein 2	22	55	2.49
1910	Endothelin B receptor Precursor	54	134	2.49
145788	-	10	26	2.49
224	Fatty aldehyde dehydrogenase	222	553	2.49
132884	Limbin	9	22	2.50

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100291892	-	1375	3436	2.50
84675	Tripartite motif-containing protein 55	5	14	2.52
163087	Zinc finger protein 383	9	24	2.52
-	Butyrophilin subfamily 3 member A1 Precursor	9	22	2.53
390	Rho-related GTP-binding protein RhoE Precursor	723	1835	2.54
100291254	-	7	19	2.54
84172	DNA-directed RNA polymerase I subunit RPA2	8	21	2.54
1462	Versican core protein Precursor	13	33	2.54
22949	Prostaglandin reductase 1	954	2428	2.55
100293919	-	6	16	2.56
-	Putative uncharacterized protein LOC554202	17	45	2.56
29062	WD repeat-containing protein 91	6	14	2.56
222234	Protein FAM185A	13	34	2.56
92345	H/ACA ribonucleoprotein complex non-core subunit NAF1	6	17	2.57
84706	Alanine aminotransferase 2	50	128	2.57
162963	Zinc finger protein 610	7	17	2.58
-	Putative 60S ribosomal protein L39-like 5	1106	2852	2.58
79572	Probable cation-transporting ATPase 13A3	8	22	2.58
64130	Lin-7 homolog B	7	19	2.58
51339	Dapper homolog 1	11	29	2.59
79819	WD repeat-containing protein 78	8	21	2.59
121268	GTPase RhebL1 Precursor	15	39	2.59
54414	Sialate O-acetyltransferase Precursor	7	18	2.59
51083	Galanin Precursor	32	84	2.60
23532	Melanoma antigen preferentially expressed in tumors	5	14	2.60
6692	Kunitz-type protease inhibitor 1 Precursor	8	20	2.60
-	-	18	46	2.61
-	Ankyrin repeat domain-containing protein 18A	8	21	2.61
146434	Zinc finger protein 597	7	19	2.62
56288	Partitioning defective 3 homolog	65	169	2.62
5470	Serine/threonine-protein phosphatase with EF-hands 2	7	18	2.62
-	UHRF1-binding protein 1	7	19	2.65
114112	-	15	41	2.66
-	Transmembrane protein C6orf70	44	117	2.67
374900	Zinc finger protein 568	8	22	2.69
29123	Ankyrin repeat domain-containing protein 11	536	1455	2.71
100129710	MSTP131	62	168	2.71
23520	Acidic leucine-rich nuclear phosphoprotein 32 family member C	9	25	2.73
23562	Claudin-14	11	30	2.73
-	Guanine nucleotide exchange factor for Rab3A	17	45	2.73
137682	UPF0551 protein C8orf38, mitochondrial Precursor	6	16	2.73
7436	Very low-density lipoprotein receptor Precursor	6	16	2.73
1662	Probable ATP-dependent RNA helicase DDX10	93	256	2.74
-	-	127	350	2.74
2817	Glypican-1 Precursor	89	245	2.75
4856	Protein NOV homolog Precursor	6	17	2.75
23223	RRP12-like protein	33	91	2.76
3099	Hexokinase-2	27	74	2.77
3600	Interleukin-15 Precursor	15	43	2.77
284406	Zinc finger protein 82 homolog	6	16	2.78

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100131266	Putative uncharacterized protein ENSP00000385367 Fragment	127	353	2.79
1675	Complement factor D Precursor	14	39	2.79
493861	-	13	35	2.79
128061	Uncharacterized protein C1orf131	31	87	2.79
112479	Exonuclease domain-containing protein 1	7	20	2.80
55034	Molybdenum cofactor sulfurase	10	27	2.80
6520	4F2 cell-surface antigen heavy chain	621	1743	2.81
-	-	7	20	2.82
51175	Tubulin epsilon chain	65	186	2.84
1728	NAD(P)H dehydrogenase [quinone] 1	2401	6831	2.85
6542	Low affinity cationic amino acid transporter 2	73	208	2.85
50486	Putative lymphocyte G0/G1 switch protein 2	17	49	2.85
875	Cystathionine beta-synthase	164	468	2.85
148156	Zinc finger protein 558	14	40	2.87
6091	Roundabout homolog 1 Precursor	14	41	2.89
140809	Sulfiredoxin-1	227	658	2.90
286262	Uncharacterized protein C9orf75	5	15	2.92
-	-	8	25	2.94
91694	LON peptidase N-terminal domain and RING finger protein 1	44	132	2.98
347736	Thioredoxin domain-containing protein 6	17	50	2.99
3755	Potassium voltage-gated channel subfamily G member 1	14	41	2.99
55297	Coiled-coil domain-containing protein 91	10	30	3.00
122953	Jun dimerization protein 2	79	236	3.01
9855	FERM, RhoGEF and pleckstrin domain-containing protein 2	6	19	3.01
57620	Stromal interaction molecule 2 Precursor	7	21	3.03
4897	Neuronal cell adhesion molecule Precursor	89	270	3.05
55859	Protein BEX1	7	23	3.07
203286	Ankyrin repeat and SAM domain-containing protein 6	7	21	3.08
22795	Nidogen-2 Precursor	343	1059	3.09
79840	Solute carrier family 23 member 3	13	40	3.14
10602	Cdc42 effector protein 3	200	627	3.14
353376	TIR domain-containing adapter molecule 2	9	29	3.14
284306	Zinc finger protein 547	6	17	3.15
100130469	-	6	19	3.19
751071	Methyltransferase-like protein 12 Precursor	21	68	3.19
51134	Coiled-coil domain-containing protein 41	10	32	3.19
4257	Microsomal glutathione S-transferase 1	1094	3597	3.29
5106	Phosphoenolpyruvate carboxykinase [GTP], mitochondrial Precursor	56	184	3.30
-	Putative LRRC37B-like protein 1	6	20	3.33
-	Monocarboxylate transporter 7	11	37	3.36
1051	CCAAT/enhancer-binding protein beta	179	603	3.37
116496	Protein Niban	42	141	3.37
5866	Guanine nucleotide exchange factor for Rab3A	23	78	3.40
10797	Bifunctional methylenetetrahydrofolate dehydrogenase/cyclohydrolase, mitochondrial Precursor	313	1078	3.44
8382	Nucleoside diphosphate kinase homolog 5	8	29	3.47
57761	Tribbles homolog 3	280	979	3.49
3357	5-hydroxytryptamine receptor 2B	32	111	3.50

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
374946	Uncharacterized protein C1orf187 Precursor	17	60	3.55
8644	Aldo-keto reductase family 1 member C3	415	1482	3.57
1359	Mast cell carboxypeptidase A Precursor	8	29	3.57
338376	Interferon epsilon-1 Precursor	6	21	3.58
161835	Fibrous sheath-interacting protein 1	6	23	3.62
26471	Nuclear protein 1	53	190	3.62
-	-	14	51	3.66
64208	Popeye domain-containing protein 3	40	147	3.68
286343	Uncharacterized protein C9orf150	24	90	3.71
94015	Protein tweety homolog 2	6	22	3.82
8140	Large neutral amino acids transporter small subunit 1	96	369	3.85
5055	Plasminogen activator inhibitor 2 Precursor	15	60	3.92
5367	Pro-MCH Precursor	42	165	3.96
1491	Cystathionine gamma-lyase	37	147	3.99
65243	Zinc finger protein 643	5	21	4.09
58526	Mid1-interacting protein 1	6	25	4.18
7296	Thioredoxin reductase 1, cytoplasmic	2215	9605	4.34
341405	Ankyrin repeat domain-containing protein 33	6	25	4.36
3576	Interleukin-8 Precursor	293	1298	4.43
80329	NKG2D ligand 1 Precursor	6	28	4.51
8614	Stanniocalcin-2 Precursor	67	302	4.52
26227	D-3-phosphoglycerate dehydrogenase	336	1529	4.55
-	D-3-phosphoglycerate dehydrogenase	264	1250	4.72
79094	Cation transport regulator-like protein 1	51	241	4.73
147495	Protein APCDD1 Precursor	7	31	4.77
29968	Phosphoserine aminotransferase	50	249	4.94
2730	Glutamate-cysteine ligase regulatory subunit	316	1600	5.06
1646	Aldo-keto reductase family 1 member C2	15	78	5.27
5743	Prostaglandin G/H synthase 2 Precursor	149	881	5.90
6916	Thromboxane-A synthase	6	34	5.94
55244	Multidrug and toxin extrusion protein 1	7	42	5.96
23657	Cystine/glutamate transporter	242	1461	6.03
25907	transmembrane protein 158 (TMEM158), mRNA	23	143	6.19
440	Asparagine synthetase [glutamine-hydrolyzing]	120	1233	10.29
-	Cytochrome P450 1A1	6	59	10.47
1543	Cytochrome P450 1A1	9	117	13.59
3162	Heme oxygenase 1	788	17123	21.74
3055	Tyrosine-protein kinase HCK			
2894	Glutamate receptor delta-1 subunit Precursor			
4057	Lactotransferrin Precursor			
3846	-			
3816	Kallikrein-1 Precursor		7	
816	Calcium/calmodulin-dependent protein kinase type II beta chain		6	
793	Calbindin			
607	B-cell CLL/lymphoma 9 protein			
6736	Sex-determining region Y protein			
6556	Natural resistance-associated macrophage protein 1			
3554	Interleukin-1 receptor type I Precursor			
3237	Homeobox protein Hox-D11			
2835	Probable G-protein coupled receptor 12			
3758	ATP-sensitive inward rectifier potassium channel 1			
766	Carbonic anhydrase 7			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
338	Apolipoprotein B-100 Precursor			
111	Adenylate cyclase type 5			
6874	Transcription initiation factor TFIIID subunit 4			
2822	Phosphatidylinositol-glycan-specific phospholipase D Precursor			
3976	Leukemia inhibitory factor Precursor			
3695	Integrin beta-7 Precursor			
676	Bromodomain testis-specific protein			
249	Alkaline phosphatase, tissue-nonspecific isozyme Precursor		4	
89	-			
6641	Beta-1-syntrophin			
2912	Metabotropic glutamate receptor 2 Precursor			
2738	Zinc finger protein 41 homolog			
4115	Melanoma-associated antigen B4		5	
3885	Keratin, type I cuticular Ha4			
3645	Insulin receptor-related protein Precursor			
656	Bone morphogenetic protein 8B Precursor			
635	Betaine-homocysteine S-methyltransferase 1			
399	Rho-related GTP-binding protein RhoH Precursor		6	
10786	Sodium-dependent phosphate transport protein 4			
7216	Trophinin		8	
7023	Transcription factor AP-4		6	
8638	59 kDa 2'-5'-oligoadenylate synthetase-like protein	7		
10761	Placenta-specific protein 1 Precursor		7	
7404	Histone demethylase UTY			
4602	Myb proto-oncogene protein			
10902	Bromodomain-containing protein 8 (p120)			
10663	C-X-C chemokine receptor type 6		7	
11122	Receptor-type tyrosine-protein phosphatase T Precursor			
100293129	-			
8128	Alpha-2,8-sialyltransferase 8B			
4583	Mucin-2 Precursor			
10462	C-type lectin domain family 10 member A			
100292202	Calcium-binding mitochondrial carrier protein SCaMC-2		6	
7074	T-lymphoma invasion and metastasis-inducing protein 1			
6850	Tyrosine-protein kinase SYK			
8477	Psychosine receptor			
8447	Double C2-like domain-containing protein beta		6	
100293766	-		4	
80834	Taste receptor type 1 member 2 Precursor			
80122	SPS1/STK20-related protein kinase YSK4			
79839	Coiled-coil domain-containing protein 102B		4	
79817	Mps one binder kinase activator-like 2B			
54112	Probable G-protein coupled receptor 88			
55507	G-protein coupled receptor family C group 5 member D		6	
23284	Latrophilin-3 Precursor			
23261	Calmodulin-binding transcription activator 1			
23105	Follistatin-related protein 4 Precursor			
22897	Centrosomal protein of 164 kDa			
80760	Inter-alpha-trypsin inhibitor heavy chain H5 Precursorx		4	
80704	Thiamine transporter 2			
80045	Probable G-protein coupled receptor 157		9	
79788	Zinc finger protein 665		12	
54587	Matrix-remodeling-associated protein 8 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
80326	Protein Wnt-10a Precursor			
79962	DnaJ homolog subfamily C member 22		5	
79931	TNFAIP3-interacting protein 3			
54549	Protein sidekick-2 Precursor			
54511	Probable 3-hydroxymethyl-3-methylglutaryl-CoA lyase 2			
53345	Transmembrane 6 superfamily member 2		4	
55273	Transmembrane protein 100			
54894	RING finger protein 43 Precursor			
22978	Cytosolic purine 5'-nucleotidase			
80183	Uncharacterized protein C13orf18		6	
100287126	-		4	
55061	Sushi domain-containing protein 4 Precursor		6	
23130	Autophagy-related protein 2 homolog A			
100128574	-		15	
732434	-			
256148	Olfactory receptor 4S1			
221692	Phosphatase and actin regulator 1		8	
221409	spermatogenesis associated, serine-rich 1 (SPATS1), mRNA			
200558	Aprataxin and PNK-like factor		6	
92369	SPRY domain-containing SOCS box protein 4		5	
85478	Coiled-coil domain-containing protein 65			
730351	-		6	
283777	UPF0611 protein FAM169B			
255275	Myeloid-associated differentiation marker-like protein 2			
221188	Probable G-protein coupled receptor 114 Precursor		4	
220296	Hepatocyte cell adhesion molecule Precursor			
199920	Uncharacterized protein C1orf168			
340784	Homeobox protein HMX3			
285697	Putative TAF11-like protein ENSP00000332601			
285464	Cysteine-rich PAK1 inhibitor		7	
85289	Keratin-associated protein 4-5			
84695	Lysyl oxidase homolog 3 Precursor		8	
100128124	similar to HGC6.3 (HGC6.3), mRNA			
100128055	-		6	
730067	-			
283104	-			
253970	Putative protein SFTA3			
246778	Interleukin-27 subunit alpha Precursor			
219790	Rhotekin-2		6	
205717	Basic helix-loop-helix domain-containing protein KIAA2018		6	
730465	Putative ankyrin repeat domain-containing protein encoded by NCRNA00164			
339327	Zinc finger protein 546		4	
90865	Interleukin-33 Precursor			
84951	Tensin-4 Precursor			
84618	Cytosolic 5'-nucleotidase 1A			
84063	Kin of IRRE-like protein 2 Precursor			
100287633	-			
100113407	Transmembrane protein 170B			
729856	-			
729665	Uncharacterized protein C14orf38			
266722	Heparan-sulfate 6-O-sulfotransferase 3		6	
222967	Radial spoke head 10 homolog B			
222255	La-related protein 6			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
203328	Sushi domain-containing protein 3		6	
202374	Serine/threonine-protein kinase 32A		4	
169981	Spindlin-3			
81570	Caseinolytic peptidase B protein homolog			
338811	Protein FAM19A2 Precursor			
338324	Protein S100-A7A		5	
284498	Uncharacterized protein C1orf167			
284349	Zinc finger protein 230		15	
83716	Cysteine-rich secretory protein LCCL domain-containing 2 Precursor			
55603	Protein FAM46A		4	
100292122	-			
100130128	-			
100129390	-		8	
100134379	Bactericidal permeability-increasing protein Precursor			
100134274	-			
100133286	-			
100132051	-			
374918	Insulin growth factor-like family member 1 Precursor			
374407	DnaJ homolog subfamily B member 13		4	
100292458	-			
100292010	-			
100291520	Zinc finger protein 568			
100129986	-		6	
100129890	-			
100129094	Putative uncharacterized protein ENSP00000383732		6	
100133998	-		4	
100131773	-			
388567	Zinc finger protein 749			
388279	-		4	
353299	regulator of G-protein signaling like 1 (RGSL1), mRNA			
100292765	-			
100291845	-			
100291375	-			
100129699	-			
100128904	-		5	
100133890	-			
100130751	-			
387715	age-related maculopathy susceptibility 2 (ARMS2), nuclear gene encoding mitochondrial protein, mRNA			
387104	Uncharacterized protein C6orf174 Precursor		8	
347411	-			
100292707	-			
100291786	Ig kappa chain V-III region VH Precursor; Fragment		4	
100129596	-			
100128789	-			
100128683	-			
100133686	-		13	
100133598	-			
100132469	-		4	
100132284	-			
100131296	-			
100130379	-		7	
378465	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
346007	Protein eyes shut homolog Precursor			
9210	Bone morphogenetic protein 15 Precursor		5	
1834	Dentin sialophosphoprotein Precursor			
22865	SLIT and NTRK-like protein 3 Precursor			
8708	Beta-1,3-galactosyltransferase 1		10	
-	Glutamate receptor-interacting protein 1		6	
116443	Glutamate [NMDA] receptor subunit 3A Precursor			
100293539	-			
255626	Histone H2B type 1-A		5	
6247	Retinoschisin Precursor		4	
10673	Tumor necrosis factor ligand superfamily member 13B		5	
3765	G protein-activated inward rectifier potassium channel 3			
2904	Glutamate [NMDA] receptor subunit epsilon-2 Precursor		6	
1272	Contactin-1 Precursor			
-	SLIT and NTRK-like protein 6 Precursor			
100294368	-			
100294345	-		4	
100293806	-			
2267	Fibrinogen-like protein 1 Precursor		9	
6527	Low affinity sodium-glucose cotransporter			
30816	HERV-W_7q21.2 provirus ancestral Env polyprotein Precursor		6	
317701	Vomerolnasal type-1 receptor 2		7	
81501	Transmembrane 7 superfamily member 4			
28316	Cadherin-20 Precursor			
100293738	-		5	
100293668	-			
56832	Interferon kappa Precursor		3	
27302	Bone morphogenetic protein 10 Precursor		7	
171019	A disintegrin and metalloproteinase with thrombospondin motifs 19 Precursor		4	
84107	Zinc finger protein ZIC 4			
-	Scavenger receptor cysteine-rich type 1 protein M130 Precursor			
8807	Interleukin-18 receptor accessory protein Precursor			
5506	Protein phosphatase 1 regulatory subunit 3A			
-	Cyclic nucleotide-gated cation channel alpha-4			
1008	Cadherin-10 Precursor			
8735	Myosin-13		6	
64405	Cadherin-22 Precursor			
26253	C-type lectin domain family 4 member E			
100294488	-			
100293573	-		3	
100293186	-		6	
7305	TYRO protein tyrosine kinase-binding protein Precursor			
91151	Tigger transposable element-derived protein 7		9	
5100	Protocadherin-8 Precursor (Arcadlin)			
4956	Outer dense fiber protein 1		8	
7356	Uteroglobin Precursor x		6	
577	Brain-specific angiogenesis inhibitor 3 Precursor		8	
10777	cAMP-regulated phosphoprotein 21			
4249	Alpha-1,6-mannosylglycoprotein 6-beta-N-acetylglucosaminyltransferase A			
167681	Inactive serine protease 35 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1496	Catenin alpha-2		8	
4210	Pyrin (Marenostrin)		5	
93517	3-beta-HSD family protein HSPC105			
84735	Beta-Ala-His dipeptidase Precursor		4	
22989	Myosin-15			
56287	Gastrokine-1 Precursor		9	
286133	Scavenger receptor class A member 5		7	
-	Transmembrane protein C17orf87			
-	Zinc transporter ZIP12		4	
54900	Lymphocyte transmembrane adapter 1		5	
9214	Fas apoptotic inhibitory molecule 3 Precursor		8	
4908	Neurotrophin-3 Precursor		10	
221421	Uncharacterized protein C6orf206		16	
144125	Olfactory receptor 2AG1		4	
345651	Beta-actin-like protein 2		11	
149650	Novel protein		5	
164668	DNA dC->dU-editing enzyme APOBEC-3H		9	
26034	Interactor protein for cytohesin exchange factors 1			
-	Aspartyl protease 3 Fragment		7	
645832	Homeobox protein SEBOX		4	
9037	Semaphorin-5A Precursor		4	
-	WD repeat-containing protein 63		18	
133418	Embigin Precursor		4	
339302	Complexin-4 Precursor			
140733	MACRO domain-containing protein 2		5	
23312	DmX-like protein 2 (Rabconnectin-3)		9	
65975	Serine/threonine-protein kinase 33		5	
-	Filamin-A-interacting protein 1		5	
8492	Neurotrypsin Precursor		7	
153643	Protein FAM81B			
-	Protein very KIND			
125488	Tetratricopeptide repeat protein 39C		10	
219938	Spermatogenesis-associated protein 19, mitochondrial Precursor		6	
9248	Melatonin-related receptor			
388799	Uncharacterized protein C20orf107 Precursor		5	
3229	Homeobox protein Hox-C13		5	
163404	Lipid phosphate phosphatase-related protein type 5			
390999	PRAME family member 12			
84226	Uncharacterized protein C2orf16			
26239	Late cornified envelope protein 2B			
392390	Olfactory receptor 1L6		5	
26245	Olfactory receptor 2M4			
114787	G protein-regulated inducer of neurite outgrowth 1		7	
199713	NACHT, LRR and PYD domains-containing protein 7			
54760	Proprotein convertase subtilisin/kexin type 4 Precursor		8	
151473	Monocarboxylate transporter 14		5	
91544	UBX domain-containing protein 11		10	
1292	Collagen alpha-2(VI) chain Precursor		5	
6332	Sodium channel protein type 7 subunit alpha		9	
391723	Hairy and enhancer of split-related protein HELT			
339967	Transmembrane protease, serine 11A		4	
440585	Protein FAM183A		12	
-	Putative uncharacterized protein C14orf165		4	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
642938	Coiled-coil domain-containing protein C10orf141			
-	-			
388228	Serine/threonine-protein kinase SBK1			
-	Uncharacterized protein C3orf55. Fragment		12	
-	Anterior gradient protein 3 homolog Precursor			
123041	Sodium/potassium/calcium exchanger 4 Precursor		4	
1825	Desmocollin-3 Precursor		6	
203569	G antigen family E member 2			
100129216	Beta-defensin 131 Precursor			
-	-		7	
115749	CL056_HUMAN Isoform 2 of Q8IXR9 · Homo sapiens (Human)			
-	-			
3167	Homeobox protein HMX2			
51301	Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,6-N-acetylglucosaminyltransferase 4			
119682	Olfactory receptor 51L1			
202309	Uncharacterized protein C5orf29			
163782	KN motif and ankyrin repeat domain-containing protein 4		6	
-	Zinc finger protein 132			
-	Matrix metalloproteinase-19 Precursor			
390148	Olfactory receptor 5W2			
651536	Immunoglobulin Lambda light chain V gene segment			
286183	Sodium/potassium-transporting ATPase subunit beta-1-interacting protein 3			
-	Coiled-coil domain-containing protein C1orf110			
442361	Olfactory receptor 2A2			
389073	Uncharacterized protein C2orf80			
-	Homeobox protein HMX3		6	
-	Cytosolic phospholipase A2 epsilon		6	
124817	Cyclin N-terminal domain-containing protein 1			
-	Putative uncharacterized protein CXorf55			
651959	Protein FRG2-like-2			
56995	Tubby-related protein 4			
2302	Forkhead box protein J1		7	
-	Serpin A13 Precursor		4	
342510	CMRF35-like molecule 2 Precursor			
8590	Olfactory receptor 6A2			
401027	Uncharacterized protein C2orf66 Precursor			
-	Putative uncharacterized protein FLJ36797			
283150	Forkhead box protein R1			
387718	Putative uncharacterized protein C10orf122			
-	-			
146167	Putative sodium-coupled neutral amino acid transporter 8			
149499	Leucine-rich repeat-containing protein C10orf92		12	
-	Seven transmembrane helix receptor		4	
26230	T-lymphoma invasion and metastasis-inducing protein 2			
157807	Retinaldehyde-binding protein 1-like protein 1			
143662	Mucin-15 Precursor			
-	Putative uncharacterized protein FLJ45684		8	
-	-			
-	MGC16075 protein			
56479	Potassium voltage-gated channel subfamily KQT member 5			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3804	Killer cell immunoglobulin-like receptor 2DL3 Precursor			
8852	A-kinase anchor protein 4 Precursor			
3590	Interleukin-11 receptor alpha chain Precursor			
-	Cell division cycle protein 20 homolog B			
79442	Leucine-rich repeat-containing protein 2		6	
-	Putative ATP-dependent RNA helicase TDRD9			
-	-			
163115	Zinc finger protein 781			
221718	Putative uncharacterized protein C6orf218			
150681	Olfactory receptor 6B3			
347344	Zinc finger protein 81			
2561	Gamma-aminobutyric acid receptor subunit beta-2 Precursor			
4322	Collagenase 3 Precursor			
81472	Olfactory receptor 2C3		7	
400508	Putative uncharacterized protein ENSP00000341502			
2668	Glial cell line-derived neurotrophic factor Precursor			
2322	FL cytokine receptor Precursor			
1436	Macrophage colony-stimulating factor 1 receptor Precursor		5	
1401	C-reactive protein Precursor		4	
978	Cytidine deaminase		4	
5629	Prospero homeobox protein 1		8	
2042	Ephrin type-A receptor 3 Precursor			
4818	Protein NKG7			
1621	Dopamine beta-hydroxylase			
1136	Neuronal acetylcholine receptor subunit alpha-3 Precursor			
933	B-cell receptor CD22 Precursor			
915	T-cell surface glycoprotein CD3 delta chain Precursor			
5802	Receptor-type tyrosine-protein phosphatase S Precursor x		10	
2543	G antigen 4			
2214	Low affinity immunoglobulin gamma Fc region receptor III-A Precursor			
1804	Dipeptidyl aminopeptidase-like protein 6			
5179	Proenkephalin A Precursor			
4973	Oxidized low-density lipoprotein receptor 1			
100293484	-			
2516	Steroidogenic factor 1			
2352	Folate receptor gamma Precursor		5	
2172	Gastrotropin			
1749	Homeobox protein DLX-5			
4929	Nuclear receptor subfamily 4 group A member 2		5	
1493	Cytotoxic T-lymphocyte protein 4 Precursor			
1234	C-C chemokine receptor type 5			
1001	Cadherin-3 Precursor		5	
844	Calsequestrin-1 Precursor		7	
27199	2-oxoglutarate receptor 1		4	
27151	C3 and PZP-like alpha-2-macroglobulin domain-containing protein 8 Precursor			
10020	Bifunctional UDP-N-acetylglucosamine 2-epimerase/N-acetylmannosamine kinase		10	
6364	C-C motif chemokine 20 Precursor			
9447	Interferon-inducible protein AIM2			
10144	Protein FAM13A1			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
6335	Sodium channel protein type 9 subunit alpha		5	
6304	DNA-binding protein SATB1			
23418	Crumbs homolog 1 Precursor			
9175	Mitogen-activated protein kinase kinase kinase 13			
9148	Neuralized-like protein 1			
5468	Peroxisome proliferator-activated receptor gamma		4	
10125	RAS guanyl-releasing protein 1		7	
9934	P2Y purinoceptor 14			
6010	Rhodopsin (Opsin-2)			
8916	Probable E3 ubiquitin-protein ligase HERC3		8	
26585	Gremlin-1 Precursor			
100288966	POTE ankyrin domain family member D			
5330	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase beta-2		4	
65997	Ras-like protein family member 11B		4	
57393	Collectrin Precursor		4	
56123	Protocadherin beta-13 Precursor			
56099	Protocadherin gamma-B7 Precursor		7	
79295	Olfactory receptor 5H6			
65267	Serine/threonine-protein kinase WNK3			
29998	Glioma tumor suppressor candidate region gene 1 protein		9	
23620	Neurotensin receptor type 2			
59350	Relaxin receptor 1			
29944	Paraneoplastic antigen Ma3		8	
57126	-			
56676	Achaete-scute homolog 3			
26049	UPF0611 protein FAM169A			
64843	Insulin gene enhancer protein ISL-2		7	
58189	WAP four-disulfide core domain protein 1 Precursor			
50624	CUB and zona pellucida-like domain-containing protein 1 Precursor			
29760	B-cell linker protein			
56155	Testis-expressed protein 14			
100290000	-			
25801	Grancalcin		12	
25769	Sodium/potassium/calcium exchanger 2 Precursor			
23504	RIMS-binding protein 2			
646457	UPF0575 protein C19orf67		5	
166614	Serine/threonine-protein kinase DCLK2			
154907	Putative uncharacterized protein LOC154907			
401548	Sorting nexin-30			
392307	Uncharacterized protein C9orf128			
391191	Olfactory receptor 2AK2			
126859	Uncharacterized protein C1orf125			
119695	Olfactory receptor 52R1		6	
118491	Tetratricopeptide repeat protein 18			
114792	Kelch-like protein 32			
114132	Sialic acid-binding Ig-like lectin 11 Precursor			
652671	Probable transcription factor PML		4	
645971	-		7	
645605	-			
165186	Protein FAM179A			
163255	Zinc finger protein 540		9	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
140699	Uncharacterized protein C20orf132		8	
140453	Mucin-17 Precursor			
401285	t-complex 10-like 2			
401089	Uncharacterized protein C3orf72			
390874	One cut domain family member 3		6	
390561	-			
131669	Probable urocanate hydratase			
125981	Alkaline ceramidase 1			
125113	Keratin-like protein KRT222			
117195	Mas-related G-protein coupled receptor member X3			
650405	-			
648044	-			
645277	Uncharacterized protein LOC645277		9	
644844	hypothetical protein LOC644844			
162514	Transient receptor potential cation channel subfamily V member 3			
161436	Echinoderm microtubule-associated protein-like 5			
151393	Regulator of microtubule dynamics protein 2			
146556	Uncharacterized protein C16orf89 Precursor		7	
146057	Tau-tubulin kinase 2			
139378	Probable G-protein coupled receptor 112		4	
79170	Protein ATAD4			
400945	-			
400660	-			
389610	XK-related protein 5			
129881	Uncharacterized protein C2orf77			
124602	Kinesin-like protein KIF19		5	
57595	PDZ domain-containing protein 4			
647219	-			
646951	UPF0526 protein C3orf76			
644504	Novel protein similar to chondroitin sulfate GalNAcT-2			
644139	Phosphoinositide-interacting protein			
158399	Zinc finger protein 483			
145497	Uncharacterized protein C14orf166B			
137362	Putative aspartate aminotransferase, cytoplasmic 2			
400221	-		5	
399693	-		5	
389161	Uncharacterized protein C3orf16			
128178	Ectodysplasin-A receptor-associated adapter protein			
121296	-		6	
93492	Tripartite motif-containing protein 7			
100291080	-		5	
100290286	-			
100289753	-			
100289250	-			
728564	-			
728470	-			
100287733	-			
100287218	-		7	
643750	Putative uncharacterized protein ENSP00000383515 [S		6	
442194	olfactory receptor, family 10, subfamily C, member 1 (OR10C1), mRNA		6	
441669	Olfactory receptor 4Q3		5	
100290785	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100289597	-			
100289538	-			
100289119	-			
729154	-			
728316	-			
100288643	-			
100288587	-			
100288147	-		4	
100287659	-			
2251	Fibroblast growth factor 6 Precursor			
100287137	-			
642394	non-protein coding RNA 168 (NCRNA00168), mRNA			
441172	-			
645425	PRAME family member 20/21			
100290703	-			
100290634	-			
100290050	-			
100289984	-			
100289503	-		7	
100289424	-		6	
100288990	-			
100288925	-			
727913	-		5	
100288475	-		5	
100287962	-		5	
100287519	-		7	
100286959	-			
619343	Putative DAP-2 like protein C8orf68			
440193	Protein Daple		4	
100290469	-			
100289925	-			
100289844	-			
100289334	-		8	
728780	-			
728667	-		4	
100288320	-		6	
100287904	-			
100287397	-		10	
100287342	-		7	
100286897	-		4	
494551	Wee1-like protein kinase 2			
445577	Putative uncharacterized protein C9orf129			
439957	-		5	
405753	Dual oxidase maturation factor 2			
6407	Semenogelin-2 Precursor		8	
-	Sclerostin domain-containing protein 1 Precursor			
478	Sodium/potassium-transporting ATPase subunit alpha-3		5	
3641	Early placenta insulin-like peptide Precursor		5	
444	Aspartyl/asparaginyl beta-hydroxylase		7	
3884	Keratin, type I cuticular Ha3-II		8	
2709	Gap junction beta-5 protein (Connexin-31.1)			
-	Erythroid transcription factor		6	
116	Pituitary adenylate cyclase-activating polypeptide Precursor		7	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
200909	5-hydroxytryptamine receptor 3D Precursor			
-	Tight junction protein ZO-3			
27012	Potassium voltage-gated channel subfamily V member 1			
-	Tumor necrosis factor ligand superfamily member 6			
-	CaM kinase-like vesicle-associated protein			
7364	UDP-glucuronosyltransferase 2B7 Precursor			
1544	Cytochrome P450 1A2			
-	Trace amine-associated receptor 5			
84676	E3 ubiquitin-protein ligase TRIM63		5	
3788	Potassium voltage-gated channel subfamily S member 2			
3744	Potassium voltage-gated channel subfamily A member 10		12	
-	Protein kinase C-binding protein NELL1 Precursor			
147741	Zinc finger protein 560		6	
-	Putative dimethylaniline monooxygenase [N-oxide-forming] 6		5	
340120	Ankyrin repeat domain-containing protein 34B			
-	Elastase-2B Precursor		4	
347365	Inter-alpha-trypsin inhibitor heavy chain H5-like protein Precursor		5	
64232	Membrane-spanning 4-domains subfamily A member 5			
284359	Izumo sperm-egg fusion protein 1 Precursor		4	
140880	Cystatin-11 Precursor			
134526	Acyl-coenzyme A thioesterase 12		6	
375341	Uncharacterized protein C3orf62		5	
590	Cholinesterase Precursor		8	
-	Fos39347_1			
-	Dynein heavy chain 2, axonemal			
10235	RAS guanyl-releasing protein 2		4	
146227	Protein BEAN			
407738	Protein FAM19A1 Precursor		4	
219623	Transmembrane protein 26		4	
25763	Huntingtin-interacting protein M			
-	Zinc finger protein 749		4	
23217	Zinc finger RNA-binding protein 2		12	
1747	Homeobox protein DLX-3		4	
23619	Zinc finger imprinted 2		10	
22806	Zinc finger protein Aiolos		10	
57156	Transmembrane protein 63C			
-	XK-related protein 5		6	
162461	Transmembrane protein 92 Precursor		5	
119395	Calcium homeostasis modulator protein 3			
79924	ADM2 Precursor (Intermedin)		11	
5568	cAMP-dependent protein kinase catalytic subunit gamma		9	
653707	Phosducin-like protein 2			
100134006	Tripartite motif-containing protein 48			
-	Uncharacterized protein C17orf64		4	
286362	Olfactory receptor 13C9		7	
-	Eosinophil cationic-related protein Fragment		9	
151649	PP2C-like domain-containing protein C3orf48			
284958	5'-nucleotidase domain-containing protein 4			
3400	DNA-binding protein inhibitor ID-4			
256979	Sad1/unc-84 domain-containing protein 1			
340286	Protein FAM183B			
339479	Protein FAM5C Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
94026	POM121-like protein 2			4
9717	SEC14-like protein 5			
-	Protein naked cuticle homolog 2			8
-	Rho GTPase-activating protein 28			10
-	RPE-retinal G protein-coupled receptor			6
1990	Elastase-1 Precursor			
90423	V-type proton ATPase subunit E 2			10
-	Disks large-associated protein 1			4
84691	Protein FAM71F1			4
83639	Testis-expressed protein 101 Precursor			
56169	Gasdermin-C			
7483	Protein Wnt-9a Precursor			
56956	LIM/homeobox protein Lhx9			
85352	Uncharacterized protein KIAA1644 Precursor			7
59340	Histamine H4 receptor			
157310	Phosphatidylethanolamine-binding protein 4 Precursor			
-	Putative uncharacterized protein C8orf39			12
165918	RING finger protein 168			8
121551	Ankyrin repeat and BTB/POZ domain-containing protein BTBD11			7
-	Ankyrin repeat domain-containing protein 2			5
60675	Prokineticin-2 Precursor			4
-	Zinc finger protein 541			
29947	DNA (cytosine-5)-methyltransferase 3-like			
-	Intraflagellar transport protein 172 homolog			8
56923	Neuromedin-U receptor 2			4
-	Uncharacterized protein ENSP00000347308			5
100132967	Uncharacterized protein CXorf52			6
390066	Olfactory receptor 52D1			4
-	-			
2262	Glypican-5 Precursor			
9509	A disintegrin and metalloproteinase with thrombospondin motifs 2 Precursor			5
-	Probable phospholipid-transporting ATPase IIA			4
-	Putative uncharacterized protein FLJ22714			
1538	Cylicin-1 (Cylicin I)			
-	Transcription factor Sp2			4
-	Putative uncharacterized protein LOC439951			
100132760	-			8
259286	Taste receptor type 2 member 40			
-	Transmembrane protein 78			
3038	Hyaluronan synthase 3			
100128046	Putative uncharacterized protein pp13439			4
259295	Taste receptor type 2 member 49			8
286530	P2Y purinoceptor 8			5
150737	Tetrapeptide repeat protein 30B			13
-	Putative uncharacterized protein PRO0461			7
126326	PDZ domain-containing protein GIPC3			5
161829	Exonuclease 3'-5' domain-like-containing protein 1			
389336	Uncharacterized protein C5orf46 Precursor			
619373	Ghrelin O-acyltransferase			
57452	Putative polypeptide N-acetylgalactosaminyltransferase-like protein 1			4
-	neurexin 3 isoform 1 precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	T-cell differentiation antigen CD6 Precursor			
163351	Guanylate-binding protein 6			
646450	Uncharacterized protein C3orf71		9	
402135	Olfactory receptor 5K2			
-	-		5	
-	Transmembrane protein 26		4	
-	Fibrous sheath-interacting protein 2			
-	cDNA FLJ37453 fis, clone BRAWH2010754			
-	Receptor tyrosine-protein kinase erbB-4 Precursor			
286122	Uncharacterized protein C8orf31		3	
347051	Sodium/bile acid cotransporter 5 Precursor			
-	Putative uncharacterized protein FLJ45831			
245932	Beta-defensin 119 Precursor			
-	Immunoglobulin Lambda light chain V gene segment			
341676	Serine/threonine-protein kinase Nek5			
-	Importin subunit alpha-8			
10747	Mannan-binding lectin serine protease 2 Precursor			
145741	Nuclear-localized factor 1		10	
387778	Speedy protein C		9	
93978	C-type lectin domain family 6 member A			
5670	Pregnancy-specific beta-1-glycoprotein 2 Precursor		7	
-	Leucine-rich repeat-containing protein 31			
144453	Bestrophin-3			
283365	Olfactory receptor 6C6			
-	-			
219965	Olfactory receptor 5B17			
-	Putative uncharacterized protein gs114		9	
-	Putative uncharacterized protein gs19		5	
-	Transcription factor RFX4			
2891	Glutamate receptor 2 Precursor		4	
64816	Cytochrome P450 3A43			
375033	Platelet endothelial aggregation receptor 1 Precursor			
389763	FAM75-like protein FLJ46321			
147719	Ly6/PLAUR domain-containing protein 4 Precursor			
-	Putative uncharacterized protein OR7E91P		4	
-	-			
57521	Regulatory-associated protein of mTOR		12	
2348	Folate receptor alpha Precursor			
-	Keratin, type I cytoskeletal 25			
6473	Short stature homeobox protein		10	
342850	UPF0634 protein D			
-	Putative uncharacterized protein C1orf191 Precursor			
6999	Tryptophan 2,3-dioxygenase		4	
6578	Solute carrier organic anion transporter family member 2A1		6	
3617	Interphotoreceptor matrix proteoglycan 1 Precursor			
3305	Heat shock 70 kDa protein 1L		10	
3092	Huntingtin-interacting protein 1		6	
2895	Glutamate receptor delta-2 subunit Precursor			
3848	Keratin, type II cytoskeletal 1		4	
3817	Kallikrein-2 Precursor			
608	Tumor necrosis factor receptor superfamily member 17			
360	Aquaporin-3		6	
155	Beta-3 adrenergic receptor		4	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
6559	Solute carrier family 12 member 3			
6523	Sodium/glucose cotransporter 1			
3556	Interleukin-1 receptor accessory protein Precursor		7	
3238	Homeobox protein Hox-D12			
3001	Granzyme A Precursor		4	
2837	Urotensin II receptor		6	
4007	Prickle-like protein 3		6	
767	Carbonic anhydrase-related protein		4	
728	C5a anaphylatoxin chemotactic receptor			
554	Vasopressin V2 receptor		7	
344	Apolipoprotein C-II Precursor			
114	Adenylate cyclase type 8			
6875	Transcription initiation factor TFIID subunit 4B		5	
6693	Leukosialin Precursor			
3439	Interferon alpha-1/13 Precursor			
2823	Neuronal membrane glycoprotein M6-a			
3697	Inter-alpha-trypsin inhibitor heavy chain H1 Precursor			
6819	Sulfotransferase 1C2			
3358	5-hydroxytryptamine receptor 2C			
3158	Hydroxymethylglutaryl-CoA synthase, mitochondrial Precursor		7	
3115	HLA class II histocompatibility antigen, DP(W4) beta chain Precursor			
2913	Metabotropic glutamate receptor 3 Precursor		4	
2740	Glucagon-like peptide 1 receptor Precursor			
4118	Myelin and lymphocyte protein			
3886	Keratin, type I cuticular Ha5			
658	Bone morphogenetic protein receptor type-1B Precursor		7	
429	Achaete-scute homolog 1		7	
10815	Complexin-1		7	
10578	Granulysin Precursor			
8404	SPARC-like protein 1 Precursor			
7857	Secretogranin-2 Precursor			
7486	Werner syndrome ATP-dependent helicase		9	
51277	DnaJ homolog subfamily C member 27		7	
10344	C-C motif chemokine 26 Precursor			
7172	Thiopurine S-methyltransferase		4	
7143	Tenascin-R Precursor			
8277	Transketolase-like protein 1			
4626	Myosin-8			
54798	Protocadherin-23			
10665	Uncharacterized protein C6orf10			
7111	Tropomodulin-1			
11123	Calcipressin-3		4	
8537	Breast carcinoma-amplified sequence 1			
8218	Clathrin heavy chain 2			
10858	Cholesterol 24-hydroxylase			
10261	Immunoglobulin superfamily member 6 Precursor			
7046	TGF-beta receptor type-1 Precursor		8	
6853	Synapsin-1			
11069	Rap guanine nucleotide exchange factor 4	8		
4332	Myeloid cell nuclear differentiation antigen			
83481	-			
81050	Olfactory receptor 5AC2			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
80852	Glutamate receptor-interacting protein 2			
54768	Hydrocephalus-inducing protein homolog			
54149	Protein EURL homolog		8	
23285	Uncharacterized protein KIAA1107		6	
81871	Keratin-associated protein 4-6			
80763	Spexin Precursor		4	
80709	AT-hook-containing transcription factor			
80055	GPI inositol-deacylase		4	
53829	P2Y purinoceptor 13			
54959	Odontogenic ameloblast-associated protein Precursor			
23240	Transmembrane protein 131-like Precursor		12	
23218	Neurobeachin-like protein 2		4	
100287025	-		4	
55110	Protein mago nashi homolog 2		4	
54897	Zinc finger protein castor homolog 1			
51733	Beta-ureidopropionase			
51348	Killer cell lectin-like receptor subfamily F member 1			
54854	Protein FAM83E		4	
100290555	-			
11249	Neurexophilin-2 Precursor			
100128588	-		4	
100128471	-		7	
732443	-			
731220	Uncharacterized protein FLJ42986			
284067	hypothetical protein LOC284067			
256158	cDNA FLJ23816 fis, clone HSI02685HCG31249			
221424	Uncharacterized protein C6orf154		5	
342615	Schlafen family member 12-like		5	
286151	F-box only protein 43		4	
84867	Tyrosine-protein phosphatase non-receptor type 5			
84239	Probable cation-transporting ATPase 13A4			
100128302	-		10	
730413	-		7	
730159	-			
283807	F-box/LRR-repeat protein 22			
255352	Uncharacterized protein C10orf92			
221191	Plasma kallikrein-like protein 4 Precursor			
340895	-			
340267	Collagen alpha-1(XXVIII) chain Precursor			
85293	Keratin-associated protein 3-3			
84698	Calcyphosin-2			
84181	Chromodomain-helicase-DNA-binding protein 6			
100128127	-			
100128064	-			
729989	-		6	
283129	Uncharacterized protein C11orf85			
339829	Coiled-coil domain-containing protein 39			
285180	RUN and FYVE domain-containing protein 4			
91156	Immunoglobulin-like and fibronectin type III domain-containing protein 1		8	
84503	Zinc finger protein 527		7	
100125288	GATA-like protein 1			
729870	-			
259215	Lymphocyte antigen 6 complex locus protein G6f Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
222256	Cadherin-like protein 28 Precursor			
203413	Kita-kyushu lung cancer antigen 1			
170712	Cytochrome c oxidase subunit 7B2, mitochondrial Precursor			
338339	C-type lectin domain family 4 member D			
284370	Zinc finger protein 615		12	
84904	Vav-like protein C9orf100			
100288104	-		4	
55604	Leucine-rich repeat-containing protein 16A			
100293044	-		10	
100292572	-		5	
100292521	-		6	
100291666	HCG1993240Serologically defined breast cancer antigen NY-BR-40 Fragment		7	
100133511	Complement C3 Precursor		7	
100133305	-		7	
100132057	-			
100131871	-			
388780	-			
374955	Spermatogenesis-associated protein 21		3	
374462	Phosphatidylinositol phosphatase PTPRQ Precursor			
100292879	-		7	
100291443	-			
100129988	-		5	
2104	Estrogen-related receptor gamma			
100129194	-		6	
100129098	-			
100293360	-		4	
100134160	-		8	
100131688	-		7	
100130951	-		7	
100130882	-		4	
388585	Transcription factor HES-5			
388284	Uncharacterized protein C16orf86		5	
100292813	-		6	
100291902	-		4	
100291849	-		6	
100291310	-		4	
100129792	Coiled-coil domain-containing protein 152		7	
100128979	cDNA FLJ35275 fis, clone PROST2006282, weakly similar to TRANSLATION INITIATION FACTOR IF-2			
100128905	-		6	
100133893	MANSC domain-containing protein ENSP00000370673 Precursor		5	
100133807	-			
100132805	-		5	
100132649	-		5	
100131554	CDNA: FLJ23120 fis, clone LNG07989HCG1987724			
100130764	Putative uncharacterized protein Fragment			
387733	Interferon-induced transmembrane protein 5		4	
348094	Pleckstrin homology domain-containing family O member 2		7	
347475	UPF0625 coiled-coil domain-containing protein ENSP00000359845			
100292715	Multidrug resistance-associated protein 6			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100292653	-			
100292226	Zinc finger domain-related protein TSRM Fragment			
100292178	-		4	
100291795	-			
100291714	-		3	
100291243	-		8	
100291186	-			
100129597	-			
100129489	-			
100133698	-			
100133599	-			
100131391	-		7	
100131297	Putative golgin subfamily A member 2-like protein 5			
100130472	-		7	
100130386	-			
346171	Zinc finger protein 57 homolog			
23017	Fas apoptotic inhibitory molecule 2		8	
8302	NKG2-F type II integral membrane protein			
-	Attractin-like protein 1 Precursor			
116512	Mas-related G-protein coupled receptor member D			
57084	Vesicular glutamate transporter 2			
100293940	-			
100293898	-			
100293546	-		5	
5368	Nociceptin Precursor [Contains Neuropeptide 1:Nociceptin			
3630	Insulin Precursor			
10690	Alpha-(1,3)-fucosyltransferase			
