

## Supplementary Table 1

| Unigene                             |           | Gene symbol |           | Description   | Log2 ratio (A/B) |       | P-value (t-test) |         |
|-------------------------------------|-----------|-------------|-----------|---|------------------|-------|------------------|---------|
| Human                               | Mouse     | Hs.GENE     | Mm.Gene   |   | Human            | Mouse | Human            | Mouse   |
| <b>More Expressed in subclass A</b> |           |             |           |   |                  |       |                  |         |
| Hs.155421                           | Mm.80     | AFP         | Afp       | alpha-fetoprotein   | 0.97             | 1.45  | 1.3E-06          | 3.2E-07 |
| Hs.75313                            | Mm.451    | AKR1B1      | Akr1b3    | aldo-keto reductase family 1, member B1 (aldose reductase)        | 0.72             | 1.42  | 0.0011           | 7E-07   |
| Hs.273415                           | Mm.275831 | ALDOA       | Aldo1     | aldolase A, fructose-bisphosphate                                 | 1.02             | 1.22  | 2.8E-07          | 4.9E-05 |
| Hs.100194                           | Mm.19844  | ALOX5AP     | Alox5ap   | arachidonate 5-lipoxygenase-activating protein                    | 0.87             | 1.43  | 4.4E-05          | 2.2E-05 |
| Hs.78225                            | Mm.14860  | ANXA1       | Anxa1     | annexin A1  | 0.78             | 0.70  | 0.00032          | 0.03648 |
| Hs.1378                             | Mm.7214   | ANXA3       | Anxa3     | annexin A3  | 1.13             | 1.09  | 7E-09            | 0.00112 |
| Hs.300711                           | Mm.1620   | ANXA5       | Anxa5     | annexin A5  | 1.09             | 0.91  | 3.2E-08          | 0.00419 |
| Hs.83583                            | Mm.17912  | ARPC2       | Arpc2     | actin related protein 2/3 complex, subunit 2, 34kDa               | 1.35             | 0.86  | 2.9E-13          | 0.00701 |
| Hs.152759                           | Mm.22430  | ASK         | Ask       | pendin activator of S phase kinase                                | 1.15             | 0.96  | 8.3E-09          | 0.00838 |
| Hs.75692                            | Mm.2942   | ASNS        | Asns      | asparagine synthetase   | 0.76             | 1.00  | 0.00084          | 0.00136 |
| Hs.194688                           | Mm.40331  | BAZ1B       | Baz1b     | bromodomain adjacent to zinc finger domain, 1B                    | 0.79             | 0.92  | 0.00012          | 0.00378 |
| Hs.77054                            | Mm.16596  | BTG1        | Btg1      | B-cell translocation gene 1, anti-proliferative                   | 0.86             | 1.22  | 2E-05            | 5.6E-05 |
| Hs.75462                            | Mm.239605 | BTG2        | Btg2      | BTG family, member 2  | 0.71             | 1.46  | 0.00057          | 2.3E-07 |
| Hs.94953                            | Mm.3453   | C1QG        | C1qg      | complement component 1, q subcomponent, gamma polypeptide         | 0.81             | 0.86  | 6.4E-05          | 0.00783 |
| Hs.433337                           | Mm.29763  | C20orf16    | Smox-penc | chromosome 20 open reading frame 16                               | 0.80             | 0.82  | 0.00098          | 0.01804 |
| Hs.7753                             | Mm.7515   | CALU        | Calu      | calumenin   | 0.85             | 0.73  | 2.9E-05          | 0.02427 |
| Hs.75498                            | Mm.116739 | CCL20       | Ccl20     | chemokine (C-C motif) ligand 20                                   | 1.02             | 1.70  | 2.7E-07          | 0.00013 |
| Hs.75703                            | Mm.1255   | CCL4        | Ccl4      | chemokine (C-C motif) ligand 4                                    | 0.84             | 1.18  | 3.9E-05          | 0.00135 |
| Hs.79150                            | Mm.46781  | CCT4        | Cct4      | chaperonin containing TCP1, subunit 4 (delta)                     | 1.07             | 0.68  | 6.3E-08          | 0.03822 |
| Hs.1600                             | Mm.1813   | CCT5        | Cct5      | chaperonin containing TCP1, subunit 5 (epsilon)                   | 0.96             | 1.16  | 1.5E-06          | 0.00014 |
| Hs.108809                           | Mm.914    | CCT7        | Cct7      | chaperonin containing TCP1, subunit 7 (eta)                       | 1.06             | 0.75  | 7E-08            | 0.02015 |