2905	Glutamate [NMDA] receptor subunit epsilon-3 Precursor		4	
57530	Cingulin			
6121	Retinal pigment epithelium-specific 65 kDa protein			
1368	Carboxypeptidase M Precursor		4	
94160	Multidrug resistance-associated protein 9			
84631	SLIT and NTRK-like protein 2 Precursor			
-	Neuroigin-3 Precursor		6	
51305	Potassium channel subfamily K member 9			
-	Interferon-inducible protein AIM2			
-	-			
100294369	-		6	
100294346	-		8	
84659	Ribonuclease 7 Precursor		5	
3441	Interferon alpha-4 Precursor			
2165	Coagulation factor XIII B chain Precursor		5	
-	Pro-neuregulin-2, membrane-bound isoform Precursor		6	
-	Urea transporter, erythrocyte			
6528	Sodium/iodide cotransporter			
405754	HERV-FRD_6p24.1 provirus ancestral Env polyprotein Precursor			
317703	Vomeroneasal type-1 receptor 4		4	
-	-			
100294259	-			
100293745	-		4	
100293676	-			
100293296	-		5	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
57151	Lysozyme-like protein 6 Precursor			
29949	Interleukin-19 Precursor			
56547	Matrix metalloproteinase-26 Precursor			7
140612	Zinc finger protein 28 homolog			
8808	Interleukin-1 receptor-like 2 Precursor			
-	Sodium channel protein type 8 subunit alpha			7
1438	Granulocyte-macrophage colony-stimulating factor receptor subunit alpha Precursor			
1015	Cadherin-17 Precursor			
163702	Interleukin-28 receptor alpha chain Precursor			4
58475	Membrane-spanning 4-domains subfamily A member 7			
26280	X-linked interleukin-1 receptor accessory protein-like 2 Precursor			5
100294489	-			
100294459	Ig gamma-2 chain C region			5
100294062	-			
100294012	Putative uncharacterized protein Fragment			
100293611	-			4
100293574	-			
57709	Probable cationic amino acid transporter			5
84077	Uncharacterized protein C3orf20			6
9247	Chorion-specific transcription factor GCMb			
56269	Interferon-inducible GTPase 5			
23553	Hyaluronidase-4			10
7425	Neurosecretory protein VGF Precursor			9
3696	Integrin beta-8 Precursor			4
10495	Ecto-NOX disulfide-thiol exchanger 2			12
5588	Protein kinase C theta type			
55732	Uncharacterized protein C1orf112			
144193	Probable imidazolonepropionase			
23025	Protein unc-13 homolog A			
92552	Putative ataxin-3-like protein			
2939	Glutathione S-transferase A2			7
84466	Multiple epidermal growth factor-like domains 10 Precursor			
206412	Uncharacterized protein C6orf163			8
200315	Probable DNA dC->dU-editing enzyme APOBEC-3A			4
5967	Lithostathine-1-alpha Precursor			5
136227	Collagen alpha-1(XXVI) chain Precursor			5
1761	Doublesex- and mab-3-related transcription factor 1			4
23769	Leucine-rich repeat transmembrane protein FLRT1 Precursor			5
56159	Testis-expressed sequence 11 protein			8
152	Alpha-2C adrenergic receptor			8
135644	Tripartite motif-containing protein 40			8
-	Protein maelstrom homolog			
64806	Interleukin-25 Precursor			
219493	Olfactory receptor 5AR1			5
85509	Methyl-CpG-binding domain protein 3-like 1			7
49	Acrosin Precursor			
94030	Leucine-rich repeat-containing protein 4B Precursor			4
27245	A.T hook DNA-binding motif-containing protein 1			4
164312	Leucine-rich repeat neuronal protein 4 Precursor			
8876	Pantetheinase Precursor			
338094	Protein FAM151A			9

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
157657	Uncharacterized protein C8orf37		4	
285335	Sodium/hydrogen exchanger 10			
126410	Cytochrome P450 4F22			
3112	HLA class II histocompatibility antigen, DO beta chain Precursor			
120776	Olfactory receptor 2D2			
10343	Polycystic kidney disease and receptor for egg jelly-related protein Precursor			
440533	Pregnancy-specific beta-1-glycoprotein 8 Precursor			
79923	Homeobox protein NANOG			
51411	Bridging integrator 2			
147744	Transmembrane protein 190 Precursor			
-	Putative uncharacterized protein C13orf28 Precursor			
388199	Putative uncharacterized protein gs64			
11254	Sodium- and chloride-dependent neutral and basic amino acid transporter B(0+)			
3228	Homeobox protein Hox-C12			
-	17 beta-hydroxysteroid dehydrogenase			
114771	Peptidoglycan recognition protein I-alpha Precursor		5	
10879	Submaxillary gland androgen-regulated protein 3B Precursor			
285605	DTW domain-containing protein 2		4	
1472	Cystatin-S Precursor			
10202	Dehydrogenase/reductase SDR family member 2		6	
26658	Olfactory receptor 7C2			
-	Novel protein		8	
90342	Fer-1-like protein 5			
2571	Glutamate decarboxylase 1		6	
5648	Complement-activating component of Ra-reactive factor Precursor			
-	-		12	
340595	Zinc finger CCHC domain-containing protein 16			
388531	Regulator of G-protein signaling 9-binding protein			
-	Putative uncharacterized protein Fragment		9	
-	Uncharacterized protein HSD44		4	
100131137	Bovine seminal plasma protein homolog 1 Precursor			
100130833	Olfactory receptor 2T12		4	
-	-		7	
390058	Olfactory receptor 51B5		5	
504191	Olfactory receptor 9G1			
143282	Fibroblast growth factor-binding protein 3 Precursor		9	
-	-			
-	Uncharacterized protein C21orf77			
164153	Ubiquitin-like protein 4B			
-	Uncharacterized protein C21orf42			
100130651	Protein SSX10		4	
132203	Protein S100-A1-like			
440603	BCL2-like protein 15			
-	DH and coiled-coil domain-containing protein ENSP00000381780			
283446	Myosin-Ih			
-	-			
1240	Chemokine receptor-like 1			
128822	Cystatin-9 Precursor			
-	-		6	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
8170	Urea transporter, kidney			9
-	Immunoglobulin Lambda light chain V gene segment			
139599	Melanoma-associated antigen E2			5
402573	Uncharacterized protein C7orf61			
-	-		5	
339669	Protein EAN57			
-	Uncharacterized protein ENSP00000344387 Fragment			11
388555	Insulin growth factor-like family member 3 Precursor			
138009	WD repeat-containing protein 21C			8
-	Uncharacterized protein C11orf44 Precursor			
317671	Rieske domain-containing protein			14
100133895	Heparanase-2			
-	CADHL_HUMAN Isoform 2 of A6H8M9 - Homo sapiens (Human)			
-	Gliomedin			
-	Myb-related protein A			
729735	Putative TAF11-like protein ENSP00000332601			
-	-			
284415	V-set and transmembrane domain-containing protein 1 Precursor			6
730031	Afadin			6
341350	Ovochymase-1 Precursor			4
162605	Keratin, type I cytoskeletal 28			
-	Putative uncharacterized protein ENSP00000309762			
9672	Syndecan-3			7
66037	Protein boule-like			
-	Protein DLN-1			6
8844	Kinase suppressor of Ras 1			
-	Schlafen-like protein 1			
-	Kinase suppressor of Ras 2			
-	Uncharacterized protein C15orf33			
-	-			4
-	Cytochrome P450 3A4			
-	-			14
171024	Synaptopodin-2			
728946	Keratin-associated protein 1-1			
93649	Myocardin			
89882	Tumor protein D55			
9310	Zinc finger protein 235			6
9711	Uncharacterized protein KIAA0226			6
219770	Gap junction delta-4 protein			
27004	T-cell leukemia/lymphoma protein 6			
9721	G protein-regulated inducer of neurite outgrowth 2			10
-	Uncharacterized protein C14orf48			
139221	MUM1-like protein 1			
8817	Fibroblast growth factor 18 Precursor			
-	-			
-	Olfactory receptor 13C3			
-	Cytosolic endo-beta-N-acetylglucosaminidase			10
-	Protein phosphatase 1 regulatory subunit 3A			
-	Putative uncharacterized protein C12orf37			
5890	DNA repair protein RAD51 homolog 2			6
2297	forkhead box D1 (FOXO1), mRNA			7
2123	Protein EVI2A Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1917	Elongation factor 1-alpha 2			
1880	G-protein coupled receptor 183			
5091	Pyruvate carboxylase, mitochondrial Precursor			
4886	Neuropeptide Y receptor type 1			
1404	Hyaluronan and proteoglycan link protein 1 Precursor			
959	CD40 ligand			
2620	Growth arrest-specific protein 2			
2266	Fibrinogen gamma chain Precursor			
2250	Fibroblast growth factor 5 Precursor			
1824	Desmocollin-2 Precursor			
5030	P2Y purinoceptor 4			
1600	Disabled homolog 1			
1113	Chromogranin-A Precursor			
5992	Transcription factor RFX4			
5788	Leukocyte common antigen Precursor			
2555	Gamma-aminobutyric acid receptor subunit alpha-2 Precursor			
2006	Elastin Precursor			
1805	Dermatopontin Precursor			
4974	Oligodendrocyte-myelin glycoprotein Precursor			
1559	Cytochrome P450 2C9			
100288686	-			
5732	Prostaglandin E2 receptor EP2 subtype			
5549	Prolargin Precursor			
2173	Fatty acid-binding protein, brain			
1733	Type I iodothyronine deiodinase			
5140	cGMP-inhibited 3',5'-cyclic phosphodiesterase B		5	
1268	Cannabinoid receptor 1			
1235	C-C chemokine receptor type 6		4	
1004	Cadherin-6 Precursor			
845	Calsequestrin-2 Precursor			
27201	Probable G-protein coupled receptor 78		8	
10003	N-acetylated-alpha-linked acidic dipeptidase 2		8	
9677	Inositol hexakisphosphate and diphosphoinositol-pentakisphosphate kinase 1		4	
6387	Stromal cell-derived factor 1 Precursor		7	
6366	C-C motif chemokine 21 Precursor		4	
6175	60S acidic ribosomal protein P0			
9211	Leucine-rich glioma-inactivated protein 1 Precursor			
8821	Type II inositol-3,4-bisphosphate 4-phosphatase		6	
27124	Phosphatidylinositol 4,5-bisphosphate 5-phosphatase A			
9814	Protein SF11 homolog		10	
9615	Guanine deaminase			
9177	5-hydroxytryptamine receptor 3B Precursor			
8997	Histone H2B type 1-D			
5266	Elafin Precursor			
9578	Serine/threonine-protein kinase MRCK beta		5	
6279	Protein S100-A8			
6014	GTP-binding protein Rit2			
9332	Scavenger receptor cysteine-rich type 1 protein M130 Precursor			
9119	Keratin, type II cytoskeletal 75		6	
10082	Glypican-6 Precursor			
9900	Synaptic vesicle glycoprotein 2A		10	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100291688	-		7	
5972	CD225 family protein FLJ76511		5	
63970	p53-regulated apoptosis-inducing protein 1			
63924	Cell death activator CIDE-3			
57467	Protein-cysteine N-palmitoyltransferase HHAT-like protein			
56126	Protocadherin beta-10 Precursor		4	
25970	SH2B adapter protein 1			
25936	Kinetochore-associated protein NSL1 homolog		11	
65268	Serine/threonine-protein kinase WNK2			
64446	Dynein intermediate chain 2, axonemal			
29974	APOBEC1 complementation factor			
56924	Serine/threonine-protein kinase PAK 6		7	
26191	Tyrosine-protein phosphatase non-receptor type 22			
25876	Sperm flagellar protein 1			
50856	C-type lectin domain family 4 member A		6	
57127	Ammonium transporter Rh type B			
56649	Transmembrane protease, serine 4			
55867	Solute carrier family 22 member 11		4	
26074	Uncharacterized protein C20orf26			
26050	SLIT and NTRK-like protein 5 Precursor		5	
64793	Coiled-coil domain-containing protein 21		11	
58499	Zinc finger protein 462			
100191040	hypothetical protein LOC100191040		4	
50831	Taste receptor type 2 member 3			
57501	Uncharacterized protein KIAA1257		4	
55811	Adenylate cyclase type 10			
25802	Leiomodin-1			
646730	-		4	
646498	-			
148229	Probable phospholipid-transporting ATPase IK		7	
143689	Piwi-like protein 4		4	
140894	Uncharacterized protein C20orf152			
402415	XK-related protein 2			
392352	-			
391253	Kunitz-type protease inhibitor 4 Precursor			
132864	Cytoplasmic polyadenylation element-binding protein 2			
114299	Paralemmin-2			
57818	Glucose-6-phosphatase 2			
646021	-			
163479	Fibronectin type III domain-containing protein 7 Precursor			
401287	-			
401106	-			
390595	-			
131831	Uncharacterized protein C3orf44			
130827	Transmembrane protein 182 Precursor		4	
125115	Keratin, type I cytoskeletal 40		4	
648791	protein phosphatase 1, regulatory (inhibitor) subunit 3G		4	
644893	-			
161497	Stereocilin Precursor			
151516	Retroviral-like aspartic protease 1 Precursor		5	
100134308	Nebulin		4	
400946	-			
389643	Uncharacterized protein C8orf80			
130013	2-amino-3-carboxymuconate-6-semialdehyde decarboxylase			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
128817	Cystatin-like 1 Precursor			
124637	Cytochrome b5 domain-containing protein 1		11	
123876	Acyl-coenzyme A synthetase ACSM2A, mitochondrial Precursor			
100287322	-			
57597	BAH and coiled-coil domain-containing protein 1		4	
647262	-			
644150	WAS/WASL-interacting protein family member 3			
158405	Uncharacterized protein KIAA1958			
150280	HORMA domain-containing protein 2			
149643	UPF0732 protein C1orf227			
79075	Sister chromatid cohesion protein DCC1		9	
399694	SHC-transforming protein 4			
389369	-			
389174	-			
127435	Podocan Precursor		3	
121364	Olfactory receptor 10A7			
57528	BTB/POZ domain-containing protein KCTD16		5	
-	Sodium-dependent phosphate transport protein 4			
100289758	-			
100289664	-			
729526	-			
728475	-			
100288685	-			
100287738	Putative transmembrane protein MGC5590			
441687	-		5	
100290794	-			
100290227	-			
100290132	-			
100289602	-			
100289120	-			
729251	-			
729172	-		9	
728320	Lactotransferrin Precursor		5	
100288645	-			
100288588	-			
100288150	-			
100288077	-		5	
100287664	Zinc finger domain-related protein TSRM Fragment		6	
100287083	-			
642398	-		4	
441282	Aldo-keto reductase family 1 member B10		39	
100290705	-			
100290051	-		5	
100288926	-		5	
728052	-			
727918	-			
100288476	-		5	
100288007	-			
100287967	-			
100287520	-			
100287484	Putative uncharacterized protein ENSP00000334305			
100286961	-			
641372	Putative acyl-coenzyme A thioesterase 6			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
440590	Protein zyg-11 homolog A			
440243	Putative uncharacterized protein ENSP00000383535 Fragment			
100288878	-			
728789	-		4	
100287907	-			
100287847	-			
503497	Membrane-spanning 4-domains subfamily A member 13			
448834	Keratinocyte proline-rich protein			
440023	Keratin-associated protein 5-6			3
408029	hypothetical protein LOC408029			5
553	Vasopressin V1b receptor			6
-	Myomesin-1			6
-	Melanophilin			
7379	Uropod-2 Precursor			
652010	Keratin, type II cuticular Hb3			4
9080	Claudin-9			
-	Putative G-protein coupled receptor 42			
2735	Zinc finger protein GLI1			5
285242	5-hydroxytryptamine receptor 3E Precursor			4
2559	Gamma-aminobutyric acid receptor subunit alpha-6 Precursor			5
-	Transketolase-like protein 1			
85477	Adseverin (Scinderin)			9
-	Homeobox protein EMX1			
1618	Deleted in azoospermia-like			12
7365	UDP-glucuronosyltransferase 2B10 Precursor			
1135	Neuronal acetylcholine receptor subunit alpha-2 Precursor			8
1339	Cytochrome c oxidase polypeptide 6A2, mitochondrial Precursor			7
-	Zinc finger protein ZIC 2			
3745	Potassium voltage-gated channel subfamily B member 1			
-	Nicotinamide riboside kinase 2			6
-	D(2) dopamine receptor			9
8532	Carboxypeptidase Z Precursor			
64127	Nucleotide-binding oligomerization domain-containing protein 2			11
27146	Protein FAM184B			
340205	Trem-like transcript 1 protein Precursor			4
148113	Cartilage intermediate layer protein 2 Precursor			7
11063	Transcription factor SOX-30			4
27288	RNA-binding motif protein, X-linked-like-2			
282617	Interleukin-28B Precursor			
140881	Beta-defensin 129 Precursor			
-	-			7
85480	Thymic stromal lymphopoietin Precursor			
84868	Hepatitis A virus cellular receptor 2 Precursor			
84075	Fibrous sheath CABYR-binding protein			
27136	MORC family CW-type zinc finger protein 1			
51176	Lymphoid enhancer-binding factor 1			8
-	IQ motif containing D			
219681	Armadillo repeat-containing protein 3			
728760	Keratin, type I cytoskeletal 40			
83857	Transmembrane and TPR repeat-containing protein 1			7

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Beta-crystallin B1		5	
58524	Doublesex- and mab-3-related transcription factor 3			
162466	Phosphoethanolamine/phosphocholine phosphatase		4	
116135	Leucine-rich repeat-containing protein 3B Precursor			
4184	Sperm mitochondrial-associated cysteine-rich protein		6	
-	-		5	
221336	Coiled-coil domain-containing protein C6orf65		12	
390157	Olfactory receptor 8K1		4	
256006	Ankyrin repeat domain-containing protein 31			
-	Coiled-coil domain-containing protein 39		4	
4991	Olfactory receptor 1D2			
136288	Uncharacterized protein C7orf57			
91977	Myozenin-3			
-	Potassium channel subfamily T member 2		5	
-	Calcium and integrin-binding family member 4			
161357	MAM domain-containing glycosylphosphatidylinositol anchor protein 2 Precursor			
-	cDNA FLJ10346 fis, clone NT2RM2001004HCG1770745, isoform CRA_acDNA FLJ14128 fis, clone MAMMA1002590		4	
91464	Intestine-specific homeobox			
58503	proline rich, lacrimal 1			
84340	Elongation factor G 2, mitochondrial Precursor		4	
2001	ETS-related transcription factor Elf5			
9580	SOX-13 protein			
-	Neural cell adhesion molecule L1-like protein Precursor			
51276	Zinc finger protein 571			
133060	Otopetrin-1			
-	Uncharacterized protein C3orf44			
388561	Zinc finger protein 761		12	
255762	PDZ domain-containing protein C16orf65			
151242	Protein phosphatase 1 regulatory subunit 1C			
255426	Ras-GEF domain-containing family member 1C			
-	GLIPR1-like protein 1 Precursor		4	
1842	Extracellular matrix protein 2 Precursor			
-	Uncharacterized protein C21orf74			
100132853	Putative uncharacterized protein PRO1716			
-	Uncharacterized protein LOC284861		5	
255119	Uncharacterized protein C4orf22			
-	-			
390152	Olfactory receptor 8H3			
-	Olfactory receptor 52H1			
-	MGC24125 protein			
-	LOC554207 protein		4	
2775	Guanine nucleotide-binding protein G(o) subunit alpha			
-	Protein FAM123B			
259296	Taste receptor type 2 member 50			
5121	Purkinje cell protein 4		4	
388818	Keratin-associated protein 26-1		5	
399909	Pecanex-like protein 3			
339500	Zinc finger protein 678		10	
390181	Olfactory receptor 5AK2			
259240	Protein WFDC9 Precursor			
100128310	Novel protein		5	
352999	Uncharacterized protein C6orf58 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100131227	Putative uncharacterized protein GAFA-1			
8386	Olfactory receptor 1D5			
161291	Cell cycle control protein 50B (Transmembrane protein 30B) [Source:UniProtKB/Swiss-Prot;Acc:Q3MIR4]		4	
-	-			
391714	Tripartite motif-containing protein 75			
-	Olfactory receptor 52N5		6	
137814	Homeobox protein Nkx-2.6			
-	CMRF35-like molecule 7 Precursor			
245928	Beta-defensin 114 Precursor			
10170	Dehydrogenase/reductase SDR family member 9 Precursor			
55	Prostatic acid phosphatase Precursor		7	
-	Olfactory receptor 51J1			
259294	Taste receptor type 2 member 48		6	
647471	Inositol hexakisphosphate and diphosphoinositol-pentakisphosphate kinase 1			
374355	UPF0628 protein C10orf96			
219428	Olfactory receptor 4C16			
253018	HLA complex group 27			
100133616	Putative uncharacterized protein FLJ35883			
-	Olfactory receptor 2L5			
-	Putative olfactory receptor 52L2		3	
-	-		13	
342898	Syncollin Precursor			
768239	Proactivator polypeptide-like 1 Precursor			
-	-			
3452	Interferon alpha-21 Precursor			
-	Signaling lymphocytic activation molecule Precursor		4	
80352	RING finger protein 39			
3718	Tyrosine-protein kinase JAK3			
-	Probable G-protein coupled receptor 123			
344807	Cell surface glycoprotein CD200 receptor 2 Precursor			
387911	Complement C1q tumor necrosis factor-related protein 9-like Precursor			
2550	Gamma-aminobutyric acid type B receptor subunit 1 Precursor			
-	cDNA FLJ37788 fis, clone BRHIP2028593, weakly similar to Homo sapiens IL-1 receptor accessory protein mRNA		8	
84501	Protein spire homolog 2			
124739	Ubiquitin carboxyl-terminal hydrolase 43			
116983	ArfGAP with coiled-coil, ANK repeat and PH domain-containing protein 3		6	
55888	Zinc finger protein 167		5	
-	Programmed cell death protein 1 Precursor			
-	Uncharacterized protein ENSP00000381183 Fragment			
343406	Olfactory receptor 10R2			
-	-			
390144	Olfactory receptor 5D16			
401667	Olfactory receptor 51A2			
89866	Protein transport protein Sec16B			
3785	Potassium voltage-gated channel subfamily KQT member 2			
-	-			
-	3 beta-hydroxysteroid dehydrogenase Fragment			
-	cDNA FLJ42258 fis, clone TKIDN2010934			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
81832	Neuropilin and tolloid-like protein 1 Precursor			
55805	LRP2-binding protein		9	
124930	Ankyrin repeat domain-containing protein 13B		5	
-	Transmembrane protease, serine 11F			
6579	Solute carrier organic anion transporter family member 1A2			
3620	Indoleamine 2,3-dioxygenase		6	
3603	Interleukin-16 Precursor			
2875	Alanine aminotransferase 1			
4060	Lumican Precursor		9	
3820	Killer cell lectin-like receptor subfamily B member 1			
611	Blue-sensitive opsin			
361	Aquaporin-4		4	
183	Angiotensinogen Precursor			
3574	Interleukin-7 Precursor			
3002	Granzyme B Precursor			
2838	G-protein coupled receptor 15			
3763	G protein-activated inward rectifier potassium channel 2			
345	Apolipoprotein C-III Precursor			
319	Apolipoprotein F Precursor			
6696	Osteopontin Precursor		6	
6507	Excitatory amino acid transporter 1			
3454	Interferon-alpha/beta receptor alpha chain Precursor			
2984	Heat-stable enterotoxin receptor Precursor			
3952	Leptin Precursor			
3698	Inter-alpha-trypsin inhibitor heavy chain H2 Precursor		9	
474	Protein atonal homolog 1			
269	Anti-Muellerian hormone type-2 receptor Precursor			
54	Tartrate-resistant acid phosphatase type 5 Precursor			
6820	Sulfotransferase family cytosolic 2B member 1		7	
3361	5-hydroxytryptamine receptor 5A			
2915	Metabotropic glutamate receptor 5 Precursor			
3679	Integrin alpha-7 Precursor		4	
640	Tyrosine-protein kinase BLK			
12	Alpha-1-antichymotrypsin Precursor		4	
10816	Kunitz-type protease inhibitor 3 Precursor			
10788	Ras GTPase-activating-like protein IQGAP2			
10603	SH2B adapter protein 2		9	
7225	Short transient receptor potential channel 6			
4653	Myocilin Precursor			
4314	Stromelysin-1 Precursor			
10345	Triadin			
6947	Transcobalamin-1 Precursor			
8284	Histone demethylase JARID1D			
4604	Myosin-binding protein C, slow-type			
10485	Protein CROC-4			
100292217	-			
8513	Gastric triacylglycerol lipase Precursor			
7710	Zinc finger protein 154			
4586	Mucin-5B Precursor			
51151	Membrane-associated transporter protein			
10886	Neuropeptide FF receptor 2			
10859	Leukocyte immunoglobulin-like receptor subfamily B member 1 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
8076	Microfibrillar-associated protein 5 Precursor			
8000	Prostate stem cell antigen Precursor			
4360	Macrophage mannose receptor 1 Precursor			
4336	Myelin-associated oligodendrocyte basic protein			
81061	Olfactory receptor 11H1			
80125	Coiled-coil domain-containing protein 33			5
79822	Rho GTPase-activating protein 28			7
54769	GTP-binding protein Di-Ras2			
51617	Neuron-specific protein family member 2			
55510	Probable ATP-dependent RNA helicase DDX43			
23286	Protein WWC1			5
23263	Guanine nucleotide exchange factor DBS			
81872	Keratin-associated protein 2-1			
80059	Leucine-rich repeat transmembrane neuronal protein 4 Precursor			
53831	Probable G-protein coupled receptor 84			
51548	Mono-ADP-ribosyltransferase sirtuin-6			
23242	Protein cordon-bleu			
81621	Kazal-type serine protease inhibitor domain-containing protein 1 Precursor			
54551	MAGE-like 2 (MAGEL2), mRNA			4
53347	Ubiquitin-associated and SH3 domain-containing protein A			
81551	Stathmin-4			
79870	Brain and acute leukemia cytoplasmic protein			4
55063	Zinc finger CW-type PWWP domain protein 1			8
54855	Protein FAM46C			3
54827	Protein FAM55D Precursor			
11250	Probable G-protein coupled receptor 45			
100128597	-			
100128476	-			6
732455	-			
284215	-			
257044	Uncharacterized protein C1orf101 Precursor			
221711	Synaptonemal complex protein 2-like			
201299	RAD52 motif-containing protein 1			
200726	hCG1657980 (LOC200726), mRNA			
343413	Fc receptor-like protein 6 Precursor			
342618	Schlafen family member 14			
286177	-			
89869	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase zeta-1			
85569	Galanin-like peptide Precursor			
100128361	-			
283847	Coiled-coil domain-containing protein 79			
283551	Uncharacterized protein C14orf182			
255512	-			4
254958	Exonuclease GOR			
221223	Carboxylesterase 7 Precursor			
340351	Cytosolic carboxypeptidase 3			4
285755	Peptidyl-prolyl cis-trans isomerase-like 6			
285498	ring finger protein 212 isoform b			
85413	Solute carrier family 22 member 16			
85294	Keratin-associated protein 2-4			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
84699	Cyclic AMP-responsive element-binding protein 3-like protein 3			
84182	Indolethylamine N-methyltransferase		13	
100128131	-			
100128069	-			
730079	-			
283383	Probable G-protein coupled receptor 133 Precursor			
252884	Zinc finger protein 396			
219855	Sugar phosphate exchanger 2			
339834	Coiled-coil domain-containing protein 36			
339390	C-type lectin domain family 4 member G			
285195	Sodium/hydrogen exchanger 9		6	
91181	Nuclear pore membrane glycoprotein 210-like Precursor			
85004	Ras-related and estrogen-regulated growth inhibitor			
84958	Synaptotagmin-like protein 1			
84620	Beta-galactoside alpha-2,6-sialyltransferase 2			
55652	Heme transporter HRG1		10	
100127885	Liver-related low express protein 1		7	
729706	Putative TAF11-like protein ENSP00000332601		9	
225689	Mitogen-activated protein kinase 15			
202500	T-complex-associated testis-expressed protein 1			
170850	Potassium voltage-gated channel subfamily G member 3			
170261	Zinc finger CCHC domain-containing protein 12 (		4	
81578	Collagen alpha-1(XI) chain Precursor			
338382	-			
284546	Uncharacterized protein C1orf185			
90522	Protein YIF1B		5	
84905	Zinc finger protein 341		10	
84444	Histone-lysine N-methyltransferase, H3 lysine-79 specific		8	
83889	WD repeat-containing protein 87			
83729	Inhibin beta E chain Precursor			
41	amiloride-sensitive cation channel 2, neuronal isoform a			
100293104	-		4	
100292127	-			
100292070	-			
100130298	-		4	
100130138	-			
100129410	-			
100129282	-			
100293489	ATP synthase subunit f, mitochondrial			
100134395	-		4	
100133515	-			
100133311	-		4	
100132068	-		5	
100131891	-		4	
100131225	-			
389072	Pleckstrin homology domain-containing family M member 3		5	
388795	EF-hand calcium-binding domain-containing protein 8			
374470	Uncharacterized protein C12orf42		4	
100292991	-			
100292420	-			
100129195	cDNA FLJ45995 fis, clone SKNMC2003639		7	
100134162	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100133086	-			
100131696	Putative keratin-associated protein 10-like ENSP00000375147			
388325	Transmembrane protein C17orf87			
353355	Zinc finger protein 233		6	
100292775	-			
100292383	Hypothetical LOC441242			
100292298	-		4	
100291908	-			
100291851	Putative ubiquitin-like protein FUBI-like protein ENSP00000310146			4
100129702	-			
100128993	-			
100293261	-			
100133898	Anaphase-promoting complex subunit 1			
100132813	-			
100132663	-			
100130798	-			
387787	Putative octanoyltransferase, mitochondrial Precursor			8
387129	Neuropeptide S receptor			
347487	Uncharacterized protein LOC347487 Precursor			
100292716	-			
100292654	-			
100292228	-			
100291806	-			
100291190	Rheumatoid factor RF-IP18 Fragment			4
100129603	LOC392621			4
100293155	-			
100133632	-			
100132317	Putative uncharacterized protein C20orf69			8
100130476	-			
378925	RING finger protein 148 Precursor			
375611	Prestin			
9622	Kallikrein-4 Precursor			
4317	Neutrophil collagenase Precursor			3
23209	Membrane protein MLC1			6
11027	Leukocyte immunoglobulin-like receptor subfamily A member 2 Precursor			4
-	Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 1			9
5408	Pancreatic lipase-related protein 2 Precursor			5
3818	Plasma kallikrein Precursor			
9607	Cocaine- and amphetamine-regulated transcript protein Precursor			
10317	Beta-1,3-galactosyltransferase 5			
100293809	-			
100293440	V1-4 protein Fragment			5
3442	Interferon alpha-5 Precursor			7
2249	Fibroblast growth factor 4 Precursor			
389692	Transcription factor MafA			4
-	N-acetylated-alpha-linked acidic dipeptidase 2			
9635	Calcium-activated chloride channel regulator 2 Precursor			
6564	Solute carrier family 15 member 1			
6529	Sodium- and chloride-dependent GABA transporter 1			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
404037	Hyaluronan and proteoglycan link protein 4 Precursor			
338442	Nicotinic acid receptor 1		4	
-	Leucine-rich repeat transmembrane neuronal protein 4 Precursor			
-	Immunoglobulin Kappa light chain V gene segment		6	
100293747	Leukocyte immunoglobulin-like receptor subfamily B member 3 Precursor			
100293679	-			
43847	Kallikrein-14 Precursor		4	
1	Alpha-1B-glycoprotein Precursor			
-	Matrix extracellular phosphoglycoprotein Precursor			
145226	Retinol dehydrogenase 12		5	
9348	Bifunctional heparan sulfate N-deacetylase/N-sulfotransferase 3			
8809	Interleukin-18 receptor 1 Precursor		6	
6336	Sodium channel protein type 10 subunit alpha			
1016	Cadherin-18 Precursor (Cadherin-14)		4	
2769	Guanine nucleotide-binding protein subunit alpha-15			
245802	Membrane-spanning 4-domains subfamily A member 6E		10	
26290	Probable polypeptide N-acetylgalactosaminyltransferase 8			
100294490	-			
100294067	-			
7038	Thyroglobulin Precursor		6	
100293612	-		6	
100293580	-		6	
6792	Cyclin-dependent kinase-like 5			
84073	MYCBP-associated protein			
2069	Proepiregulin Precursor			
85417	G2/mitotic-specific cyclin-B3			
7498	Xanthine dehydrogenase/oxidase		4	
-	Tetratricopeptide repeat protein 25		5	
5570	cAMP-dependent protein kinase inhibitor beta			
8048	Cysteine and glycine-rich protein 3			
2978	Guanylyl cyclase-activating protein 1		5	
2255	Fibroblast growth factor 10 Precursor		6	
-	X-linked retinitis pigmentosa GTPase regulator-interacting protein 1		6	
-	Cell adhesion molecule-related/down-regulated by oncogenes Precursor			
394263	mucin 21			
58511	Deoxyribonuclease-2-beta Precursor		5	
-	-			
50945	T-box transcription factor TBX22			
1463	Neurocan core protein Precursor		7	
56158	Testis-expressed sequence 12 protein			
83893	Spermatogenesis-associated protein 16			
56344	Calcium-binding protein 5		5	
-	Serine protease inhibitor Kazal-type 4 Precursor		5	
415117	Syntaxin-19		10	
152330	Contactin-4 Precursor		4	
51802	Amiloride-sensitive cation channel 5			
114960	Testis-specific gene 13 protein			
54843	Synaptotagmin-like protein 2 (Exophilin-4)			
-	Aggrecan core protein Precursor		6	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
654231	Oncomodulin		4	
-	Peptidase S1 domain-containing protein MGC52282		12	
219982	Olfactory receptor 5A1			
84167	Uncharacterized protein C19orf44		11	
9671	WSC domain-containing protein 2		5	
373509	Inactive ubiquitin carboxyl-terminal hydrolase 50		7	
6939	Transcription factor 15		6	
159296	Homeobox protein Nkx-2.3		5	
-	Transcript Y 5			
8383	Olfactory receptor 1A1			
441639	Olfactory receptor 9K2			
-	Uncharacterized protein C20orf168, Fragment			
-	Butyrophilin-like protein 2			
100133944	IgGFc-binding protein Precursor			
4943	TBC1 domain family member 25		5	
-	-			
399940	SPRY domain-containing protein 5			
727966	-			
57460	Protein phosphatase 1H		4	
282973	Janus kinase and microtubule-interacting protein 3			
202865	Uncharacterized protein C7orf33			
-	Putative uncharacterized protein gs104			
123970	Uncharacterized protein C16orf78		5	
-	Tyrosinase-like protein, Fragment			
377007	Kelch-like protein 30			
90594	Zinc finger protein 439		7	
729359	plasma membrane associated protein, S3-12			
57119	Eppin Precursor			
6561	Solute carrier family 13 member 1			
3937	Lymphocyte cytosolic protein 2			
56656	Olfactory receptor 2S2		7	
55891	Lens epithelial cell protein LEP503		9	
-	-			
-	Probable cation-transporting ATPase 13A4			
135941	Olfactory receptor 2A14		10	
-	Olfactory receptor 2AK2			
-	-			
644994	Uncharacterized protein C5orf50			
497189	TRAF-interacting protein with FHA domain-containing protein B			
-	Immunoglobulin heavy chain C gene segment		6	
653348	ADAMTS-like protein 2 Precursor			
-	-			
353164	Taste receptor type 2 member 42			
-	-		9	
-	LOC100129827 proteinHCG1991909			
597	Bcl-2-related protein A1		8	
199	Allograft inflammatory factor 1		5	
-	Lin-28 homolog B			
-	-			
503582	Arginine-fifty homeobox			
-	Seven transmembrane helix receptor			
-	Putative FAM75-like protein FLJ44082			
-	-		8	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Nance-Horan syndrome protein		4	
-	-		5	
386724	Amphoterin-induced protein 3 Precursor		7	
200407	Protein CREG2 Precursor		4	
124152	IQ domain-containing protein K			
158038	Leucine-rich repeat and immunoglobulin-like domain-containing nogo receptor-interacting protein 2 Precursor		6	
-	-			
-	GAS2-like protein 2		4	
389827	Transmembrane protein ENSP00000339174			
25794	Fascin-2			
-	-			
121006	Uncharacterized protein ENSP00000329995			
162387	UPF0537 transmembrane protein			
100134751	Leucine-rich repeat and death domain-containing protein LOC401387			
-	T-cell receptor alpha V gene segment			
168433	RING finger protein 133			
-	Seven transmembrane helix receptor			
374403	Carabin			
148979	Zinc finger protein GLIS1			
6861	Synaptotagmin-5		6	
-	Cancer susceptibility candidate protein 1			
353144	Late cornified envelope protein 3C		6	
219956	Olfactory receptor 9Q1			
-	Triadin		5	
-	Seven transmembrane helix receptor			
-	-			
390327	Olfactory receptor 6C70			
-	Uncharacterized protein ENSP00000381147 Fragment			
100132025	Putative transmembrane protein ENSP00000320207		6	
389384	Uncharacterized protein C6orf222			
200159	Uncharacterized protein C1orf100			
155184	Solute carrier family 2, facilitated glucose transporter member 7			
388701	Uncharacterized protein C1orf189			
2911	Metabotropic glutamate receptor 1 Precursor		5	
6752	Somatostatin receptor type 2			
247	Arachidonate 15-lipoxygenase type II			
-	Zinc finger protein 540			
126248	WD repeat-containing protein 88			
1584	Cytochrome P450 11B1, mitochondrial Precursor			
85235	Histone H2A type 1		6	
3117	HLA class II histocompatibility antigen, DQ(5) alpha chain Precursor			
-	-		6	
10580	Sorbin and SH3 domain-containing protein 1			
56146	Protocadherin alpha-2 Precursor			
5319	Phospholipase A2 Precursor			
-	-			
63978	PR domain zinc finger protein 14			
27004	T-cell leukemia/lymphoma protein 6			
121643	Forkhead box protein N4		6	
7536	Splicing factor 1			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Long-chain-fatty-acid-CoA ligase 6			
51460	Scm-like with four MBT domains protein 1		11	
-	-			
-	cDNA FLJ46300 fis, clone TEST14035989			
123722	Fibronectin type III and SPRY domain-containing protein 2			
242	Arachidonate 12-lipoxygenase, 12R type			
-	C4orf12 protein Fragment			
339778	UPF0573 protein C2orf70			
-	Uncharacterized protein C10orf90			
100131539	Putative zinc finger protein 705H		6	
645843	Transmembrane protein 14E			
2299	Forkhead box protein I1			
2100	Estrogen receptor beta			
4887	Neuropeptide Y receptor type 2			
962	CD48 antigen Precursor			
5669	Pregnancy-specific beta-1-glycoprotein 1 Precursor			
2268	Proto-oncogene tyrosine-protein kinase FGR		6	
2065	Receptor tyrosine-protein kinase erbB-3 Precursor		5	
2044	Ephrin type-A receptor 5 Precursor			
1826	Down syndrome cell adhesion molecule Precursor			
5239	Phosphoglucomutase-like protein 5			
4842	Nitric oxide synthase, brain			
4821	Homeobox protein Nkx-2.2			
1357	Carboxypeptidase A1 Precursor			
1141	Neuronal acetylcholine receptor subunit beta-2 Precursor			
1114	Secretogranin-1 Precursor		4	
940	T-cell-specific surface glycoprotein CD28 Precursor			
917	T-cell surface glycoprotein CD3 gamma chain Precursor			
2587	Galanin receptor type 1			
2560	Gamma-aminobutyric acid receptor subunit beta-1 Precursor			
2028	Glutamyl aminopeptidase			
5009	Ornithine carbamoyltransferase, mitochondrial Precursor			
4975	-		11	
4773	Nuclear factor of activated T-cells, cytoplasmic 2			
1562	Cytochrome P450 2C18			
1310	Collagen alpha-1(XIX) chain Precursor			
1045	Homeobox protein CDX-2			
5733	Prostaglandin E2 receptor EP3 subtype			
2177	Fanconi anemia group D2 protein		5	
1757	Sarcosine dehydrogenase, mitochondrial Precursor		8	
1734	-		4	
4914	High affinity nerve growth factor receptor Precursor		3	
1269	Cannabinoid receptor 2			
1236	C-C chemokine receptor type 7 Precursor		3	
1005	Cadherin-7 Precursor			
846	Extracellular calcium-sensing receptor Precursor			
9843	Hephaestin Precursor		6	
9450	Lymphocyte antigen 86 Precursor			
9048	Artemin Precursor			
27125	AF4/FMR2 family member 4		4	
27086	Forkhead box protein P1		6	
10148	Interleukin-27 subunit beta Precursor			
9982	Fibroblast growth factor-binding protein 1 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
6345	Sarcolumenin Precursor		4	
9427	Endothelin-converting enzyme-like 1		4	
9152	Sodium- and chloride-dependent glycine transporter 2			
9001	Huntingtin-associated protein 1			
5267	Kallistatin Precursor			
6252	Reticulon-1			
9365	Klotho Precursor			
9333	Protein-glutamine gamma-glutamyltransferase 5			
9120	Monocarboxylate transporter 7		12	
8897	Myotubularin-related protein 3		4	
10083	Harmonin			
9902	C-type mannose receptor 2 Precursor			
9099	Ubiquitin carboxyl-terminal hydrolase 2		4	
9073	Claudin-8			
79605	PiggyBac transposable element-derived protein 5		8	
66000	Transmembrane protein 108 Precursor			
63976	PR domain zinc finger protein 16			
50488	Misshapen-like kinase 1			
29114	Transgelin-3			
56129	Protocadherin beta-7 Precursor			
56103	-			
25975	EGF-like domain-containing protein 6 Precursor			
65123	Integrator complex subunit 3		10	
64478	CUB and sushi domain-containing protein 1 Precursor		6	
57188	ADAMTS-like protein 3 Precursor			
55997	Cryptic protein Precursor			
25878	Matrix-remodeling-associated protein 5 Precursor		4	
64900	Lipin-3			
50859	Testican-3 Precursor			
28234	Solute carrier organic anion transporter family member 1B3			
57576	Kinesin-like protein KIF17			
26085	Kallikrein-13 Precursor			
26052	Dynamin-3		4	
58500	Zinc finger protein 250			
58473	Pleckstrin homology domain-containing family B member 1			
50832	Taste receptor type 2 member 4			
55786	Zinc finger protein 415		4	
653712	cDNA FLJ53777, moderately similar to Intraflagellar transport 122 homolog		4	
653299	-			
646804	-		4	
148252	GTP-binding protein Di-Ras1		7	
143872	Rho GTPase-activating protein 10-like			
140947	Dendritic cell nuclear protein 1		4	
402509	-		5	
392435	-		6	
391322	-		8	
134187	-		6	
118663	BTB/POZ domain-containing protein 16			
114571	Solute carrier family 22 member 9			
652859	-			
646034	-			
163486	DENN domain-containing protein 1B		5	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
154075	Sterile alpha motif domain-containing protein 3			
140732	Sperm-associated antigen 4-like protein			
401321	-			
390598	Ladybird homeobox corepressor 1			
131890	G protein-coupled receptor kinase 7 Precursor			
117247	Monocarboxylate transporter 10			
650662	hypothetical protein LOC650662			
648809	-			
645369	Transmembrane protein TTMA			
644943	Ras association domain-containing protein 10			
161502	Uncharacterized protein C15orf26			
151050	Uncharacterized protein C2orf67		7	
146664	Alpha-1,6-mannosylglycoprotein 6-beta-N-acetylglucosaminyltransferase B			
146177	von Willebrand factor A domain-containing protein 3A Precursor			
139425	WD repeat domain 42B (WDR42B), mRNA			
79175	Zinc finger protein 343		8	
400952	-			
390063	Olfactory receptor 51I1			
389668	XK-related protein 9			
128821	Cystatin-9-like Precursor			
124751	KRAB-A domain-containing protein 2			
100288270	-			
94240	Epithelial-stromal interaction protein 1		5	
94031	Probable serine protease HTRA3 Precursor		11	
647281	-			
644587	-			
644193	-			
159686	Coiled-coil domain-containing protein 147			
149647	Protein FAM71A			
144568	Alpha-2-macroglobulin-like protein 1 Precursor			
135250	NKG2D ligand 4 Precursor			
400352	-		8	
399697	Cortecin-2			
389370	-			
389177	-			
122773	Kelch domain-containing protein 1		13	
121391	Keratin, type II cytoskeletal 74			
115350	Fc receptor-like protein 1 Precursor			
100291046	-		4	
100290389	-		7	
100290310	-			
58530	Lymphocyte antigen 6 complex locus protein G6f Precursor			
100289208	-		7	
728477	-			
100288745	-		6	
100288223	-			
100287790	-			
100287290	-		5	
100287237	-		6	
643812	Keratin-associated protein 27-1		6	
643376	hypothetical protein LOC643376			
442388	short chain dehydrogenase/reductase family 16C, member 6			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	DNA-binding protein SATB2			
100290228	-		4	
100289606	-		4	
100289549	-			
729254	-			
728343	Nuclear RNA export factor 2			
728228	-		6	
100287587	-			
100287089	-		5	
642891	-			
441355	-			
441054	UPF0602 protein C4orf47		7	
100290709	-			
100290643	-			
100289444	-			
728991	-		5	
728065	-			
727925	-			
100288011	-			
100287971	-			
100287526	-			
100287486	-			
100286967	-			
641455	POTE ankyrin domain family, member G			
553128	Killer cell immunoglobulin-like receptor 2DL5A Precursor			
440730	Tripartite motif-containing protein 67			
100290476	-			
100289861	-			
100289343	-			
100289296	cDNA FLJ43689 fis, clone TBAES2003550			
100288881	IQ motif and SEC7 domain-containing protein 3			
100288814	-			
728792	-		5	
728683	-		5	
727804	-			
100288427	-			
100287861	-			
100287409	-		6	
100287344	-	6		
100144748	Killin			
503542	shadow of prion protein homolog (zebrafish) (SPRN), mRNA			
440034	-			
414061	DnaJ (Hsp40) homolog, subfamily B, member 3 (DNAJB3), mRNA			
5897	V(D)J recombination-activating protein 2		7	
6441	Pulmonary surfactant-associated protein D Precursor		12	
-	Keratin, type II cytoskeletal 78		6	
-	3-oxo-5-alpha-steroid 4-dehydrogenase 2			
910	T-cell surface glycoprotein CD1b Precursor			
-	Gamma-aminobutyric acid receptor subunit beta-3 Precursor		6	
26103	Leucine-rich repeat, immunoglobulin-like domain and transmembrane domain-containing protein 1 Precursor		5	
3888	Keratin, type II cuticular Hb2			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
145270	Proline-rich membrane anchor 1 Precursor		6	
10804	Gap junction beta-6 protein		5	
-	Pleckstrin homology domain-containing family A member 6		6	
-	G-protein coupled receptor family C group 5 member C Precursor		7	
-	Twist-related protein 1		5	
2563	Gamma-aminobutyric acid receptor subunit delta Precursor			
-	Progesterone receptor			
7367	UDP-glucuronosyltransferase 2B17 Precursor		8	
1137	Neuronal acetylcholine receptor subunit alpha-4 Precursor			
-	Tumor-associated calcium signal transducer 1 Precursor		10	
-	Bromodomain testis-specific protein			
10794	Zinc finger protein 460			
-	Transcription factor AP-4		4	
51475	Calcium-binding protein 2			
-	TNFAIP3-interacting protein 3			
114548	NACHT, LRR and PYD domains-containing protein 3			
124056	NADPH oxidase organizer 1		4	
84687	Neurabin-2			
283297	Olfactory receptor 10A4			
-	-			
-	Synaptophysin-like protein 2			
282618	Interleukin-29 Precursor			
-	SERPINB1g			
2128	Homeobox even-skipped homolog protein 1			
80714	Pre-B-cell leukemia transcription factor 4			
140902	Peptidase inhibitor R3HDML Precursor			
219972	Macrophage-expressed gene 1 protein Precursor		4	
131377	Kelch repeat and BTB domain-containing protein 5		8	
83998	Regenerating islet-derived protein 4 Precursor		8	
51209	Ras-related protein Rab-9B			
10584	Collectin-10 Precursor		9	
2306	Forkhead box protein D2			
118471	Proline-rich acidic protein 1 Precursor			
5015	Homeobox protein OTX2			
100133729	CMT1A duplicated region transcript 1 protein			
116179	Protein-glutamine gamma-glutamyltransferase Z		4	
136242	Peptidase S1 domain-containing protein LOC136242 Precursor		5	
6493	Single-minded homolog 2			
136991	Ankyrin repeat, SAM and basic leucine zipper domain-containing protein 1			
-	Uncharacterized protein KIAA1843			
460	Astrotactin-1 Precursor			
390162	Olfactory receptor 5M9			
167410	Protein limb expression 1 homolog			
80816	Putative Polycomb group protein ASXL3			
84127	RUN domain-containing protein 2A		5	
-	-			
-	-			
-	Ankyrin repeat domain-containing protein ENSP00000288893			
-	Chymase Precursor			
57282	Sodium-driven chloride bicarbonate exchanger			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
83851	Synaptotagmin-16			
4762	Neurogenin-1			
651746	Ankyrin repeat domain-containing protein LOC651746		8	
-	Fibrinogen gamma chain Precursor			
27165	Glutaminase liver isoform, mitochondrial Precursor			
79173	Uncharacterized protein C19orf57		4	
158835	Acyl-CoA wax alcohol acyltransferase 2			
84920	Alpha-1,2-glucosyltransferase ALG10-A			
138724	Uncharacterized protein C9orf131		4	
201625	Dynein heavy chain domain-containing protein 2			
93099	Dermokine Precursor			
126526	Uncharacterized protein C19orf47			
114134	Proton myo-inositol cotransporter			
126147	Netrin-1-like protein Precursor			
23281	Uncharacterized protein KIAA0774			
-	-		7	
8403	Transcription factor SOX-14			
140469	Myosin-IIIB			
-	-		5	
-	Spermidine/spermine N(1)-acetyltransferase-like protein 1			
255324	Epigen Precursor			
730839	Hornerin			
-	BCoR-like protein 2			
341568	Olfactory receptor 8S1			
401898	Zinc finger protein 833			
390151	Olfactory receptor 8H2			
260436	Follicular dendritic cell secreted peptide Precursor		6	
-	Seven transmembrane helix receptor			
165721	DnaJ homolog subfamily B member 8			
282679	Aquaporin-11		8	
152084	-			
9923	Zinc finger and BTB domain-containing protein 40			
-	Uncharacterized protein C8orf12			
283298	Olfactomedin-like protein 1 Precursor		4	
401253	Putative uncharacterized protein FLJ43752			
-	Olfactory receptor 10G8		4	
442075	cDNA FLJ35033 fis, clone OCBBF2016590, weakly similar to CELL SURFACE ANTIGEN 114/A10			
196472	Protein FAM71C			
-	Uncharacterized protein C10orf67			
-	-			
-	Putative uncharacterized protein CXorf62		5	
5726	Taste receptor type 2 member 38		7	
389114	Zinc finger protein 662		10	
-	Netrin receptor UNC5C Precursor			
100130494	cDNA FLJ36340 fis, clone THYMU2006468			
-	Uncharacterized protein ENSP00000366043			
-	CYP2B7P1 proteinCytochrome P450 2B7 short isoformCYP2B protein			
89887	Zinc finger protein 628			
220032	Glycerophosphodiester phosphodiesterase domain-containing protein 4			
127623	Olfactory receptor 2B11		6	
-	Paired box protein Pax-2		7	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1946	Ephrin-A5 Precursor			
646625	Putative 2-oxo-4-hydroxy-4-carboxy-5-ureidoimidazoline decarboxylase		4	
55231	Coiled-coil domain-containing protein 87			
-	Seven transmembrane helix receptor			
-	-			
51268	Peroxisomal sarcosine oxidase			
-	-		5	
3780	Small conductance calcium-activated potassium channel protein 1			
-	Putative uncharacterized protein C1orf120			
-	Putative uncharacterized protein ENSP00000322569		8	
-	-			
-	Putative uncharacterized protein FLJ33706			
-	cDNA FLJ40453 fis, clone TESTI2041330		4	
403278	Olfactory receptor 5K4			
31	Acetyl-CoA carboxylase 1			
-	Putative uncharacterized protein ENSP00000384923			
-	Fragment			
-	CU109_HUMAN Isoform 2 of Q8TD88 - Homo sapiens (Human)			
221002	Ras-GEF domain-containing family member 1A		9	
390323	Olfactory receptor 6C75			
390078	Olfactory receptor 52E6			
57835	Electrogenic sodium bicarbonate cotransporter 4			
8875	Vascular non-inflammatory molecule 2 Precursor			
6239	RAS-responsive element-binding protein 1			
55796	Muscleblind-like protein 3			
286	Ankyrin-1			
341392	Acyl-coenzyme A synthetase ACSM4, mitochondrial Precursor			
-	Protein zyg-11 homolog A			
-	Protein piccolo (Aczonin)			
81832	Neuropilin and tolloid-like protein 1 Precursor			
117289	T-cell activation Rho GTPase-activating protein			
-	DMTA2_HUMAN Isoform 2 of Q96SC8 - Homo sapiens (Human)		6	
100133444	Sodium-dependent phosphate transport protein 2C		7	
7006	Tyrosine-protein kinase Tec			
6581	Solute carrier family 22 member 3			
3605	interleukin 17A			
3062	Orexin receptor type 2			
2897	Glutamate receptor, ionotropic kainate 1 Precursor			
2877	Glutathione peroxidase 2			
3823	Glutathione S-transferase Mu 4		4	
796	Calpain-10			
185	Type-1 angiotensin II receptor			
157	Beta-adrenergic receptor kinase 2		4	
6725	Tyrosine-protein kinase Srms			
6563	Urea transporter, erythrocyte			
6531	Sodium-dependent dopamine transporter		6	
3240	Haptoglobin Precursor			
3034	Histidine ammonia-lyase			
3003	Granzyme K Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2857	Probable G-protein coupled receptor 34			
2841	N-arachidonyl glycine receptor			
3786	Potassium voltage-gated channel subfamily KQT member 3			
3764	ATP-sensitive inward rectifier potassium channel 8			
563	Zinc-alpha-2-glycoprotein Precursor			
117	Pituitary adenylate cyclase-activating polypeptide type I receptor Precursor			
2986	Retinal guanylyl cyclase 2 Precursor			
3953	Leptin receptor Precursor			
3699	Inter-alpha-trypsin inhibitor heavy chain H3 Precursor			
680	Bombesin receptor subtype-3			
270	AMP deaminase 1			
56	Acrosomal protein SP-10 Precursor		7	
3362	5-hydroxytryptamine receptor 6			
3122	major histocompatibility complex, class II, DR alpha precursor			
2938	Glutathione S-transferase A1			
2916	Metabotropic glutamate receptor 6 Precursor			
3889	Keratin, type II cuticular Hb3			
643	C-X-C chemokine receptor type 5			
433	Asialoglycoprotein receptor 2			
229	Fructose-bisphosphate aldolase B			
32	Acetyl-CoA carboxylase 2			
51302	24-hydroxycholesterol 7-alpha-hydroxylase		4	
11023	Ventral anterior homeobox 1		6	
11001	Very long-chain acyl-CoA synthetase			
7227	Zinc finger transcription factor Trps1		4	
8626	Tumor protein 63 (p63)			
4654	Myoblast determination protein 1			
10388	Synaptonemal complex protein 2		4	
7180	Cysteine-rich secretory protein 2 Precursor			
11148	HERV-H LTR-associating protein 2 Precursor			
8287	Probable ubiquitin carboxyl-terminal hydrolase FAF-Y			
7827	Podocin			
4261	MHC class II transactivator			
10716	T-box brain protein 1			
7124	Tumor necrosis factor Precursor			
7097	Toll-like receptor 2 Precursor			
11127	Kinesin-like protein KIF3A		10	
8514	Voltage-gated potassium channel subunit beta-2			
7712	Zinc finger protein 157			
4588	Mucin-6 Precursor			
10887	Prokineticin receptor 1			
10647	Secretoglobulin family 1D member 2 Precursor			
10446	Leucine-rich repeat neuronal protein 2 Precursor			
8483	Cartilage intermediate layer protein 1 Precursor			
7567	Zinc finger protein 19			
7535	Tyrosine-protein kinase ZAP-70			
83538	Tetrapeptide repeat protein 25		6	
81099	Olfactory receptor 4F17			
54777	Uncharacterized protein C10orf92			
54413	Neurologin-3 Precursor			
54205	Cytochrome c		4	
55511	Sarcoma antigen 1			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23109	Dendrin			
23086	Exophilin-5			
80063	Activating transcription factor 7-interacting protein 2		5	
54039	Poly(rC)-binding protein 3			
53832	Interleukin-20 receptor alpha chain Precursor			
55149	Poly(A) RNA polymerase, mitochondrial Precursor			
55769	Zinc finger protein 420		5	
23057	Nicotinamide mononucleotide adenylyltransferase 2			
79977	Grainyhead-like protein 2 homolog			
79741	Uncharacterized protein C10orf68			
53353	Low-density lipoprotein receptor-related protein 1B Precursor			
55627	Sphingomyelin phosphodiesterase 4			
55301	S-acyl fatty acid synthase thioesterase, medium chain			
55086	Uncharacterized protein CXorf57			
23013	Msx2-interacting protein		4	
11326	V-set and immunoglobulin domain-containing protein 4 Precursor			
51361	Protein Hook homolog 1			
55567	Dynein heavy chain 3, axonemal		4	
55064	Uncharacterized protein C9orf68		7	
54857	Glycerophosphodiester phosphodiesterase domain-containing protein 2			
23136	Band 4.1-like protein 3		4	
22941	SH3 and multiple ankyrin repeat domains protein 2			
11251	Putative G-protein coupled receptor 44		4	
100128598	-		5	
100128489	-		6	
284217	Laminin subunit alpha-1 Precursor			
284071	Uncharacterized protein FLJ35848			
257062	Transmembrane protein 146 Precursor			
221458	Kinesin-like protein KIF6			
201305	Protein spinster homolog 3			
343450	Potassium channel subfamily T member 2			
317761	Protein SIX6OS1			
286204	Crumbs homolog 2 Precursor			
92196	Death-associated protein-like 1			
84871	Cytosolic carboxypeptidase 6			
100128362	-			
100128314	-			
730183	-			
283848	Carboxylesterase 8 Precursor			
255631	Collagen alpha-1(XXIV) chain Precursor			
255027	Mpv17-like protein			
221264	Adenylate kinase domain-containing protein 2		7	
220992	Zinc finger protein 485		11	
200008	NADH-cytochrome b5 reductase-like			
199699	DAN domain family member 5 Precursor			
83445	Germ cell-specific gene 1 protein		4	
340947	-			
340419	R-spondin-2 Precursor			
285782	Cancer-associated gene 1 protein			
285501	hypothetical protein LOC285501		6	
85300	Caytaxin			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
84700	Myosin-XVIIIb			
100128139	-		4	
730085	-			
729993	hypothetical protein LOC729993 isoform 1		5	
254050	Leucine-rich repeat-containing protein 43			
219865	Olfactory receptor 8G1			
219293	ATPase family AAA domain-containing protein 3C			
81792	A disintegrin and metalloproteinase with thrombospondin motifs 12 Precursor			
339855	Kyphoscoliosis peptidase		4	
339453	Transmembrane protein C1orf70			
284801	-			
84622	Zinc finger protein 594			
100127886	Putative uncharacterized protein PRO0628			
729722	Putative ankyrin repeat domain-containing protein ENSP00000383090			
266977	Probable G-protein coupled receptor 110 Precursor			
245914	Beta-defensin 110 Precursor			
203430	Zinc finger CCHC domain-containing protein 5		5	
170961	Ankyrin repeat domain-containing protein 24		5	
170370	Putative protein FAM170B		5	
339184	Putative coiled-coil domain-containing protein 144 N-terminal-like			
338557	G-protein coupled receptor 120			
284610	Putative uncharacterized protein NBPF6			
284391	Zinc finger protein 844		6	
90523	Uncharacterized protein C6orf142			
84909	Aminopeptidase O		5	
84446	BR serine/threonine-protein kinase 1			
100293048	-			
100292534	-		4	
100291630	-			
100129411	-			
100129303	-			
100293491	-			
100134403	-			
100134320	-			
100132082	-		5	
100131892	-			
4620	Myosin-2			
389075	Regulated endocrine-specific protein 18 Precursor			
388813	SAM domain-containing protein SAMSN-1			
375057	Uncharacterized membrane protein C1orf95		6	
374569	60 kDa lysophospholipase		4	
100292472	-			
100291447	-			
100129196	-			
100129103	-		4	
100293380	-		4	
100134017	-		4	
100133142	-			
100132987	-			
388336	UPF0626 protein B Precursor			
350383	Kinesin-like protein KIF19			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100292820	-			
100292304	-		5	
100291863	-			
100129703	-			
100128913	-		8	
100133899	-		5	
100133817	-			
100132815	cDNA FLJ32177 fis, clone PLACE6001294HCG2000535			
100132679	-			
100131580	-			
100131512	-		11	
100130800	-			
387836	C-type lectin domain family 2 member A			
348174	C-type lectin domain family 18 member A Precursor			
347517	Ras-related protein Rab-41			
85439	Stonin-2			
100292663	-			
100292251	-			
100292190	-			
100291735	-			
100291248	-		4	
100291193	-			
100129509	-			
100128818	Uncharacterized protein UNQ6126/PRO20091 Precursor			
100132330	-			
100131405	-			
100130480	-			
100130413	-		4	
378949	RNA-binding motif protein, Y chromosome, family 1 member D			
346517	Olfactory receptor 6V1			
344561	Probable G-protein coupled receptor 148			
-	ICOS ligand Precursor		9	
11061	Chondromodulin-1 Precursor			
8747	ADAM 21 Precursor		6	
685	Probetacellulin Precursor			
-	Leucine-rich repeat and fibronectin type-III domain-containing protein 5 Precursor			
-	Transmembrane channel-like protein 1			
-	Short transient receptor potential channel 7		4	
-	Serum albumin Precursor			
100293906	-			
5444	Serum paraoxonase/arylesterase 1			
10216	Proteoglycan 4 Precursor			
6367	C-C motif chemokine 22 Precursor		8	
-	Potassium channel subfamily K member 2			
3037	Hyaluronan synthase 2			
2675	GDNF family receptor alpha-2 Precursor		6	
54714	Cyclic nucleotide-gated cation channel beta-3			
-	Uncharacterized protein ENSP00000346720			
100294376	-		7	
100293813	-			
100293442	-			
90226	Urocortin-2 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3443	Interferon alpha-6 Precursor		8	
10021	Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 4			
6571	Synaptic vesicular amine transporter			
6530	Sodium-dependent noradrenaline transporter			
2693	Growth hormone secretagogue receptor type 1			
81793	Toll-like receptor 10 Precursor			
-	CUB and zona pellucida-like domain-containing protein 1 Precursor		13	
100294189	-			
100293755	-			
100293682	-			
100293302	-		4	
64184	Epididymal secretory protein E3-beta Precursor			
50604	Interleukin-20 Precursor		4	
60484	Hyaluronan and proteoglycan link protein 2 Precursor		8	
9369	neurexin 3 isoform 1 precursor		6	
6340	Amiloride-sensitive sodium channel subunit gamma		8	
5795	Receptor-type tyrosine-protein phosphatase eta Precursor			
1630	Netrin receptor DCC Precursor			
1088	Carcinoembryonic antigen-related cell adhesion molecule 8 Precursor		5	
-	Mucolipin-2			
165530	C-type lectin domain family 4 member F		9	
23632	Carbonic anhydrase 14 Precursor			
100294501	-			
100294071	-			
100293618	-			
100293585	-			
284723	Solute carrier family 25 member 34		5	
9940	Deleted in lung and esophageal cancer protein 1			
4524	Methylenetetrahydrofolate reductase		12	
3990	Hepatic triacylglycerol lipase Precursor		4	
90060	Coiled-coil domain-containing protein 120		4	
23581	Caspase-14 Precursor		6	
84679	Sodium/hydrogen exchanger 7		4	
56145	Protocadherin alpha-3 Precursor		5	
-	Sarcoplasmic reticulum histidine-rich calcium-binding protein Precursor		6	
139741	Actin-related protein T1			
-	Interphotoreceptor matrix proteoglycan 2 Precursor		12	
340533	Uncharacterized protein KIAA2022			
54848	Putative Rho guanine nucleotide exchange factor FLJ20184			
6496	Homeobox protein SIX3			
7732	RING finger protein 112			
79887	Putative phospholipase B-like 1 Precursor		6	
6444	Delta-sarcoglycan		7	
140856	Uncharacterized protein C20orf79			
140432	RING finger protein 113B		8	
9118	Alpha-interneixin		7	
51702	Protein-arginine deiminase type-3			
5406	Pancreatic triacylglycerol lipase Precursor		9	
79092	Caspase recruitment domain-containing protein 14			
219981	Olfactory receptor 5A2			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
219875	Olfactory receptor 4D5			4
-	Germ cell-specific gene 1-like protein	6		
392309	Olfactory receptor 13J1			
-	Transmembrane and coiled-coil domain-containing protein 5B			
285527	Protein furry homolog-like			
10117	Enamelin Precursor			
-	Putative nmrA-like family domain-containing protein ENSP00000305954		32	
83697	Anion exchange protein 4		8	
135152	Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase 2			
84889	Cationic amino acid transporter 3			
84688	Uncharacterized protein C9orf24		4	
84779	N-terminal acetyltransferase complex ARD1 subunit homolog B			
256764	WD repeat-containing protein 72			
727945	-			
653441	Polyhomeotic-like protein 1			
440097	Homeobox protein DBX2			
196913	Putative uncharacterized protein			
956	Ectonucleoside triphosphate diphosphohydrolase 3			
654429	Leucine-rich repeat and transmembrane domain-containing protein 2 Precursor			
-	Putative alpha-1-antitrypsin-related protein Precursor			
128611	Zinc finger protein 831		5	
-	-			
-	Prospero homeobox protein 1			
9715	Protein FAM131B			
115584	Sodium/myo-inositol cotransporter 2			
5458	POU domain, class 4, transcription factor 2			
26735	Olfactory receptor 1L3			
390445	Olfactory receptor 5AU1		6	
-	Dapper homolog 3		8	
139081	Melanoma-associated antigen C3			
9658	Zinc finger protein 516		7	
8388	Olfactory receptor 1E2		5	
138474	Transcription initiation factor TFIID 210 kDa subunit			
-	Immunoglobulin Kappa light chain V gene segment		5	
657	Bone morphogenetic protein receptor type-1A Precursor			
151278	Coiled-coil domain-containing protein 140		4	
731	Complement component C8 alpha chain Precursor			
-	Uncharacterized protein FLJ46347			
-	Uncharacterized protein C2orf78			
6490	Melanocyte protein Pmel 17 Precursor			
727910	TLC domain-containing protein 2			
393046	Olfactory receptor 2A5			
-	Seven transmembrane helix receptor		6	
222521	Uncharacterized protein C6orf224		6	
414149	Acyl-CoA-binding domain-containing protein 7			
-	Putative calcium-sensing receptor-like 1			
403314	Putative C>U-editing enzyme APOBEC-4			
83876	Protein maestro			
-	Uncharacterized protein C18orf51			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
644732	Copper-transporting ATPase 1		4	
337979	Keratin-associated protein 22-1		5	
388015	Retrotransposon-like protein 1			
100131211	Transmembrane protein 194B		7	
-	-			
-	Glycoprotein 25L Precursor			
135886	Williams-Beuren syndrome chromosomal region 28 protein			
388815	Putative uncharacterized protein C21orf34			
-	-		6	
-	Uncharacterized protein C18orf2			
64091	Popeye domain-containing protein 2		4	
399823	Forkhead box protein I2			
353142	Late cornified envelope protein 3A			
643803	Keratin-associated protein 24-1			
100130519	Transmembrane protein 221		6	
168975	Cyclic nucleotide-binding domain-containing protein 1			
143630	Ubiquilin-like protein			
134083	Olfactory receptor 2Y1			
254042	Methionine aminopeptidase 1D, mitochondrial Precursor		9	
-	Tripartite motif-containing protein 31			
30819	Kv channel-interacting protein 2			
4033	Lymphoid-restricted membrane protein			
440107	Pleckstrin homology domain-containing family G member 7			
219957	Olfactory receptor 9Q2			
-	Olfactory receptor 6P1			
100134776	EF-hand domain-containing protein LOC100130771		5	
391211	Olfactory receptor 2G6			
197021	Lactase-like protein Precursor		6	
162998	Olfactory receptor 7D2			
-	Cytokine receptor CRL2			
148345	Uncharacterized protein C1orf127		4	
353189	Solute carrier organic anion transporter family member 4C1			
375337	Uncharacterized protein FLJ36157			
121275	Olfactory receptor 10AD1			
-	Uncharacterized protein C21orf90			
128344	Uncharacterized protein C1orf88			
200879	Lipase member H Precursor			
-	-			
-	Putative Polycomb group protein ASXL2		5	
-	-			
8187	Zinc finger protein 239		16	
57094	Carboxypeptidase A6 Precursor		6	
79098	Specifically androgen-regulated gene protein			
64577	Aldehyde dehydrogenase family 8 member A1			
26493	Olfactory receptor 8B8			
22854	Netrin-G1 Precursor (Laminct-1)			
-	Protein TSPEAR Precursor			
-	-			
256394	Serpin A11 Precursor			
-	Probable G-protein coupled receptor 113 Precursor			
149628	Pyrin and HIN domain-containing protein 1			
-	FA47E_HUMAN Isoform 2 of Q6ZV65 · Homo sapiens (Human)		4	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5697	Peptide YY Precursor			
2705	Gap junction beta-1 protein			
2326	Dimethylaniline monooxygenase [N-oxide-forming] 1			
2125	Envoplakin			
100129901	-			
4889	Neuropeptide Y receptor type 5			
1179	Calcium-activated chloride channel regulator 1 Precursor			
5858	Pregnancy zone protein Precursor			
2623	Erythroid transcription factor			
2252	Keratinocyte growth factor Precursor			
2070	Eyes absent homolog 4			
5241	Progesterone receptor			
5068	Regenerating islet-derived protein 3 alpha Precursor		4	
4843	Nitric oxide synthase, inducible			
1146	Acetylcholine receptor subunit gamma Precursor			
1116	Chitinase-3-like protein 1 Precursor			
941	T-lymphocyte activation antigen CD80 Precursor			
919	T-cell surface glycoprotein CD3 zeta chain Precursor			
5996	Regulator of G-protein signaling 1			
2562	Gamma-aminobutyric acid receptor subunit beta-3 Precursor			
2199	Fibulin-2 Precursor			
1571	Cytochrome P450 2E1			
1293	Collagen alpha-3(VI) chain Precursor			
1048	Carcinoembryonic antigen-related cell adhesion molecule 5 Precursor			
5764	Pleiotrophin Precursor			
2525	Galactoside 3(4)-L-fucosyltransferase		5	
1759	Dynamin-2			
1735	Type III iodothyronine deiodinase			
4703	Nebulin			
1270	Zinc finger protein 91 homolog			
1237	C-C chemokine receptor type 8			
1006	Cadherin-8 Precursor			
9863	Membrane-associated guanylate kinase, WW and PDZ domain-containing protein 2			
5507	Protein phosphatase 1 regulatory subunit 3C	7		
5314	Fibrocystin Precursor			
27127	Structural maintenance of chromosomes protein 1B			
10149	G-protein coupled receptor 64 Precursor			
5268	Serpin B5 Precursor			
9753	Zinc finger and SCAN domain-containing protein 12		7	
6283	Protein S100-A12			
23366	Uncharacterized protein KIAA0895			
5212	Vitrin Precursor		5	
9728	SECIS-binding protein 2-like		6	
79012	CaM kinase-like vesicle-associated protein			
64753	Coiled-coil domain-containing protein 136		5	
63977	PR domain zinc finger protein 15			
63926	Ankyrin repeat domain-containing protein 5		6	
50489	C-type lectin domain family 4 member K			
57469	PNMA-like protein 2			
56131	Protocadherin beta-4 Precursor			
56104	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
79365	Class B basic helix-loop-helix protein 3			
55998	Nuclear RNA export factor 5			
26223	F-box/LRR-repeat protein 21			
64919	B-cell lymphoma/leukemia 11B			
29951	PDZ domain-containing RING finger protein 4			
56704	Junctophilin-1		5	
55843	Rho GTPase-activating protein 15			
64798	DEP domain-containing protein 6			
64094	SPARC-related modular calcium-binding protein 2 Precursor			
50833	Taste receptor type 2 member 16			
27306	Glutathione-requiring prostaglandin D synthase			
57105	Cysteinyl leukotriene receptor 2			
56300	Interleukin-1 family member 9			
56171	Dynein heavy chain 7, axonemal			
26033	Attractin-like protein 1 Precursor			
646543	-			
166824	Ras association domain-containing protein 6			
157855	Potassium channel subfamily U member 1			
155066	V-type proton ATPase subunit e 2			
149069	Doublecortin domain-containing protein 2B			
79640	hypothetical FLJ23584 (FLJ23584), mRNA		10	
401565	UPF0605 protein FAM166A			
392490	TPT1-like protein (FLJ44635), mRNA			
132954	Phosducin-like protein 2			
126432	Ras and Rab interactor-like protein		7	
120406	Protein FAM55B			
118670	Protein FAM24A Precursor			
114801	Transmembrane protein 200A		4	
57821	Uncharacterized protein C1orf114		7	
652875	-			
645722	-		4	
165545	ATP-dependent RNA helicase DQX1			
154141	Lysophospholipid acyltransferase 1			
140545	RING finger protein 32			
79574	Epidermal growth factor receptor kinase substrate 8-like protein 3			
401136	hypothetical protein LOC401136			
390616	-			
130940	Coiled-coil domain-containing protein 148			
125206	Sodium/glucose cotransporter 5			
116842	Liver-expressed antimicrobial peptide 2 Precursor		4	
112744	Interleukin-17F Precursor			
644974	hypothetical protein LOC644974			
161725	OTU domain-containing protein 7A			
151636	Protein deltex-3-like		5	
151056	Phospholipase B1, membrane-associated Precursor			
146183	Otoancorin Precursor			
400954	Echinoderm microtubule-associated protein-like 6			
389676	-			
130271	Pleckstrin homology domain-containing family H member 2			
124773	Uncharacterized protein C17orf64			
124044	Spermatogenesis-associated protein 2-like protein		9	
647283	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
160364	C-type lectin domain family 12 member B			
158471	Protein prune homolog 2			
150297	Uncharacterized protein LOC150297			
135398	-		6	
128312	Histone H2B type 3-B		6	
127670	Transmembrane epididymal protein 1			
122945	Pyrroline-5-carboxylate reductase-like protein C14orf148			
115399	Leucine-rich repeat-containing protein 56		12	
93589	Voltage-dependent calcium channel subunit alpha-2/delta-4 Precursor		4	
57536	Uncharacterized protein KIAA1328			
100289775	-			
100289688	Matrix metalloproteinase-19 Precursor			
729540	RANBP2-like and GRIP domain-containing protein 5		4	
728588	Putative uncharacterized protein Fragment			
100288276	-			
100288224	-			
643382	-			
441795	Putative high mobility group protein B3-like protein			
100289073	-			
729264	TP53-target gene 3 protein			
729189	-			
728347	-			
2099	Estrogen receptor			
100287590	-			
642515	-		4	
441376	Alanine and arginine-rich domain-containing protein			
441061	E3 ubiquitin-protein ligase MARCH11			
100289003	-			
729020	rcRPE (LOC729020), mRNA			
100288030	-			
100287036	-		4	
2248	INT-2 proto-oncogene protein Precursor			
553158	Protor-1			
440738	Microtubule-associated proteins 1A/1B light chain 3C Precursor			
100289353	-			
100289305	-			
100288817	-			
728798	Rab-like protein 2B		6	
728690	-		4	
100288348	-			
100287913	-			
100287862	-			
100287349	-		5	
100286915	-			
503614	Beta-defensin 107 Precursor			
440044	Solute carrier family 22 member 20		6	
414152	Uncharacterized protein C10orf105			
4045	Limbic system-associated membrane protein Precursor			
319101	Keratin, type II cytoskeletal 73			
-	Zinc finger imprinted 2			
4353	Myeloperoxidase Precursor		6	
1510	Cathepsin E Precursor		5	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Gamma-aminobutyric acid receptor subunit gamma-2 Precursor	6		
4435	Cbp/p300-interacting transactivator 1		4	
3891	Keratin, type II cuticular Hb5			
-	Endophilin-A1			
341947	Cytochrome c oxidase polypeptide 8C, mitochondrial Precursor			
10369	Voltage-dependent calcium channel gamma-2 subunit			
-	pleckstrin homology domain containing, family G, member 3		4	
-	G-protein coupled receptor family C group 6 member A Precursor			
3651	Pancreas/duodenum homeobox protein 1		8	
2569	Gamma-aminobutyric acid receptor subunit rho-1 Precursor		4	
22843	Protein phosphatase 1E		9	
-	Ephrin type-A receptor 7 Precursor			
1557	Cytochrome P450 2C19			
-	GTP-binding protein Rit2		8	
9312	Potassium voltage-gated channel subfamily B member 2			
-	Interleukin-1 family member 9			
-	BR serine/threonine-protein kinase 1		7	
83394	Membrane-associated phosphatidylinositol transfer protein 3	6		
83593	Ras association domain-containing protein 5		4	
144097	Uncharacterized protein C11orf84		9	
10798	Olfactory receptor 511		5	
3224	Homeobox protein Hox-C8			
114781	BTB/POZ domain-containing protein 9			
2824	Neuronal membrane glycoprotein M6-b			
2646	Glucokinase regulatory protein			
-	F-box/WD repeat-containing protein 12		5	
89846	FYVE, RhoGEF and PH domain-containing protein 3			
128864	Uncharacterized protein C20orf144		7	
-	Probable ubiquitin-conjugating enzyme E2 FLJ25076		8	
643923	cDNA FLJ25337 fis, clone TST00714HCG2032453			
131405	Tripartite motif-containing protein 71		4	
59084	Ectonucleotide pyrophosphatase/phosphodiesterase family member 5 Precursor		5	
23746	Aryl-hydrocarbon-interacting protein-like 1			
158584	Fatty-acid amide hydrolase 2		4	
100131933	Putative ADP-ribosylation factor-like protein 5C			
120425	Junctional adhesion molecule-like Precursor		8	
-	Retinoid-binding protein 7		6	
9162	Diacylglycerol kinase iota		7	
-	-		5	
-	Flavin-containing amine oxidase domain-containing protein 1			
3577	High affinity interleukin-8 receptor A			
1420	Gamma-crystallin C			
143471	Proteasome subunit alpha type-7-like			
154091	Solute carrier family 2, facilitated glucose transporter member 12			
387804	Uncharacterized protein ENSP00000381277 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
128506	Transmembrane protein C20orf123		4	
220136	Coiled-coil domain-containing protein 11			
169026	Zinc transporter 8			
168667	BMP-binding endothelial regulator protein Precursor			
440699	Leucine-rich repeat-containing protein 52 Precursor			
-	-			
90249	Netrin receptor UNC5A Precursor			
83890	Spermatogenesis-associated protein 9			
-	Uncharacterized protein C1orf87		4	
790898	Hydrocephalus-inducing protein homolog		5	
166863	Probable RNA-binding protein 46			
80705	Testis-specific gene 10 protein			
1770	Dynein heavy chain 9, axonemal			
-	Uncharacterized protein CXorf57			
100132276	Keratin-associated protein 3-3			
57495	Leucine-rich repeat and WD repeat-containing protein KIAA1239		7	
147872	Coiled-coil domain-containing protein 155			
-	Uncharacterized protein C9orf117			
1539	Cylicin-2			
341032	Uncharacterized protein C11orf53		5	
83449	Polyamine-modulated factor 1-binding protein 1			
222663	Signal peptide, CUB and EGF-like domain-containing protein 3 Precursor			
1545	Cytochrome P450 1B1		9	
-	Valyl-tRNA synthetase 2-like		6	
-	Putative palmitoyltransferase ZDHHC8-like protein			
-	WD repeat-containing protein KIAA1875			
-	cDNA FLJ32655 fis, clone TEST11000025, weakly similar to M.musculus testis-specific protein, DDC8		6	
206338	Laeverin		8	
23189	KN motif and ankyrin repeat domain-containing protein 1			
55350	Vascular non-inflammatory molecule 3 Precursor			
134121	Uncharacterized protein C5orf49			
149466	Uncharacterized protein C1orf210			
-	-			
-	Wilms tumor-associated protein			
26494	Olfactory receptor 8G1			
169693	Transmembrane protein C9orf71			
201516	Zinc finger and SCAN domain-containing protein 4			
286187	Leucine-rich repeat-containing protein 67			
100130863	Putative zinc finger protein 840			
-	-		4	
-	Uncharacterized protein FLJ40246			
-	-			
732391	CMT duplicated region transcript 1			
-	Putative olfactory receptor 5AK3			
-	Seven transmembrane helix receptor			
-	cDNA FLJ34690 fis, clone MESAN2000894			
-	-			
9498	Electroneutral sodium bicarbonate exchanger 1		8	
400746	Uncharacterized protein C1orf130		6	
386746	Mas-related G-protein coupled receptor member G		5	
-	Zinc finger protein 716			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100129307	Putative UPF0607 protein ENSP00000383144			
-	Putative uncharacterized protein ENSP00000327024			
205860	Tripartite motif family-like protein 2			
139422	Melanoma-associated antigen B10			
-	-			
1038	Cerebellar degeneration-related antigen 1			
-	Putative uncharacterized protein PRO0255			
81328	Olfactory receptor 4A15			
353238	Protein-arginine deiminase type-6			
-	-		4	
-	-			
120796	Olfactory receptor 56A1		6	
122664	Tubulin polymerization-promoting protein family member 2			
203111	Uncharacterized protein C8orf47		4	
59351	Prostate and breast cancer overexpressed gene 1 protein		9	
130026	Islet cell autoantigen 1-like protein		5	
-	Thrombopoietin receptor Precursor			
79969	UPF0635 protein C6orf134			
79974	Uncharacterized protein C7orf58 Precursor			
554313	Histone H4			
400831	Uncharacterized protein LOC400831			
-	Glycophorin E Fragment			
-	Putative uncharacterized protein C12orf33			
-	A disintegrin and metalloproteinase with thrombospondin motifs 20 Precursor			
-	Dynein heavy chain 1, axonemal			
200316	DNA dC->dU-editing enzyme APOBEC-3F			
-	-			
403273	Olfactory receptor 5H14			
390037	Olfactory receptor 52I1			
56147	Protocadherin alpha-1 Precursor			
284309	Zinc finger protein 776			
8600	Tumor necrosis factor ligand superfamily member 11			
1755	Deleted in malignant brain tumors 1 protein Precursor			
4137	Microtubule-associated protein tau	6		
-	Uncharacterized protein ENSP00000383488 Fragment			
57795	Protein FAM5B Precursor			
-	Zinc finger protein 485		13	
-	-		5	
401923	cDNA FLJ43766 fis, clone TESTI2049246			
4051	Cytochrome P450 4F3			
159195	Inactive ubiquitin carboxyl-terminal hydrolase 54			
387597	Transmembrane and immunoglobulin domain-containing protein C1orf32			
5618	Prolactin receptor Precursor			
-	-		11	
2204	Immunoglobulin alpha Fc receptor Precursor			
54492	E3 ubiquitin-protein ligase NEURL3		6	
-	-			
-	Seven transmembrane helix receptor			
6582	Solute carrier family 22 member 2			
3606	Interleukin-18 Precursor			
3340	Bifunctional heparan sulfate N-deacetylase/N-sulfotransferase 1		5	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2898	Glutamate receptor, ionotropic kainate 2 Precursor			
3854	Keratin, type II cytoskeletal 6B			
799	Calcitonin receptor Precursor			
363	Aquaporin-6			
186	Type-2 angiotensin II receptor			
3579	High affinity interleukin-8 receptor B			
3558	Interleukin-2 Precursor			
3284	3 beta-hydroxysteroid dehydrogenase/Delta 5->4-isomerase type 2			
2842	Probable G-protein coupled receptor 19		5	
4014	Loricrin			
773	Voltage-dependent P/Q-type calcium channel subunit alpha-1A			
566	Azurocidin Precursor			
6707	Small proline-rich protein 3			
6512	Excitatory amino acid transporter 5		6	
6489	Alpha-N-acetylneuraminide alpha-2,8-sialyltransferase			
3488	Insulin-like growth factor-binding protein 5 Precursor			
3456	Interferon beta Precursor		4	
2827	Probable G-protein coupled receptor 3			
100133994	-		5	
3700	Inter-alpha-trypsin inhibitor heavy chain H4 Precursor			
710	Plasma protease C1 inhibitor Precursor			
477	Sodium/potassium-transporting ATPase subunit alpha-2 Precursor			
58	Actin, alpha skeletal muscle			
6649	Extracellular superoxide dismutase [Cu-Zn] Precursor			
6445	Gamma-sarcoglycan			
3363	5-hydroxytryptamine receptor 7		9	
3123	HLA class II histocompatibility antigen, DRB1-15 beta chain Precursor			
2917	Metabotropic glutamate receptor 7 Precursor			
3890	Keratin, type II cuticular Hb4			
3681	Integrin alpha-D Precursor		5	
407	Arrestin-C			
213	Serum albumin Precursor			
33	Long-chain specific acyl-CoA dehydrogenase, mitochondrial Precursor			
7031	Trefoil factor 1 Precursor			
8437	RasGAP-activating-like protein 1			
7504	Membrane transport protein XK			
4318	Matrix metalloproteinase-9 Precursor			
10562	Olfactomedin-4 Precursor			
10347	ATP-binding cassette sub-family A member 7			
7182	Nuclear receptor subfamily 2 group C member 2			
11149	Blood vessel epicardial substance			
4633	Myosin regulatory light chain 2, ventricular/cardiac muscle isoform			
4607	Myosin-binding protein C, cardiac-type			
7125	Troponin C, skeletal muscle			
7098	Toll-like receptor 3 Precursor		10	
100293141	-		4	
100294420	-			
7718	Zinc finger protein 165		4	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
7366	UDP-glucuronosyltransferase 2B11 Precursor			
10888	Probable G-protein coupled receptor 83 Precursor			
10864	Solute carrier family 22 member 7			
10267	Receptor activity-modifying protein 1 Precursor			
7079	Metalloproteinase inhibitor 4 Precursor			
7051	Protein-glutamine gamma-glutamyltransferase K			
6863	Protachykinin-1 Precursor			
11074	Tripartite motif-containing protein 31			
7299	Tyrosinase Precursor			
81282	Olfactory receptor 51G2			
80128	Tripartite motif-containing protein 46			
79846	Uncharacterized protein C7orf63			
79825	Coiled-coil domain-containing protein 48		6	
54429	Taste receptor type 2 member 5			
54209	Triggering receptor expressed on myeloid cells 2 Precursor			
55512	Sphingomyelin phosphodiesterase 3			
79772	Multiple C2 and transmembrane domain-containing protein 1	6		
53836	Probable G-protein coupled receptor 87			
51555	PEX5-related protein			
22853	Serine/threonine-protein kinase LMTK2 Precursor			
80342	TRAF3-interacting JNK-activating modulator			
80303	EF-hand domain-containing protein D1			
80233	Fanconi anemia-associated protein of 100 kDa		6	
80201	Putative hexokinase HKDC1			
79679	V-set domain-containing T-cell activation inhibitor 1 Precursor			
54494	Uncharacterized protein C11orf71			
51364	Zinc finger MYND domain-containing protein 10			
54829	Asporin Precursor			
11280	Sodium channel protein type 11 subunit alpha			
100128496	Putative uncharacterized protein C20orf78		4	
284221	-			
284072	-			
343472	BarH-like 2 homeobox protein			
342900	Putative leucine-twenty homeobox			
317762	Coiled-coil domain-containing protein 85C			
89876	AMY-1-associating protein expressed in testis 1			
89766	Uromodulin-like 1 Precursor			
84873	Probable G-protein coupled receptor 128 Precursor			
84807	NF-kappa-B inhibitor delta			
84249	PH and SEC7 domain-containing protein 2			
100128315	-		4	
730184	-		6	
283629	Testis-specific serine/threonine-protein kinase 4			
255649	-			
199704	Zinc finger protein 585A		8	
340990	-			
285804	-			
91828	SEC6-like protein C14orf73			
85442	Protein very KIND			
85302	Fas-binding factor 1			
84187	Transmembrane protein 164			
55713	Zinc finger protein 334			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100128142	-			
100128074	-			
730087	-			
729994	-			
283189	Olfactory receptor 9G4			
254173	Probable tubulin polyglutamylase TTLL10			
253175	Rho GTPase-activating protein 7			
100129932	-			
196296	-			
81796	Solute carrier organic anion transporter family member 5A1			
339883	AP20 region protein 1			
285231	F-box/WD repeat-containing protein 12			
84960	Uncharacterized coiled-coil domain-containing protein KIAA1984			
84071	Armadillo repeat-containing protein 2			
83953	High affinity immunoglobulin alpha and immunoglobulin mu Fc receptor Precursor			
100127987	-			
729747	similar to zinc finger protein 709			
259232	Sodium leak channel non-selective protein			
245930	Beta-defensin 116 Precursor			
222545	G-protein coupled receptor family C group 6 member A Precursor			
203447	Nik-related protein kinase			
338596	Alpha-2,8-sialyltransferase 8F			
284612	Synaptophysin-like protein 2			
284395	-			
90527	Dual oxidase maturation factor 1		7	
83895	Keratin-associated protein 1-5			
83755	Keratin-associated protein 4-12			
107	Adenylate cyclase type 1			
100292590	-			
100292136	-			
100291672	-		4	
100291632	-			
100130172	-			
100129413	-			
100129315	-			
100133553	-			
100133337	-			
100132084	-			
100131102	-			
389118	Cadherin-like protein 29 Precursor			
374768	Spermatid maturation protein 1			
245973	V-type proton ATPase subunit C 2			
100292473	HCG17281PRO0038		6	
100291983	CDNA FLJ27256 fis, clone SYN09689			
100130054	-			
100129200	-			
100129119	-			
100293405	-			
100134170	-			
100134060	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100133153	-			
100132992	-			
353497	DNA polymerase nu			
352909	UPF0470 protein C19orf51			
100292784	-			
100291915	-		4	
100291870	-			
100291387	-		4	
100291337	-			
100129810	-			
100133910	-			
100132816	-		7	
100131621	-			
100131514	-			
100130803	-			
100130673	-			
387837	C-type lectin domain family 12 member B			
347527	Arylsulfatase H		6	
100292664	TBC1 domain family member 28			
100292257	-			
100292192	-		4	
100291740	-		6	
100291196	-			
100129626	-		7	
100129514	-			
100293163	-			
100133728	-			
100133641	-		11	
100132514	-			
100132336	-		4	
100131409	-		5	
100131315	-			
100130503	-			
379034	-			
7252	Thyrotropin subunit beta Precursor			
11085	ADAM 30 Precursor			
4064	CD180 antigen Precursor			
696	Butyrophilin subfamily 1 member A1 Precursor			
117532	Transmembrane channel-like protein 2			
57121	Lysophosphatidic acid receptor 5			
100294434	-			
100293555	-			
10648	Secretoglobulin family 1D member 1 Precursor		4	
6900	Contactin-2 Precursor			
3386	Intercellular adhesion molecule 4 Precursor			
6677	Hyaluronidase PH-20 Precursor		8	
114798	SLIT and NTRK-like protein 1 Precursor			
85320	ATP-binding cassette transporter sub-family C member 11			
54716	Sodium- and chloride-dependent transporter XTRP3			
-	-		6	
100294378	-		4	
100293871	-		5	
100293814	-			
100293443	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10060	ATP-binding cassette transporter sub-family C member 9			
6572	Vesicular acetylcholine transporter			
2811	Platelet glycoprotein Ib alpha chain Precursor			
1260	Cyclic nucleotide-gated olfactory channel			
340273	ATP-binding cassette sub-family B member 5			
81849	Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 5			
-	-			
100294276	HLA class II histocompatibility antigen, DR-1 beta chain Precursor			
100293687	-			
100293312	-			
64600	Group IIF secretory phospholipase A2 Precursor			
50616	Interleukin-22 Precursor			
335	Apolipoprotein A-I Precursor			
147968	Calpain-12			
-	P-selectin Precursor			
1180	Chloride channel protein, skeletal muscle			
2780	Guanine nucleotide-binding protein G(t) subunit alpha-2		6	
166752	FRAS1-related extracellular matrix protein 3 Precursor		5	
100128018	Cutaneous T-cell lymphoma-associated antigen 1		4	
23704	Potassium voltage-gated channel subfamily E member 4			
-	Immunoglobulin heavy chain V gene segment			
100294463	-			
100294073	-			
100294030	-			
100293624	-			
100293205	-			
-	Lactoperoxidase Precursor			
-	Synaptojanin-1		5	
84217	Zinc finger MYND domain-containing protein 12		4	
-	-		4	
56109	Protocadherin gamma-A6 Precursor			
725	C4b-binding protein beta chain Precursor			
57379	Activation-induced cytidine deaminase		6	
50964	Sclerostin Precursor		5	
6822	Bile salt sulfotransferase			
3872	Keratin, type I cytoskeletal 17			
84125	Leucine-rich repeat and IQ domain-containing protein 1			
197	Alpha-2-HS-glycoprotein Precursor			
6011	Rhodopsin kinase Precursor		9	
137868	Zeta-sarcoglycan			
91703	Aspartoacylase-2			
55068	Ecto-NOX disulfide-thiol exchanger 1		4	
80231	Uncharacterized protein CXorf21			
79258	Membrane metallo-endopeptidase-like 1		11	
219477	Olfactory receptor 8J1			
390191	Olfactory receptor 5B12			
2357	fMet-Leu-Phe receptor			
26534	Olfactory receptor 10G2		4	
161514	TBC1 domain family member 21			
374864	Uncharacterized protein C18orf34	8		
84528	Rhox homeobox family member 2			
140836	Barrier-to-autointegration factor-like protein			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
8622	High affinity cAMP-specific and IBMX-insensitive 3',5'-cyclic phosphodiesterase 8B			
118738	Zinc finger protein 488		4	
26189	Olfactory receptor 1A2			
164237	Protein WFDC13 Precursor			
-	-			
780776	Protein FAM18A			
128861	Short palate, lung and nasal epithelium carcinoma-associated protein 3 Precursor			
338917	Visual system homeobox 2			
153918	UPF0418 protein FAM164B			
345895	Radial spokehead-like protein 3		6	
-	SMAD5 opposite strand protein			
133923	Zinc finger protein 474			
112939	BTB/POZ domain-containing protein 14B		5	
136895	Uncharacterized protein C7orf31		6	
256297	Pancreas transcription factor 1 subunit alpha			
200010	solute carrier family 5 (sodium/glucose cotransporter), member 9 isoform 1			
339488	Transcription factor AP-2 epsilon			
26508	Hairy/enhancer-of-split related with YRPW motiflike protein			
284348	Ly6/PLAUR domain-containing protein 5 Precursor			
90199	WAP four-disulfide core domain protein 8 Precursor			
280657	Protein SSX6		4	
204474	Protein disulfide-isomerase-like protein of the testis Precursor			
762	Carbonic anhydrase 4 Precursor			
100130934	Zinc finger protein 663		4	
57644	Myosin-7B		4	
5256	Phosphorylase b kinase regulatory subunit alpha, liver isoform		5	
23349	-		11	
93408	Myosin light chain 2, lymphocyte-specific			
-	Uncharacterized protein C6orf81		4	
85449	Uncharacterized protein KIAA1755			
-	TIR domain-containing adapter molecule 1			
399671	HEAT repeat-containing protein 4			
342372	Polycystic kidney disease protein 1-like 3 Precursor			
100127206	UPF0258 protein KIAA1024-like			
5453	POU domain, class 3, transcription factor 1		5	
257177	Uncharacterized protein C1orf192			
-	-			
100130894	cDNA FLJ37701 fis, clone BRHIP2016990HCG1998535			
100129346	-			
122742	Olfactory receptor 4L1			
219986	Olfactory receptor 4D11			
9687	Protein GREB1			
-	Hepatocyte nuclear factor 1-alpha		5	
745	Uncharacterized protein C11orf9			
359710	Long palate, lung and nasal epithelium carcinoma-associated protein 3 Precursor			
-	-			
349633	Placenta-expressed transcript 1 protein Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
26659	Olfactory receptor 7A5			
253012	HEPACAM family member 2 Precursor			
100129455	cDNA FLJ34815 fis, clone NT2NE2007786			
125958	Olfactory receptor 7D4			
126868	Uncharacterized protein C1orf161			
-	Uncharacterized protein KIAA1109		5	
8190	Melanoma-derived growth regulatory protein Precursor			
-	Spindlin-4			
123103	Kelch-like protein 33		5	
284185	Uncharacterized protein C17orf55			
113763	Uncharacterized protein C7orf29		6	
-	-			
400359	Uncharacterized protein C15orf53		7	
55584	Neuronal acetylcholine receptor subunit alpha-9 Precursor			
-	Coiled-coil domain-containing protein 147			
353324	Spermatogenesis-associated protein 12			
-	Immunoglobulin Lambda light chain V gene segment			
-	Zinc finger and BTB domain-containing protein 8			
133491	Uncharacterized protein C5orf47			
345062	Epidermis-specific serine protease-like protein Precursor			
342897	FBA domain-containing protein LOC342897			
285386	Tumor protein p63-regulated gene 1 protein			
92737	Delta and Notch-like epidermal growth factor-related receptor Precursor		8	
390195	Olfactory receptor 5AN1			
-	cDNA FLJ60250, moderately similar to Ankyrin repeat domain-containing protein 30A			
651751	Immunoglobulin Kappa light chain V gene segment			
168400	Probable ATP-dependent RNA helicase DDX53		6	
84696	Abhydrolase domain-containing protein 1			
154664	ATP-binding cassette sub-family A member 13			
-	F-box/WD repeat-containing protein 10			
197257	Probable D-lactate dehydrogenase, mitochondrial Precursor			
-	Uncharacterized protein C16orf73			
116328	Uncharacterized protein C8orf34			
100129631	Uncharacterized protein ENSP00000381669 Fragment			
-	Putative uncharacterized protein C11orf55			
-	Protein KRBA1		5	
-	Putative uncharacterized protein LQK1			
9832	Janus kinase and microtubule-interacting protein 2			
171489	Sperm protein associated with the nucleus on the X chromosome D			
-	Uncharacterized protein C14orf23			
-	Seven transmembrane helix receptor			
-	C-type lectin and transmembrane domain-containing protein FLJ45910			
5592	cGMP-dependent protein kinase 1, beta isozyme			
-	EF-hand domain-containing family member B		7	
56776	Formin-2			
2707	Gap junction beta-3 protein			
2327	Dimethylaniline monooxygenase [N-oxide-forming] 2			
100130652	-			
1444	60S ribosomal protein L41			
5874	Ras-related protein Rab-27B			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2641	Glucagon Precursor			
2253	Fibroblast growth factor 8 Precursor			
5243	Multidrug resistance protein 1			
920	T-cell surface glycoprotein CD4 Precursor			
1787	tRNA (cytosine-5)-methyltransferase		5	
5016	Oviduct-specific glycoprotein Precursor		5	
1576	Cytochrome P450 3A4			
1524	CX3C chemokine receptor 1			
1294	Collagen alpha-1(VII) chain Precursor		6	
1081	Glycoprotein hormones alpha chain Precursor			
5578	Protein kinase C alpha type			
2158	Coagulation factor IX Precursor			
1501	Catenin delta-2			
1277	Collagen alpha-1(I) chain Precursor			
1238	Chemokine-binding protein 2			
9865	KIAA0644 gene product (KIAA0644), mRNA		4	
6372	C-X-C motif chemokine 6 Precursor		8	
9478	Calcium-binding protein 1			
9254	Voltage-dependent calcium channel subunit alpha-2/delta-2 Precursor			
9032	Transmembrane 4 L6 family member 5			
8832	SLAM family member 5 Precursor			
27128	Cytohesin-4		4	
6352	C-C motif chemokine 5 Precursor			
23428	Large neutral amino acids transporter small subunit 2		10	
8749	Disintegrin and metalloproteinase domain-containing protein 18 Precursor			
27035	NADPH oxidase 1			
10107	Tripartite motif-containing protein 10			
6285	Protein S100-B			
100291445	-			
5396	Paired mesoderm homeobox protein 1			
26664	Olfactory receptor 7C1			
10086	Otoconin-90 Precursor			
8689	Keratin, type I cuticular Ha6			
63928	Calcineurin B homologous protein 2			
51086	Serine/threonine-protein kinase TNKI3K			
29091	Syntaxin-binding protein 6 (Amisyn)			
56134	Protocadherin alpha-C2 Precursor			
56105	Protocadherin gamma-A11 Precursor			
23743	Betaine-homocysteine S-methyltransferase 2		4	
65217	Protocadherin-15 Precursor			
64579	Bifunctional heparan sulfate N-deacetylase/N-sulfotransferase 4			
51066	Uncharacterized protein C3orf32		4	
57332	Chromobox protein homolog 8			
56934	Carbonic anhydrase-related protein 10			
56000	Nuclear RNA export factor 3			
25884	Chordin-like protein 2 Precursor			
23626	Meiotic recombination protein SPO11			
65059	Ras-associated and pleckstrin homology domains-containing protein 1			
64218	Semaphorin-4A Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
29953	Thyrotropin-releasing hormone-degrading ectoenzyme			
57578	Protein unc-79 homolog			
56729	Resistin Precursor			4
23563	Carbohydrate sulfotransferase 5			
64849	Solute carrier family 13 member 3			
64799	IQ domain-containing protein H			
50834	Taste receptor type 2 member 1			4
55815	Translin-associated factor X-interacting protein 1			5
26002	DBH-like monooxygenase protein 1 Precursor			
23538	Olfactory receptor 52A1			
23508	Tetratricopeptide repeat protein 9A			
653808	Zymogen granule membrane protein 16 Precursor			
653316	Protein FAM153C			
646851	-			5
168620	Class A basic helix-loop-helix protein 15			
166979	Cell division cycle protein 20 homolog B			
157869	RPE-spondin Precursor			
149095	DC-STAMP domain-containing protein 1			
142680	Sodium-dependent phosphate transport protein 2C			
401665	Olfactory receptor 51T1			
392509	ADP-ribosylation factor-like protein 13A			
133396	Interleukin-31 receptor A Precursor			
127003	Uncharacterized protein C1orf194			
120787	Olfactory receptor 52W1			
118788	Phosphoinositide 3-kinase adapter protein 1			
57822	Grainyhead-like protein 3 homolog			
652991	Ladybird homeobox corepressor 1-like protein			
645781	-			
165631	Poly [ADP-ribose] polymerase 15			
164118	Tetratricopeptide repeat protein 24			
152756	Uncharacterized protein C4orf39			
147798	Transmembrane channel-like protein 4			3
140767	Neurensin-1			
401137	Uncharacterized protein C4orf40 Precursor			
390956	-			
390637	UPF0580 protein C15orf58			5
132141	IQ domain-containing protein F1			6
130951	Uncharacterized protein C2orf65			
125336	Lipoxygenase homology domain-containing protein 1			
116931	Mediator of RNA polymerase II transcription subunit 12-like protein			
113451	Arginine decarboxylase			
284697	BTB/POZ domain-containing protein 8			
151647	Protein FAM19A4 Precursor			
151176	-			
146713	Fox-1 homolog C			
139562	OTU domain-containing protein 6A			
138715	AT-rich interactive domain-containing protein 3C			
400955	-			
400706	-			
390067	Olfactory receptor 52H1			
130340	AP-1 complex subunit sigma-3			
124093	Coiled-coil domain-containing protein 78			
647286	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
647020	-			
644620	-		8	
339541	chromosome 1 open reading frame 228 (C1orf228), mRNA			
160419	Uncharacterized protein C12orf50			
158763	Putative Rho GTPase-activating protein FLJ46335 Precursor			
150350	ENTH domain-containing protein 1			
145581	Leucine-rich repeat and fibronectin type-III domain-containing protein 5 Precursor			
144715	Cell cycle checkpoint control protein RAD9B homolog		6	
137902	Peroxidasin-like protein Precursor			
399814	Uncharacterized protein C10orf120			
389383	Colipase-like protein C6orf126 Precursor		3	
389206	Coiled-coil domain-containing protein 4		5	
128346	Transmembrane protein C1orf162		4	
57537	VPS10 domain-containing receptor SorCS2 Precursor			
-	Very long-chain acyl-CoA synthetase			
100291116	-			
100291055	-		7	
100290322	-			
100289782	-		4	
729426	-			
100288691	Non-histone chromosomal protein HMG-17			
100288278	-			
100287297	-			
84288	EF-hand calcium-binding domain-containing protein 2			
643836	Zinc finger protein 62 homolog		7	
643414	Lipase member K Precursor			
-	Sciellin		4	
100290964	-			
100289555	-			
54825	Protocadherin-24 Precursor			
729268	-			
728351	-			
100288653	-			
100288606	-		4	
83723	Protein FAM57B			
100287598	-			
441389	-			
441086	-			
100290006	-			
100289462	Beta-defensin 2 Precursor			
100289007	-		4	
100288953	-	6		
729041	-		4	
728858	Uncharacterized protein C12orf71			
728086	-		8	
727934	-			
100288539	-		11	
100288039	-			
100287979	-			
100287535	-			
100287491	-			
554251	F-box only protein 48		5	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
440804	RIMS-binding protein 3B			7
100290483	-			
100289867	-			
100288892	-			
727844	-			
100288350	-			
100287914	-			
100287864	-			
100287359	-			
100286921	-			
100170229	hypothetical protein LOC100170229			
503618	Beta-defensin 104 Precursor			
474381	Histone H2A-Bbd type 2/3			7
440050	Keratin-associated protein 5-7			
414260	Putative uncharacterized protein C10orf136			
2220	Ficolin-2 Precursor			
9311	Amiloride-sensitive cation channel 3			4
774	Voltage-dependent N-type calcium channel subunit alpha-1B			
-	Ras-related protein Rab-37			6
-	Poly(rC)-binding protein 3			5
-	Ensconsin			
3662	Interferon regulatory factor 4			7
1907	Endothelin-2 Precursor			
-	Trehalase Precursor			
51327	Alpha-hemoglobin-stabilizing protein			
-	Calcium/calmodulin-dependent 3',5'-cyclic nucleotide phosphodiesterase 1B			5
-	Epidermal growth factor receptor kinase substrate 8-like protein 1			4
9420	Cytochrome P450 7B1			
1558	Cytochrome P450 2C8			15
56604	Putative tubulin beta-4q chain			10
212	5-aminolevulinate synthase, erythroid-specific, mitochondrial Precursor			
79696	UPF0418 protein FAM164C			4
59082	Caspase-1 inhibitor Iceberg			
29118	ATP-dependent RNA helicase DDX25			7
26538	Olfactory receptor 10H2			
344892	Receptor-transporting protein 2			4
338323	NACHT, LRR and PYD domains-containing protein 14			6
158798	A-kinase anchor protein 14			
114823	Leukocyte receptor cluster member 8			4
93035	Fibrocystin-L Precursor			4
54757	Protein FAM20A Precursor			
-	Leucine zipper protein 4			
55295	Kelch-like protein 26			4
282996	Probable RNA-binding protein 20			
142686	ankyrin repeat and SOCS box-containing 14 isoform 2			
340719	Nanos homolog 1			6
64902	Alanine-glyoxylate aminotransferase 2, mitochondrial Precursor			5
80343	Protein sel-1 homolog 2 Precursor			
-	Uncharacterized protein KIAA1107			6

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
28999	Krueppel-like factor 15		7	
6013	Prorelaxin H1 Precursor			
84451	Mitogen-activated protein kinase kinase kinase		10	
56133	Protocadherin beta-2 Precursor		5	
339	C>U-editing enzyme APOBEC-1			
93145	Noelin-2 Precursor			
25770	Uncharacterized protein C22orf31		6	
9892	Clathrin coat assembly protein AP180		5	
84684	Insulinoma-associated protein 2			
140683	Short palate, lung and nasal epithelium carcinoma-associated protein 2 Precursor			
391365	Sulfotransferase 6B1			
164781	WD repeat-containing protein 69		5	
121601	Anoctamin-4		8	
116966	WD repeat-containing protein 17			
-	-			
152519	NIPA-like protein 1		7	
5651	Enteropeptidase Precursor			
124538	Olfactory receptor 4D2			
100132417	High affinity immunoglobulin gamma Fc receptor I Precursor			
345274	Solute carrier family 10 member 6			
6326	Sodium channel protein type 2 subunit alpha			
-	Uncharacterized protein CYorf14			
51778	Myozenin-2			
4982	Tumor necrosis factor receptor superfamily member 11B Precursor		3	
8645	Potassium channel subfamily K member 5			
150726	F-box only protein 41			
163589	Tudor domain-containing protein 5			
340152	Zinc finger CCCH domain-containing protein 12D		7	
729085	Uncharacterized protein C3orf41 Precursor			
-	-			
140701	Uncharacterized protein C20orf135			
-	Uncharacterized protein KIAA0825			
221301	Protein FAM26D	15		
-	PR domain zinc finger protein 9			
-	Leucine-rich repeat-containing protein 53			
83894	Tetratricopeptide repeat protein 29			
8522	Growth arrest-specific protein 7			
138804	Olfactory receptor 13C4		6	
84443	FERM and PDZ domain-containing protein 3		5	
55345	Uncharacterized protein C4orf21			
-	Putative uncharacterized protein (HCG1998685) Fragment		6	
-	-			
119385	Centaurin-gamma-like protein KIAA1975			
117155	Cation channel sperm-associated protein 2		4	
401262	Cysteine-rich protein 3			
-	-			
-	Seven transmembrane helix receptor			
338751	Olfactory receptor 52L1			
-	Lipoma HMGIC fusion partner-like 1 protein Precursor		4	
-	Putative uncharacterized protein FLJ42280			
-	Seven transmembrane helix receptor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
219473	Olfactory receptor 8K3			
-	Putative uncharacterized protein OR6W1P Fragment			
-	KRAB-A domain-containing protein 2		4	
-	AMY-1-associated protein expressed in testis 1			
83698	Calneuron-1			
401409	RAB19, member RAS oncogene family			
100129345	Full-length cDNA clone CSODI087YB20 of Placenta of Homo sapiens (human)			
79614	Uncharacterized protein C5orf23			
-	Putative uncharacterized protein C16orf81			
-	-			
-	-		6	
1361	Carboxypeptidase B2 Precursor			
201140	Dehydrogenase/reductase SDR family member 7C Precursor			
283694	Olfactory receptor 4N4			
-	-			
-	Solute carrier family 22 member 24			
391189	Olfactory receptor 11L1			
401124	Putative death domain-containing protein FLJ16686			
286365	Olfactory receptor 13D1			
79501	Olfactory receptor 4F5			
4808	Helix-loop-helix protein 2	6		
442247	Ret finger protein-like 4B			
-	Neurotrimin Precursor		16	
-	Putative uncharacterized protein C11orf64			
-	-		7	
127074	Olfactory receptor 2T4			
137209	Zinc finger protein 572		5	
-	Putative uncharacterized protein C1orf180			
285754	Transmembrane protein FLJ37396			
-	Uncharacterized protein C8orf79			
142910	Lipase member J			
-	Putative uncharacterized protein FLJ44790			
730	Complement component C7 Precursor			
1002	Cadherin-4 Precursor			
8618	Calcium-dependent secretion activator 1			
-	Protocadherin-20 Precursor			
54033	Putative RNA-binding protein 11			
-	Putative uncharacterized protein FLJ46838			
65250	Uncharacterized protein C5orf42		5	
-	Transformation/transcription domain-associated protein	5		
285489	Protein Dok-7			
6508	Anion exchange protein 3		5	
403277	Olfactory receptor 5K3			
390321	Olfactory receptor 6C1			
-	Leucine-rich repeat serine/threonine-protein kinase 2			
27004	T-cell leukemia/lymphoma protein 6			
-	Synaptonemal complex protein 2-like			
10814	Complexin-2			
158062	Epididymal-specific lipocalin-6 Precursor		5	
-	Protein kinase-like protein SgK071			
-	Insulin growth factor-like family member 4 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
10407	Sperm-associated antigen 11B Precursor			
55553	Transcription factor SOX-6			
65121	PRAME family member 1			
987	Lipopolysaccharide-responsive and beige-like anchor protein		4	
-	Putative ribosomal RNA-processing protein 7 homolog B			
84439	HHIP-like protein 1 Precursor		6	
-	-		4	
3347	Histatin-3 Precursor			
3067	Histidine decarboxylase			
364	Aquaporin-7			
187	Apelin receptor			
3559	Interleukin-2 receptor alpha chain Precursor			
3290	Corticosteroid 11-beta-dehydrogenase isozyme 1			
3242	4-hydroxyphenylpyruvate dioxygenase			
3769	Inward rectifier potassium channel 13			
6708	Spectrin alpha chain, erythrocyte			
6492	Single-minded homolog 1			
3458	Interferon gamma Precursor			
3957	Galectin-2			
3702	Tyrosine-protein kinase ITK/TSK			
712	Complement C1q subcomponent subunit A Precursor			
479	Potassium-transporting ATPase alpha chain 2			
6650	Calpain-15			
3371	Tenascin Precursor			
3131	Hepatic leukemia factor			
2918	Metabotropic glutamate receptor 8 Precursor			
4129	Amine oxidase [flavin-containing] B			
438	Hydroxyindole O-methyltransferase		4	
18	4-aminobutyrate aminotransferase, mitochondrial Precursor			
51334	Proline-rich protein 16			
10413	65 kDa Yes-associated protein			
7248	phosphonoformate immuno-associated protein 5 isoform 1			
7032	Trefoil factor 2 Precursor			
8630	Hydroxysteroid 17-beta dehydrogenase 6 Precursor			
4684	Neural cell adhesion molecule 1 Precursor			
4660	Protein phosphatase 1 regulatory subunit 12B			
10771	Zinc finger MYND domain-containing protein 11		9	
100292280	-			
10563	C-X-C motif chemokine 13 Precursor			
10391	Coronin-2B			
10351	ATP-binding cassette sub-family A member 8			
8292	Acetylcholinesterase collagenic tail peptide Precursor			
4608	Myosin-binding protein H			
10913	Tumor necrosis factor receptor superfamily member EDAR Precursor			
10718	Pro-neuregulin-3, membrane-bound isoform Precursor			
10290	Striated muscle preferentially expressed protein kinase			
6906	Thyroxine-binding globulin Precursor			
8542	Apolipoprotein L1 Precursor		5	
8516	Integrin alpha-8 Precursor			
10631	Periostin Precursor			
10268	Receptor activity-modifying protein 3 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
6865	Substance-K receptor			
11076	Tubulin polymerization-promoting protein		9	
4340	myelin oligodendrocyte glycoprotein isoform beta2 precursor			
80157	PGAP2-interacting protein			
79827	Adipocyte adhesion molecule Precursor			
23268	Dynamin-binding protein		4	
23090	Zinc finger protein 423			
80726	Uncharacterized protein KIAA1683			
80070	A disintegrin and metalloproteinase with thrombospondin motifs 20 Precursor			
79799	UDP-glucuronosyltransferase 2A3 Precursor			
79774	Growth hormone-regulated TBC protein 1			
51557	Lengsin			
55335	Protein NipSnap homolog 3B			
54967	Uncharacterized protein CXorf48			
54937	Spermatogenesis- and oogenesis-specific basic helix-loop-helix-containing protein 2		6	
23036	Zinc finger protein 292		6	
81626	Uncharacterized protein C1orf14		4	
79981	FERM domain-containing protein 1			
79948	Lipid phosphate phosphatase-related protein type 3			
79750	Zinc finger protein 385D		11	
55304	Serine palmitoyltransferase 3			
55282	Leucine-rich repeat-containing protein 36			
23178	PAS domain-containing serine/threonine-protein kinase		9	
54463	Protein FAM134B			
51744	Natural killer cell receptor 2B4 Precursor		4	
51365	Phospholipase A1 member A Precursor			
55234	smu-1 suppressor of mec-8 and unc-52 homolog			
54830	Nucleoporin-62 C-terminal-like protein			
23139	Microtubule-associated serine/threonine-protein kinase 2			
22921	Methionine-R-sulfoxide reductase B2, mitochondrial Precursor		9	
100128613	-			
752014	Cementoblastoma-derived protein 1		4	
731551	-		5	
284274	Putative uncharacterized protein C18orf62			
257144	Germinal center B-cell-expressed transcript 2 protein			
221785	Zinc finger protein 498		6	
221472	FYVE, RhoGEF and PH domain-containing protein 2		7	
200844	Uncharacterized protein C3orf67			
83648	UPF0484 protein FAM167A		5	
343521	Tetx1 domain-containing protein 4		3	
286207	Uncharacterized protein C9orf117			
89885	Fetal and adult testis-expressed transcript protein		4	
89778	Serpin B11			
100287247	-			
100128317	-			
283876	cDNA FLJ39639 fis, clone SMINT2003340			
255743	Nephronectin Precursor			
83450	Leucine-rich repeat-containing protein 48			
341019	Doublecortin domain-containing protein 1			
340527	NHS-like protein 2			
285525	Protein YIPF7			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
91851	Chordin-like protein 1 Precursor			
91523	Protein FAM113B			
85443	Serine/threonine-protein kinase DCLK3			
84663	Uncharacterized protein CYorf15B			
100128081	-			
730007	-			
254251	Ligand-dependent nuclear receptor corepressor-like protein			
253314	Eukaryotic translation initiation factor 4E type 1B			
196993	Cancer/testis antigen 62			
196374	Keratin, type II cytoskeletal 78			
81797	Olfactory receptor 5V1			
284948	SH2 domain-containing protein 6			
84072	HORMA domain-containing protein 1			
83954	FKSG83 (FKSG83), mRNA			
100127988	-			
100127899	-			
729933	-			
729756	-			
259249	Mas-related G-protein coupled receptor member X1			
245972	V-type proton ATPase subunit d 2			
222546	DNA-binding protein RFX6			
338645	Leucine zipper protein 2 Precursor			
284615	Ankyrin repeat domain-containing protein 34A			
90273	Carcinoembryonic antigen-related cell adhesion molecule 21 Precursor		4	
84940	Coronin-6		6	
83896	Keratin-associated protein 3-1			
-	Adenylate cyclase type 8			
100293123	-			
100292537	-		5	
100291634	-			
100129318	-			
100134413	-			
100133554	-			
100132107	-			
100131960	-			
100131257	-			
100131109	-		6	
389123	IQ domain-containing protein F2			
388906	-			
375248	-			
374786	EF-hand calcium-binding domain-containing protein 5			
100292931	-			
100292432	-			
100292022	-		5	
100291988	-			
100291462	Protein FAM70B			
100129924	-			
100129122	-		4	
100134174	-			
100134067	-		4	
100131818	-		6	
100130897	-		4	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
388611	CD164 sialomucin-like 2 protein Precursor		8	
388389	Coiled-coil domain-containing protein 103		6	
353514	Leukocyte immunoglobulin-like receptor subfamily A member 5 Precursor			
353091	Retinoic acid early transcript 1G protein Precursor			
100292825	-			
100292311	-			
100291871	-			
100291393	-			
100129711	-			
100128927	Zinc finger and BTB domain-containing protein 42		6	
100133928	-			
100133839	-			
100132839	-			
100132705	-			
100131515	-			
138307	Epididymal-specific lipocalin-8 Precursor			
100130692	-			
387496	Ras-like protein family member 11A		5	
347541	Melanoma-associated antigen B5			
100292722	-		7	
100292665	-			
100292193	-			
100291814	-		5	
100291258	-			
100291207	-			
100129520	-			
100128714	cDNA FLJ42943 fis, clone BRSTN2003835			
100293165	-		6	
100133732	-			
100133654	-		5	
100132339	-			
100131414	-			
100131316	-		4	
100130445	-			
386653	Interleukin-31 Precursor			
344787	Zinc finger protein 860			
10850	C-C motif chemokine 27 Precursor			
7276	Transthyretin Precursor			
258	Ameloblastin Precursor		5	
23439	X/potassium-transporting ATPase subunit beta-m			
11086	ADAM 29 Precursor			
-	ADAM 18 Precursor			
4978	Opioid-binding protein/cell adhesion molecule Precursor			
4065	CD302 antigen Precursor		4	
930	B-lymphocyte antigen CD19 Precursor			
147409	Desmoglein-4 Precursor			
57216	Vang-like protein 2			
-	Aquaporin-1			
100293910	-			
5553	Bone marrow proteoglycan Precursor			
4753	Protein kinase C-binding protein NELL2 Precursor			
10911	Urotensin-2 Precursor		5	
10825	Sialidase-3			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3547	Immunoglobulin superfamily member 1 Precursor			
7007	Alpha-tectorin Precursor		4	
3593	Interleukin-12 subunit beta Precursor		5	
114836	SLAM family member 6 Precursor			
100293874	-			
100293817	Uncharacterized protein KIAA1486	6		
100293446	-		4	
6847	Synaptonemal complex protein 1			
3446	Interferon alpha-10 Precursor			
2658	Growth/differentiation factor 2 Precursor			
-	Receptor-type tyrosine-protein phosphatase U Precursor			
6534	Sodium-dependent proline transporter			
2814	Platelet glycoprotein V Precursor			
2515	Disintegrin and metalloproteinase domain-containing protein 2 Precursor			
83401	Elongation of very long chain fatty acids protein 3		4	
50700	Retinol dehydrogenase 8			
100294204	-		5	
100293765	-			
100293688	-			
100293315	-			
51050	Peptidase inhibitor 15 Precursor		5	
336	Apolipoprotein A-II Precursor		6	
64066	Matrix metalloproteinase-27 Precursor			
-	Receptor-type tyrosine-protein phosphatase-like N Precursor		7	
-	L-dopachrome tautomerase Precursor			
-	Chloride channel protein 2		7	
261729	Metalloreductase STEAP2			
168391	Putative polypeptide N-acetylgalactosaminyltransferase-like protein 5		7	
64699	Transmembrane protease, serine 3			
100294466	-			
100294080	-			
100293634	-		9	
7306	5,6-dihydroxyindole-2-carboxylic acid oxidase Precursor			
91608	Ras-like protein family member 10B Precursor			
57471	Ermin (Juxtanodin)		7	
4102	Melanoma-associated antigen 3		9	
-	JmjC domain-containing protein 5		6	
-	Putative Rho GTPase-activating protein FLJ46335 Precursor			
84915	Uncharacterized protein C12orf34			
140700	Sterile alpha motif domain-containing protein 10			
23639	Leucine-rich repeat-containing protein 6		14	
116255	2-acylglycerol O-acyltransferase 1			
2645	Glucokinase		9	
221806	Von Willebrand factor D and EGF domain-containing protein Precursor		4	
26240	Protein FAM50B			
7166	Tryptophan 5-hydroxylase 1			
-	EF-hand calcium-binding domain-containing protein 6			
84103	Uncharacterized protein C4orf17			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
3236	Homeobox protein Hox-D10			
-	-		6	
1795	Dedicator of cytokinesis protein 3			
1050	CCAAT/enhancer-binding protein alpha		5	
56903	Poly(A) polymerase beta		6	
55824	Phosphoprotein associated with glycosphingolipid-enriched microdomains 1		9	
10047	Cystatin-8 Precursor		6	
223117	Semaphorin-3D Precursor		9	
54106	Toll-like receptor 9 Precursor			
-	Nephrin Precursor			
9856	Uncharacterized protein KIAA0319 Precursor			
10693	T-complex protein 1 subunit zeta-2		15	
-	Dachshund homolog 2			
166655	Tripartite motif-containing protein 60		8	
79805	Vasohibin-2		4	
84970	Uncharacterized protein C1orf94			
9623	T-cell leukemia/lymphoma protein 1B		11	
57596	Brain-enriched guanylate kinase-associated protein		3	
160065	Prostate and testis expressed protein Precursor			
390883	Olfactory receptor 7G3			
26533	Olfactory receptor 10G3			
113	Adenylate cyclase type 7			
4488	Homeobox protein MSX-2			
-	Putative olfactory receptor 2B3			
128153	Spermatogenesis-associated protein 17			
57497	Leucine-rich repeat and fibronectin type-III domain-containing protein 2 Precursor			
120586	Olfactory receptor 8I2			
26496	Olfactory receptor 10A3			
146212	BTB/POZ domain-containing protein KCTD19			
-	Zinc finger protein 90 Fragment			
57828	Uncharacterized protein C19orf15 Precursor			
79776	Zinc finger homeobox protein 4			
56751	BarH-like 1 homeobox protein		5	
282890	Zinc finger protein 311			
6337	Amiloride-sensitive sodium channel subunit alpha			
124220	Uncharacterized protein UNQ773/PRO1567 Precursor			
148103	Zinc finger protein 599		7	
128209	Krueppel-like factor 17			
-	-			
-	LPP60_HUMAN Isoform 2 of Q86U10 · Homo sapiens (Human)			
389941	Complement C1q-like protein 3 Precursor		5	
285051	Uncharacterized protein C2orf61			
60437	Cadherin-like protein 26 Precursor		6	
51296	Solute carrier family 15 member 3		5	
115795	Uncharacterized protein C3orf24		4	
170626	G antigen family D member 4			
728468	Putative BCR-like protein 1		4	
100130216	Probable ubiquitin carboxyl-terminal hydrolase FAF-Y			
643641	Zinc finger protein 862			
152405	Uncharacterized protein C3orf30			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
79626	Tumor necrosis factor, alpha-induced protein 8-like protein 2			
388407	Putative uncharacterized protein C17orf82			
100128793	Putative uncharacterized protein CS0DE013YM09			
-	Putative olfactory receptor 10D4			
333929	Zinc finger protein SNAI3		5	
100128265	Putative uncharacterized protein FLJ34945			
139604	Melanoma-associated antigen B16			
-	FR1L5_HUMAN Isoform 3 of A0AVI2 - Homo sapiens (Human)			
403341	Zinc finger and BTB domain-containing protein 34		5	
390433	Olfactory receptor 4K13			
219482	Olfactory receptor 5M3			
152816	Uncharacterized protein C4orf26 Precursor			
90381	Uncharacterized protein C15orf42	6		
-	-			
-	Kelch domain-containing protein 6			
138802	Olfactory receptor 13C8			
129293	UPF0632 protein B Precursor			
149954	Long palate, lung and nasal epithelium carcinoma-associated protein 4 Precursor		7	
285513	G protein-regulated inducer of neurite outgrowth 3			
100134314	Heparan-sulfate 6-O-sulfotransferase 3			
149297	Protein FAM78B			
342527	Smoothelin-like protein 2			
-	-		5	
79324	Olfactory receptor 51G1		5	
286464	Uncharacterized protein CXorf59			
-	Protein FAM47A			
148808	Major facilitator superfamily domain-containing protein 4			
-	Transmembrane and coiled-coil domains protein 2		4	
-	Uncharacterized protein C1orf170			
245939	Beta-defensin 128 Precursor			
84614	Zinc finger and BTB domain-containing protein 37			
90827	Zinc finger protein 479		10	
-	Uncharacterized protein ENSP00000341058			
-	Seven transmembrane helix receptor			
-	Protein eyes shut homolog Precursor			
283111	Olfactory receptor 51V1			
100128398	cDNA FLJ37429 fis, clone BRAWH2001666		6	
-	CDNA FLJ25945 fis, clone JTH12731			
143502	Olfactory receptor 52I2			
-	Podocan Precursor			
152877	Protein FAM53A		12	
50514	Deleted in esophageal cancer 1			
84660	Coiled-coil domain-containing protein 60			
26526	Tetraspanin-16			
-	-		7	
283471	Transmembrane protease, serine 12 Precursor		5	
-	T-cell receptor alpha V gene segment			
-	Putative uncharacterized protein ENSP00000332615 Fragment		4	
80320	Transcription factor Sp6		9	
389874	Zinc finger CCHC domain-containing protein 13			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	cDNA FLJ34594 fis, clone KIDNE2009109			
162655	Zinc finger protein 519			
-	Immunoglobulin Kappa light chain V gene segment			
2350	Folate receptor beta Precursor		5	
-	Putative metallothionein MT1DP			
781	Voltage-dependent calcium channel subunit alpha-2/delta-1 Precursor			
55289	Acyl-coenzyme A oxidase-like protein			
-	Exocyst complex component 6B		7	
-	Mitogen-activated protein kinase kinase kinase 15			
204801	NACHT, LRR and PYD domains-containing protein 11		10	
51517	SH3 adapter protein SPIN90			
123688	Probable phosphotransferase LOC123688		13	
1745	Homeobox protein DLX-1			
-	Actin-related protein 11 Precursor			
122011	Casein kinase I isoform alpha-like			
-	Killer cell lectin-like receptor subfamily F member 1			
58529	Myozenin-1			
196740	Uncharacterized protein C10orf72 Precursor			
170063	Uncharacterized protein CXorf22			
399888	Protein FAM180B			
-	Hemoglobin subunit epsilon			
284521	Olfactory receptor 2L13			
27179	Interleukin-1 family member 6			
284486	Thioesterase superfamily member 5			
-	Protein FAM150B Precursor			
341567	Testis-specific H1 histone			
-	-			
3751	Potassium voltage-gated channel subfamily D member 2			
-	Transmembrane protein C6orf170		4	
388503	Complement C3-like protein LOC388503		5	
9726	Zinc finger protein 646			
-	Calpain-13			
92370	Acid phosphatase-like protein 2 Precursor			
646799	ZAR1-like protein			
6157	60S ribosomal protein L27a		12	
5919	Retinoic acid receptor responder protein 2 Precursor		5	
2676	GDNF family receptor alpha-3 Precursor		4	
2328	Dimethylaniline monooxygenase [N-oxide-forming] 3		4	
2134	Exostosin-like 1			
1943	Ephrin-A2 Precursor		4	
4892	Nebulin-related-anchoring protein			
5639	Transmembrane gamma-carboxyglutamic acid protein 2 Precursor			
2642	Glucagon receptor Precursor			
2277	Vascular endothelial growth factor D Precursor			
2254	Glia-activating factor Precursor			
1830	Desmoglein-3 Precursor			
5071	E3 ubiquitin-protein ligase parkin			
1634	Decorin Precursor			
948	Platelet glycoprotein 4			
5609	Dual specificity mitogen-activated protein kinase kinase 7			
5593	cGMP-dependent protein kinase 2			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2201	Fibrillin-2 Precursor			
2016	Homeobox protein EMX1			
1811	Chloride anion exchanger			
1789	DNA (cytosine-5)-methyltransferase 3B		4	
4986	Kappa-type opioid receptor			
1527	Testis-specific protein TEX28			
881	Calicin			
5579	Protein kinase C beta type			
2359	N-formyl peptide receptor 3			
2160	Coagulation factor XI Precursor			
4917	Netrin-3 Precursor			
1475	Cystatin-A			
1010	Cadherin-12 Precursor			
27159	Acidic mammalian chitinase Precursor			
6373	C-X-C motif chemokine 11 Precursor			
23491	Carboxylesterase 3 Precursor			
9479	C-jun-amino-terminal kinase-interacting protein 1		5	
9455	Homer protein homolog 2			
9033	Polycystic kidney disease 2-like 1 protein			
27092	Voltage-dependent calcium channel gamma-4 subunit			
9963	Solute carrier family 23 member 1			
9407	Transmembrane protease, serine 11D Precursor			
9755	TANK-binding kinase 1-binding protein		4	
6258	Retinoic acid receptor RXR-gamma		6	
6019	Cancer/testis antigen 2			
23368	Apoptosis-stimulating of p53 protein 1			
9340	Glucagon-like peptide 2 receptor Precursor			
8711	Non-receptor tyrosine-protein kinase TNK1		8	
5407	Pancreatic lipase-related protein 1 Precursor			
26696	Olfactory receptor 2T1		6	
26525	Interleukin-1 family member 5			
9514	Galactosylceramide sulfotransferase			
5979	Proto-oncogene tyrosine-protein kinase receptor ret Precursor			
9104	Regucalcin		4	
9081	PTPN13-like protein, Y-linked			
8856	Nuclear receptor subfamily 1 group I member 2		5	
29119	Catenin alpha-3			
29093	39S ribosomal protein L22, mitochondrial Precursor			
57484	RING finger protein 150 Precursor			
57412	Arsenite methyltransferase		6	
56955	Matrix extracellular phosphoglycoprotein Precursor			
56135	Protocadherin alpha-C2 Precursor		4	
56106	Protocadherin gamma-A2 Precursor			
79368	Fc receptor-like protein 2 Precursor			
60677	CUG-BP- and ETR-3-like factor 6			
30811	Hormonally up-regulated neu tumor-associated kinase			
29068	Zinc finger and BTB domain-containing protein 44		8	
56001	Nuclear RNA export factor 2			
26228	Signal-transducing adaptor protein 1			
23630	Potassium voltage-gated channel subfamily E member 1-like protein			
65061	Serine/threonine-protein kinase PFTAIRE-2			
57582	Potassium channel subfamily T member 1			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
55879	Gamma-aminobutyric acid receptor subunit theta Precursor			
25849	Protein PARM-1 Precursor			
79057	Transmembrane gamma-carboxyglutamic acid protein 3 Precursor			
64800	EF-hand calcium-binding domain-containing protein 6			
64106	Neuropeptide FF receptor 1			
58510	Probable proline dehydrogenase 2			
50835	Taste receptor type 2 member 9			
27314	Ras-related protein Rab-30	6		
56244	Butyrophilin-like protein 2			
653857	-			
646575	-			
169044	Collagen alpha-1(XXII) chain Precursor			
158055	Uncharacterized protein C9orf163			
148398	Sterile alpha motif domain-containing protein 11			
142683	Intellectin-2 Precursor			
403239	Olfactory receptor 2T27			
401720	-		6	
392555	-		3	
134391	Probable G-protein coupled receptor 151			
133482	Solute carrier organic anion transporter family member 6A1			
120793	Olfactory receptor 56A4			
114804	RING finger protein 157			
114770	N-acetylmuramoyl-L-alanine amidase Precursor			
57823	SLAM family member 7 Precursor			
653082	Probable palmitoyltransferase ZDHHC11B			
652164	Myomegalin			
646079	Breast cancer anti-estrogen resistance protein 1			
645811	Coiled-coil domain-containing protein 154			
165679	Protein ADMP			
164395	Probable tubulin polyglutamylase TTLL9			
154197	Poly(A)-specific ribonuclease PARN-like domain-containing protein 1 Precursor			
152789	Janus kinase and microtubule-interacting protein 1			
147183	Keratin, type I cytoskeletal 25			
140775	Smith-Magenis syndrome chromosomal region candidate gene 8 protein			
140578	Chondrolectin Precursor			
401387	Leucine-rich repeat and death domain-containing protein LOC401387			
401147	-			
390980	Zinc finger protein 805		12	
390638	-			
131096	Potassium voltage-gated channel subfamily H member 8			
126123	Uncharacterized protein C19orf41 Precursor			
118426	Loss of heterozygosity 12 chromosomal region 1 protein		5	
116984	Centaurin-delta-1			
651302	zinc finger protein 389 (ZNF389), mRNA			
645432	Arrestin domain-containing protein 5			
151651	EF-hand domain-containing family member B			
146723	Uncharacterized protein C17orf77 Precursor			
146206	Leucine-rich repeat-containing protein 16C			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
400961	Polyadenylate-binding protein-interacting protein 2B			
390075	Olfactory receptor 52N5			
389690	FLJ43860 protein (FLJ43860), mRNA			
130497	Protein odd-skipped-related 1			
116362	Retinoid-binding protein 7			
94097	Sideroflexin-5			
647309	Uncharacterized protein ENSP00000371466			
647024	-			
644634	UPF0627 protein ENSP00000358171			
644280	-		4	
150365	Meiosis inhibitor protein 1			
137970	Netrin receptor UNC5D Precursor			
135927	Uncharacterized protein C7orf34 Precursor			
79083	Melanophilin (Exophilin-3)		5	
400456	-		5	
389396	Glycine N-acyltransferase-like protein 3			
389207	Glutaredoxin domain-containing cysteine-rich protein 1			
128360	Olfactory receptor 10T2			
57540	Patched domain-containing protein 2			
100291118	-			
100291056	Putative uncharacterized protein ENSP00000375040		5	
100290415	Putative uncharacterized protein ENSP00000375019		4	
100290323	-		5	
100289267	-		5	
100289230	-			
100288694	-			
100288284	-			
100288226	-			
100287304	-			
643972	-			
643418	Lipase member N Precursor			
441864	hypothetical LOC441864			
100290966	HLA class II histocompatibility antigen, DR-1 beta chain Precursor			
100290251	-		5	
100290147	-			
100289079	Putative uncharacterized protein ENSP00000383585 Fragment			
729288	-			
728275	-		4	
100287688	-			
100287160	cDNA FLJ46230 fis, clone TEST14014977			
642574	IQ motif and ankyrin repeat domain-containing protein LOC642574			
441476	Uncharacterized protein FLJ40246			
441108	Putative uncharacterized protein LOC441108			
100290663	-			
100290070	ATP-sensitive inward rectifier potassium channel 12			
100290015	-			
100288956	-			
729065	-			
728100	-			
727936	Glycosyltransferase 8 domain-containing protein 4			
100288504	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100287980	-			
100287497	Transmembrane protein FLJ78588		6	
100287048	-			
574016	Putative chronic lymphocytic leukemia up-regulated protein 1 opposite strand transcript protein			
440836	Outer dense fiber protein 3B			
440307	Tubulin polyglutamylase TTL13			
-	Retinol-binding protein 4 Precursor			
100290487	-			
56107	-			
100289369	-			
100288893	-			
654502	IQ domain-containing protein J			
100288439	Putative uncharacterized protein		6	
100288353	-			
100287869	-		4	
100286923	-		5	
100170765	Uncharacterized protein C19orf69			
503841	Beta-defensin 106 Precursor			
492307	Exocrine differentiation and proliferation factor-like protein			
414301	Protein DDI1 homolog 1			
27019	Dynein intermediate chain 1, axonemal			
337880	Keratin-associated protein 11-1		4	
10394	Proteoglycan 3 Precursor			
51412	Actin-like protein 6B		8	
776	Voltage-dependent L-type calcium channel subunit alpha-1D		6	
-	Tyrosine-protein phosphatase non-receptor type 3			
5539	Pancreatic prohormone Precursor		11	
-	Glutamate [NMDA] receptor subunit zeta-1 Precursor			
6699	Cornifin-B			
383	Arginase-1			
57369	Gap junction delta-2 protein		5	
-	Protein kinase C epsilon type			
-	Mitogen-activated protein kinase 10			
-	Glucagon-like peptide 2 receptor Precursor			
-	Cadherin-16 Precursor			
-	Chondroitin sulfate proteoglycan 5 Precursor		6	
6860	Synaptotagmin-4		10	
2741	Glycine receptor subunit alpha-1 Precursor		4	
-	Triggering receptor expressed on myeloid cells 2 Precursor		4	
151742	Protein phosphatase 1L			
169522	Potassium voltage-gated channel subfamily V member 2		5	
-	Laminin subunit alpha-2 Precursor			
6656	SOX-1 protein		9	
1143	Neuronal acetylcholine receptor subunit beta-4 Precursor		4	
81027	Tubulin beta-1 chain		6	
9992	Potassium voltage-gated channel subfamily E member 2		5	
3753	Potassium voltage-gated channel subfamily E member 1		5	
-	Interleukin-2 receptor alpha chain Precursor			
3200	Homeobox protein Hox-A3			
143501	Putative uncharacterized protein C11orf40			
7092	Tolloid-like protein 1 Precursor		6	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
344901	Osteocrin Precursor (Musclin)			
378951	RNA-binding motif protein, Y chromosome, family 1 member F/J			
-	Meiotic recombination protein SPO11			
10900	RUN domain-containing protein 3A			
-	Translin-associated factor X-interacting protein 1			
139212	Uncharacterized protein CXorf41			
285440	Cytochrome P450 4V2		17	
136541	Trypsin-X3 Precursor		7	
90161	Heparan-sulfate 6-O-sulfotransferase 2			
3565	Interleukin-4 Precursor			
113278	Uncharacterized protein C20orf54 Precursor		8	
55195	Uncharacterized protein C14orf105			
219539	Protein yippee-like 4			
-	Solute carrier family 22 member 16		4	
255022	Calcium homeostasis modulator protein 1			
221357	Glutathione S-transferase A5			
54715	Fox-1 homolog A		11	
84281	Uncharacterized protein MGC13057		5	
51298	Testicular haploid expressed gene protein			
79852	Abhydrolase domain-containing protein 9 Precursor		5	
126353	Uncharacterized protein C19orf21			
-	PR domain zinc finger protein 6 Fragment			
116969	Ecto-ADP-ribosyltransferase 5 Precursor		11	
-	UPF0567 protein ENSP00000298105			
85438	Uncharacterized protein C4orf35			
4990	Homeobox protein SIX6		4	
-	cDNA FLJ14238 fis, clone NT2RP4000519Putative uncharacterized protein MGC45800			
286514	Melanoma-associated antigen B18			
57571	ATP-grasp domain-containing protein KIAA1394			
-	Ras association domain-containing protein 3			
-	Immunoglobulin superfamily member 10 Precursor			
-	Testicular acid phosphatase Precursor			
1961	Early growth response protein 4			
120065	Olfactory receptor 5P2			
254187	Testis-specific protein 10-interacting protein			
256987	Serine incorporator 5		10	
-	Putative aquaporin-7-like protein 3			
285175	Uncharacterized protein C2orf21			
374618	Testis-expressed sequence 9 protein			
54766	Protein BTG4			
392391	Olfactory receptor 5C1			
139760	Glucose-dependent insulinotropic receptor			
-	Liprin-alpha-2			
1828	Desmoglein-1 Precursor			
130813	Uncharacterized protein C2orf50		4	
65999	Leucine-rich repeat-containing protein 61		4	
-	T-complex-associated testis-expressed protein 1		5	
-	-			
55017	Uncharacterized protein C14orf119			
55175	Kelch-like protein 11 Precursor			
26579	Myeloma-overexpressed gene protein		4	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
154215	Sodium/potassium-transporting ATPase subunit beta-1-interacting protein 2			
-	Transmembrane protein 75		7	
79310	Olfactory receptor 5H2			
-	Olfactory receptor 8H1		4	
119467	Clarin-3			
-	cDNA FLJ34090 fis, clone FCBBF3006399			
7066	Thrombopoietin Precursor			
114786	XK-related protein 4			
164684	Postacrosomal sheath WW domain-binding protein			
100128612	-			
26707	olfactory receptor, family 2, subfamily J, member 2			
254783	Olfactory receptor 6C74			
219874	Olfactory receptor 6T1			
128371	Olfactory receptor 6K6			
389015	Sodium/hydrogen exchanger 4			
100170841	Uncharacterized protein C17orf96			
286234	FAM75-like protein C9orf79			
-	cDNA FLJ30785 fis, clone FEBRA2000901			
-	Prostaglandin E2 receptor EP3 subtype		6	
390083	Olfactory receptor 56A3			
-	-		4	
-	Trichohyalin-like protein 1 (Basalin)			
-	-		4	
400165	Putative uncharacterized protein C13orf35			
-	-			
100134762	cDNA FLJ35943 fis, clone TESTI2011750			
387748	Olfactory receptor 56B1		4	
-	-			
5063	Serine/threonine-protein kinase PAK 3			
341277	Ovochymase-2 Precursor		7	
-	Uncharacterized protein ENSP00000331463 Fragment			
115948	Coiled-coil domain-containing protein 151			
-	Seven transmembrane helix receptor			
-	Olfactory receptor 52E5			
160298	Uncharacterized protein C11orf42			
388394	Reprimo-like protein		5	
-	CCD79_HUMAN Isoform 3 of Q8NA31 - Homo sapiens (Human)			
221091	LRRN4 C-terminal-like protein Precursor			
138255	Uncharacterized protein C9orf135			
-	cDNA FLJ45139 fis, clone BRAWH3039623			
161882	Zinc finger protein ZFP161			
7401	Clarin-1		4	
388646	Guanylate-binding protein 7			
169792	Zinc finger protein GLIS3			
-	Zinc finger protein 667		9	
56901	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 4-like 2			
56891	Placental protein 13-like			
127665	Zinc finger protein 648			
80217	WD repeat-containing protein C10orf79			
51284	Toll-like receptor 7 Precursor		6	
-	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Ankyrin repeat domain-containing protein 26-like protein			
1435	Macrophage colony-stimulating factor 1 Precursor			
441478	Notch-regulated ankyrin repeat-containing protein		7	
403282	Olfactory receptor 6C65			
390053	Putative olfactory receptor 52A4			
126767	Arylacetamide deacetylase-like 3			
153478	Pleckstrin homology domain-containing family G member 4B			
147700	Kinesin light chain 3			
-	Metallothionein-1G			
4134	Microtubule-associated protein 4		4	
390142	Olfactory receptor 5D13			
-	-		5	
636	Protein bicaudal D homolog 1		7	
389257	Leucine-rich repeat-containing protein 14-like			
-	Zinc finger matrin-type protein 1		4	
-	CUG-BP- and ETR-3-like factor 6			
-	Proto-oncogene DBL			
10000	RAC-gamma serine/threonine-protein kinase			
342184	formin 1			
-	-			
6775	Signal transducer and activator of transcription 4			
3627	C-X-C motif chemokine 10 Precursor			
3350	5-hydroxytryptamine receptor 1A		5	
2900	Glutamate receptor, ionotropic kainate 4 Precursor		10	
2886	Growth factor receptor-bound protein 7			
4093	Mothers against decapentaplegic homolog 9			
3860	Keratin, type I cytoskeletal 13		4	
623	B1 bradykinin receptor		5	
366	Aquaporin-9			
6928	Hepatocyte nuclear factor 1-beta			
6750	Somatostatin Precursor			
6536	Sodium- and chloride-dependent glycine transporter 1		6	
3586	Interleukin-10 Precursor			
3560	Interleukin-2 receptor subunit beta Precursor			
3293	Testosterone 17-beta-dehydrogenase 3			
3248	15-hydroxyprostaglandin dehydrogenase [NAD+]			
3045	Hemoglobin subunit delta		4	
2862	Motilin receptor		4	
2845	Probable G-protein coupled receptor 22			
777	Voltage-dependent R-type calcium channel subunit alpha-1E			
538	Copper-transporting ATPase 1		7	
350	Beta-2-glycoprotein 1 Precursor			
6514	Solute carrier family 2, facilitated glucose transporter member 2			
2829	Chemokine XC receptor 1			
2810	14-3-3 protein sigma (Stratifin)			
3988	Lysosomal acid lipase/cholesteryl ester hydrolase Precursor			
3738	Potassium voltage-gated channel subfamily A member 3			
715	Complement C1r subcomponent Precursor		8	
6424	Secreted frizzled-related protein 4 Precursor			
3373	Hyaluronidase-1 Precursor		4	
2948	Claudin-10		4	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2786	Guanine nucleotide-binding protein G(I)/G(S)/G(O) subunit gamma-4 Precursor			
100131479	-			
3918	Laminin subunit gamma-2 Precursor		7	
3684	Integrin alpha-M Precursor			
238	ALK tyrosine kinase receptor Precursor			
215	ATP-binding cassette sub-family D member 1		5	
10842	G-substrate		5	
10800	Cysteinyl leukotriene receptor 1		5	
10417	Spondin-2 Precursor (Mindin)		4	
7941	Platelet-activating factor acetylhydrolase Precursor		7	
10748	killer cell lectin-like receptor subfamily A, member 1		6	
10551	Anterior gradient protein 2 homolog Precursor			
7161	Tumor protein p73			
6954	T-complex protein 11 homolog			
11178	Leucine zipper putative tumor suppressor 1			
11155	LIM domain-binding protein 3			
8295	Transformation/transcription domain-associated protein		4	
7840	Alstrom syndrome protein 1			
100132983	-			
51187	Probable ribosome biogenesis protein RLP24		6	
10936	Probable G-protein coupled receptor 75			
10721	DNA polymerase theta		6	
10675	Chondroitin sulfate proteoglycan 5 Precursor			
10529	Nebulette			
10320	DNA-binding protein Ikaros			
6909	T-box transcription factor TBX2			
11107	PR domain zinc finger protein 5			
7369	Uromodulin Precursor			
10891	Peroxisome proliferator-activated receptor gamma coactivator 1-alpha			
10866	HLA class I histocompatibility antigen protein P5			
10451	Guanine nucleotide exchange factor VAV3			
7053	Protein-glutamine gamma-glutamyltransferase E Precursor		5	
6866	Tachykinin-3 Precursor			
11077	Heat shock factor 2-binding protein			
7544	Zinc finger Y-chromosomal protein			
100293210	-			
4342	Proto-oncogene serine/threonine-protein kinase mos			
81341	Olfactory receptor 10W1			
80975	Transmembrane protease, serine 5		5	
80133	Uncharacterized protein C1orf129			
54212	Gamma-1-syntrophin			
55521	Tripartite motif-containing protein 36			
23114	Neurofascin Precursor			
22882	Zinc fingers and homeoboxes protein 2		6	
81888	Putative hydroxypyruvate isomerase			
79802	HHIP-like protein 2 Precursor			
54734	Ras-related protein Rab-39A			
54658	UDP-glucuronosyltransferase 1-1 Precursor			
54084	Protein TSPEAR Precursor			
23248	Regulation of nuclear pre-mRNA domain-containing protein 2			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
23225	Nuclear pore membrane glycoprotein 210 Precursor			
79949	hypothetical protein LOC79949			
53405	Chloride intracellular channel protein 5			
55283	Mucolipin-3			
55095	Protein Smaug homolog 2		10	
22987	Synaptic vesicle glycoprotein 2C			
11330	Chymotrypsin-C Precursor			
54831	Bestrophin-2		4	
11283	Cytochrome P450 4F8			
11255	Histamine H3 receptor			
100128615	-			
768206	Progressive rod-cone degeneration protein		5	
731852	-			
284099	Uncharacterized protein C17orf78			
256380	Sex comb on midleg-like protein 4			
83657	Dynein light chain roadblock-type 2			
343578	Rho GTPase-activating protein 18-like			
342931	Ret finger protein-like 4A			
319089	-			
286223	Uncharacterized protein C9orf47 Precursor			
89886	SLAM family member 9 Precursor		4	
84814	Probable lipid phosphate phosphatase PPAPDC3		6	
84251	SH3-containing GRB2-like protein 3-interacting protein 1			
55765	Uncharacterized protein C1orf106			
730474	-			
730236	-		6	
283897	Transmembrane protein C16orf54			
283659	Protogenin Precursor			
221303	UPF0389 protein FAM162B			
200150	Inactive phospholipase D5			
341346	Uncharacterized protein C12orf70			
285966	Protein FAM115C			
91526	Serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit B			
85445	Contactin-associated protein-like 4 Precursor			
84725	Pleckstrin homology domain-containing family A member 8		4	
84665	Myopalladin			
84189	SLIT and NTRK-like protein 6 Precursor			
100128084	-			
730011	-			
283455	Kinase suppressor of Ras 2			
253559	Cell adhesion molecule 2 Precursor			
219970	Glycine N-acyltransferase-like protein 2			
219453	Olfactory receptor 8K5			
339965	Coiled-coil domain-containing protein 158			
285313	Immunoglobulin superfamily member 10 Precursor			
284992	Coiled-coil domain-containing protein 150		7	
84968	Paraneoplastic antigen-like protein 6B		4	
84628	Netrin-G2 Precursor (Laminet-2)			
84539	Melanin-concentrating hormone receptor 2			
84074	Glutamine-rich protein 2			
83987	Coiled-coil domain-containing protein 8			
282966	UPF0728 protein C10orf53			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
259282	Protein FAM44A		5	
246126	Uncharacterized protein CYorf15A			
222553	Solute carrier family 35 member F1			
338661	Transmembrane protein PMP22CD			
284403	WD repeat-containing protein 62			
90634	NEDD4-binding protein 2-like 1			
90293	Kelch-like protein 13			
84941	Hematopoietic SH2 domain-containing protein			
84913	Protein atonal homolog 8			
83897	Keratin-associated protein 3-2			
417	GPI-linked NAD(P)(+)-arginine ADP-ribosyltransferase 1 Precursor			
100291638	-			
100130184	-			
100129323	-			
100134423	-			
100131112	CDNA FLJ25042 fis, clone CBL03351		4	
389124	IQ domain-containing protein F5			
388910	Novel gene			
374860	Ankyrin repeat domain-containing protein 30B			
-	Myosin-XVIIIb			
100293003	-			
100292932	cDNA FLJ61769		5	
100292479	HCG2013738Putative uncharacterized protein Fragment		4	
8740	Tumor necrosis factor ligand superfamily member 14		5	
100291465	-			
100130084	-			
100129126	-			
100134181	-			
100134071	-			
100133176	-		6	
100131827	zinc finger protein 717			
360030	Homeobox protein C14			
9576	Sperm-associated antigen 6			
100292830	-			
100292321	-			
100291924	-			
100291873	-		4	
100291400	-		6	
100291351	-			
100129027	-			
100128935	-			
100293270	Rheumatoid factor RF-IP15 Fragment			
100133949	-			
100133843	Fibulin-1 Precursor		5	
100132870	-			
100132713	-			
100131635	-			
100131519	-		5	
100130701	-			
387890	hypothetical protein LOC387890			
347730	Leucine-rich repeat transmembrane neuronal protein 1 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100292726	-			
100292671	-			
100291746	-			
100291259	-		7	
100128838	cDNA FLJ39609 fis, clone SKNSH2008043		4	
100128728	-		7	
100293168	-		7	
100133741	-			
100132529	-			
100131416	-	8		
100130520	-			
100130452	-			
386675	Keratin-associated protein 10-7			
345222	Uncharacterized protein C4orf44			
9313	Matrix metalloproteinase-20 Precursor		9	
265	Amelogenin, X isoform Precursor		8	
5024	P2X purinoceptor 3			
4099	Myelin-associated glycoprotein Precursor		5	
931	B-lymphocyte antigen CD20			
27255	Contactin-6 Precursor			
57419	Sodium/potassium/calcium exchanger 3 Precursor			
7368	2-hydroxyacylsphingosine 1-beta-galactosyltransferase Precursor		4	
100294409	-			
100293913	-			
100293560	-			
5671	Pregnancy-specific beta-1-glycoprotein 3 Precursor		4	
4880	C-type natriuretic peptide Precursor			
7784	Zona pellucida sperm-binding protein 3 Precursor		6	
-	Killer cell immunoglobulin-like receptor 3DL2 Precursor			
7780	Zinc transporter 2		6	
4153	Mannose-binding protein C Precursor			
115019	Solute carrier family 26 member 9			
-	Natural killer cell receptor 2B4 Precursor			
-	cDNA FLJ35839 fis, clone TESTI2006659			
100293818	-			
11144	Meiotic recombination protein DMC1/LIM15 homolog		4	
3451	Interferon alpha-17 Precursor			
2661	Growth/differentiation factor 9 Precursor		4	
10089	Potassium channel subfamily K member 7			
-	Solute carrier organic anion transporter family member 1A2			
2844	Probable G-protein coupled receptor 21			
312	Annexin A13		4	
344805	Transmembrane protease, serine 7			
83597	Receptor-transporting protein 3			
80350	Apolipoprotein(a)-like protein 2 Precursor			
-	Immunoglobulin Kappa light chain C gene segment			
100294299	-			
100294228	Putative uncharacterized protein C6orf100			
100293318	-			
51297	Protein Plunc Precursor			
-	Antithrombin-III Precursor		8	
-	Fibrillin-3 Precursor		13	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
85416	Zinc finger protein ZIC 5		8	
5961	Peripherin-2			
266675	Bestrophin-4			
64922	Leucine-rich repeat-containing protein 19 Precursor			
64084	Calsyntenin-2 Precursor			
27094	Calcium-activated potassium channel subunit beta-3			
100294035	-			
100293636	Putative uncharacterized proteinPutative uncharacterized protein ENSP00000364222 Fragment			
100293591	-		5	
100293211	Rheumatoid factor RF-IP18 Fragment		4	
-	Spermatogenesis-associated protein 22			
130540	Amyotrophic lateral sclerosis 2 chromosomal region candidate gene 12 protein			
-	Fetal and adult testis-expressed transcript protein			
64122	Fructosamine-3-kinase		8	
8288	Eosinophil peroxidase Precursor		4	
170302	Homeobox protein ARX			
85291	Keratin-associated protein 4-2			
57710	Uncharacterized protein KIAA1614			
-	Uncharacterized protein C6orf50			
51378	Angiopoietin-4 Precursor			
-	Kinesin-like protein KIF17		5	
4547	Microsomal triglyceride transfer protein large subunit Precursor			
63982	Anoctamin-3			
84953	MICAL C-terminal-like protein			
-	Homeobox protein Hox-D11			
79000	Uncharacterized protein C1orf135		7	
4143	S-adenosylmethionine synthetase isoform type-1		8	
56914	Otoraplin Precursor		6	
28954	GTP-binding protein REM 1			
10566	A-kinase anchor protein 3		6	
7274	Alpha-tocopherol transfer protein			
29113	Uncharacterized protein C6orf15 Precursor			
128876	Protein FAM83C			
56128	Protocadherin beta-8 Precursor			
26330	Glyceraldehyde-3-phosphate dehydrogenase, testis-specific			
5475	Serine/threonine-protein phosphatase with EF-hands 1		9	
5145	Rod cGMP-specific 3',5'-cyclic phosphodiesterase subunit alpha		10	
79849	PDZ domain-containing protein 3			
347468	Olfactory receptor 13H1		4	
390882	Olfactory receptor 7G2			
343169	Olfactory receptor 6F1			
146378	Uncharacterized protein FLJ25404			
-	DEP domain-containing protein 5			
-	Leucine-rich repeat-containing protein 9			
83884	Mitochondrial ornithine transporter 2			
442191	Olfactory receptor 14J1			
55220	Kelch domain-containing protein 8A			
345275	17-beta hydroxysteroid dehydrogenase 13 Precursor			
8712	G antigen family B member 1			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	cDNA FLJ32212 fis, clone PLACE6003399, weakly similar to SPIDROIN 1			
-	Putative uncharacterized protein			
-	Transcription factor BTF3 homolog 1			
-	Calcium-activated chloride channel regulator family member 3 Precursor			
-	Zinc finger protein 834			
121599	Transcription factor Spi-C		4	
81569	Actin-like protein 8			
84680	1-aminocyclopropane-1-carboxylate synthase-like protein 1			
57649	PHD finger protein 12			
252995	Fibronectin type III domain-containing protein 5 Precursor			
56245	Uncharacterized protein C21orf62			
170627	G antigen family D member 5			
-	YV012_HUMAN Isoform 2 of Q6ZQY2 - Homo sapiens (Human)			
4983	Oligophrenin-1			
-	Uncharacterized protein ENSP00000382242		13	
5620	Protamine-2			
388695	LysM and putative peptidoglycan-binding domain-containing protein 1		7	
150082	Lebercilin-like protein			
-	Tryptophan 5-hydroxylase 1			
-	Ret finger protein-like 1		4	
-	Putative uncharacterized protein FLJ45999		6	
26648	Olfactory receptor 7E24			
79842	Zinc finger and BTB domain-containing protein 3		4	
145946	Spermatogenesis-associated protein 8			
401546	Uncharacterized protein C9orf152			
387695	Putative uncharacterized protein C10orf99 Precursor			
127062	Olfactory receptor 2M3			
171483	Protein FAM9B			
-	-			
92597	Mps one binder kinase activator-like 1A			
55784	Multiple C2 and transmembrane domain-containing protein 2			
7621	Zinc finger protein 70		4	
642987	Putative uncharacterized protein FLJ43080		6	
-	DNA excision repair protein ERCC-6-like		5	
-	Immunoglobulin Lambda light chain V gene segment		7	
285588	EF-hand domain-containing protein ENSP00000381247			
-	Ladybird homeobox corepressor 1			
-	Putative uncharacterized protein C21orf9			
-	Matrilin-4 Precursor			
339501	Serine protease MPN2 Precursor		5	
338599	Dual specificity phosphatase DUPD1		8	
390443	Ribonuclease-like protein 9 Precursor			
256892	Olfactory receptor 51F1			
-	-			
283598	Putative uncharacterized protein C14orf177			
158506	Zinc finger protein 645			
-	Uncharacterized protein C9orf130			
340024	Sodium-dependent neutral amino acid transporter B(0)		5	
344905	Probable cation-transporting ATPase 13A5		5	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
653140	UPF0638 protein A			
-	Olfactory receptor 10W1			
387357	Uncharacterized protein C6orf190			
6547	Sodium/calcium exchanger 3 Precursor			
220382	Protein FAM181B		4	
390439	Olfactory receptor 11G2		5	
84688	Uncharacterized protein C9orf24			
27328	Protocadherin-11 X-linked Precursor			
84159	AT-rich interactive domain-containing protein 5B			
9242	Musculin			
51266	C-type lectin domain family 1 member B			
-	Signal peptide, CUB and EGF-like domain-containing protein 1 Precursor		4	
400077	Uncharacterized protein FLJ42957			
-	Olfactory receptor 5AC2			
26188	Olfactory receptor 1C1			
3250	Haptoglobin-related protein Precursor		4	
100129686	Zinc finger protein ZnFP12			
151790	WD repeat-containing protein 49			
255738	Proprotein convertase subtilisin/kexin type 9 Precursor		6	
116987	Centaurin-gamma-2		9	
139628	Forkhead box protein R2			
81327	Olfactory receptor 4A16		8	
-	cDNA FLJ46020 fis, clone SPLEN2019480		4	
26689	Olfactory receptor 4D1			
57159	Tripartite motif-containing protein 54			
-	Limbin		4	
401994	Olfactory receptor 14I1	6		
2329	Dimethylaniline monooxygenase [N-oxide-forming] 4		7	
2312	Filaggrin			
5126	Neuroendocrine convertase 2 Precursor			
5098	Protocadherin gamma-A12 Precursor			
1447	Beta-casein Precursor			
1413	Beta-crystallin A4			
2626	Transcription factor GATA-4			
2258	Fibroblast growth factor 13			
5076	Paired box protein Pax-2			
4829	Neuromedin-B receptor			
1607	Diacylglycerol kinase beta			
1393	Corticotropin-releasing factor-binding protein Precursor		4	
1364	Claudin-4			
6000	Regulator of G-protein signaling 7			
5816	Parvalbumin alpha		4	
5794	Receptor-type tyrosine-protein phosphatase H Precursor		7	
5617	Prolactin Precursor			
2566	Gamma-aminobutyric acid receptor subunit gamma-2 Precursor			
1326	Mitogen-activated protein kinase kinase kinase 8		4	
1089	Carcinoembryonic antigen-related cell adhesion molecule 4 Precursor			
1056	Bile salt-activated lipase Precursor			
5955	Reticulocalbin-2 Precursor			
2532	Duffy antigen/chemokine receptor			
2444	Tyrosine-protein kinase FRK			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2162	Coagulation factor XIII A chain Precursor		5	
4948	P protein			
4745	Protein kinase C-binding protein NELL1 Precursor			
1281	Collagen alpha-1(III) chain Precursor			
1244	Canalicular multispecific organic anion transporter 1			
860	Runt-related transcription factor 2			
838	Caspase-5 Precursor			
9848	Microfibrillar-associated protein 3-like Precursor			
9665	Limkain-b1		4	
9481	Mitochondrial uncoupling protein 4		8	
9053	Ensconsin			
27134	Tight junction protein ZO-3			
9826	Rho guanine nucleotide exchange factor 11			
9437	Natural cytotoxicity triggering receptor 1 Precursor			
9194	Monocarboxylate transporter 2		6	
8756	Disintegrin and metalloproteinase domain-containing protein 7 Precursor			
5450	POU domain class 2-associating factor 1			
27039	Polycystic kidney disease 2-like 2 protein			
26998	Fetuin-B Precursor			
9920	Kelch repeat and BTB domain-containing protein 11			
9592	Immediate early response gene 2 protein		4	
6262	Ryanodine receptor 2			
9350	Cerberus Precursor			
8714	Canalicular multispecific organic anion transporter 2			
26737	Olfactory receptor 1L1			
10071	Mucin-12 Precursor			
9890	Lipid phosphate phosphatase-related protein type 4			
9736	Ubiquitin carboxyl-terminal hydrolase 34			
9705	Suppression of tumorigenicity protein 18			
9515	Syntaxin-binding protein 5-like			
100288993	-			
23314	DNA-binding protein SATB2		5	
9082	XK, Kell blood group complex subunit-related, Y-linked 2			
8857	IgGfC-binding protein Precursor			
5168	Ectonucleotide pyrophosphatase/phosphodiesterase family member 2 Precursor			
29121	C-type lectin domain family 2 member D			
29094	Galectin-related protein		7	
56136	Protocadherin alpha-C2 Precursor			
100289881	-			
65987	BTB/POZ domain-containing protein KCTD14		4	
60680	CUG-BP- and ETR-3-like factor 5			
29986	Zinc transporter ZIP2			
57194	Probable phospholipid-transporting ATPase VA			
64220	Stimulated by retinoic acid gene 6 protein homolog		4	
60482	High affinity choline transporter 1			
59336	PR domain zinc finger protein 13			
57167	Sal-like protein 4			
25850	Zinc finger protein 345		6	
23601	C-type lectin domain family 5 member A			
23566	Lysophosphatidic acid receptor 3			
64108	Receptor-transporting protein 4			
50836	Taste receptor type 2 member 8			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
27329	Angiopoietin-related protein 3 Precursor			
27283	Tubulointerstitial nephritis antigen			
57053	Neuronal acetylcholine receptor subunit alpha-10 Precursor		5	
56341	Protein arginine N-methyltransferase 8			
26037	Signal-induced proliferation-associated 1-like protein 1			
646864	Putative uncharacterized protein ENSP00000380290 Fragment			
169436	Protein kinase-like protein SgK071			
167359	Serine/threonine-protein kinase NIM1			
158056	Apical endosomal glycoprotein Precursor		5	
149233	Interleukin-23 receptor Precursor			
144100	Pleckstrin homology domain-containing family A member 7		7	
79648	Microcephalin		7	
392636	Transmembrane protein 195			
391475	Dystrotelin			
133522	Peroxisome proliferator-activated receptor gamma coactivator 1-beta		10	
127247	Ankyrin repeat and SOCS box protein 17			
126637	Trichohyalin-like protein 1 (Basalin)			
120863	DEP domain-containing protein 4			
165829	Probable G-protein coupled receptor 156			
147920	Insulin growth factor-like family member 2 Precursor			
147463	Ankyrin repeat domain-containing protein 29		5	
140803	Transient receptor potential cation channel subfamily M member 6			
401399	hypothetical protein LOC401399			
401172	hypothetical protein LOC401172			
390667	Neuronal pentraxin-like protein C16orf38 Precursor			
132228	Uncharacterized protein C3orf45		4	
131177	Protein FAM3D Precursor			
125704	Uncharacterized protein C18orf51			
118427	Noelin-3 Precursor (Olfactomedin-3)			
113730	Kelch domain-containing protein 7B			
112817	Dihydrodipicolinate synthase-like, mitochondrial Precursor			
57705	Protein WDFY4			
649201	-			
645434	-			
645101	-			
162083	Protein TNT			
151835	Copine-9			
146754	Dynein heavy chain 2, axonemal			
138882	Olfactory receptor 1N2			
400966	RANBP2-like and GRIP domain-containing protein 1			
390079	Olfactory receptor 52E8			
116379	Interleukin-22 receptor subunit alpha-2 Precursor			
112399	Egl nine homolog 3			
57619	Protein Shroom3			
647310	-			
647055	-			
644662	-		4	
158809	Melanoma-associated antigen B6			
150372	NFAT activation molecule 1 Precursor			
150084	Immunoglobulin superfamily member 5			
145773	Protein FAM81A			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
137994	LETM1 domain-containing protein LETM2, mitochondrial Precursor		5	
135932	Transmembrane protein 139 Precursor			
400509	RUN domain-containing protein 2B			
389419	-			
389208	Transmembrane protease, serine 11F			
127707	Kelch domain-containing protein 7A			
123228	Sentrin-specific protease 8			
121793	Uncharacterized protein C13orf16			
115701	Alpha-protein kinase 2			
93166	Putative histone-lysine N-methyltransferase PRDM6			
100291058	-			
100290334	-			
100289232	XK-related protein 3			
729570	-		8	
729468	-			
728621	Prefoldin subunit 6-like protein		8	
728510	-			
284	Angiopoietin-1 Precursor			
100288699	-			
100288232	-			
100287751	-			
100287308	-			
643479	Protein FAM25			
442676	-		5	
100290968	-		4	
100290859	-			
100290257	-			
100289617	-		7	
100289566	-			
100289151	-		9	
729201	Sperm acrosome-associated protein 5 Precursor			
728279	Putative keratin-associated protein ENSP00000381495			
-	T-cell surface glycoprotein CD3 epsilon chain Precursor			
100288672	-			
100288169	-		4	
100287691	-			
441495	-			
441123	-			
-	-			
100290755	-			
100290678	-		4	
100290075	-			
100290023	-		4	
100289469	-			
100289009	-			
729069	-		4	
728116	Zinc finger and BTB domain-containing protein 8			
727944	-			
100288505	-			
100287981	-			
100287499	-			
79841	Cytosolic carboxypeptidase 2			
642127	Putative TAF11-like protein ENSP00000332601			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
574537	-			
440854	Calpain-14		6	
100290496	-			
100288894	-			
100288835	-			
728724	-			
727857	Class B basic helix-loop-helix factor 42			
100288441	Putative uncharacterized protein C14orf144 Precursor		6	
100288361	-			
100287877	-			
100287362	-			
100286928	-			
504180	Beta-defensin 105 Precursor			
440087	Uncharacterized protein C12orf69			
414325	Beta-defensin 103 Precursor			
10499	Nuclear receptor coactivator 2		9	
123036	Tandem C2 domains nuclear protein			
5232	Phosphoglycerate kinase 2		4	
778	Voltage-dependent L-type calcium channel subunit alpha-1F		4	
-	Neutrophil cytosol factor 2			
-	15-hydroxyprostaglandin dehydrogenase [NAD+]			
4618	Myogenic factor 6		9	
8419	Phakinin			
-	SID1 transmembrane family member 1 Precursor			
81025	Gap junction alpha-9 protein		6	
53842	Claudin-22			
-	Metabotropic glutamate receptor 4 Precursor			
3670	Insulin gene enhancer protein ISL-1		11	
2488	Follitropin subunit beta Precursor		4	
8927	Protein bassoon			
386618	BTB/POZ domain-containing protein KCTD4			
-	Extracellular calcium-sensing receptor Precursor		6	
6658	Transcription factor SOX-3			
10941	UDP-glucuronosyltransferase 2A1 Precursor		6	
7350	Mitochondrial brown fat uncoupling protein 1			
-	Catenin delta-2			
10008	Potassium voltage-gated channel subfamily E member 3		8	
-	Nociceptin receptor		6	
-	Nucleolar protein 4			
56253	Cytotoxic and regulatory T-cell molecule Precursor		6	
3783	Intermediate conductance calcium-activated potassium channel protein 4		6	
80032	Zinc finger protein 556		17	
116071	Basic leucine zipper transcriptional factor ATF-like 2		8	
23101	Probable guanine nucleotide exchange factor MCF2L2			
345557	Phosphatidylinositol-specific phospholipase C X domain-containing protein 3		9	
-	retinitis pigmentosa 1-like 1		5	
116444	Glutamate [NMDA] receptor subunit 3B Precursor		6	
58158	Neurogenic differentiation factor 4		10	
26476	Olfactory receptor 10J1			
3008	Histone H1.4			
219409	GS homeobox 1			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
160287	L-lactate dehydrogenase A-like 6A			
-	Zinc finger MYND domain-containing protein 10			
126638	Repetin			
-	-		6	
-	Cytosolic carboxypeptidase 2			
-	ADP-ribosylation factor-like protein 13A			
117156	Secretoglobin family 3A member 2 Precursor			
474354	Leucine-rich repeat-containing protein 18			
266747	Ral-GDS-related protein		5	
146857	Schlafen family member 13			
79925	Sperm flagellar protein 2			
51043	Zinc finger and BTB domain-containing protein 7B		7	
-	2-amino-3-carboxymuconate-6-semialdehyde decarboxylase			
7915	Succinate-semialdehyde dehydrogenase, mitochondrial Precursor		6	
348938	Ichthyin			
-	Noelin-3 Precursor			
145501	Thrombospondin and AMOP domain-containing isthmin-like protein 1 Precursor		7	
89944	Beta-galactosidase-1-like protein 2 Precursor		5	
84504	Homeobox protein Nkx-6.2			
160428	Probable 10-formyltetrahydrofolate dehydrogenase ALDH1L2		9	
120066	Olfactory receptor 5P3			
342667	SH3 and cysteine-rich domain-containing protein 2		4	
57481	Uncharacterized protein KIAA1210		4	
-	LIM/homeobox protein Lhx8			
84332	DPY30 domain-containing protein 2			
-	Protein-cysteine N-palmitoyltransferase HHAT-like protein			
653192	Tripartite motif-containing protein 43			
9723	Semaphorin-3E Precursor			
-	Guanylate cyclase soluble subunit alpha-3			
341640	FRAS1-related extracellular matrix protein 2 Precursor		5	
158248	Tetratricopeptide repeat protein 16			
146330	F-box/LRR-repeat protein 16		8	
92241	Capz-interacting protein			
142685	Ankyrin repeat and SOCS box protein 15			
10777	cAMP-regulated phosphoprotein 21			
-	Kallikrein-7 Precursor			
7442	Transient receptor potential cation channel subfamily V member 1			
340206	Trem-like transcript 3 protein Precursor			
283677	Uncharacterized protein C15orf60			
-	Uncharacterized protein C12orf71			
9951	Heparan sulfate glucosamine 3-O-sulfotransferase 4			
387332	TATA box-binding protein-like protein 2			
388698	Filaggrin-2			
646486	Probable fatty acid-binding protein ENSP00000353650			
219447	Olfactory receptor 5AS1			
390155	Olfactory receptor 5T1			
-	cDNA FLJ40178 fis, clone TEST12017932			
-	Putative uncharacterized protein C3orf56		4	
163071	Zinc finger protein 114			
1608	Diacylglycerol kinase gamma			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	POM121-like 1 protein		5	
-	Putative uncharacterized protein			
100129038	-			
-	Uncharacterized protein ENSP00000353084 Fragment		5	
-	Putative protein TPRXL			
222659	Peroxisomal testis-specific protein 1			
100129726	MGC40574 protein			
100127933	-		7	
-	-		4	
344018	Factor in the germline alpha			
645191	Leucine-rich repeat and immunoglobulin-like domain-containing nogo receptor-interacting protein 3 Precursor			
-	Coiled-coil domain-containing protein 154			
-	-			
-	Seven transmembrane helix receptor		4	
132625	Zinc finger protein 42 homolog			
401474	Sterile alpha motif domain-containing protein 12			
6557	Solute carrier family 12 member 1		4	
3009	Histone H1.5		8	
25834	Alpha-1,3-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase C			
-	-			
-	-			
-	Uncharacterized protein C18orf20 Precursor			
-	Carcinoembryonic antigen-related cell adhesion molecule 16 Precursor		4	
167826	Oligodendrocyte transcription factor 3			
-	cDNA FLJ40194 fis, clone TEST12019481FLJ40194 protein			
-	Putative uncharacterized protein MGC163334		5	
-	-			
-	Voltage-dependent R-type calcium channel subunit alpha-1E			
-	Putative FetA-like protein			
-	Coiled-coil domain-containing protein FLJ25770			
5132	Phosducin			
6440	Pulmonary surfactant-associated protein C Precursor		5	
10326	Signal-regulatory protein beta-1 isoform 3 Precursor		4	
8224	Synapsin-3			
-	-			
414157	Uncharacterized protein C10orf62			
342357	Zinc finger protein with KRAB and SCAN domains 2			
9098	Ubiquitin carboxyl-terminal hydrolase 6			
342125	Transmembrane channel-like protein 3			
403284	Olfactory receptor 6C68			
81318	Olfactory receptor 4A5			
343066	Arylacetamide deacetylase-like 4			
5673	Pregnancy-specific beta-1-glycoprotein 5 Precursor			
9536	Prostaglandin E synthase			
9750	Protein FAM65B		4	
114784	CUB and sushi domain-containing protein 2		7	
57713	Scm-like with four MBT domains protein 2			
376132	Leucine-rich repeat-containing protein 10			
138799	Olfactory receptor 13C5			
445328	Rho guanine nucleotide exchange factor 5-like protein			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
158401	Uncharacterized protein C9orf84			
79748	Protein ERGIC-53-like Precursor			
-	Protein arginine N-methyltransferase 8		4	
55613	Myotubularin-related protein 8			
57585	Protein cramped-like		10	
23040	Myelin transcription factor 1-like protein			
146722	CMRF35-like molecule 1 Precursor			
-	Regulator of G-protein signaling 7			
716	Complement C1s subcomponent Precursor		6	
6588	Sarcolipin			
4094	Transcription factor Maf		10	
624	B2 bradykinin receptor		10	
190	Nuclear receptor subfamily 0 group B member 1		24	
6751	Somatostatin receptor type 1		5	
6568	Sodium-dependent phosphate transport protein 1			
3587	Interleukin-10 receptor alpha chain Precursor		5	
4246	Mammaglobin-B Precursor			
4023	Lipoprotein lipase Precursor			
3773	Inward rectifier potassium channel 16			
125	Alcohol dehydrogenase 1B			
2830	Sphingosine 1-phosphate receptor GPR6			
3959	Galectin-3-binding protein Precursor		4	
3741	Potassium voltage-gated channel subfamily A member 5		12	
717	Complement C2 Precursor			
72	Actin, gamma-enteric smooth muscle			
2788	Phosphatidylinositol-5-phosphate 4-kinase type2 alpha		4	
3689	Integrin beta-2 Precursor		6	
239	Arachidonate 12-lipoxygenase, 12S-type			
51311	Toll-like receptor 8 Precursor			
11009	Interleukin-24 Precursor			
7287	Tubby-related protein 1			
11199	Annexin A10		4	
8632	-			
7512	Xaa-Pro aminopeptidase 2 Precursor			
4688	Neutrophil cytosol factor 2			
4321	Macrophage metalloelastase Precursor			
100132015	-		8	
4283	C-X-C motif chemokine 9 Precursor			
10942	Testisin Precursor		5	
10321	Cysteine-rich secretory protein 3 Precursor			
7130	Tumor necrosis factor-inducible gene 6 protein Precursor			
6911	T-box transcription factor TBX6		4	
7694	Zinc finger protein 135		5	
4477	Beta-microseminoprotein Precursor			
4158	Adrenocorticotrophic hormone receptor			
83550	Probable G-protein coupled receptor 101			
81442	Olfactory receptor 6N2		5	
81029	Protein Wnt-5b Precursor			
80164	-			
79853	Transmembrane 4 L6 family member 20			
54814	GlutaminyI-peptide cyclotransferase-like protein		4	
54221	Gamma-2-syntrophin			
55200	Pleckstrin homology domain-containing family G member 6		5	
80728	Uncharacterized protein KIAA1688		16	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
54662	TBC1 domain family member 13			6
53904	Myosin IIIA			
54970	Tetratricopeptide repeat protein 12			10
22866	Connector enhancer of kinase suppressor of ras 2			
79983	Protein POF1B			
79953	Transmembrane protein 90B			
54886	Lipid phosphate phosphatase-related protein type 1			
23019	CCR4-NOT transcription complex subunit 1			5
22798	Laminin subunit beta-4 Precursor			
79908	Butyrophilin-like protein 8 Precursor			
79883	Podocan-like protein 1 Precursor			
79689	Metalloreductase STEAP4			
54502	RNA-binding protein 47			
54466	Spindlin-2A			
55582	Kinesin-like protein KIF27			12
55258	Threonine synthase-like 2			
22953	P2X purinoceptor 2			
100128619	-			5
768329	-			
257396	-			10
221481	Uncharacterized protein C6orf81			5
200958	Mucin-20 Precursor			
342933	Zinc finger and SCAN domain-containing protein 5B			
319100	Trace amine-associated receptor 6			
286238	-			5
92285	Zinc finger protein 585B			5
89790	Sialic acid-binding Ig-like lectin 10 Precursor			
84824	Fc receptor-like A Precursor			
100128327	Trafficking protein particle complex subunit 3-like protein			
730242	-			
283685	-			
255189	Cytosolic phospholipase A2 zeta			
221322	Uncharacterized protein C6orf170			4
200162	Sperm-associated antigen 17			
199786	Niban-like protein 2			
340554	Probable ribonuclease ZC3H12B			
285973	Autophagy-related protein 9B			
91584	Plexin-A4 Precursor			
85452	Uncharacterized protein C1orf222			
84144	Rho GTPase-activating protein SYDE2			
100128163	-			
100128088	Putative uncharacterized protein Fragment			
283461	Uncharacterized protein C12orf40			
254268	Uncharacterized protein C1orf62			
219487	-			
197135	protein associated with topoisomerase II homolog 2			
340069	Protein FAM170A			
285315	Uncharacterized protein C3orf33			20
285016	Protein FAM150B Precursor			
83988	Neurocalcin-delta			
100127998	-			
100127920	-			
729966	-			
259285	Taste receptor type 2 member 39			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
222611	Probable G-protein coupled receptor 111			
204219	LAG1 longevity assurance homolog 3			
284648	-			
84457	Phytanoyl-CoA hydroxylase-interacting protein-like			
83850	Extended synaptotagmin-3			
55612	Fermitin family homolog 1			
419	Ecto-ADP-ribosyltransferase 3 Precursor			
23305	Long-chain-fatty-acid-CoA ligase 6			
100292541	-			
100292156	-		6	
9499	Myotilin			
100130345	-			
100129335	Leucine-rich repeat-containing protein ENSP00000371558			
100293526	-			
100133408	-			
100132168	-			
100131271	-			
389125	Musculoskeletal embryonic nuclear protein 1		7	
388942	-			
100293005	-			
100292482	-		5	
100292033	-			
100291554	-		6	
100291473	-			
100130086	Heat shock transcription factor, X-linked			
100129129	-			
100133189	-			
100133008	-		6	
100131009	-			
388649	Uncharacterized protein C1orf146			
388512	C-type lectin and transmembrane domain-containing protein FLJ45910			
353132	Late cornified envelope protein 1B			
152015	Ropporin-1B			
100291878	-			
100129733	-			
100129035	-			
100293275	-		4	
100133844	-			
100132891	-			
100131639	-			
100130828	-		4	
387914	Protein shisa-2 homolog Precursor		5	
387638	Putative uncharacterized protein C10orf113			
4619	Myosin-1		4	
100292677	-		5	
100291268	-			
100291212	-			
100129652	-	6		
100129532	PXMP2 protein		4	
100293173	-			
100133747	-			
100133659	-			
100132364	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100131426	-			
100130522	hypothetical protein LOC100130522 isoform 2		5	
375791	UPF0574 protein C9orf169		8	
347088	-			
-	Neurexophilin-2 Precursor			
9508	A disintegrin and metalloproteinase with thrombospondin motifs 3 Precursor		7	
266	Amelogenin, Y isoform Precursor			
11126	CD160 antigen Precursor			
5026	P2X purinoceptor 5			
944	Tumor necrosis factor ligand superfamily member 8			
53833	Interleukin-20 receptor beta chain Precursor		11	
126364	Leucine-rich repeat-containing protein 25 Precursor			
100294446	-			
100293966	-			
100293914	-			
100293561	-			
5741	Parathyroid hormone Precursor		3	
6694	Secreted phosphoprotein 24 Precursor			
10871	CMRF35-like molecule 6 Precursor			
7100	Toll-like receptor 5 Precursor			
3821	NKG2-A/NKG2-B type II integral membrane protein			
7439	Bestrophin-1			
5067	Contactin-3 Precursor			
-	Sialic acid-binding Ig-like lectin 10 Precursor			
100294391	-		4	
100293879	-		4	
100293453	-			
434	Agouti-signaling protein Precursor			
10100	Tetraspanin-2			
9899	Synaptic vesicle glycoprotein 2B			
6580	Solute carrier family 22 member 1			
6546	Sodium/calcium exchanger 1 Precursor			
2527	Alpha-(1,3)-fucosyltransferase			
344838	Progesterin and adipoQ receptor family member 9		12	
83661	Membrane-spanning 4-domains subfamily A member 8B		5	
-	Uroplakin-3B Precursor (p35)		5	
50852	T-cell receptor-associated transmembrane adapter 1			
100294302	-			
100293695	-			
100293322	-			
81494	Complement factor H-related protein 5 Precursor			
-	Alpha-S1-casein Precursor		5	
118856	Matrix metalloproteinase-21 Precursor			
158800	Rhox homeobox family member 1			
-	Sodium/potassium/calcium exchanger 2 Precursor			
-	Multidrug resistance-associated protein 6			
100294471	Putative uncharacterized protein C14orf144 Precursor			
100294103	-			
100294036	-			
100293598	-			
100293213	-		6	
90506	Leucine-rich repeat-containing protein 46		8	
4110	Melanoma-associated antigen 11			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
153657	Tetratricopeptide repeat protein 23-like			
-	Putative transmembrane protein MGC5590		7	
3227	Homeobox protein Hox-C11		5	
57453	Down syndrome cell adhesion molecule-like protein 1 Precursor		7	
7288	Tubby-related protein 2		11	
83844	Ubiquitin carboxyl-terminal hydrolase 26			
55821	Probable allantoinase			
201780	Sodium/bile acid cotransporter 4			
1068	Centrin-1		4	
-	-			
92747	Long palate, lung and nasal epithelium carcinoma-associated protein 1 Precursor			
63948	Doublesex- and mab-3-related transcription factor B1			
5535	Calcineurin subunit B type 2		6	
-	Putative protein FAM170B		5	
-	-		4	
140290	T-complex protein 10A homolog 2		10	
1690	Cochlin Precursor		5	
63923	Tenascin-N Precursor			
81696	Olfactory receptor 12D3			
4146	Cartilage matrix protein Precursor			
-	Uncharacterized protein ENSP00000340206			
-	Seven transmembrane helix receptor			
-	Cytochrome c oxidase polypeptide 7B2, mitochondrial Precursor			
64591	Testis-specific Y-encoded protein 2			
-	Putative cytochrome P450 2G1-like protein			
-	Putative zinc finger protein ENSP00000292633		8	
100133774	Sodium/glucose cotransporter 5			
402317	Olfactory receptor 2A1/2A42			
285596	Protein FAM153A			
81697	Olfactory receptor 2B2			
730249	Immune-responsive gene 1 protein homolog			
59272	Angiotensin-converting enzyme 2 Precursor			
130399	Activin receptor type-1C Precursor		5	
100134052	Ubiquitin associated and SH3 domain-containing protein A			
138881	Olfactory receptor 1L8			
-	Sodium channel protein type 9 subunit alpha		5	
-	Keratin, type II cytoskeletal 80			
8495	Liprin-beta-2		4	
80243	Phosphatidylinositol 3,4,5-trisphosphate-dependent Rac exchanger 2 protein			
-	Protein SERAC1		10	
525	V-type proton ATPase subunit B, kidney isoform			
-	Olfactory receptor 51I2			
-	Uncharacterized protein ENSP00000343074			
7565	Zinc finger protein 17		6	
-	-			
391104	Von Hippel-Lindau-like protein		6	
-	-			
122748	Olfactory receptor 11H6			
344758	Probable G-protein coupled receptor 149			
57124	Endosialin Precursor		7	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
123264	Organic solute transporter subunit beta			
374973	Uncharacterized protein C1orf223			
246329	SH3 and cysteine-rich domain-containing protein 3			9
284340	VEGF co-regulated chemokine 1 Precursor			4
378807	Cation channel sperm-associated protein 4			
653203	Uncharacterized protein ENSP00000341636			
729173	cDNA FLJ39662 fis, clone SMINT2007140			
-	-			
143496	Olfactory receptor 52B4			
6288	Serum amyloid A protein Precursor			4
1742	Disks large homolog 4			7
6718	3-oxo-5-beta-steroid 4-dehydrogenase			
338398	Taste receptor type 2 member 60			
162540	Signal peptide peptidase-like 2C Precursor			8
283726	Protein FAM154B			4
-	Putative uncharacterized protein C1orf157			4
81392	Olfactory receptor 2AE1			6
643677	Putative uncharacterized protein FLJ40176			11
119765	Olfactory receptor 4B1			
100134384	Coiled-coil domain-containing protein 63			5
5357	Plastin-1			
-	Uncharacterized protein C4orf40 Precursor			
-	WD repeat domain 86			
-	-			
-	Putative C-type lectin domain-containing protein FLJ44005			
645104	Clarin-2			
644070	Putative germ cell-specific gene 1-like protein 2 Precursor			
259287	Taste receptor type 2 member 41			
-	-			
220359	Tigger transposable element-derived protein 3			
219959	Olfactory receptor 1S1			
390431	Olfactory receptor 4K2			
-	Indoleamine 2,3-dioxygenase-like protein 1			
2840	Uracil nucleotide/cysteinyl leukotriene receptor			
-	Thioredoxin domain-containing protein 6			
26027	Acyl-coenzyme A thioesterase 11			4
222235	F-box/LRR-repeat protein 13			
-	cDNA FLJ45964 fis, clone PLACE7014396			
-	Olfactory receptor 10G4			
653240	Keratin-associated protein 4-8			
129852	Uncharacterized protein C2orf73			
-	SIGLECP3 protein Fragment			
-	-			4
-	Protocadherin Fat 3 Precursor			6
-	Disintegrin and metalloproteinase domain-containing protein 7 Precursor			
115111	Anion exchange transporter			
389558	Protein FAM180A Precursor			
-	Olfactory receptor 52K2			
728765	Keratin, type I cytoskeletal 39			
5275	Serpin B13			
55016	E3 ubiquitin-protein ligase MARCH1			
10655	Doublesex- and mab-3-related transcription factor 2			
142679	Dual specificity protein phosphatase 19			8

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-			
441911	Olfactory receptor 10J3		4	
729767	Carcinoembryonic antigen-related cell adhesion molecule 18 Precursor			
5923	Ras-specific guanine nucleotide-releasing factor 1			
2719	Glypican-3 Precursor			
2330	Dimethylaniline monooxygenase [N-oxide-forming] 5			
2138	Eyes absent homolog 1		4	
1949	Ephrin-B3 Precursor		5	
4878	Atrial natriuretic factor Precursor			
1414	Beta-crystallin B1			
1184	H(+)/Cl(-) exchange transporter 5			
969	Early activation antigen CD69			
2074	DNA excision repair protein ERCC-6		5	
1859	Dual specificity tyrosine-phosphorylation-regulated kinase 1A			
1832	Desmoplakin			
5079	Paired box protein Pax-5			
1638	L-dopachrome tautomerase Precursor			
1610	D-amino-acid oxidase		7	
1395	Corticotropin-releasing factor receptor 2 Precursor			
1128	Muscarinic acetylcholine receptor M1			
2567	Gamma-aminobutyric acid receptor subunit gamma-3 Precursor			
2205	High affinity immunoglobulin epsilon receptor subunit alpha Precursor		7	
2018	Homeobox protein EMX2			
1813	D(2) dopamine receptor			
1794	Dedicator of cytokinesis protein 2			
5194	Peroxisomal membrane protein PEX13			
5021	Oxytocin receptor			
4810	Nance-Horan syndrome protein			
886	Cholecystokinin receptor type A			
5774	Tyrosine-protein phosphatase non-receptor type 3			
2533	FYN-binding protein			
2185	Protein tyrosine kinase 2 beta			
2166	Fatty-acid amide hydrolase 1			
1996	ELAV-like protein 4			
1768	Dynein heavy chain 6, axonemal			
1259	cGMP-gated cation channel alpha-1			
1014	Cadherin-16 Precursor			
27237	Rho guanine nucleotide exchange factor 16			
10224	Zinc finger protein 443		4	
10050	Putative small intestine sodium-dependent phosphate transport protein			
9849	Zinc finger protein 518A		13	
9666	E3 ubiquitin-protein ligase DZIP3		12	
23493	Hairy/enhancer-of-split related with YRPW motif protein 2			
9462	Ras GTPase-activating protein nGAP			
9228	Disks large-associated protein 2			
9038	Trace amine-associated receptor 5			
27101	Calcyclin-binding protein		7	
9829	Putative tyrosine-protein phosphatase auxilin			
6323	Sodium channel protein type 1 subunit alpha			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
8988	Heat shock protein beta-3			
5454	POU domain, class 3, transcription factor 2			
5274	Neuroserpin Precursor		9	
9783	Regulating synaptic membrane exocytosis protein 3			
9758	FERM and PDZ domain-containing protein 4			
9595	Cytohesin-interacting protein			
6263	Ryanodine receptor 3			
9127	P2X purinoceptor 6			
8942	Kynureninase		22	
8715	Nucleolar protein 4			
9737	G-protein coupled receptor-associated sorting protein 1			
9708	Protocadherin gamma-A8 Precursor			
23316	Homeobox protein cut-like 2			
9108	Myotubularin-related protein 7			
9087	Thymosin beta-4, Y-chromosomal			
8858	Vitamin K-dependent protein Z Precursor			
8671	Electrogenic sodium bicarbonate cotransporter 1			
79625	Fibronectin type-III domain-containing protein C4orf31 Precursor			
78989	Collectin-11 Precursor			
29122	Testis-specific protease-like protein 50 Precursor			
56137	Protocadherin alpha-12 Precursor			
56108	-			
26279	Group IID secretory phospholipase A2 Precursor			
25981	Dynein heavy chain 1, axonemal			
79370	Apoptosis facilitator Bcl-2-like 14 protein			
65988	KRAB domain-containing protein ZNF747		6	
30817	EGF-like module-containing mucin-like hormone receptor-like 2 Precursor		6	
28985	Malignant T cell amplified sequence 1			
57198	Probable phospholipid-transporting ATPase ID		6	
25891	Inactive serine protease RAMP Precursor			
65065	Neurobeachin-like protein 1			
59339	Pleckstrin homology domain-containing family A member 2			
50937	Cell adhesion molecule-related/down-regulated by oncogenes Precursor			
29958	Dimethylglycine dehydrogenase, mitochondrial Precursor			
29930	Protocadherin beta-1 Precursor			
57139	Ral guanine nucleotide dissociation stimulator-like 3		9	
56833	SLAM family member 8 Precursor			
56666	Pannexin-2		14	
55885	LIM domain only protein 3			
26108	Pygopus homolog 1		6	
25830	Sulfotransferase 4A1			
23569	Protein-arginine deiminase type-4			
64857	Pleckstrin homology domain-containing family G member 2			
64802	Nicotinamide mononucleotide adenylyltransferase 1			
64109	Cytokine receptor-like factor 2 Precursor			
50837	Taste receptor type 2 member 7			
50801	Potassium channel subfamily K member 4			
27330	Ribosomal protein S6 kinase alpha-6			
56413	Leukotriene B4 receptor 2		5	
26038	Chromodomain-helicase-DNA-binding protein 5			
653879	Complement C3 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
646865	-			
646626	-		6	
169611	Olfactomedin-like protein 2A Precursor			
155465	Anterior gradient protein 3 homolog Precursor			
149281	Methyltransferase-like protein 11B			
148534	Transmembrane protein 56			
403253	Putative olfactory receptor 4A4			
401940	PRAME family member 3			
392862	Delphinin			
391712	Putative tripartite motif-containing protein 61		8	
133558	Uncharacterized protein FLJ40243			
127255	Leucine-rich repeat and IQ domain-containing protein 3			
120892	Leucine-rich repeat serine/threonine-protein kinase 2			
114827	Forkhead-associated domain-containing protein 1			
652215	-			
646268	-			
165904	Xin actin-binding repeat-containing protein 1			
164656	Transmembrane protease, serine 6			
154288	ES cell-associated transcript 1 protein			
152940	Uncharacterized protein C4orf45			
147645	LOC147645 protein Fragment			
401180	-			
390748	Embryonic polyadenylate-binding protein 2			
132332	Protein TMEM155 Precursor			
131368	Zona pellucida-like domain-containing protein 1 Precursor			
651610	Serine-protein kinase ATM			
649264	-			
645435	-			
645121	Cyclin I2			
151254	Amyotrophic lateral sclerosis 2 chromosomal region candidate gene 11 protein			
146779	EF-hand calcium-binding domain-containing protein 3			
139067	Sperm protein associated with the nucleus on the X chromosome N3			
400986	UPF0634 protein C			
400757	Uncharacterized protein C1orf141			
390110	1-aminocyclopropane-1-carboxylate synthase-like protein 2			
389813	similar to CG15216-PA		4	
124411	Putative protein ZNF720			
644672	claudin-like		6	
644316	-			
158830	Uncharacterized protein LOC158830			
150094	Serine/threonine-protein kinase SIK1			
138046	RNA-binding Raly-like protein			
135935	Homeobox protein NOBOX			
400550	-			
399968	Prostate and testis expressed protein 4 Precursor			
389421	Lin-28 homolog B		4	
128414	Sodium/potassium-transporting ATPase subunit beta-1-interacting protein 4			
127795	Uncharacterized protein C1orf87			
123591	Transmembrane protein C15orf27		4	
121906	-			
115708	tRNA			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
114900	Complement C1q tumor necrosis factor-related protein 4 Precursor		4	
100291071	-		6	
100290430	-			
100289818	-			
100289720	-			
100289270	-			
100289236	-			
729475	RAD51-associated protein 2			
728528	-			
-	Collectin-11 Precursor		8	
100288701	-		4	
100287812	-			
100287310	-			
442721	Leiomodlin-2		7	
100290892	-		4	
100290173	-			
100289089	-			
729296	-			
729204	-			
728434	-			
728283	-			
100287622	-			
642597	hypothetical protein LOC642597			
100290765	-			
100289521	-			
100289020	-			
729076	-		5	
728927	cDNA FLJ57041, moderately similar to Zinc finger protein 92			
728129	Putative LRRC3-like protein ENSP00000367157 Precursor			
100288565	-			
100287553	Putative uncharacterized protein UNQ6494/PRO21346 Precursor			
100287050	-			
642131	Putative V-set and immunoglobulin domain-containing protein 6 Precursor			
440918	-			
440411	-			
100290612	-			
100290506	-			
100289955	-		6	
100289387	-			
100288836	-		5	
728806	-		4	
728730	-			
100288382	-			
100287933	-		5	
100287432	-			
100286939	-		4	
100190949	Uncharacterized protein ENSP00000340795			
440119	-			
414332	Epididymal-specific lipocalin-10 Precursor			
148281	Synaptotagmin-6		9	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
646862	-			
779	Voltage-dependent L-type calcium channel subunit alpha-1S			
4656	Myogenin		6	
26281	Fibroblast growth factor 20		5	
6037	Eosinophil cationic protein Precursor		7	
8687	Keratin, type I cuticular Ha8		5	
-	Metabotropic glutamate receptor 7 Precursor			
7490	Wilms tumor protein			
2520	Gastrin Precursor		8	
728464	UPF0624 protein C6orf186 Precursor			
3359	5-hydroxytryptamine receptor 3A Precursor		5	
5161	Pyruvate dehydrogenase E1 component subunit alpha, testis-specific form, mitochondrial Precursor			
2301	Forkhead box protein E3		9	
1582	Cytochrome P450 8B1		6	
-	Gamma-1-syntrophin			
10242	Calcium-activated potassium channel subunit beta-2			
3760	G protein-activated inward rectifier potassium channel 1		6	
-	Olfactory receptor 51I1		4	
-	-			
6975	Beta-tectorin Precursor			
64211	LIM/homeobox protein Lhx5			
2596	Neuromodulin		8	
57475	Pleckstrin homology domain-containing family H member 1			
729	Complement component C6 Precursor			
-	Ras-related protein Rab-41		4	
283160	Olfactory receptor 8D2			
2712	Glycerol kinase 2			
8929	Paired mesoderm homeobox protein 2B			
59067	Interleukin-21 Precursor		6	
283420	C-type lectin domain family 9 member A			
93034	Cytosolic 5'-nucleotidase 1B		5	
5455	POU domain, class 3, transcription factor 3			
7275	Tubby protein homolog		4	
127124	V-type proton ATPase subunit G 3			
84106	PML-RARA-regulated adapter molecule 1		6	
64170	Caspase recruitment domain-containing protein 9			
-	Uncharacterized protein C12orf59 Precursor			
-	Solute carrier family 22 member 25			
202333	Cardiomyopathy-associated protein 5		7	
171389	NACHT, LRR and PYD domains-containing protein 6		5	
-	SH2 domain-containing protein 1B			
9402	GRB2-related adapter protein 2			
29851	Inducible T-cell costimulator Precursor			
56163	RING finger protein 17			
8838	WNT1-inducible-signaling pathway protein 3 Precursor			
-	-			
-	Iroquois-class homeodomain protein IRX-5			
118430	Mucin-like protein 1 Precursor			
-	WD repeat-containing protein 64			
448831	Protein FRG2			
143879	Kelch repeat and BTB domain-containing protein 3			
133121	Ectonucleotide pyrophosphatase/phosphodiesterase family member 6 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
131034	Copine-4			
22986	VPS10 domain-containing receptor SorCS3 Precursor			
5156	Alpha-type platelet-derived growth factor receptor Precursor			
6289	serum amyloid A2 isoform a			
-	Transmembrane protein 182 Precursor			
285126	DnaJ homolog subfamily C member 5G			
79544	Olfactory receptor 4K1		4	
-	Prospero homeobox protein 2			
-	UPF0611 protein FAM169A			
84553	Uncharacterized protein C6orf168		5	
-	ZNF697 protein			
3798	Kinesin heavy chain isoform 5A			
152206	Coiled-coil domain-containing protein 13		6	
-	ATP-binding cassette transporter sub-family C member 9		6	
-	-		4	
347516	Diacylglycerol O-acyltransferase 2-like protein 6		6	
-	-			
338879	Ribonuclease-like protein 10 Precursor			
344752	Arylacetamide deacetylase-like 2 Precursor		5	
-	Uncharacterized protein ENSP00000370271			
-	Putative uncharacterized protein ENSP00000385364			
7932	olfactory receptor, family 2, subfamily H, member 2		10	
-	Gm140 Fragment			
-	-			
-	Uncharacterized protein ENSP00000258589			
-	LOC440700 protein			
114821	SCAN domain-containing protein 3			
-	-		9	
400120	Uncharacterized protein C13orf36			
201243	Uncharacterized protein C17orf74			
346389	SH3 domain-containing protein 7a5			
83733	Mitochondrial glutamate carrier 2			
1419	Gamma-crystallin B			
-	Putative uncharacterized protein			
-	Anthrax toxin receptor-like Precursor			
-	Tudor domain-containing protein 6			
-	EF-hand domain-containing protein C17orf37			
972	HLA class II histocompatibility antigen gamma chain			
124783	Uncharacterized protein C17orf46			
54988	Acyl-coenzyme A synthetase ACSM5, mitochondrial Precursor		6	
-	-			
219432	Olfactory receptor 4C6			
391112	Olfactory receptor 6Y1			
-	Uncharacterized protein ENSP00000328747			
23026	Myosin-XVI			
-	Seven transmembrane helix receptor			
284254	Uncharacterized protein C18orf26			
388633	Low-density lipoprotein receptor class A domain-containing protein 1			
-	cDNA FLJ42418 fis, clone BLADE2001987		4	
-	Uncharacterized protein C6orf201			
-	NADPH oxidase 1		6	
391194	Olfactory receptor 2M2			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
149018	Late cornified envelope-like proline-rich protein 1			
158798	A-kinase anchor protein 14			
-	-		5	
442186	olfactory receptor, family 2, subfamily J, member 3			
7273	titin isoform novex-3			
10762	Nucleoporin 50 kDa		6	
85235	Histone H2A type 1			
402317	Olfactory receptor 2A1/2A42			
-	Heparan-sulfate 6-O-sulfotransferase 2		8	
-	p53-associated parkin-like cytoplasmic protein			
140	Adenosine A3 receptor		5	
148641	Solute carrier family 35 member F3			
6753	Somatostatin receptor type 3			
7745	Zinc finger protein 192			
392138	Olfactory receptor 2A25			
339457	Uncharacterized protein C1orf222			
79659	Cytoplasmic dynein 2 heavy chain 1			
1421	Gamma-crystallin D			
124626	Zona pellucida-binding protein 2 Precursor			
-	Olfactory receptor 14A2			
7018	Serotransferrin Precursor			
6590	Antileukoprotease Precursor			
3316	Heat shock protein beta-2			
3071	Nck-associated protein 1-like			
2902	Glutamate [NMDA] receptor subunit zeta-1 Precursor			
4100	Melanoma-associated antigen 1			
827	Calpain-6			
173	Afamin Precursor			
6934	Transcription factor 7-like 2			
6569	Sodium-dependent phosphate transport protein 2A			
6540	Sodium- and chloride-dependent GABA transporter 2			
2867	Free fatty acid receptor 2			
3775	Potassium channel subfamily K member 1		10	
783	Voltage-dependent L-type calcium channel subunit beta-2			
758	Metallophosphoesterase domain-containing protein 1			
330	Baculoviral IAP repeat-containing protein 3			
147	Alpha-1B adrenergic receptor		4	
6688	Transcription factor PU.1			
6518	Solute carrier family 2, facilitated glucose transporter member 5			
3512	Immunoglobulin J chain			
3226	Homeobox protein Hox-C10			
2996	Glycophorin-E Precursor			
2977	Guanylate cyclase soluble subunit alpha-2			
2831	Neuropeptides B/W receptor type 1			
2813	Pancreatic secretory granule membrane major glycoprotein GP2 Precursor			
3748	Potassium voltage-gated channel subfamily C member 3			
3706	Inositol-trisphosphate 3-kinase A		6	
718	Complement C3 Precursor			
487	Sarcoplasmic/endoplasmic reticulum calcium ATPase 2		7	
100288773	-			
6633	Small nuclear ribonucleoprotein Sm D2			
2922	Gastrin-releasing peptide Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2765	Glycosyl-phosphatidylinositol-anchored molecule-like protein Precursor			
3898	Ladinin-1			4
3691	Integrin beta-4 Precursor			
443	Aspartoacylase			
240	Arachidonate 5-lipoxygenase			
10846	cAMP and cAMP-inhibited cGMP 3',5'-cyclic phosphodiesterase 10A			
10590	Secretagogen			
8633	Netrin receptor UNC5C Precursor			
7474	Protein Wnt-5a Precursor			
4666	Nascent polypeptide-associated complex subunit alpha			
51285	Ras-like protein family member 12			
10752	Neural cell adhesion molecule L1-like protein Precursor			
7201	Thyrotropin-releasing hormone receptor			
7164	Tumor protein D53			
11181	Trehalase Precursor			
8608	Retinol dehydrogenase 16			
7773	Zinc finger protein 222			4
10917	Butyrophilin-like protein 3 Precursor			
7104	Transmembrane 4 L6 family member 4			
6913	T-box transcription factor TBX15			6
11113	Citron Rho-interacting kinase			
8547	Ficolin-3 Precursor			
4543	Melatonin receptor type 1A			
10249	Glycine N-acyltransferase			
6869	Substance-P receptor			
4159	Melanocortin receptor 3			
83551	Trace amine-associated receptor 8			4
81491	Probable G-protein coupled receptor 63			
81030	Z-DNA-binding protein 1			
54437	Semaphorin-5B			
55532	Zinc transporter 10			
23120	Probable phospholipid-transporting ATPase VB			
80114	Protein bicaudal C homolog 1			
79782	Leucine-rich repeat-containing protein 31			
54097	Protein FAM3B Precursor			
53905	Dual oxidase 1 Precursor			
23251	UPF0258 protein KIAA1024	6		
23067	Histone-lysine N-methyltransferase SETD1B			
23046	Kinesin-like protein KIF21B			
80311	Kelch-like protein 15			
79987	Sushi, von Willebrand factor type A, EGF and pentraxin domain-containing protein 1 Precursor			
55286	Uncharacterized protein C4orf19			
54887	UHRF1-binding protein 1			
23186	REST corepressor 1			
22996	Tetratricopeptide repeat protein 39A			
79884	Microtubule-associated protein 9			15
51755	Cell division cycle 2-related protein kinase 7			
55259	Cancer susceptibility candidate protein 1			
55072	RING finger protein 31			4
54866	Protein phosphatase 1 regulatory subunit 14D			
54836	B box and SPRY domain-containing protein			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100128655	-		4	
100128556	-			
731996	-			
284111	Solute carrier family 13 member 5		5	
257407	Uncharacterized protein C2orf72 Precursor			
200959	gamma-aminobutyric acid (GABA) receptor, rho 3			
343641	Protein-glutamine gamma-glutamyltransferase 6			
342945	Zinc finger and SCAN domain-containing protein 22		5	
326624	Ras-related protein Rab-37		5	
92840	Receptor expression-enhancing protein 6		5	
92291	Calpain-13			
89795	Neuron navigator 3		14	
100287170	-		7	
730254	-		4	
255928	Synaptotagmin-14			
255193	chromosome 19 open reading frame 34			
221391	Opsin-5			
221074	Zinc transporter ZIP12			
100129800	-		5	
341418	Olfactory receptor 6C4			
340596	Lipoma HMGIC fusion partner-like 1 protein Precursor			
91646	Tudor domain-containing protein 12			
84197	Protein kinase-like protein SgK196			
730121	-			
283463	-			
283238	Solute carrier family 22 member 24			
220047	Coiled-coil domain-containing protein 83			
219537	Smoothelin-like protein 1			
81850	keratin associated protein 1-3			
340146	Solute carrier family 35 member D3			
339742	-			
285025	Coiled-coil domain-containing protein 141			
85021	RalBP1-associated Eps domain-containing protein 1		8	
84630	Tau-tubulin kinase 1			
84561	Solute carrier family 12 member 8		9	
84083	Zinc finger Ran-binding domain-containing protein 3			
83992	Cortactin-binding protein 2			
100128009	-			
282974	Serine/threonine-protein kinase 32C		18	
246181	Aflatoxin B1 aldehyde reductase member 4		7	
203102	Disintegrin and metalloproteinase domain-containing protein 32 Precursor		4	
191585	-			
339263	Uncharacterized protein C17orf51		10	
338756	-			
284654	R-spondin-1 Precursor			
284412	-			
90780	Pygopus homolog 2			
90326	THAP domain-containing protein 3			
84944	Protein maelstrom homolog			
83931	Serine/threonine-protein kinase 40		9	
-	Asialoglycoprotein receptor 2			
11096	A disintegrin and metalloproteinase with thrombospondin motifs 5 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100292542	Creatine kinase, ubiquitous mitochondrial Precursor			
100292100	-			
100291643	-			
100130357	Putative uncharacterized protein DKFZp686I05132			
100130228	CDNA FLJ26529 fis, clone KDN08784		6	
100134576	-			
100134360	-			
100133450	-			
100132184	-		6	
100131283	-			
388946	-			
375298	Ceramide kinase-like protein			
100292950	-		4	
100292444	-			
100130097	Novel protein Fragment			
100129958	-			
100129236	-			
100293413	-			
100134216	Mucin-3B Fragment			
100134123	-			
100133224	-			
100131014	-			
100130911	-			
388650	Protein FAM69A		10	
388551	Carcinoembryonic antigen-related cell adhesion molecule 16 Precursor			
374286	CMT1A duplicated region transcript 1 protein			
100292403	-			
100292331	-			
100291881	-			
100291356	-		5	
100129848	-			
100129773	-			
100128942	cDNA FLJ46600 fis, clone THYMU3047144			
100133959	-			
100133862	Rheumatoid factor RF-IP9 Fragment			
100132893	-			
100132779	-			
100130711	-		5	
387694	SH2 domain-containing protein 4B			
348751	-			
-	Myosin-2			
100291748	cDNA FLJ42903 fis, clone BRHIP3013765			
100291271	-		4	
100291218	-			
100129654	-		7	
100129538	-			
100128859	-			
100293175	-			
100133749	-			
100133661	-		4	
100130539	-		4	
347148	Orexigenic neuropeptide QRFP Precursor			
345611	Immunity-related GTPase family M protein			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Fetuin-B Precursor			
10143	C-type lectin domain family 3 member A Precursor		14	
1101	Chondroadherin Precursor		7	
23495	Tumor necrosis factor receptor superfamily member 13B		10	
8647	Bile salt export pump		8	
5169	Ectonucleotide pyrophosphatase/phosphodiesterase family member 3			
152831	Beta-klotho			
56659	Potassium channel subfamily K member 13			
100294448	-			
100293975	-		5	
5196	Platelet factor 4 Precursor		5	
10568	Sodium-dependent phosphate transport protein 2B			
7809	Barttin			
7173	Thyroid peroxidase Precursor			
3595	Interleukin-12 receptor beta-2 chain Precursor			
89822	Potassium channel subfamily K member 17			
53616	ADAM metallopeptidase domain 22 isoform 4 preproprotein		5	
100293829	Non-histone chromosomal protein HMG-17		6	
100293459	-			
7141	Spermatid nuclear transition protein 1		6	
2880	Epididymal secretory glutathione peroxidase Precursor			
1117	Chitinase-3-like protein 2 Precursor		7	
6550	Sodium/hydrogen exchanger 3			
2529	Alpha-(1,3)-fucosyltransferase			
859	Caveolin-3		4	
922	CD5 antigen-like Precursor		9	
-	Probable G-protein coupled receptor 144		7	
83795	Potassium channel subfamily K member 16			
-	Proline-rich transmembrane protein 1			
51046	Sia-alpha-2,3-Gal-beta-1,4-GlcNAc-R:alpha 2,8-sialyltransferase			
100293705	-			
100293326	-			
1448	Kappa-casein Precursor		9	
129080	EMI domain-containing protein 1 Precursor		3	
9196	Voltage-gated potassium channel subunit beta-3			
-	Excitatory amino acid transporter 2			
-	Ryanodine receptor 2			
1896	Ectodysplasin-A			
203562	Transmembrane protein 31		5	
-	Transmembrane gamma-carboxyglutamic acid protein 3 Precursor			
64102	Tenomodulin			
100294474	-			
100294135	-			
100294038	-			
100293643	-			
100293218	-			
7638	Zinc finger protein 221		7	
53822	FXYP domain-containing ion transport regulator 7			
-	Fructose-bisphosphate aldolase B			
117285	Beta-defensin 118 Precursor			
4113	Melanoma-associated antigen B2			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Gastric triacylglycerol lipase Precursor		8	
80853	JmjC domain-containing histone demethylation protein 1D		16	
56964	WD repeat-containing protein 93		5	
84530	Uncharacterized protein KIAA1853			
54514	Probable ATP-dependent RNA helicase DDX4			
57549	Protein turtle homolog A Precursor		7	
-	Annexin A10		6	
4155	Myelin basic protein			
121506	Endoplasmic reticulum resident protein ERp27 Precursor			
84692	Coiled-coil domain-containing protein 54			
56154	Testis-expressed sequence 15 protein			
8139	Gigaxonin		4	
7069	Thyroid hormone-inducible hepatic protein			
30820	Kv channel-interacting protein 1			
56124	Protocadherin beta-12 Precursor			
26248	Olfactory receptor 2K2			
125963	Olfactory receptor 1M1		6	
388381	Uncharacterized protein C17orf98			
64111	FMRFamide-related peptides Precursor			
161394	SAM domain-containing protein C14orf174			
112937	galactosidase, beta 1 like 3			
80336	Polyadenylate-binding protein 1-like		7	
-	-			
168090	Uncharacterized protein C6orf118			
136263	Uncharacterized protein C7orf45			
219429	Olfactory receptor 4C11			
284076	Tubulin polyglutamylase TTL6			
150590	Uncharacterized protein C2orf15			
83259	Protocadherin-11 Y-linked Precursor			
140628	Transcription factor GATA-5		5	
27253	Protocadherin-17 Precursor			
1669	Neutrophil defensin 4 Precursor			
1673	Beta-defensin 2 Precursor			
1469	Cystatin-SN Precursor			
-	Xin actin-binding repeat-containing protein 1		4	
222584	Protein FAM83B			
2196	Protocadherin Fat 2 Precursor			
-	Rho guanine nucleotide exchange factor 6			
55531	ELMO domain-containing protein 1			
57047	Phospholipid scramblase 2			
714	Complement C1q subcomponent subunit C Precursor			
-	-			
-	Ras association domain-containing protein 6			
81168	Olfactory receptor 8J3			
-	T-cell receptor beta V gene segment			
64168	N-terminal EF-hand calcium-binding protein 1		4	
-	PEX5-related protein			
57824	Minor histocompatibility protein HB-1			
-	Protein FAM59B		6	
-	Tensin-3		7	
5655	Kallikrein-10 Precursor		8	
121549	Achaete-scute homolog 4			
100133469	Putative uncharacterized protein HCG2042090		6	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
254773	Lysozyme g-like protein 2 Precursor			
283652	Sodium/potassium/calcium exchanger 5 Precursor			
79317	Olfactory receptor 4K5		4	
342908	Zinc finger protein 404			
282775	Olfactory receptor 5J2			
80759	KH homology domain-containing protein 1		7	
338949	Transmembrane protein 202			
337972	Keratin-associated protein 19-5		5	
138805	Olfactory receptor 13F1			
219438	Olfactory receptor 5D18			
-	Transmembrane protein FLJ23183			
26333	Olfactory receptor 7A17			
440435	Probable G-protein coupled receptor 179 Precursor			
255798	Uncharacterized protein C3orf43			
4629	Myosin-11			
-	Z-DNA-binding protein 1		4	
-	-			
338567	Potassium channel subfamily K member 18			
93273	LEM domain-containing protein 1			
158880	Ubiquitin carboxyl-terminal hydrolase 51			
353274	Zinc finger protein 445			
-	-			
-	Putative uncharacterized protein C21orf125			
-	-			
728597	Putative doublecortin domain-containing protein ENSP00000382097			
142827	Acyl-coenzyme A synthetase ACSM6, mitochondrial Precursor			
-	protein expressed in prostate, ovary, testis, and placenta 14			
171484	Protein FAM9C		8	
730908	BA251O17.3		6	
390326	Olfactory receptor 6C76			
-	Sarcalumenin Precursor			
338440	Anoctamin-9			
-	-			
3291	Corticosteroid 11-beta-dehydrogenase isozyme 2		5	
220416	Leucine-rich repeat-containing protein 63			
399716	Putative uncharacterized protein DKFZp667F0711 Fragment			
283985	Fatty acid desaturase 6		4	
353139	Late cornified envelope protein 2A			
341208	Hephaestin-like protein 1 Precursor			
730329	Putative WBSCR19-like protein 9		7	
-	Homeobox protein Nkx-3.1		6	
-	Uncharacterized protein ENSP00000383317		5	
2246	Heparin-binding growth factor 1 Precursor			
127254	Uncharacterized protein C1orf173			
3643	Insulin receptor Precursor		8	
153579	Butyrophilin-like protein 9 Precursor			
-	-		4	
390260	Olfactory receptor 6X1			
10861	Sulfate anion transporter 1		5	
932	Membrane-spanning 4-domains subfamily A member 3			
159963	Sodium-coupled monocarboxylate transporter 2		4	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Putative zinc finger protein ENSP00000383832			8
4632	Myosin light chain 1, skeletal muscle isoform			
79623	Polypeptide N-acetylgalactosaminyltransferase 14			4
284739	Proline-rich protein 17			6
-	Regulator of G-protein signaling protein-like			
285533	RING finger protein 175			5
-	Zinc finger protein 483			
-	Contactin-associated protein-like 5 Precursor			5
340811	Aldo-keto reductase family 1 member C-like protein 1			
5724	Platelet-activating factor receptor			5
2690	Growth hormone receptor Precursor			
2315	Melanoma antigen recognized by T-cells 1			
2139	Eyes absent homolog 2			
1902	Lysophosphatidic acid receptor 1			
5304	Prolactin-inducible protein Precursor			
5650	Kallikrein-7 Precursor			
2053	Epoxide hydrolase 2			4
4852	Neuropeptide Y Precursor			
1129	Muscarinic acetylcholine receptor M2			
925	T-cell surface glycoprotein CD8 alpha chain Precursor			
2568	Gamma-aminobutyric acid receptor subunit pi Precursor			
2206	High affinity immunoglobulin epsilon receptor subunit beta			
5023	P2X purinoceptor 1			
1586	Cytochrome P450 17A1			
1300	Collagen alpha-1(X) chain Precursor			
911	T-cell surface glycoprotein CD1c Precursor			
887	Gastrin/cholecystokinin type B receptor			
5152	High affinity cGMP-specific 3',5'-cyclic phosphodiesterase 9A			
4922	Neurotensin/neuromedin N Precursor			
1262	Cyclic nucleotide-gated cation channel alpha-4			
863	Protein CBFA2T3			
6401	E-selectin Precursor			
9229	Disks large-associated protein 1			
8814	Cyclin-dependent kinase-like 1			12
10158	PDZK1-interacting protein 1			
9628	Regulator of G-protein signaling 6			
9201	Serine/threonine-protein kinase DCLK1			4
8989	Transient receptor potential cation channel subfamily A member 1			
8788	Protein delta homolog 1 Precursor			
5493	Periplakin			
5276	Serpin I2 Precursor			
9760	Thymocyte selection-associated high mobility group box protein TOX			6
6039	Ribonuclease K6 Precursor			7
8908	Glycogenin-2			
26576	Serine/threonine-protein kinase SRPK3			
100291682	Putative uncharacterized protein ENSP00000374805			
23318	Zinc finger CCHC domain-containing protein 11			7
5174	Na(+)/H(+) exchange regulatory cofactor NHE-RF3			
64762	Protein FAM59A			10
64067	Neuronal PAS domain-containing protein 3			
50615	Interleukin-21 receptor Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
57491	Programmed cell death protein 6		6	
57016	Aldo-keto reductase family 1 member B10		42	
56977	Storkhead-box protein 2			
56138	Protocadherin alpha-11 Precursor			
56110	-			
26285	Claudin-17			
25984	Keratin, type I cytoskeletal 23			
79400	NADPH oxidase 5			
23671	Tomoregulin-2 Precursor			
50939	Interphotoreceptor matrix proteoglycan 2 Precursor			
28959	Transmembrane protein 176B			
57586	Synaptotagmin-13			
57172	Calcium/calmodulin-dependent protein kinase type 1G			
56667	Mucin-13 Precursor			
25854	Protein FAM149A		4	
23584	V-set and immunoglobulin domain-containing protein 2 Precursor		5	
64805	P2Y purinoceptor 12		4	
50838	Taste receptor type 2 member 13			
27290	Serine protease inhibitor Kazal-type 4 Precursor			
57113	Short transient receptor potential channel 7			
57091	Cas scaffolding protein family member 4			
55799	Voltage-dependent calcium channel subunit alpha-2/delta-3 Precursor			
23544	Seizure 6-like protein Precursor			
646627	-		5	
158158	RAS and EF-hand domain-containing protein			
148581	Ubiquitin-conjugating enzyme E2 U			
144203	-			
143279	Probable E3 ubiquitin-protein ligase HECTD2		9	
403257	Olfactory receptor 4C45			
401980	-			
126695	Uncharacterized protein C1orf172			
120939	Uncharacterized protein C12orf59 Precursor			
57834	Cytochrome P450 4F11			
653129	Tyrosine-protein phosphatase non-receptor type 20			
645937	-			
166012	Carbohydrate sulfotransferase 13			
164714	tubulin tyrosine ligase-like family, member 8			
153020	Ras-GEF domain-containing family member 1B			
147646	-		4	
140870	WAP four-disulfide core domain protein 6 Precursor			
401190	Regulator of G-protein signaling 7-binding protein			
391059	Ferric-chelate reductase 1			
390760	-			
132430	poly(A) binding protein, cytoplasmic 4-like			
131375	Lysozyme-like protein 4 Precursor			
126206	NACHT, LRR and PYD domains-containing protein 5			
125919	Zinc finger protein 543			
112885	PHD finger protein 21B			
649330	Heterogeneous nuclear ribonucleoprotein C-like 1			
645446	-		5	
645139	Polyadenylate-binding protein-interacting protein 1			
152098	Zinc finger CW-type PWWP domain protein 2		5	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
151258	Putative sodium-coupled neutral amino acid transporter 11			
146845	WD repeat-containing protein 16			
146395	Germ cell-specific gene 1-like protein			
139804	RNA binding motif protein, X-linked-like 3 (RBMXL3), mRNA			
79190	Iroquois-class homeodomain protein IRX-6			
401014	-			
400761	-			
390231	-			
389852	Sperm acrosome-associated protein 5 Precursor			
130560	Spermatogenesis-associated protein 3			
129607	UMP-CMP kinase 2, mitochondrial Precursor			7
124975	Gamma-glutamyltransferase 6 Precursor			
57633	Leucine-rich repeat neuronal protein 1 Precursor			
647471	Inositol hexakisphosphate and diphosphoinositol-pentakisphosphate kinase 1			4
160762	Coiled-coil domain-containing protein 63			
158833	Acyl-CoA wax alcohol acyltransferase 1			
150159	Sodium/hydrogen exchanger-like domain-containing protein 1			
136306	Putative transporter SVOPL			
400553	-			
399972	-			
389422	-			
389300	-			
123624	Cytosolic carboxypeptidase 4			
122042	Relaxin receptor 2			
93190	Uncharacterized protein C1orf158			
57553	Uncharacterized protein KIAA0819			
-	SWI/SNF-related matrix-associated actin-dependent regulator of chromatin subfamily D member 1			7
100291131	-			5
100291074	-			7
100290432	-			14
55840	ELL-associated factor 2			8
100289819	-			4
100289727	-			6
100289272	-			
100289242	-			
729590	-			4
729479	-			9
728637	-			
100288782	-			
100288303	-			
100288244	-			4
100287770	-			5
100287267	-			6
442862	PTPN13-like protein, Y-linked			
441925	-			
100290184	-			
100289626	-			
729312	-			
729224	-			
728288	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100288624	-		4	
100288110	-			
100287699	-		5	
100287184	-		5	
100287122	-			
643201	-			
642612	-			
100290093	-			
100289474	-			
100288977	-			
728148	-			
-	Uncharacterized protein C9orf27		5	
100288568	-			
100288512	-			
100288060	Putative keratin-associated protein 10-like ENSP00000375147			
642326	Putative cyclin-Y-like protein 3		9	
606495	NADH-cytochrome b5 reductase-like		6	
440981	-			
-	Renin Precursor			
100290617	-			
100289323	-			
100288840	-			
727869	-		11	
100288446	-			
100288393	-			
100287942	-			
100287889	-			
100287436	-		4	
100287377	-			
100286941	-			
440132	-			
414899	BH3-like motif-containing cell death inducer		8	
728951	keratin associated protein 1-3		5	
786	Voltage-dependent calcium channel gamma-1 subunit			
1767	Dynein heavy chain 5, axonemal			
1823	Desmocollin-1 Precursor			
-	Vitamin K-dependent protein Z Precursor			
-	Periostin Precursor			
3196	T-cell leukemia homeobox protein 2		6	
-	Tumor necrosis factor receptor superfamily member 17			
100133672	Sarcoplasmic/endoplasmic reticulum calcium ATPase 1		5	
-	Follicle-stimulating hormone receptor Precursor			
-	Cytochrome P450 4F11			
1373	Carbamoyl-phosphate synthase [ammonia], mitochondrial Precursor		5	
56203	Leiomodlin-3		4	
4168	Proto-oncogene DBL			
-	Dipeptidase 2 Precursor		4	
-	Uncharacterized protein C16orf67			
85235	Histone H2A type 1			
-	Armadillo repeat-containing protein 2		4	
200523	Protein TSC21			
93377	Opalin		5	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
286046	XK-related protein 6			5
140458	Ankyrin repeat and SOCS box protein 5			
-	Complement C1q tumor necrosis factor-related protein 2 Precursor			6
727	Complement C5 Precursor			15
30012	T-cell leukemia homeobox protein 3			8
122618	Phospholipase D4			10
132724	Transmembrane protease, serine 11B			5
128218	Transmembrane protein 125			
-	Nuclear RNA export factor 5			6
-	-			6
164633	Calcium-binding protein 7			
90167	FERM domain-containing protein 7			4
203100	Probable serine protease HTRA4 Precursor			6
171558	Pre T-cell antigen receptor alpha Precursor			6
124274	Probable G-protein coupled receptor 139			5
117166	WAP, kazal, immunoglobulin, kunitz and NTR domain- containing protein 1 Precursor			7
81833	Sperm acrosome membrane-associated protein 1 Precursor			12
158131	Olfactory receptor 1Q1			4
89765	Radial spoke head 1 homolog			4
23732	Uncharacterized protein C9orf4			
30832	Zinc finger protein 354C			5
6664	Transcription factor SOX-11			
154865	IQ and ubiquitin-like domain-containing protein			5
-	IAP-like protein 3			9
54805	Metal transporter CNM2			6
130749	Carboxypeptidase O Precursor			
-	-			
3936	Plastin-2			4
23440	Homeobox protein orthopedia			
-	cancer antigen 1			
-	Mineralocorticoid receptor			
-	Zinc finger protein 777			10
85479	DnaJ homolog subfamily C member 5B			4
50511	Synaptonemal complex protein 3			
80851	SH3 domain-binding protein 5-like	39		
128826	Uncharacterized protein C20orf166			5
79993	Elongation of very long chain fatty acids protein 7			
125962	Olfactory receptor 7G1			
343930	Mesogenin-1			
346673	Stimulated by retinoic acid gene 8 protein homolog			
-	Putative testis-specific prion protein Precursor			
254778	Uncharacterized protein C8orf46			
219958	Olfactory receptor 1S2			5
-	Uncharacterized protein ENSP00000349693 Fragment			
219464	Olfactory receptor 5T2			5
-	Ankyrin repeat domain-containing protein 30B			
205147	Protein FAM123C			
51168	Myosin-XV			
203074	Probable serine protease UNQ9391/PRO34284 Precursor			6
-	-			11
1379	Complement component receptor 1-like protein Precursor			
100129940	-			7

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Putative uncharacterized protein ENSP00000384646			
219484	Olfactory receptor 5M8			
2619	Growth arrest-specific protein 1 Precursor		7	
284369	Uncharacterized protein FLJ40235			
390928	Iron/zinc purple acid phosphatase-like protein Precursor		8	
399949	Uncharacterized protein C11orf88			
-	Putative uncharacterized protein HLA-DRB9 Fragment			
100132116	cDNA FLJ36021 fis, clone TEST12016568		10	
220388	Coiled-coil domain-containing protein 89			
6666	SOX-12 protein		6	
3082	Hepatocyte growth factor Precursor		7	
160365	C-type lectin-like domain family 1			
-	Uncharacterized protein C10orf120			
-	Regulated endocrine-specific protein 18 Precursor			
-	Putative BMS1-like protein		14	
-	Uncharacterized protein ENSP00000348964 Fragment		9	
-	cDNA FLJ42710 fis, clone BRAMY3007609, moderately similar to Homo sapiens nuclear RNA export factor 2 (NXF2)HCG1987937, isoform CRA_a			
389320	Uncharacterized protein C5orf48			
390077	Olfactory receptor 52N2		8	
-	Putative transcript Y 11 protein			
144809	Uncharacterized protein C13orf30			
-	-			
-	RNA-binding protein 44			
-	-			
338872	Complement C1q tumor necrosis factor-related protein 9 Precursor			
127943	Fc receptor-like B Precursor		6	
-	Lipid phosphate phosphatase-related protein type 4			
7799	PR domain zinc finger protein 2		11	
114815	VPS10 domain-containing receptor SorCS1 Precursor			
649179	Leucine-rich repeat-containing protein PRAME-like			
80835	Taste receptor type 1 member 1 Precursor			
26261	F-box only protein 24			
51322	WW domain-containing adapter protein with coiled-coil		5	
80108	Zinc finger protein 2 homolog		9	
-	Olfactory receptor 6K3		4	
7373	Collagen alpha-1(XIV) chain Precursor			
200403	von Willebrand factor A domain-containing protein 3B		4	
80309	A-kinase anchor protein SPHKAP			
140710	Uncharacterized protein C20orf117			
-	Rhesus blood group-associated glycoprotein			
-	-			
-	Kin of IRRRE-like protein 1 Precursor			
-	Uncharacterized protein ENSP00000383477 Fragment		7	
26246	Olfactory receptor 2L2		6	
389058	Transcription factor Sp5			
-	Uncharacterized protein C21orf85 Precursor		5	
127602	Putative uncharacterized protein ENSP00000328980			
219736	Storkhead-box protein 1			
200576	FYVE finger-containing phosphoinositide kinase			
-	Putative chondrosarcoma-associated gene 1 protein Precursor		6	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-			
3354	5-hydroxytryptamine receptor 1E			
3109	HLA class II histocompatibility antigen, DM beta chain Precursor			
2903	Glutamate [NMDA] receptor subunit epsilon-1 Precursor			
810	Calmodulin-like protein 3		5	
6543	Sodium/calcium exchanger 2 Precursor			
3026	Hyaluronan-binding protein 2 Precursor			
2868	G protein-coupled receptor kinase 4			
4250	Mammaglobin-A Precursor			
4035	Prolow-density lipoprotein receptor-related protein 1 Precursor			
3776	Potassium channel subfamily K member 2			
574	B melanoma antigen 2 Precursor			
148	Alpha-1A adrenergic receptor			
130	Alcohol dehydrogenase 6			
6716	3-oxo-5-alpha-steroid 4-dehydrogenase 2			
6689	Transcription factor Spi-B			
6519	Neutral and basic amino acid transport protein rBAT			
2979	Guanylyl cyclase-activating protein 2		4	
2832	Neuropeptides B/W receptor type 2		4	
3750	Potassium voltage-gated channel subfamily D member 1		4	
719	C3a anaphylatoxin chemotactic receptor			
6635	Putative small nuclear ribonucleoprotein polypeptide E-like protein 1		7	
3172	Hepatocyte nuclear factor 4-alpha			
4142	MAS proto-oncogene			
3932	Proto-oncogene tyrosine-protein kinase LCK			
3902	Lymphocyte activation gene 3 protein Precursor		5	
671	Bactericidal permeability-increasing protein Precursor			
651	Bone morphogenetic protein 3 Precursor			
462	Antithrombin-III Precursor			
241	Arachidonate 5-lipoxygenase-activating protein		5	
218	Aldehyde dehydrogenase, dimeric NADP-preferring		16	
11037	Stonin-1		6	
10803	C-C chemokine receptor type 9			
7039	Protransforming growth factor alpha Precursor			
11238	Carbonic anhydrase 5B, mitochondrial Precursor		13	
8653	ATP-dependent RNA helicase DDX3Y			
8424	Gamma-butyrobetaine dioxygenase			
7517	DNA repair protein XRCC3		9	
51289	Relaxin-3 receptor 1		4	
4645	Myosin-Vb			
10500	Semaphorin-6C Precursor			
6915	Thromboxane A2 receptor			
8200	Growth/differentiation factor 5 Precursor			
7399	Usherin Precursor			
4544	Melatonin receptor type 1B			
4221	Menin			
10896	-			
10636	Regulator of G-protein signaling 14		4	
10251	Protein sprouty homolog 3			
7060	Thrombospondin-4 Precursor		4	
6870	Neurexin-K receptor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
7547	Zinc finger protein ZIC 3			
4355	MAGUK p55 subfamily member 2			
4160	Melanocortin receptor 4			
79858	Serine/threonine-protein kinase Nek11		6	
55753	2-oxoglutarate dehydrogenase E1 component-like, mitochondrial Precursor		4	
55203	Leucine-rich repeat LGI family member 2 Precursor		4	
55026	Protein FAM70A			
23125	Calmodulin-binding transcription activator 2			
22887	Forkhead box protein J3		5	
80115	Brain-specific angiogenesis inhibitor 1-associated protein 2-like protein 2			
80020	FAD-dependent oxidoreductase domain-containing protein 2 Precursor		5	
54753	zinc finger protein 853 (ZNF853), mRNA			
54674	Leucine-rich repeat neuronal protein 3 Precursor			
54101	Receptor-interacting serine/threonine-protein kinase 4			
55184	Ankyrin repeat-containing protein C20orf12		6	
23233	Exocyst complex component 6B		4	
80313	Leucine-rich repeat-containing protein 27		5	
79955	PDZ domain-containing protein 7		6	
79759	Zinc finger protein 668		6	
54577	UDP-glucuronosyltransferase 1-8 Precursor			
51473	Doublecortin domain-containing protein 2			
55287	Transmembrane protein 40		8	
55102	Autophagy-related protein 2 homolog B			
54891	INO80 complex subunit D			
80258	EF-hand domain-containing family member C2			
79917	PDZ domain-containing protein MAGIX			
51725	F-box only protein 40			
54869	Epidermal growth factor receptor kinase substrate 8-like protein 1			
100128559	-			
100037417	D-dopachrome decarboxylase-like protein			
284312	Zinc finger and SCAN domain-containing protein 1			
256646	Protein NUT			
54933	Rhomboid-related protein 2			
100128420	-			
100128332	-			
283710	-			
256076	Collagen alpha-5(VI) chain Precursor			
255220	Thioredoxin domain-containing protein 8			
221393	Probable G-protein coupled receptor 115 Precursor		3	
342132	Zinc finger protein 774			
340654	Lipase member M Precursor			
286002	-			
91653	Brother of CDO Precursor			
84168	Anthrax toxin receptor 1 Precursor			
100128221	-		8	
730130	hypothetical protein LOC730130			
730045	-			
254528	Uncharacterized protein C16orf73			
253782	LAG1 longevity assurance homolog 6		8	
81851	Keratin-associated protein 1-1			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
340156	Myosin light chain kinase family member 4			4
91074	Ankyrin repeat domain-containing protein 30A			
84632	Actin filament-associated protein 1-like 2			
84570	Collagen alpha-1(XXV) chain			
84101	Ubiquitin carboxyl-terminal hydrolase 44			
84034	EMILIN-2 Precursor			
100128014	-			
100127930	-			
729815	-			
204962	Choline transporter-like protein 5			6
192134	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 6			
81616	Long-chain-fatty-acid--CoA ligase ACSBG2			3
284656	Ephrin type-A receptor 10 Precursor			
284418	Uncharacterized protein DKFZp434G1729			
84419	Normal mucosa of esophagus-specific gene 1 protein			
482	Sodium/potassium-transporting ATPase subunit beta-2			4
100293076	-			
100292168	LRP11 protein Fragment			4
100292104	-			
100130360	-			
100129463	-			
100293532	-			
100134361	-			
100133583	-			
100133477	-			
100131289	-			
389151	UPF0572 protein FLJ46116			4
388960	Uncharacterized protein C2orf78			
375316	RNA-binding protein 44			
100292958	-			
100291482	-			
100129969	-			
100129162	-			
100293421	-			
100133251	-			
100131738	-			
100130921	-			5
388553	-			3
353149	TBC1 domain family member 26			
100292858	Putative V-set and immunoglobulin domain-containing protein 6 Precursor			
100292799	-			
100292406	-			
100291947	-			
100129852	-			
100129778	-			
100129042	-			
100133975	-			
100133881	-			
100132909	-			
100132781	-			
100131669	-			
100131540	CDNA FLJ26411 fis, clone HRT09683			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100130840	-		4	
387700	Monocarboxylate transporter 12			
348801	Leukemia NUP98 fusion partner 1		9	
347741	Otopetrin-3			
4622	Myosin-4		6	
100291750	-			
100129669	Uncharacterized protein C9orf134 homolog Precursor			
100129551	-			
100128757	LOC648232 protein Fragment			
100133662	40S ribosomal protein S4, Y isoform 1			
100132388	-		4	
100131347	cDNA FLJ42226 fis, clone THYMU2040824			
376940	Zinc finger CCCH domain-containing protein 6		4	
347240	Kinesin-like protein KIF24			
27121	Dickkopf-related protein 4 Precursor		8	
649279	Protein Wnt-7b Precursor			
11081	Keratocan Precursor			
4248	Beta-1,4-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase		7	
11075	Stathmin-2		4	
153201	Proton-coupled amino acid transporter 2			
131450	Cell surface glycoprotein CD200 receptor 1 Precursor			
56660	Potassium channel subfamily K member 12		5	
-	Arrestin-C			
-	Angiopoietin-1 Precursor			
100293567	-		5	
6036	Non-secretory ribonuclease Precursor		5	
10599	Solute carrier organic anion transporter family member 1B1			
-	Voltage-gated potassium channel subunit beta-1			
7222	Short transient receptor potential channel 3			
3929	Lipopolysaccharide-binding protein Precursor			
3604	Tumor necrosis factor receptor superfamily member 9 Precursor			
5146	Cone cGMP-specific 3',5'-cyclic phosphodiesterase subunit alpha'			
-	Pituitary adenylate cyclase-activating polypeptide type I receptor Precursor			
100294361	-		4	
100293888	Homeobox protein NANOG			
100293830	-			
100293467	-		5	
128488	WAP four-disulfide core domain protein 12 Precursor			
3567	Interleukin-5 Precursor		10	
3950	Leukocyte cell-derived chemotaxin-2 Precursor		5	
1118	Chitotriosidase-1 Precursor			
10154	Plexin-C1 Precursor			
9955	Heparan sulfate glucosamine 3-O-sulfotransferase 3A1			
-	Sodium- and chloride-dependent transporter XTRP2			
100294307	-			
100294236	-		4	
100293784	-			
81623	Beta-defensin 126 Precursor			
1668	Neutrophil defensin 3 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1233	C-C chemokine receptor type 4			
8787	Regulator of G-protein signaling 9		4	
206358	Proton-coupled amino acid transporter 1		8	
-	Fc receptor-like protein 2 Precursor			
27180	Sialic acid-binding Ig-like lectin 9 Precursor			
100294475	-		6	
100294146	-		5	
100293605	-			
56981	PR domain-containing protein 11			
113220	Kinesin-like protein KIF12		8	
57663	Ubiquitin carboxyl-terminal hydrolase 29			
4114	Melanoma-associated antigen B3		10	
26153	Kinesin-like protein KIF26A		4	
-	Putative uncharacterized protein FLJ25328		4	
124404	Septin-12		8	
115669	Tetratricopeptide repeat protein 6			
-	PR domain zinc finger protein 8			
-	Putative protocadherin beta-18			
51440	Hippocalcin-like protein 4		9	
84643	Kinesin-like protein KIF2B		8	
23201	UPF0541 protein FAM168A		4	
-	-			
747	Sn1-specific diacylglycerol lipase alpha			
2792	Guanine nucleotide-binding protein G(T) subunit gamma-T1 Precursor			
55964	Neuronal-specific septin-3		4	
6469	Sonic hedgehog protein Precursor		8	
5924	Ras-specific guanine nucleotide-releasing factor 2		6	
3834	Kinesin-like protein KIF25		5	
83888	Fibroblast growth factor-binding protein 2 Precursor			
6003	Regulator of G-protein signaling 13			
84432	Prokineticin-1 Precursor			
148823	Putative uncharacterized protein C1orf150			
375607	Putative acetyltransferase C7orf52		8	
56311	Ankyrin repeat domain-containing protein 7			
5909	Rap1 GTPase-activating protein 1		4	
-	-			
729330	Otoconin-90 Precursor		4	
92797	DNA helicase B			
-	C-jun-amino-terminal kinase-interacting protein 1			
127733	UBX domain-containing protein 10			
504190	Olfactory receptor 8U1			
143241	DPY30 domain-containing protein 1			
9942	Xylulose kinase		12	
8968	Histone H3.1		4	
1671	Defensin-6 Precursor			
26532	Olfactory receptor 10H3			
151827	Leucine-rich repeat-containing protein 34		8	
-	RING finger protein 150 Precursor			
-	Putative uncharacterized protein DKFZp434O0320 Fragment			
4993	Olfactory receptor 2C1		5	
388323	Glycolipid transfer protein domain-containing protein 2		6	
84560	Metallothionein-4			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-			
128602	Uncharacterized protein C20orf85			
-	Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,6-N-acetylglucosaminyltransferase 7			
138883	Olfactory receptor 1N1			
342574	Keratin, type I cytoskeletal 27			
122740	Olfactory receptor 4K14			
100131720	-			
140862	Isthmin Precursor			
1356	Ceruloplasmin Precursor			
127495	Leucine-rich repeat-containing protein 39		5	
60676	Pappalysin-2 Precursor		6	
26084	SH3 domain-containing guanine exchange factor		10	
92749	UPF0407 protein C2orf39			
550631	Coiled-coil domain-containing protein KIAA1656		8	
344658	Sterile alpha motif domain-containing protein 7			
-	-		7	
399948	Putative uncharacterized protein FLJ45803			
-	Ankyrin repeat and death domain-containing protein ENSP00000345065			
729025	Peptide/histidine transporter ENSP00000340402			
127066	Olfactory receptor 14C36			
25914	Rotatin		10	
282770	Olfactory receptor 10AG1			
390992	Transcription factor HES-3		7	
126204	NACHT, LRR and PYD domains-containing protein 13			
91862	MARVEL domain-containing protein 3			
10595	Serine/threonine-protein kinase/endoribonuclease IRE2 Precursor		6	
65266	Serine/threonine-protein kinase WNK4			
337971	Keratin-associated protein 19-4			
-	-			
345079	Ankyrin repeat domain-containing protein 56			
-	UPF0626 protein B Precursor			
390927	Zinc finger protein 793			
119692	Olfactory receptor 51S1		4	
-	cDNA FLJ34503 fis, clone HLUNG2005738			
-	-		10	
113828	Protein FAM83F			
10396	Probable phospholipid-transporting ATPase 1A			
-	Uncharacterized protein ENSP00000340795			
26539	Olfactory receptor 10H1			
257240	Kelch-like protein 34			
375567	Brorin Precursor			
-	Spermatid-specific linker histone H1-like protein		5	
401498	Transmembrane protein 215			
256536	Transcription elongation regulator 1-like protein			
-	HORMA domain-containing protein 2			
-	Putative UPF0528 protein FAM172B			
122046	Uncharacterized protein C13orf26			
7634	Zinc finger protein 80			
654790	Purkinje cell protein 4-like protein 1			
253558	Lysocardiolipin acyltransferase		4	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
84658	EGF-like module-containing mucin-like hormone receptor-like 3 Precursor			
100131632	Dipeptidyl aminopeptidase-like protein 6			
9870	cDNA FLJ61063			6
388327	Uncharacterized protein C17orf100			10
-	-			
399947	Uncharacterized protein C11orf87 Precursor			
-	GJD4 protein Fragment			
387775	Solute carrier family 22 member 10			
64090	Galactose-3-O-sulfotransferase 2			
374467	Putative uncharacterized protein C12orf63			
389799	Uncharacterized protein FLJ46082			4
391013	Putative inactive group IIC secretory phospholipase A2 Precursor			
100133815	Olfactory receptor 4A47			
-	Transmembrane protein C18orf30			
-	Olfactory receptor 2T1			
-	-			20
353140	Late cornified envelope protein 2C			
57338	Junctophilin-3			
-	Uncharacterized protein C16orf89 Precursor			
151126	Zinc finger protein 385B			
-	Orofacial cleft 1 candidate gene 1 protein			
-	Uncharacterized protein C12orf40			
-	-			
284532	Olfactory receptor 14A16			
220164	Docking protein 6			
2649	Nuclear receptor subfamily 6 group A member 1			
652710	Voltage-dependent L-type calcium channel subunit alpha-1C			
83983	Testis-specific serine/threonine-protein kinase 6			5
-	Putative uncharacterized protein ENSP00000304519			
143379	Uncharacterized protein C10orf82			3
-	NACHT, LRR and PYD domains-containing protein 4			11
8038	ADAM 12 Precursor			7
-	-			
1258	Cyclic nucleotide-gated cation channel beta-1			
79608	Protein RIC-3 Precursor			
25942	Paired amphipathic helix protein Sin3a			5
94120	Synaptotagmin-like protein 3			6
8968	Histone H3.1			
343505	Neuroblastoma breakpoint family member 7			
-	UMP-CMP kinase 2, mitochondrial Precursor			
-	Novel protein Fragment			
10178	Teneurin-1			
9752	Protocadherin alpha-9 Precursor			
133688	UDP-glucuronosyltransferase 3A1 Precursor			
-	Myopalladin			
388931	Major facilitator superfamily domain-containing protein LOC388931			
-	-			7
-	Putative uncharacterized protein C14orf70			
5727	Protein patched homolog 1			
1428	Mu-crystallin homolog			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
1215	Chymase Precursor			
971	B-cell differentiation antigen CD72			
2261	Fibroblast growth factor receptor 3 Precursor		13	
5260	Phosphorylase b kinase gamma catalytic chain, skeletal muscle isoform		5	
1641	Neuronal migration protein doublecortin			
1158	Creatine kinase M-type			
1131	Muscarinic acetylcholine receptor M3			
952	ADP-ribosyl cyclase 1			
926	T-cell surface glycoprotein CD8 beta chain Precursor			
6004	Regulator of G-protein signaling 16		4	
5624	Vitamin K-dependent protein C Precursor			
2572	Glutamate decarboxylase 2			
2244	Fibrinogen beta chain Precursor			
1588	Cytochrome P450 19A1			
1536	Cytochrome b-245 heavy chain			
912	T-cell surface glycoprotein CD1d Precursor			
5746	Parathyroid hormone 2 receptor Precursor			
1741	Disks large homolog 3			
5153	Calcium/calmodulin-dependent 3',5'-cyclic nucleotide phosphodiesterase 1B			
4958	Osteomodulin Precursor			
1285	Collagen alpha-3(IV) chain Precursor			
864	Runt-related transcription factor 3			
27185	Disrupted in schizophrenia 1 protein			
100291438	-		6	
10207	InaD-like protein		4	
9468	Choline-phosphate cytidyltransferase B			
8840	WNT1-inducible-signaling pathway protein 1 Precursor			
5327	Tissue-type plasminogen activator Precursor			
27145	Filamin-A-interacting protein 1		7	
6328	Sodium channel protein type 3 subunit alpha			
9023	Cholesterol 25-hydroxylase			
5460	Myomegalin		4	
100292865	-		7	
6299	Sal-like protein 1			
9378	Neurexin-1-alpha Precursor			
9355	LIM/homeobox protein Lhx2		4	
8736	Myomesin-1			
26762	Hepatitis A virus cellular receptor 1 Precursor			
26577	Procollagen C-endopeptidase enhancer 2 Precursor			
10076	Receptor-type tyrosine-protein phosphatase U Precursor			
78995	Uncharacterized protein C17orf53		5	
64784	CREB-regulated transcription coactivator 3		9	
29125	Uncharacterized protein C11orf21			
56139	-			
56111	-		9	
24149	Zinc finger protein 318		8	
100289735	-			
57209	Zinc finger protein 248		7	
55966	Adherens junction-associated protein 1		4	
65083	Nucleolar protein 6		5	
64344	Hypoxia-inducible factor 3 alpha			
50940	Dual 3',5'-cyclic-AMP and -GMP phosphodiesterase 11A			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
56670	Succinate receptor 1			
25861	Whirlin		8	
58494	Junctional adhesion molecule B Precursor		9	
50839	Taste receptor type 2 member 10			
29909	Probable G-protein coupled receptor 171			
27334	Putative P2Y purinoceptor 10			
57116	Zinc finger protein 695			
26040	SET-binding protein			
646629	-			
169834	-		5	
167838	Beta-taxilin			
148738	Hemojuvelin Precursor			
144245	Putative alpha-1,2-glucosyltransferase ALG10-B		10	
143425	Synaptotagmin-9			
404203	Serine protease inhibitor Kazal-type 6 Precursor			
402160	-			
391766	Putative TAF11-like protein ENSP00000332601			
134701	Protein ripply2			
126755	Leucine-rich repeat-containing protein 38 Precursor			
119587	Carboxypeptidase-like protein X2 Precursor		4	
114788	CUB and sushi domain-containing protein 3 Precursor			
652554	-			
165082	Probable G-protein coupled receptor 113 Precursor		7	
140873	Uncharacterized protein C20orf173			
140687	Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,6-N-acetylglucosaminyltransferase 7			
401230	-			
391107	Olfactory receptor 10K2			
390790	Putative ADP-ribosylation factor-like protein 5C			
132612	Adenosine deaminase domain-containing protein 1			
125931	Carcinoembryonic antigen-related cell adhesion molecule 20 Precursor			
118461	Uncharacterized protein C10orf71			
117154	Dachshund homolog 2			
114088	Tripartite motif-containing protein 9			
645177	-			
152110	Serine/threonine-protein kinase Nek10			
146862	Protein unc-45 homolog B			
146433	Interleukin-34 Precursor			
139818	Dedicator of cytokinesis protein 11 (Zizimin-2)			
139135	PAS domain-containing protein 1			
79191	Iroquois-class homeodomain protein IRX-3			
401036	Ankyrin repeat and SOCS box-containing protein 18			
400793	Carboxyl-terminal PDZ ligand of neuronal nitric oxide synthase protein			
390245	-			
389856	Ubiquitin carboxyl-terminal hydrolase 27		4	
130576	Ly6/PLAUR domain-containing protein 6B Precursor			
124989	EF-hand domain-containing protein C17orf57			
57634	E1A-binding protein p400			
647169	-			
644717	-			
160857	Coiled-coil domain-containing protein 122		14	
158866	Palmitoyltransferase ZDHHC15			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
150696	Prominin-2 Precursor			
150160	Putative T-complex protein 1 subunit theta-like 2			
145814	Pyroglutamyl-peptidase 1-like protein			
145447	Abhydrolase domain-containing protein 12B			
138065	ring finger protein 183 (RNF183), mRNA			
136371	Ankyrin repeat and SOCS box protein 10			
400581	Putative GRB2-related adapter protein LOC400581		4	
389432	Sterile alpha motif domain-containing protein 5			
123745	Cytosolic phospholipase A2 epsilon			
122258	Putative uncharacterized protein C13orf28 Precursor			
115811	IQ domain-containing protein D			
57556	Semaphorin-6A Precursor			
-	Acid sphingomyelinase-like phosphodiesterase 3b Precursor		8	
100291147	-		6	
100291075	-			
100290437	-			
100289243	-			
729601	-			
728531	-		7	
100288723	-			
100287321	-			
100287268	-			
644100	-			
643637	-			
442868	Testis-specific basic protein Y 2			
442038	Putative sulfotransferase 1C3			
-	Semaphorin-4G Precursor	15		
100291015	-			
100290189	-		10	
100289178	-			
729225	-			
728458	Green-sensitive opsin			
728290	-			
100288679	-			
100288189	-		7	
100288126	-			
100287709	-			
100287641	-		5	
100287203	-			
79656	BEN domain-containing protein 5		5	
643226	Glutaredoxin domain-containing cysteine-rich protein 2			
642622	-		5	
441519	Cancer/testis antigen 45-3			
100290781	-			
100290697	-			
100290103	-			
728152	-			
100288520	-			
100288064	-			
100287987	-			
100287007	-			
642337	-			
613210	Beta-defensin 136 Precursor			
440982	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100290622	-		7	
100290519	PR domain zinc finger protein 16			
100289969	-			
100289399	-			
100289324	-			
100288915	-			
728819	hCG1645220 (LOC728819), mRNA		5	
728744	-			
727878	-		7	
727731	Metallophosphoesterase domain containing 1 Fragment			
100288449	-			
100288406	-			
100287947	-			
100287890	-		5	
100287437	-			
100286944	-			
100271715	DH and coiled-coil domain-containing protein ENSP00000381780			
440137	-			
431704	Regulator of G-protein signaling 21			
84649	Diacylglycerol O-acyltransferase 2		4	
27285	Tektin-2		4	
-	Natural cytotoxicity triggering receptor 1 Precursor			
5013	Homeobox protein OTX1		11	
4760	Neurogenic differentiation factor 1		8	
27189	Interleukin-17C Precursor		8	
124872	Beta-1,4 N-acetylgalactosaminyltransferase 2		7	
-	Keratin, type I cuticular Ha6		7	
-	Choline-phosphate cytidylyltransferase B		4	
4284	Lens fiber major intrinsic protein		7	
-	POU domain class 2-associating factor 1			
4004	Rhombotin-1		4	
54363	Hydroxyacid oxidase 1		5	
8973	Neuronal acetylcholine receptor subunit alpha-6 Precursor			
-	Ryanodine receptor 3			
-	Leucine-rich repeat-containing G-protein coupled receptor 4 Precursor		14	
-	Follistatin-related protein 5 Precursor			
-	Chromobox protein homolog 6			
-	Steroidogenic factor 1		7	
-	Transcription factor COE1		9	
2554	Gamma-aminobutyric acid receptor subunit alpha-1 Precursor			
-	Transcription factor AP-2 beta			
57626	Kelch-like protein 1		10	
3762	G protein-activated inward rectifier potassium channel 4		9	
-	ELAV-like protein 4			
54898	Elongation of very long chain fatty acids protein 2			
8825	Lin-7 homolog A		7	
29106	Secretogranin-3 Precursor			
7093	Tolloid-like protein 2 Precursor			
83875	Beta,beta-carotene 9',10'-oxygenase		7	
11055	Zona pellucida-binding protein 1 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
339398	Leucine-rich repeat and immunoglobulin-like domain-containing nogo receptor-interacting protein 4 Precursor		8	
27098	Clusterin-like protein 1 Precursor			
286676	Immunoglobulin-like domain-containing receptor 1 Precursor		9	
85397	Regulator of G-protein signaling 8		10	
9901	SLIT-ROBO Rho GTPase-activating protein 3			
127391	Transmembrane and coiled-coil domain-containing protein 2			
5949	Retinol-binding protein 3 Precursor		5	
30062	Retinal homeobox protein Rx		8	
-	Uncharacterized protein FLJ92257			
123775	Uncharacterized protein C16orf46			
245936	Beta-defensin 123 Precursor		8	
84654	Spermatogenic leucine zipper protein 1		7	
100128819	Keratin-associated protein 3-2			
135946	Olfactory receptor 6B1			
56132	Protocadherin beta-3 Precursor			
100130829	Zinc finger Y-chromosomal protein			
2928	Homeobox protein goosecoid-2			
157638	Protein FAM84B		6	
55530	Synaptic vesicle 2-related protein			
158067	Putative adenylate kinase-like protein C9orf98			
-	XK-related protein 2		5	
388364	Transmembrane and immunoglobulin domain-containing protein 1 Precursor			
124460	Sorting nexin-20		5	
83417	Fc receptor-like protein 4 Precursor		4	
-	Phytanoyl-CoA hydroxylase-interacting protein-like			
392392	Olfactory receptor 1K1			
83539	Carbohydrate sulfotransferase 9			
10349	ATP-binding cassette sub-family A member 10		7	
132851	Spermatogenesis-associated protein 4		8	
222826	Uncharacterized protein C6orf146		9	
92421	Charged multivesicular body protein 4c		4	
-	-			
-	C2 domain-containing protein 3		7	
100133825	Putative uncharacterized protein C20orf78			
7761	Zinc finger protein 214		7	
57624	Uncharacterized protein KIAA1486		4	
-	Zinc finger and SCAN domain-containing protein 29		8	
5619	Sperm protamine-P1			
57057	T-box transcription factor TBX20			
93010	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 7			
389932	Putative truncated aldo-keto reductase			
-	Apelin receptor			
8999	Cyclin-dependent kinase-like 2		4	
64388	Gremlin-2 Precursor			
348807	Coiled-coil domain-containing protein 37			
-	Uncharacterized protein C15orf26			
84076	Transketolase-like protein 2			
79740	Zinc finger B-box domain containing protein 1			
79722	Ankyrin repeat domain-containing protein 55		6	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
170392	Oncoprotein-induced transcript 3 protein Precursor			
79919	Uncharacterized protein C2orf54			
-	cDNA FLJ20712 fis, clone HUV01027			
116448	Oligodendrocyte transcription factor 1			5
654463	Fer-1-like protein 6			
341799	Olfactory receptor 6S1			4
-	-			
-	Zinc finger protein 594			6
-	Glycoprotein hormone beta-5 Precursor			
154661	RUN domain-containing protein 3B			9
-	Ankyrin repeat-containing protein C20orf12			
4058	Leukocyte tyrosine kinase receptor Precursor			8
642273	Protein FAM110C			
127069	Olfactory receptor 2T10			
-	-			
-	Huntingtin-associated protein 1			6
219960	Olfactory receptor 10Q1			6
285848	Patatin-like phospholipase domain-containing protein 1			4
57214	KIAA1199			6
668	Forkhead box protein L2			
100131748	Uncharacterized protein C21orf41			
280664	Protein WFDC10B Precursor			
-	Zinc finger protein 679			
92293	Transmembrane protein 132C Precursor			
8387	Olfactory receptor 1E1			
392376	Olfactory receptor 13C2			7
284355	Tetra-peptide repeat homeobox protein 1			
4481	Macrophage scavenger receptor types I and II			
-	Uncharacterized protein C21orf128			7
-	Uncharacterized protein ENSP00000332241 Fragment			
-	Latherin Precursor			
390649	Olfactory receptor 4F15			
-	cDNA FLJ37045 fis, clone BRACE2012185HCG1652096, isoform CRA_a			
-	-			7
56125	Protocadherin beta-11 Precursor			
150763	Glycerol-3-phosphate acyltransferase-like protein 1			
285668	Uncharacterized protein FLJ37543 Precursor			
100134611	-			
81470	Olfactory receptor 2G2			
-	-			
392399	Epididymal-specific lipocalin-9 Precursor			
22914	NKG2-D type II integral membrane protein			
90525	SH2 domain-containing adapter protein F			9
170482	C-type lectin domain family 4 member C			5
9971	Bile acid receptor			5
100129278	Putative uncharacterized protein ENSP00000384376			
253017	Steroid 5-alpha-reductase 2-like 2 protein			
-	Putative tripartite motif-containing protein 64D			4
5136	Calcium/calmodulin-dependent 3',5'-cyclic nucleotide phosphodiesterase 1A			3
3827	Kininogen-1 Precursor			
157922	Calmodulin-regulated spectrin-associated protein 1			
-	Putative uncharacterized protein LOC388900			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
284467	Protein FAM19A3 Precursor			
440350	Olfactory receptor 51A4			
641649	Transmembrane protein 91		6	
-	Leukocyte immunoglobulin-like receptor subfamily A member 1 Precursor			
-	Transcriptional activator of the c-fos promoter CROC4		6	
100133072	-			
340075	Arylsulfatase I Precursor		7	
-	-		11	
127059	Olfactory receptor 2M5			
-	Thioredoxin domain-containing protein 8			
-	MCM3-associated gene antisense protein			
-	-			
120935	Coiled-coil domain-containing protein 38			
100132000	Transmembrane protein ENSP00000382582		7	
-	Putative EGF-like module-containing mucin-like hormone receptor-like 4 Precursor			
-	Voltage-dependent L-type calcium channel subunit beta-4		4	
-	-		6	
7020	Transcription factor AP-2 alpha			
6779	Statherin Precursor			
3355	5-hydroxytryptamine receptor 1F		6	
3081	Homogentisate 1,2-dioxygenase			
2906	Glutamate [NMDA] receptor subunit epsilon-4 Precursor			
2892	Glutamate receptor 3 Precursor			
4308	Transient receptor potential cation channel subfamily M member 1			
4109	Melanoma-associated antigen 10		6	
3881	Keratin, type I cuticular Ha1			
374	Amphiregulin Precursor		7	
176	Aggrecan core protein Precursor			
2849	Probable G-protein coupled receptor 26		5	
4036	Low-density lipoprotein receptor-related protein 2 Precursor		4	
3777	Potassium channel subfamily K member 3			
785	Voltage-dependent L-type calcium channel subunit beta-4			
760	Carbonic anhydrase 2			
356	Tumor necrosis factor ligand superfamily member 6			
131	Alcohol dehydrogenase class 4 mu/sigma chain			
6690	Pancreatic secretory trypsin inhibitor Precursor			
6503	SRC-like-adaptor			
2998	Glycogen [starch] synthase, liver			
2833	C-X-C chemokine receptor type 3			
3973	Lutropin-choriogonadotropic hormone receptor Precursor			
3708	Inositol 1,4,5-trisphosphate receptor type 1			
313	Acyloxyacyl hydrolase Precursor			
287	Ankyrin-2		4	
108	Adenylate cyclase type 2			
6456	Endophilin-A1			
3174	Hepatocyte nuclear factor 4-gamma			
2925	Gastrin-releasing peptide receptor			
3933	Lipocalin-1 Precursor		5	
3671	Immunoglobulin superfamily containing leucine-rich repeat protein Precursor			
246	Arachidonate 15-lipoxygenase			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
51314	Thioredoxin domain-containing protein 3			
11012	Kallikrein-11 Precursor			
10620	AT-rich interactive domain-containing protein 3B			5
10439	Noelin Precursor			5
11240	Protein-arginine deiminase type-2			4
11202	Kallikrein-8 Precursor			5
7982	Suppressor of tumorigenicity protein 7			4
7477	Protein Wnt-7b Precursor			
4669	Alpha-N-acetylglucosaminidase Precursor			
4327	Matrix metalloproteinase-19 Precursor			
8570	Far upstream element-binding protein 2			5
7850	Interleukin-1 receptor type II Precursor			4
7447	Visinin-like protein 1			
4617	Myogenic factor 5			
51237	Proapoptotic caspase adapter protein Precursor			
10686	Claudin-16 (Paracellin-1)			
10331	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 3			4
7134	Troponin C, slow skeletal and cardiac muscles			
4600	Interferon-induced GTP-binding protein Mx2			
10874	Neuromedin-U Precursor [Contains Neuromedin-U-25			
10637	Left-right determination factor 1 Precursor			
10279	Thymus-specific serine protease Precursor			
7070	Thy-1 membrane glycoprotein Precursor			
8499	Liprin-alpha-2			4
4356	MAGUK p55 subfamily member 3			
4161	Melanocortin receptor 5			
54821	DNA excision repair protein ERCC-6-like			4
55001	Tetratricopeptide repeat protein 22			
23127	Glycosyltransferase 25 family member 2 Precursor			
80830	Apolipoprotein L6			10
80117	ADP-ribosylation factor-like protein 14			4
54102	Chloride intracellular channel protein 6			8
55366	Leucine-rich repeat-containing G-protein coupled receptor 4 Precursor			
79958	DENN domain-containing protein 1C			
54544	Cysteine-rich C-terminal protein 1			12
53637	Sphingosine 1-phosphate receptor 5			
23024	PDZ domain-containing RING finger protein 3			
22999	Regulating synaptic membrane exocytosis protein 1			
81563	Uncharacterized protein C1orf21			
55079	Fez family zinc finger protein 2			
54845	Epithelial splicing regulatory protein 1			
11314	CMRF35-like molecule 8 Precursor			
11262	Nuclear body protein SP140			
-	-			
100128564	-			
100038246	TLX1 divergent (TD1), mRNA			
257629	Ankyrin repeat and SAM domain-containing protein 4B			
256710	GLIPR1-like protein 1 Precursor			
337960	Keratin-associated protein 13-3			
84900	Ring finger and transmembrane domain-containing protein 2			9
100128430	-			5
100128334	-			4

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
730268	Anaphase-promoting complex subunit 1			
283742	Protein FAM98B			
256130	Transmembrane protein 196			
255231	Mucolipin-2			
342293	-			
340706	von Willebrand factor A domain-containing protein 2 Precursor		8	
285676	Zinc finger protein 454		4	
92017	Sorting nexin-29			
84171	Lysyl oxidase homolog 4 Precursor			
100128253	-			
100128105	-			
730051	Putative zinc finger LOC730051			
283481	-		13	
283310	-			
254786	Olfactory receptor 6C3			
220082	Spermatid-associated protein			
340168	Developmental pluripotency-associated 5 protein			
339766	Protein LOC339766			
285093	Uncharacterized protein C2orf85			
84612	Partitioning defective 6 homolog beta			
100127937	-			
729830	UPF0518 protein FAM160A1			
283008	Protein FAM22D			
266553	Orofacial cleft 1 candidate gene 1 protein			
222894	Fer3-like protein			
203238	Uncharacterized protein C9orf93		4	
192666	Keratin, type I cytoskeletal 24			
339291	Leucine-rich repeat-containing protein 30		4	
338785	Keratin, type II cytoskeletal 79		10	
284677	V-set and immunoglobulin domain-containing protein 8 Precursor			
284422	Transmembrane protein HSPC323 Precursor			
84465	Multiple epidermal growth factor-like domains 11 Precursor			
100293077	-			
100129465	-		9	
100134668	-			
100134365	-		7	
100132234	-			
100131293	-			
100131180	-		8	
389152	UPF0572 protein FLJ46210			
388963	Uncharacterized protein C2orf81			
374899	Zinc finger protein 829		6	
100291596	-			
100130100	-		5	
100129239	chromosome X open reading frame 51 (CXorf51), mRNA			
100129169	-			
100293425	-			
100134244	-			
100134139	-			
100131744	-			
388697	Hornerin			
388564	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
353174	Zinc-activated ligand-gated ion channel Precursor			
-	Ras-specific guanine nucleotide-releasing factor 1			
100292800	-			
100292356	-		5	
100291950	-			
100291435	-			
100129781	-		4	
100128956	-			
100293285	-			
100133981	-		6	
100133882	-			
100132782	-			
100131673	-			
100131542	-			
100130846	-			
388210	-			
347744	Putative uncharacterized protein C6orf52			
4624	Myosin-6			
100292752	Putative uncharacterized protein Fragment			
100291839	-			
100129677	CDNA FLJ25865 fis, clone CBR01927			
100128785	Putative uncharacterized protein gs85			
100293182	-		8	
100132625	-			
100132413	-			
100131450	-			
100130589	-			
100130465	-			
387079	-			
377047	Putative testis serine protease 5			
347273	Muscle-related coiled-coil protein			
345778	Metaxin-3		6	
653111	Tripartite motif-containing protein 49		4	
1758	Dentin matrix acidic phosphoprotein 1 Precursor		10	
-	Cadherin-8 Precursor			
131578	Leucine-rich repeat-containing protein 15 Precursor		11	
57689	Netrin-G1 ligand Precursor			
100294414	-		5	
100293921	-			
6291	Serum amyloid A-4 protein Precursor		8	
50487	Group 3 secretory phospholipase A2 Precursor		7	
3938	Lactase-phlorizin hydrolase Precursor			
8482	Semaphorin-7A Precursor			
116211	Transmembrane 4 L6 family member 19			
-	Solute carrier organic anion transporter family member 1C1		8	
100293835	-			
164832	LON peptidase N-terminal domain and RING finger protein 2			
3578	Interleukin-9 Precursor			
3346	Histatin-1 Precursor		4	
10225	T-cell surface protein tactile Precursor			
6554	Sodium/bile acid cotransporter		6	
-	Glutamate receptor 3 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
2651	N-acetylglucosaminide beta-1,6-N-acetylglucosaminyl-transferase		5	
9472	A-kinase anchor protein 6			
348980	Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 1			
-	Membrane-associated transporter protein			
29933	Probable G-protein coupled receptor 132		4	
100294331	UDP-glucuronosyltransferase 2B11 Precursor			
100294254	-			
100293789	-		4	
100293735	-			
100293346	-			
1673	Beta-defensin 2 Precursor			
170689	A disintegrin and metalloproteinase with thrombospondin motifs 15 Precursor			
-	cGMP-gated cation channel alpha-1			
-	Regulator of G-protein signaling 6			
285641	Proton-coupled amino acid transporter 3		4	
64240	ATP-binding cassette sub-family G member 5			
26154	ATP-binding cassette sub-family A member 12			
100294476	-			
100294050	-			
100293228	-			
155100	Putative T-complex protein 1 subunit theta-like 1		6	
2774	Guanine nucleotide-binding protein G(olf) subunit alpha		5	
79727	Lin-28 homolog A			
7700	Zinc finger protein 141		7	
401265	Kelch-like protein 31			
-	Tryptase delta Precursor		10	
353515	Testis-specific XK-related protein, Y-linked 2		12	
84891	Zinc finger and SCAN domain-containing protein 10			
140731	Ankyrin repeat domain-containing protein 60 Precursor			
23205	Long-chain-fatty-acid-CoA ligase ACSBG1		9	
-	Uncharacterized protein KIAA1409			
80008	Transmembrane protein 156		18	
-	ELAV-like protein 2		5	
56963	Repulsive guidance molecule A Precursor		8	
10350	ATP-binding cassette sub-family A member 9		7	
284525	Sodium/hydrogen exchanger 11		6	
85462	FH2 domain-containing protein 1			
-	-			
943	Tumor necrosis factor receptor superfamily member 8 Precursor			
-	FMO9P protein		4	
27071	Dual adapter for phosphotyrosine and 3-phosphotyrosine and 3-phosphoinositide		4	
-	FBXL21 protein			
64078	Solute carrier family 28 member 3			
150353	DnaJ homolog subfamily B member 7			
-	Nuclear cap-binding protein subunit 2-like			
135948	Olfactory receptor 2F2			
50805	Iroquois-class homeodomain protein IRX-4			
148870	Coiled-coil domain-containing protein 27		7	
79192	Iroquois-class homeodomain protein IRX-1			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
80323	Coiled-coil domain-containing protein 68			
4214	Mitogen-activated protein kinase kinase kinase 1			
26692	Olfactory receptor 2W1		7	
-	-		9	
157753	Transmembrane protein 74			
126731	Uncharacterized protein C1orf96		4	
-	-			
-	Homeobox protein Hox-D12			
-	HLA-DPB2 protein			
-	Coiled-coil domain-containing protein ENSP00000299415			
55653	Breast carcinoma-amplified sequence 4		27	
140690	Transcriptional repressor CTCFL			
-	Uncharacterized protein C1orf129			
116449	Mast cell immunoreceptor signal transducer			
79668	Poly [ADP-ribose] polymerase 8			
4135	Microtubule-associated protein 6		7	
57684	Zinc finger and BTB domain-containing protein 26			
-	cDNA FLJ26056 fis, clone PRS03239			
81127	Olfactory receptor 4K15			
-	CMRF35-like molecule 8 Precursor		4	
-	Sulphydryl oxidase 2 Precursor			
343702	XK-related protein 7			
-	-		4	
6322	Sex comb on midleg-like protein 1		8	
-	Tau-tubulin kinase 2		4	
83446	Coiled-coil domain-containing protein 70 Precursor			
8320	Eomesodermin homolog			
250	Alkaline phosphatase, placental type Precursor			
90737	G antigen family E member 1			
-	Cadherin-like protein 28 Precursor		9	
4675	Nucleosome assembly protein 1-like 3			
254956	MORN repeat-containing protein 5			
81448	Olfactory receptor 6K2			
149998	Lipase member I Precursor			
-	-			
650137	Olfactory receptor 4N2			
390436	Olfactory receptor 4K17			
375347	Axonemal dynein heavy chain 12-like protein		4	
-	Uncharacterized protein KIAA0748		4	
389766	Uncharacterized protein C9orf153		7	
254950	Keratin-associated protein 15-1			
-	Tetratricopeptide repeat protein 39A		6	
-	Seven transmembrane helix receptor			
-	Seven transmembrane helix receptor			
84747	Protein unc-119 homolog B		10	
391109	Olfactory receptor 10K1			
-	C-reactive protein Precursor			
-	Protein POF1B			
342909	Zinc finger protein 284		7	
-	-			
494119	Sperm protein associated with the nucleus on the X chromosome N2			
-	-		4	
-	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	CD225 family protein FLJ76511		7	
119678	Olfactory receptor 52E2			
284756	Uncharacterized protein C20orf197			
137735	Actin-binding Rho-activating protein			
-	Alcohol dehydrogenase 6			
-	Alpha-1A adrenergic receptor			
343071	PRAME family member 10			
-	Kinesin-like protein KIF24			
284890	Uncharacterized protein ENSP00000372248 Fragment			
-	T-cell receptor beta V gene segment			
-	Myeloid-associated differentiation marker-like protein 2			
-	DNA-binding protein RFX6			
-	Putative uncharacterized protein			
-	UNQ5830/PRO19650/PRO19816 Precursor			
-	-			
-	Olfactory receptor 4C5			
390093	Olfactory receptor 10A6			
146850	Phosphoinositide 3-kinase regulatory subunit 6			
-	-	7		
161142	Protein FAM71D			
386682	Keratin-associated protein 10-3		6	
353141	Late cornified envelope protein 2D			
-	Uncharacterized protein C17orf78		8	
-	-			
-	Putative sulfotransferase 1C3			
7068	Thyroid hormone receptor beta			
-	T cell receptor beta variable 23/OR9-2 Fragment			
-	Prestin		7	
159989	Coiled-coil domain-containing protein 67			
1956	Epidermal growth factor receptor Precursor		5	
56143	Protocadherin alpha-5 Precursor			
-	Mitochondrial uncoupling protein 3			
440712	Uncharacterized protein C1orf186			
441525	Sperm protein associated with the nucleus on the X chromosome N4			
29841	Grainyhead-like protein 1 homolog			
26047	Contactin-associated protein-like 2 Precursor			
6526	Sodium/myo-inositol cotransporter		6	
-	IQ domain-containing protein F1			
3899	AF4/FMR2 family member 3		9	
5729	Prostaglandin D2 receptor			
2694	Gastric intrinsic factor Precursor			
2334	AF4/FMR2 family member 2			
1908	Endothelin-3 Precursor			
5133	Programmed cell death protein 1 Precursor		5	
1670	Defensin-5 Precursor			
1230	C-C chemokine receptor type 1			
6098	Proto-oncogene tyrosine-protein kinase ROS Precursor		4	
2263	Fibroblast growth factor receptor 2 Precursor			
4854	Neurogenic locus notch homolog protein 3 Precursor		7	
1380	Complement receptor type 2 Precursor			
1160	Creatine kinase, sarcomeric mitochondrial Precursor			
6005	Rhesus blood group-associated glycoprotein		6	
5800	Receptor-type tyrosine-protein phosphatase O Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5625	Proline dehydrogenase, mitochondrial Precursor			
1589	cytochrome P450, family 21, subfamily A, polypeptide 2 isoform b			
1302	Collagen alpha-2(XI) chain Precursor			
1066	Liver carboxylesterase 1 Precursor			
913	T-cell surface glycoprotein CD1e, membrane-associated Precursor			
5753	Tyrosine-protein kinase 6			
2492	Follicle-stimulating hormone receptor Precursor			
2192	Fibulin-1 Precursor			
1286	Collagen alpha-4(IV) chain Precursor			
1264	Calponin-1			
27197	Probable G-protein coupled receptor 82			
9693	Rap guanine nucleotide exchange factor 2		6	
23475	Nicotinate-nucleotide pyrophosphorylase [carboxylating]			
8842	Prominin-1 Precursor			
27147	DENN domain-containing protein 2A			
6362	C-C motif chemokine 18 Precursor			
6331	Sodium channel protein type 5 subunit alpha		9	
9024	BR serine/threonine-protein kinase 2			
10141	Uncharacterized protein C4orf6			
9605	Uncharacterized protein C16orf7		7	
9356	Solute carrier family 22 member 6		7	
8968	Histone H3.1			
8911	Voltage-dependent T-type calcium channel subunit alpha-1I			
5414	Septin-4			
5225	Gastricsin Precursor			
100288822	-			
10077	Tetraspanin-32		6	
9744	ARFGAP with coiled-coil, ANK repeat and PH domain-containing protein 1			
9542	Pro-neuregulin-2, membrane-bound isoform Precursor		12	
9290	Probable G-protein coupled receptor 55		4	
8863	Period circadian protein homolog 3			
5176	Pigment epithelium-derived factor Precursor			
79632	Protein FAM184A			
29102	Ribonuclease 3			
56142	Protocadherin alpha-6 Precursor			
56112	Protocadherin gamma-A3 Precursor		6	
25960	Probable G-protein coupled receptor 124 Precursor			
23779	Protor-1			
79412	Kremen protein 2 Precursor			
60686	Uncharacterized protein C14orf93 Precursor		16	
56097	Protocadherin gamma-A12 Precursor		6	
23676	Small muscular protein			
79168	Leukocyte immunoglobulin-like receptor subfamily A member 6 Precursor			
60495	Heparanase-2			
50944	SH3 and multiple ankyrin repeat domains protein 1			
28965	Long-chain fatty acid transport protein 6			
27439	Cat eye syndrome critical region protein 6		4	
57176	valyl-tRNA synthetase 2, mitochondrial			
57144	Serine/threonine-protein kinase PAK 7			
25837	Ras-related protein Rab-26		6	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
64866	CUB domain-containing protein 1 Precursor		4	
64173	Spermatogenesis-associated protein 1			
58495	Transcription factor Ovo-like 2			
50840	Taste receptor type 2 member 14			
27293	Acid sphingomyelinase-like phosphodiesterase 3b Precursor			
57096	X-linked retinitis pigmentosa GTPase regulator-interacting protein 1			
56603	Cytochrome P450 26B1			
55803	Arf-GAP with dual PH domain-containing protein 2			
25817	Protein FAM19A5			
23550	PH and SEC7 domain-containing protein 4			
23522	Histone acetyltransferase MYST4		8	
653513	Myomegalin		5	
646892	SH2 domain-containing protein 7		6	
168002	Dapper homolog 2		8	
149469	Uncharacterized protein C1orf84		12	
143503	Olfactory receptor 51E1			
404220	hypothetical protein LOC404220			
392275	Putative uncharacterized protein ENSP0000036688 Fragment		6	
134860	Trace amine-associated receptor 9			
127385	Olfactory receptor 10J5			
126820	WD repeat-containing protein 63		15	
119679	Olfactory receptor 52J3			
114880	Oxysterol-binding protein-related protein 6			
653220	G antigen family D member 2			
646396	-			
166348	Kelch domain-containing protein 6			
154790	C-type lectin domain family 2 member L		7	
153328	Putative mitochondrial carrier protein FLJ44862		4	
147658	Testis-specific chromodomain protein Y 1			
140876	Protein FAM65C			
401535	Uncharacterized protein C9orf170			
401236	-			
391114	Olfactory receptor 6K3			
390792	Keratin, type I cytoskeletal 39			
117157	SH2 domain-containing protein 1B			
651845	-		4	
645545	hypothetical protein LOC645545			
163131	Zinc finger protein 780B			
152118	hypothetical protein LOC152118		4	
151306	G-protein coupled bile acid receptor 1			
146456	Transmembrane emp24 domain-containing protein 6 Precursor			
139886	Spindlin-4			
139189	Diacylglycerol kinase kappa			
401067	IQ domain-containing protein F3			
400798	Putative uncharacterized protein C1orf220			
390275	Olfactory receptor 8A1			
389895	-			
124583	Soluble calcium-activated nucleotidase 1		7	
116535	Mas-related G-protein coupled receptor member F			
94137	retinitis pigmentosa 1-like 1			
647678	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
647174	serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 3 (SERPINE3), mRNA			
161253	GTP-binding protein REM 2			
158931	transcription elongation factor A (SID)-like 6			
150709	Ankyrin and armadillo repeat-containing protein		7	
150165	XK-related protein 3			
145482	Prostaglandin reductase 2			
136853	Scavenger receptor cysteine-rich domain-containing group B protein Precursor			
400617	-		5	
400046	-			
389434	Iodotyrosine dehalogenase 1 Precursor			
389333	hypothetical protein LOC389333			
128646	Signal-regulatory protein delta Precursor			
122402	Putative ATP-dependent RNA helicase TDRD9			
115004	Uncharacterized protein C6orf150		8	
93953	Acidic repeat-containing protein			
93233	Coiled-coil domain-containing protein 114			
57559	AMSH-like protease			
100290458	Protein FAM87B		4	
100290346	-		8	
100289831	HCG1993240Serologically defined breast cancer antigen NY-BR-40 Fragment			
100289245	-			
729626	-			
728656	Doublesex- and mab-3-related transcription factor C1		5	
728544	-			
100287827	-			
100287269	-		4	
643669	-			
444882	Insulin growth factor-like family member 4 Precursor			
442142	-			
100289651	-			
729370	-		7	
729230	C-C chemokine receptor type 2			
728460	-			
-	SLAM family member 5 Precursor			
100288680	-		4	
100288131	-		5	
100287722	-			
100287651	-			
642636	Double-strand-break repair protein rad21-like protein 1			
100290036	Imunoglobulin heavy chain Fragment		4	
100289531	-			
100288983	-			
729113	-			
728940	-		8	
728163	-		6	
727969	-			
100288571	-			
100288524	-		5	
100288069	-			
100287574	-			
100287515	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100287070	-			
642340	-		5	
613212	Cortexin-3			
100290623	-			
100290522	-			
100289918	-			
100289329	-			
728752	-			
727735	TBC1 domain family member 3C/3D		5	
100288461	Cell growth-inhibiting protein 7HCG1784586		10	
100288409	-			
100287897	-			
100287440	-			
100287382	-			
100286949	cDNA FLJ44676 fis, clone BRACE3009075		4	
100286892	-			
494118	Sperm protein associated with the nucleus on the X chromosome N1			
64518	Tektin-3		4	
-	Serine/threonine-protein kinase DCLK2			
51738	Appetite-regulating hormone Precursor		7	
-	Dynein intermediate chain 2, axonemal			
116337	Pannexin-3			
-	Microfibrillar-associated protein 5 Precursor			
-	Probable G-protein coupled receptor 112			
-	Eosinophil lysophospholipase		6	
3375	Islet amyloid polypeptide Precursor			
-	Sphingosine 1-phosphate receptor 5			
5288	Phosphatidylinositol-4-phosphate 3-kinase C2 domain-containing gamma polypeptide		6	
-	Protein FAM149A			
-	Transcription factor E3		6	
167127	UDP-glucuronosyltransferase 3A2 Precursor			
4939	2'-5'-oligoadenylate synthetase 2			
2556	Gamma-aminobutyric acid receptor subunit alpha-3 Precursor		5	
1585	Cytochrome P450 11B2, mitochondrial Precursor			
284427	Solute carrier family 25 member 41			
100131619	Potassium voltage-gated channel subfamily E member 1-like protein			
3770	ATP-sensitive inward rectifier potassium channel 14			
-	Uncharacterized protein KIAA1328			
-	Ras GTPase-activating-like protein IQGAP2		7	
-	ETS-related transcription factor Elf2			
-	Disks large-associated protein 2			
1369	Carboxypeptidase N catalytic chain Precursor			
79611	Acyl-CoA synthetase short-chain family member 3, mitochondrial Precursor		4	
81492	Radial spokehead-like protein 1		7	
171177	Rho-related GTP-binding protein RhoV			
-	Tudor domain-containing protein 1			
83881	Homeobox protein MIXL1		12	
4992	Olfactory receptor 1F1		10	
151888	B- and T-lymphocyte attenuator Precursor		7	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
51442	Transcription cofactor vestigial-like protein 1			
79645	EF-hand calcium-binding domain-containing protein 1			
317705	Vomerolateral type-1 receptor 5			4
140766	A disintegrin and metalloproteinase with thrombospondin motifs 14 Precursor			6
85407	Protein naked cuticle homolog 1			
27042	Digestive organ expansion factor homolog			8
-	HHIP-like protein 2 Precursor			
89932	papilin			8
-	Potassium-transporting ATPase alpha chain 2			
54860	Membrane-spanning 4-domains subfamily A member 12	5		
245938	Beta-defensin 125 Precursor			8
129684	Contactin-associated protein-like 5 Precursor			8
-	NACHT and WD repeat domain-containing protein 1			
26167	Protocadherin beta-5 Precursor			7
-	Zinc finger protein 275			5
404552	Secretoglobulin family 1D member 4 Precursor			
124590	Usher syndrome type-1G protein			8
245915	Beta-defensin 112 Precursor			
132204	Synaptotagmin			8
26045	Leucine-rich repeat transmembrane neuronal protein 2 Precursor			
-	Uncharacterized protein LOC113230			5
-	-			
79345	Olfactory receptor 51B2			6
375307	Uncharacterized protein C2orf62			7
-	Receptor-type tyrosine-protein phosphatase delta Precursor			
118932	Ankyrin repeat domain-containing protein 22			
219990	Placenta-specific 1-like protein Precursor			
-	Espin-like protein			6
80099	Putative uncharacterized protein FLJ21075 Precursor			
127540	High mobility group protein B4			
284307	Zinc finger protein interacting with ribonucleoprotein K			5
163747	Uncharacterized protein C1orf177			
100133904	Mpv17-like protein			4
27287	Homeobox protein VENTX			
-	Nucleoporin-62 C-terminal-like protein			
1807	Dihydropyrimidinase			
160728	Sodium-coupled monocarboxylate transporter 1			
-	T-box transcription factor TBX3			
153745	Protein FAM71B			
256126	Synaptonemal complex central element protein 2			
285888	Protein canopy homolog 1			
9153	Sodium/nucleoside cotransporter 2			
223075	Coiled-coil domain-containing protein 129			
864	Runt-related transcription factor 3			7
-	Proline-rich protein 16			7
5350	Cardiac phospholamban			
441933	Olfactory receptor 13G1			
645922	Protein S100-A7-like 2			
164127	Uncharacterized protein C1orf65			
-	Seven transmembrane helix receptor			
10281	Down syndrome critical region protein 4			5
-	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	-			
-	-		5	
26219	Olfactory receptor 1J4		7	
-	cDNA FLJ40032 fis, clone STOMA2009256		8	
-	Putative uncharacterized protein FLJ45983		6	
144321	GLIPR1-like protein 2		6	
-	Endozepine-like protein type 2 mutant		6	
-	Putative protein TMEM148			
8528	D-aspartate oxidase			
440822	Piwi-like protein 3			
386617	BTB/POZ domain-containing protein KCTD8			
-	MARHB_HUMAN Isoform 2 of A6NNE9 - Homo sapiens (Human)			
145942	Transmembrane and coiled-coil domain-containing protein 5A			
390072	Olfactory receptor 52N4			
-	Uncharacterized protein FLJ43933			
414318	Putative uncharacterized protein C9orf106			
-	YIPF7_HUMAN Isoform 2 of Q8N8F6 - Homo sapiens (Human)			
-	Polycystic kidney disease 2-like 2 protein			
23154	Neurochondrin			
127550	Alpha 1,3-galactosyltransferase 2 Precursor			
-	-			
26686	Olfactory receptor 4E2			
374308	Patched domain-containing protein 3			
-	cDNA FLJ46836 fis, clone UTERU2029660			
346525	Olfactory receptor 2A12		10	
646174	Uncharacterized protein C16orf90		4	
79413	Zinc finger BED domain-containing protein 2		5	
-	-		5	
151112	Zinc finger SWIM domain-containing protein 2			
121278	Tryptophan 5-hydroxylase 2			
4621	Myosin-3		5	
80333	Kv channel-interacting protein 4		5	
253582	Putative transmembrane protein C6orf191		4	
93979	Carboxypeptidase A5 Precursor			
-	Immunoglobulin Lambda light chain V gene segment		4	
113540	chemokine-like factor superfamily 1 isoform 4		6	
-	Mucin-6 Precursor		4	
90134	Potassium voltage-gated channel subfamily H member 7			
340441	ANKRD26-like family A member 1			
-	Inactive L-threonine 3-dehydrogenase, mitochondrial Precursor			
23767	Leucine-rich repeat transmembrane protein FLRT3 Precursor			
50509	Collagen alpha-3(V) chain Precursor			
-	Uncharacterized protein FLJ43826			
-	-		6	
-	major histocompatibility complex, class II, DR alpha precursor			
-	-			
85280	Keratin-associated protein 9-4			
283116	Putative tripartite motif-containing protein 49B			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
152404	Immunoglobulin superfamily member 11 Precursor			7
-	B-cell receptor CD22 Precursor			
339761	Cytochrome P450 27C1			
-	G-protein coupled receptor 120			
57118	Calcium/calmodulin-dependent protein kinase type 1D			4
-	-			6
7021	Transcription factor AP-2 beta			
6781	Stanniocalcin-1 Precursor			8
3642	Insulinoma-associated protein 1			
3356	5-hydroxytryptamine receptor 2A			
3111	HLA class II histocompatibility antigen, DO alpha chain Precursor			5
4112	Melanoma-associated antigen B1			
3883	Keratin, type I cuticular Ha3-I			5
398	Protein ITFG3			7
177	Advanced glycosylation end product-specific receptor Precursor			
6943	Transcription factor 21			
6549	Sodium/hydrogen exchanger 2			
3598	Interleukin-13 receptor alpha-2 chain Precursor			
3568	Interleukin-5 receptor subunit alpha Precursor			
3274	Histamine H2 receptor			
3778	Calcium-activated potassium channel subunit alpha-1			
765	Carbonic anhydrase 6 Precursor			
576	Brain-specific angiogenesis inhibitor 2 Precursor			
153	Beta-1 adrenergic receptor			
6691	Serine protease inhibitor Kazal-type 2 Precursor			
6521	Band 3 anion transport protein			
6504	Signaling lymphocytic activation molecule Precursor			
3553	Interleukin-1 beta Precursor			
2981	Guanylate cyclase activator 2B Precursor			4
3975	LIM/homeobox protein Lhx1			
722	C4b-binding protein alpha chain Precursor			
695	Tyrosine-protein kinase BTK			
316	Aldehyde oxidase			
288	Ankyrin-3			
88	Alpha-actinin-2			
6660	Transcription factor SOX-5			
6457	Endophilin-A3			5
2798	Gonadotropin-releasing hormone receptor			
4145	Megakaryocyte-associated tyrosine-protein kinase			5
3934	Neutrophil gelatinase-associated lipocalin Precursor			
3908	Laminin subunit alpha-2 Precursor			
3694	Integrin beta-6 Precursor			
3674	Integrin alpha-IIb Precursor			
655	Bone morphogenetic protein 7 Precursor			
7294	Tyrosine-protein kinase TXK			11
7043	Transforming growth factor beta-3 Precursor			6
11211	Frizzled-10 Precursor			
7984	Rho guanine nucleotide exchange factor 5			7
7478	Protein Wnt-8a Precursor			
10991	-			
10758	Adapter protein CIKS			4
8395	Phosphatidylinositol-4-phosphate 5-kinase type-1 beta			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
4648	Myosin-VIIb			
10692	Visual pigment-like receptor peropsin			
10537	ubiquitin D		4	
10512	Semaphorin-3C Precursor			
10332	C-type lectin domain family 4 member M			
7135	Troponin I, slow skeletal muscle			
11141	X-linked interleukin-1 receptor accessory protein-like 1 Precursor		11	
8270	L antigen family member 3			
7704	Zinc finger and BTB domain-containing protein 16		4	
7380	Uroplakin-3a Precursor			
4582	-		8	
4225	Meprin A subunit beta Precursor			
10661	Krueppel-like factor 1			
10256	Connector enhancer of kinase suppressor of ras 1		5	
11094	Transmembrane protein C9orf7			
7617	-			
7552	Zinc finger protein 711		9	
7348	Uroplakin-1b			
4486	Macrophage-stimulating protein receptor Precursor			
79838	Transmembrane channel-like protein 5		6	
54346	Protein unc-93 homolog A		7	
80832	Apolipoprotein L4 Precursor		6	
79785	Ras-related and estrogen-regulated growth inhibitor-like protein			
53919	Solute carrier organic anion transporter family member 1C1			
54954	Constitutive coactivator of PPAR-gamma-like protein 2			
23049	Serine/threonine-protein kinase SMG1			
79961	DENN domain-containing protein 2D			
79730	Putative methyltransferase NSUN7			
54586	Acrosome formation-associated factor Precursor			
54546	RING finger protein 186		4	
55107	Anoctamin-1			
80263	Tripartite motif-containing protein 45		5	
79705	Leucine-rich repeat serine/threonine-protein kinase 1			
54510	Protocadherin-18 Precursor			
51761	Probable phospholipid-transporting ATPase IB			
51438	Melanoma-associated antigen C2			
55057	Absent in melanoma 1-like protein		7	
54847	SID1 transmembrane family member 1 Precursor			
23148	NAC-alpha domain-containing protein 1		8	
22977	Aflatoxin B1 aldehyde reductase member 3	6		
100128572	-		8	
284131	Putative endonuclease FLJ39025		4	
256714	MAP7 domain-containing protein 2			
221656	Flavin-containing amine oxidase domain-containing protein 1		14	
202134	Protein FAM153B		5	
83715	Espin			
344065	-			
337970	Keratin-associated protein 19-3			
286411	hypothetical protein LOC286411			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
92346	Uncharacterized protein C1orf105			
100128435	-		4	
100128336	-			
731109	-			
283748	Cytosolic phospholipase A2 delta		7	
256144	Olfactory receptor 4C3			
255239	Ankyrin repeat and protein kinase domain-containing protein 1			
221400	Tudor domain-containing protein 6			
200539	Ankyrin repeat domain-containing protein 23			
199897	-			
340745	Leucine-rich repeat, immunoglobulin-like domain and transmembrane domain-containing protein 2 Precursor			
285679	Putative uncharacterized protein LOC285679			
85463	Probable ribonuclease ZC3H12C		12	
85379	Uncharacterized protein KIAA1671			
84690	Spermatogenesis-associated protein 22		7	
100128256	-			
283486	-			
283349	Ras association domain-containing protein 3			
254827	Inactive N-acetylated-alpha-linked acidic dipeptidase-like protein 2		4	
196477	Uncharacterized protein C12orf12			
339768	Espin-like protein		4	
285431	-			
285135	-			
85285	Keratin-associated protein 4-1			
84636	Probable G-protein coupled receptor 174			
84126	ATR-interacting protein		16	
55670	Peroxisome assembly protein 26	5		
100128031	-			
729977	-			
283093	Olfactory receptor 4C12			
266629	SEC14-like protein 3			
246777	Sperm equatorial segment protein 1 Precursor		8	
192668	Cystin-1			
170691	A disintegrin and metalloproteinase with thrombospondin motifs 17 Precursor			
338809	Uncharacterized protein C12orf74			
284680	Uncharacterized protein C1orf111		6	
284485	chromosome 1 open reading frame 230 (C1orf230), mRNA			
84467	Fibrillin-3 Precursor		4	
84435	Probable G-protein coupled receptor 123			
495	Potassium-transporting ATPase alpha chain 1		4	
100292641	-			
100292174	-		6	
100292114	Immunoglobulin superfamily member 3 Precursor			
100291704	-			
100291658	-		8	
100129376	-			
100133592	-		5	
100133500	-		4	
100132261	-		4	
100132024	FLJ00287 protein Fragment		4	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100131192	-		6	
389158	Phospholipid scramblase family member 5			
375387	Leucine-rich repeat-containing protein 33 Precursor		10	
100293014	-			
100292454	Putative uncharacterized protein Fragment			
100292051	-			
100291517	-			
100293428	-		5	
100134257	Aldo-keto reductase family 1 member C2			
100133053	-			
100131746	-			
388566	Zinc finger protein 470			
353288	Keratin, type I cytoskeletal 26		10	
100292807	-			
100292409	-		6	
10231	Calciopressin-2	13		
100291373	cDNA FLJ45398 fis, clone BRHIP3027947			
100129887	-			
100129786	-			
100128960	-		5	
100293289	-			
100132785	-			
100131544	-		7	
100130859	-			
100130742	Leucine-rich repeat-containing protein 69			
387712	Enolase-like protein ENSP00000345555			
7137	Troponin I, cardiac muscle			
100292699	-		4	
100292293	-			
100292220	-			
100291843	-			
100291229	Annexin A8-like protein 1			
100129583	Protein FAM47E			
100128787	-			
100132628	CDNA FLJ26529 fis, clone KDN08784			
100132423	-			
100130595	-			
100130467	-			
345930	Putative guanine nucleotide exchange factor LFDH			
8993	Peptidoglycan recognition protein Precursor		7	
23546	Synaptogyrin-4		4	
-	Neurologin-4, Y-linked Precursor		9	
8707	Beta-1,3-galactosyltransferase 2			
4326	Matrix metalloproteinase-17 Precursor		8	
54756	Interleukin-17 receptor D Precursor		10	
161003	Stomatin-like protein 3		10	
-	Interleukin-31 receptor A Precursor			
57829	Zona pellucida sperm-binding protein 4 Precursor			
-	Anoctamin-1			
100293994	-		4	
6343	Secretin Precursor		8	
5345	Alpha-2-antiplasmin Precursor			
10666	CD226 antigen Precursor			
7224	Short transient receptor potential channel 5		4	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5173	Beta-neoendorphin-dynorphin Precursor			7
116369	Testis anion transporter 1			
55504	Tumor necrosis factor receptor superfamily member 19 Precursor			5
54207	Potassium channel subfamily K member 10			
-	Anterior gradient protein 2 homolog Precursor			
100294396	-			5
254240	Bactericidal/permeability-increasing protein-like 2 Precursor			
1271	Ciliary neurotrophic factor receptor alpha Precursor			
353345	Probable G-protein coupled receptor 141			5
84109	Orexigenic neuropeptide QRFP receptor			
100294256	-			
4923	Neurotensin receptor type 1			11
100293348	-			
84569	Lysozyme-like protein 1 Precursor			6
2153	Coagulation factor V Precursor			7
9227	Lecithin retinol acyltransferase			
6517	Solute carrier family 2, facilitated glucose transporter member 4			
1261	Cyclic nucleotide-gated cation channel alpha-3			
79895	Probable phospholipid-transporting ATPase IM			4
100294487	-			
100294178	-			
100294057	-			
100293667	cDNA FLJ43791 fis, clone TESTI2053526			
100293607	-			
100293242	-			
-	Putative uncharacterized protein ENSP00000348645			
64407	Regulator of G-protein signaling 18			6
122481	Putative adenylate kinase 7			
2583	Beta-1,4 N-acetylgalactosaminyltransferase 1			4
27296	TP53-target gene 5 protein			
3904	Leukocyte-associated immunoglobulin-like receptor 2 Precursor			6
146279	Tektin-5			
-	Glutamate--ammonia ligase domain-containing protein 1			
-	-			
-	Putative uncharacterized protein DKFZp434P211			
83447	ADP/ATP translocase 4			
4133	Microtubule-associated protein 2			
-	Myosin-XVI			
64776	Uncharacterized protein C11orf1			
26166	Regulator of G-protein signaling 22			
83887	Probable tubulin polyglutamylase TTL2			
653	Bone morphogenetic protein 5 Precursor			
26011	Teneurin-4			
8497	Liprin-alpha-4			
5657	Myeloblastin Precursor			
57604	Putative methyltransferase KIAA1456			
-	Seven transmembrane helix receptor			
282763	Olfactory receptor 51B5			5
735	Complement component C9 Precursor			
254158	Putative uncharacterized protein CXorf58			4

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	C-type lectin domain family 7 member A			
26529	olfactory receptor, family 12, subfamily D, member 2		4	
-	-		7	
-	Alpha-2-macroglobulin-like protein 1 Precursor			
120400	Protein FAM55A Precursor			
157724	Solute carrier family 7 member 13			
117159	Dermcidin Precursor (Preproteolysin)			
390054	Olfactory receptor 52A5			
91752	Zinc finger protein 804A		11	
84879	Major facilitator superfamily domain-containing protein 2		5	
144124	Olfactory receptor 10A5			
-	CKLF-like MARVEL transmembrane domain-containing protein 5			
9683	NEDD4-binding protein 1			
158046	Nucleoredoxin-like protein 2			
23096	IQ motif and SEC7 domain-containing protein 2		8	
57558	Ubiquitin carboxyl-terminal hydrolase 35			
64850	Alanine--glyoxylate aminotransferase 2-like 1		7	
260434	Pyrin domain-containing protein 1		6	
129025	Zinc finger protein 280A			
-	Killer cell immunoglobulin-like receptor 3DL1 Precursor		5	
-	Uncharacterized protein C12orf64			
395	Rho GTPase-activating protein 6			
25775	Uncharacterized protein C22orf24		5	
30010	Neurexophilin-1 Precursor			
117153	Melanoma inhibitory activity protein 2 Precursor			
1130	Lysosomal-trafficking regulator		6	
339977	Leucine-rich repeat-containing protein 66			
-	Melanoma-associated antigen B5			
391196	Olfactory receptor 2M7			
219431	Olfactory receptor 4S2			
116986	Centaurin-gamma-1		9	
124	Alcohol dehydrogenase 1A			
651308	Putative RNA polymerase II subunit A C-terminal domain phosphatase SSU72-like protein 1		7	
-	YO003_HUMAN Isoform 2 of Q6ZVN6 · Homo sapiens (Human)			
119694	Olfactory receptor 51F2			
163259	DENN domain-containing protein 2C		6	
-	-		24	
136259	Krueppel-like factor 14			
122651	Probable ribonuclease 11 Precursor			
-	Putative POU domain, class 5, transcription factor 1-like protein 1		4	
55089	Sodium-coupled neutral amino acid transporter 4			
-	Inter-alpha-trypsin inhibitor heavy chain H5 Precursor			
-	cDNA FLJ44313 fis, clone TRACH2025911FLJ44313 protein		5	
-	-			
360226	Testis serine protease 1 Precursor			
-	Leukemia-associated protein 7			
-	Putative uncharacterized protein ARL15		4	
-	Neuroblastoma breakpoint family member 5			
-	Putative cationic amino acid transporter 3-like protein			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
729809	Putative GED domain-containing protein LOC554175			
-	cDNA FLJ34047 fis, clone FCBBF3000001			
344191	Homeobox even-skipped homolog protein 2			
-	Ras-associated and pleckstrin homology domains-containing protein 1		9	
-	UPF0623 protein			
-	Seven transmembrane helix receptor			
-	Protein FAM75A6			
377677	Carbonic anhydrase 13			
57474	Zinc finger protein 490			
222696	Zinc finger and SCAN domain-containing protein 23		6	
-	Olfactory receptor 4C3		4	
121130	Olfactory receptor 10P1			
-	-			
5017	Putative transcription factor Ovo-like 1		6	
81469	Olfactory receptor 2G3			
254910	Late cornified envelope protein 5A			
-	Inactive phospholipase D5			
-	Interleukin-23 receptor Precursor			
-	Putative methyltransferase NSUN7			
-	Glutamate receptor, ionotropic kainate 1 Precursor			
5913	43 kDa receptor-associated protein of the synapse		3	
7253	Thyrotropin receptor Precursor		5	
-	NBEL2_HUMAN Isoform 3 of Q6ZNJ1 · Homo sapiens (Human)		4	
441459	Ankyrin repeat domain-containing protein 18B		4	
389658	Protein FAM150A Precursor		10	
158431	Zinc finger protein 782		4	
-	Disintegrin and metalloproteinase domain-containing protein 5			
-	Lethal(3)malignant brain tumor-like 4 protein			
2524	Galactoside 2-alpha-L-fucosyltransferase 2			
146691	TOM1-like protein 2			
3360	5-hydroxytryptamine receptor 4			
909	T-cell surface glycoprotein CD1a Precursor			
-	Seven transmembrane helix receptor		6	
-	Armadillo repeat-containing X-linked protein 4			
401250	mitochondrial coiled-coil domain 1			
-	Coiled-coil domain-containing protein 36			
79443	FYVE and coiled-coil domain-containing protein 1		4	
2528	Alpha-(1,3)-fucosyltransferase			
-	Putative uncharacterized protein			
388021	transmembrane protein 179			
4883	Atrial natriuretic peptide clearance receptor Precursor		4	
1672	Beta-defensin 1 Precursor			
1232	C-C chemokine receptor type 3			
2295	Forkhead box protein F2			
2263	Fibroblast growth factor receptor 2 Precursor		7	
1644	Aromatic-L-amino-acid decarboxylase		5	
1620	Deleted in bladder cancer protein 1 Precursor		8	
1400	Dihydropyrimidinase-related protein 1		5	
1381	Cellular retinoic acid-binding protein 1			
1133	Muscarinic acetylcholine receptor M5			
5801	Receptor-type tyrosine-protein phosphatase R Precursor		8	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
5602	Mitogen-activated protein kinase 10			
2212	Low affinity immunoglobulin gamma Fc region receptor II- a Precursor			
5207	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 1		6	
5028	P2Y purinoceptor 1			
914	T-cell surface antigen CD2 Precursor		5	
5968	Lithostathine-1-beta Precursor			
5783	Tyrosine-protein phosphatase non-receptor type 13		8	
1776	Deoxyribonuclease gamma Precursor			
1746	Homeobox protein DLX-2			
4969	Mimecan Precursor			
4756	Neogenin Precursor			
1288	Collagen alpha-6(IV) chain Precursor			
1040	Phosphatidate cytidyltransferase 1			
866	Corticosteroid-binding globulin Precursor			
843	Caspase-10 Precursor			
27198	Probable G-protein coupled receptor 81			
9495	A-kinase anchor protein 5		5	
9245	Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,6-N- acetylglucosaminyltransferase 3		4	
8843	Niacin receptor 1		4	
5540	Neuropeptide Y receptor type 4		4	
5522	Serine/threonine-protein phosphatase 2A 55 kDa regulatory subunit B gamma isoform			
27148	Serine/threonine-protein kinase 36			
9651	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase eta-2			
6334	Sodium channel protein type 8 subunit alpha		6	
9173	Interleukin-1 receptor-like 1 Precursor			
8796	Sciellin			
5467	Peroxisome proliferator-activated receptor delta		6	
8969	Histone H2A type 1			
10079	Probable phospholipid-transporting ATPase IIA			
9912	Rho GTPase-activating protein RICH2			
9745	Zinc finger protein 536			
9720	Coiled-coil domain-containing protein 144A		5	
8867	Synaptojanin-1			
8701	Dynein heavy chain 11, axonemal			
5178	Zinc finger imprinted 2			
79633	Protocadherin Fat 4 Precursor		5	
64080	Ribokinase		17	
63950	Doublesex- and mab-3-related transcription factor A2			
50619	Differentially expressed in FDCP 6 homolog			
49861	Claudin-20			
56144	Protocadherin alpha-4 Precursor		9	
56113	Protocadherin gamma-A2 Precursor		8	
57217	Tetratricopeptide repeat protein 7A		6	
56098	Protocadherin gamma-A12 Precursor			
25928	Sclerostin domain-containing protein 1 Precursor			
25903	Olfactomedin-like protein 2B Precursor (Photomedin-2)			
27443	Cat eye syndrome critical region protein 2			
56884	Follistatin-related protein 5 Precursor			
23616	SH3 domain-binding protein 1			
64881	Protocadherin-20 Precursor			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
64174	Dipeptidase 2 Precursor			
27299	ADAM DEC1 Precursor			
57524	Caskin-1			
57125	Plexin domain-containing protein 1 Precursor			
55808	Alpha-N-acetylgalactosaminide alpha-2,6-sialyltransferase 1			
26025	Protocadherin gamma-A12 Precursor			
23551	GTP-binding protein Rhes Precursor			
23523	Calcineurin-binding protein cabin-1			
646938	LOC646938 protein Fragment		9	
646670	-			
169966	Protein FAM46D			
168417	Zinc finger protein 679			
158326	FRAS1-related extracellular matrix protein 1 Precursor			
149473	Coiled-coil domain-containing protein 24		11	
148811	Probable carboxypeptidase PM20D1 Precursor			
144448	Putative tetraspanin-19			
143678	hypothetical protein LOC143678		5	
402360	-		4	
392288	-			
134864	Trace amine-associated receptor 1		6	
133746	Junction-mediating and -regulatory protein		10	
121273	Uncharacterized protein C12orf54		5	
119687	Olfactory receptor 51A7			
114881	Oxysterol-binding protein-related protein 7		5	
58160	-		4	
652636	-			
646409	Putative diacylglycerol O-acyltransferase 2-like protein 7 Precursor			
166378	Spermatogenesis-associated protein 5			
154860	-			
147670	-			
140691	Tripartite motif-containing protein 69			
391123	V-set and immunoglobulin domain-containing protein 8 Precursor		5	
125972	Calreticulin-3 Precursor		7	
118490	Zinc finger MYND domain-containing protein 17		4	
117194	Mas-related G-protein coupled receptor member X2			
57718	Serine/threonine-protein phosphatase 4 regulatory subunit 4			
-	Sialic acid-binding Ig-like lectin 11 Precursor		7	
650262	-			
645249	-		5	
163223	Zinc finger protein 676			
162494	Rhomboid-related protein 3		4	
152138	Pyrin domain-containing protein 2		4	
140258	Keratin-associated protein 13-1			
139285	Protein FAM123B		15	
79290	Olfactory receptor 13A1			
401082	hypothetical protein LOC401082			
400799	-			
389906	Novel proteinHCG1981372, isoform CRA_cPutative uncharacterized protein ENSP00000370498		7	
130752	Putative malate dehydrogenase 1B			
129870	-			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
125111	-		8	
124599	CMRF35-like molecule 7 Precursor			
94233	Melanopsin (Opsin-4)			
644809	Putative uncharacterized protein C15orf56			
161424	Pumilio domain-containing protein C14orf21		9	
150921	Transcription factor 23			
150248	Uncharacterized protein C22orf15		4	
145483	Protein FAM161B		6	
137075	-		4	
79132	Probable ATP-dependent RNA helicase DHX58		12	
400629	Testis-expressed sequence 19 protein			
389337	Probable guanine nucleotide exchange factor FLJ41603			
128674	Prokineticin receptor 2		8	
100291176	-		9	
100289743	-		9	
100289246	-		5	
729506	-			
100288738	-		9	
100288316	-			
100287831	-			
100287775	-		8	
100287338	-		6	
644129	-			
643736	-			
445347	TCR gamma alternate reading frame protein isoform 1			
442184	Putative olfactory receptor 2B3			
-	Serpin B3			
100291027	-			
100290283	-			
100290201	-		9	
100289652	-			
100289109	-		4	
729378	-			
729238	Pulmonary surfactant-associated protein A2 Precursor			
728461	Chondrosarcoma-associated gene 2/3A protein			
100288682	-			
100288639	-			
100288141	-			
100287723	-		12	
100287658	-			
100287213	-			
100287132	-		8	
643338	Uncharacterized protein C15orf82, mitochondrial Precursor		4	
642666	-			
441644	-			
100290784	-		12	
100290701	-		4	
100290117	-			
100289536	-		6	
100288529	-		5	
100288070	-		4	
100287997	-			
100287517	-			
100287009	-		4	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
100290629	-			
100289922	cDNA FLJ32655 fis, clone TEST11000025, weakly similar to M.musculus testis-specific protein, DDC8			
100289409	-			
100289332	-			
100288919	Seven transmembrane helix receptor			
100288867	-			
728841	Novel protein Fragment		4	
728767	-			
727738	Amphiregulin Precursor			
-	Bone morphogenetic protein 7 Precursor			
100287950	-			
100287898	Tetratricopeptide repeat protein 34		6	
100287386	-		7	
100286952	-		6	
100286893	-			
494513	Pejvakin		13	
440163	Ribonuclease-like protein 13 Precursor			
6096	Nuclear receptor ROR-beta		11	
225	ATP-binding cassette sub-family D member 2		6	
-	Hypoxia-inducible factor 3 alpha		4	
10215	Oligodendrocyte transcription factor 2		5	
55801	Interleukin-26 Precursor		7	
3882	Keratin, type I cuticular Ha2			
2703	Gap junction alpha-8 protein		8	
-	Calcium-activated chloride channel regulator 4 Precursor			
4010	LIM homeobox transcription factor 1-beta		5	
127833	Synaptotagmin-2		9	
10017	Apoptosis regulator Bcl-B			
9075	Claudin-2			
-	Tissue-type plasminogen activator Precursor	596		
-	Leukocyte immunoglobulin-like receptor subfamily B member 2 Precursor			
-	Coiled-coil and C2 domain-containing protein 1A		13	
199974	Cytochrome P450 4Z1			
7363	UDP-glucuronosyltransferase 2B4 Precursor		4	
2557	Gamma-aminobutyric acid receptor subunit alpha-4 Precursor			
1591	1,25-dihydroxyvitamin D(3) 24-hydroxylase, mitochondrial Precursor			
79933	Synaptopodin 2-like protein			
10324	Kelch repeat and BTB domain-containing protein 10			
26251	Potassium voltage-gated channel subfamily G member 2		4	
3787	Potassium voltage-gated channel subfamily S member 1		5	
-	Coiled-coil domain-containing protein C1orf165			
79946	Uncharacterized protein C10orf95		8	
114990	Vasorin Precursor		7	
4438	MutS protein homolog 4			
-	Echinoderm microtubule-associated protein-like 5		5	
153218	Serine protease inhibitor Kazal-type 5-like 3 Precursor		8	
147686	Zinc finger protein 418		8	
-	Uncharacterized protein C1orf114		14	
647868	PR domain zinc finger protein 16		9	
56949	Pre-mRNA-splicing factor SYF1		9	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
81285	Olfactory receptor 51E2			
317719	Kelch-like protein 10		9	
284186	Transmembrane protein 105		6	
147323	StAR-related lipid transfer protein 6			
140850	Beta-defensin 127 Precursor			
-	Kunitz-type protease inhibitor 3 Precursor			
84689	Membrane-spanning 4-domains subfamily A member 14			
9086	Eukaryotic translation initiation factor 1A, Y-chromosomal			
3010	Histone H1t		6	
56130	Protocadherin beta-6 Precursor			
23784	ANKRD26-like family C member 3			
389400	GDNF family receptor alpha-like Precursor			
219527	Leucine-rich repeat-containing protein 55 Precursor	7		
80736	Choline transporter-like protein 4	9		
2706	Gap junction beta-2 protein (Connexin-26)			
10841	Formimidoyltransferase-cyclodeaminase		5	
440279	Protein unc-13 homolog C			
153769	Putative E3 ubiquitin-protein ligase SH3RF2		10	
-	Coiled-coil domain-containing protein 83		4	
-	Zinc finger protein 57 homolog		5	
-	Putative uncharacterized protein FLJ13224		10	
-	Chloride intracellular channel protein 6			
9506	G antigen family C member 1			
-	Mediator of RNA polymerase II transcription subunit 12-like protein			
-	Copine-9			
90187	EMILIN-3 Precursor			
-	Delphinin		6	
164045	Probable ATP-dependent DNA helicase HFM1		8	
-	Coiled-coil domain-containing protein 65			
57639	Coiled-coil domain-containing protein 146			
220965	Protein FAM13C1			
-	UDP glycosyltransferase 2 family protein Fragment			
121355	Gametocyte-specific factor 1			
83942	Testis-specific serine/threonine-protein kinase 1			
200931	Organic solute transporter subunit alpha			
-	Uncharacterized protein C6orf10			
-	-			
347404	LanC-like protein 3			
221935	Protein sidekick-1 Precursor			
148753	UPF0417 protein FAM163A			
80312	Protein TET1		6	
84839	Retina and anterior neural fold homeobox protein 2		9	
286256	Epididymal-specific lipocalin-12 Precursor			
390648	Olfactory receptor 4F6			
219621	Uncharacterized protein C10orf107		26	
8968	Histone H3.1		9	
-	Putative protein PABPC1-like			
-	-		9	
-	Putative uncharacterized protein C16orf47			
64864	DNA-binding protein RFX7			
-	Olfactory receptor 8K5			
27319	Class B basic helix-loop-helix protein 5			
4081	Protein mab-21-like 1			

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
246213	Vesicular glutamate transporter 3		6	
-	Putative uncharacterized protein C9orf62			
-	Nitric oxide synthase, brain			
-	-			
53820	Protein ripply3		6	
128553	Teashirt homolog 2			
131920	Transmembrane protein 207 Precursor			
-	-		6	
163183	KASH domain-containing protein C19orf46		9	
23060	Zinc finger protein 609		7	
-	Uncharacterized protein C1orf101 Precursor		7	
-	Putative uncharacterized protein FLJ37770			
339906	Putative testis serine protease 2 Precursor		6	
-	Spermatogenesis- and oogenesis-specific basic helix-loop-helix-containing protein 2			
3909	Laminin subunit alpha-3 Precursor			
157983	Uncharacterized protein C9orf66		5	
161753	Outer dense fiber protein 3-like protein 1		8	
326340	Zygote arrest protein 1			
219968	Olfactory receptor 5B21			
-	Myeloid-associated differentiation marker-like protein		6	
57529	Retrotransposon gag domain-containing protein 1			
651503	seven transmembrane helix receptor			
-	-			
286499	Protein FAM133A			
-	Protein CASC2, isoform 3		6	
390437	Olfactory receptor 4N5			
401145	Uncharacterized protein KIAA1680			
51270	Transcription factor Dp family member 3			
-	-			
389090	Olfactory receptor 6B2			
81300	Olfactory receptor 4P4			
400823	Protein FAM177B			
284353	NTPase KAP family P-loop domain-containing protein 1			
-	-			
-	Putative uncharacterized protein C16orf85		9	
-	Uncharacterized protein ENSP00000382635		10	
285555	Uncharacterized protein C4orf37			
2100	Estrogen receptor beta			
131873	Collagen alpha-6(VI) chain Precursor			
196385	Dynein heavy chain 10, axonemal			
-	NACHT, LRR and PYD domains-containing protein 9			
-	-			
283162	Olfactory receptor 8B4		5	
-	Colipase-like protein C6orf127 Precursor		4	
494188	F-box only protein 47		4	
79027	Zinc finger protein 655		7	
10407	sperm associated antigen 11B isoform H preproprotein			
442117	Putative polypeptide N-acetylgalactosaminyltransferase 17			
80206	FH1/FH2 domain-containing protein 3			
113540	chemokine-like factor superfamily 1 isoform 4		4	
-	Keratin, type I cuticular Ha5		6	
6261	Ryanodine receptor 1			
5244	Multidrug resistance protein 3		7	

Enterz ID	description	Cy5	Cy3	ratio(Cy3/Cy5)
-	Growth hormone receptor Precursor			
60468	Transcription regulator protein BACH2			
26339	Olfactory receptor 5K1		5	
-	T-cell receptor delta V gene segment			
-	Brother of CDO Precursor			
-	Membrane-spanning 4-domains subfamily A member 4A			
114818	Kelch-like protein 29			
493860	Coiled-coil domain-containing protein 73			
1482	Homeobox protein Nkx-2.5			