| Hs.375108                           | Mm.6417   | CD24        | Cd24a     | CD24 antigen (small cell lung carcinoma cluster 4 antigen)        | 0.99             | 1.45  | 8E-07            | 1.3E-05 |
| Hs.374340                           | Mm.259329 | CD2AP       | Cd2ap     | CD2-associated protein  | 0.67             | 0.72  | 0.00115          | 0.02677 |
| Hs.82212                            | Mm.2692   | CD53        | Cd53      | CD53 antigen  | 0.87             | 0.73  | 1.7E-05          | 0.02719 |
| Hs.433996                           | Mm.4426   | CD63        | Cd63      | CD63 antigen (melanoma 1 antigen)                                 | 0.84             | 1.62  | 3.8E-05          | 1.2E-09 |
| Hs.246381                           | Mm.15819  | CD68        | Cd68      | CD68 antigen  | 0.79             | 0.86  | 0.00011          | 0.00715 |
| Hs.79197                            | Mm.57175  | CD83        | Cd83      | CD83 antigen (activated B lymphocytes, immunoglobulin superfam    | 0.62             | 1.57  | 0.00467          | 0.00014 |
| Hs.1634                             | Mm.29800  | CDC25A      | Cdc25a    | cell division cycle 25A   | 0.58             | 1.32  | 0.00989          | 2E-05   |
| Hs.28853                            | Mm.20842  | CDC7L1      | Cdc7l1    | CDC7 cell division cycle 7-like 1 (S. cerevisiae)                 | 0.84             | 0.95  | 0.00012          | 0.0342  |
| Hs.95577                            | Mm.6839   | CDK4        | Cdk4      | cyclin-dependent kinase 4   | 1.31             | 0.93  | 2.4E-12          | 0.00319 |
| Hs.20295                            | Mm.16753  | CHEK1       | Chek1     | CHK1 checkpoint homolog (S. pombe)                                | 1.06             | 1.23  | 1.6E-07          | 0.00251 |
| Hs.414565                           | Mm.29524  | CLIC1       | Clic1     | chloride intracellular channel 1                                  | 1.51             | 0.68  | 4.9E-18          | 0.03685 |
| Hs.81343                            | Mm.2423   | COL2A1      | Col2a1    | collagen, type II, alpha 1 (primary osteoarthritis, spondyloepiph | 0.49             | 1.34  | 0.02497          | 8.9E-05 |
| Hs.119129                           | Mm.738    | COL4A1      | Col4a1    | collagen, type IV, alpha 1  | 0.56             | 1.01  | 0.00743          | 0.00123 |
| Hs.5057                             | Mm.20910  | CPD         | Cpd       | carboxypeptidase D  | 0.78             | 0.93  | 0.00014          | 0.00635 |
| Hs.198726                           | Mm.193526 | CSDA        | Csda      | cold shock domain protein A                                       | 0.92             | 0.78  | 0.00014          | 0.01616 |
| Hs.90073                            | Mm.22417  | CSE1L       | Cse1l     | CSE1 chromosome segregation 1-like (yeast)                        | 1.13             | 0.90  | 4.9E-09          | 0.00486 |
| Hs.171391                           | Mm.226905 | CTBP2       | Ctbp2     | C-terminal binding protein 2                                      | 0.80             | 0.75  | 7.9E-05          | 0.04437 |
| Hs.78056                            | Mm.930    | CTSL        | Ctsl      | cathepsin L   | 0.70             | 0.73  | 0.00067          | 0.02488 |
| Hs.75562                            | Mm.5021   | DDR1        | Ddr1      | discoidin domain receptor family, member 1                        | 0.69             | 1.49  | 0.00114          | 4.4E-07 |
| Hs.6790                             | Mm.27432  | DNAJB9      | Dnajb9    | DnaJ (Hsp40) homolog, subfamily B, member 9                       | 0.70             | 1.57  | 0.00067          | 4E-07   |
| Hs.122579                           | Mm.2995   | ECT2        | Ect2      | epithelial cell transforming sequence 2 oncogene                  | 1.39             | 0.98  | 2.8E-12          | 0.0099  |
| Hs.119503                           | Mm.206404 | EIF3S6IP    | Eif3s6ip  | eukaryotic translation initiation factor 3, subunit 6 interacting | 0.76             | 0.75  | 0.0002           | 0.02354 |
| Hs.183684                           | Mm.525    | EIF4G2      | Eif4g2    | eukaryotic translation initiation factor 4 gamma, 2               | 0.92             | 0.87  | 5E-06            | 0.00635 |
| Hs.408061                           | Mm.741    | FABP5       | Fabp5     | fatty acid binding protein 5 (psoriasis-associated)               | 1.29             | 1.30  | 2.8E-11          | 1E-05   |
| Hs.750                              | Mm.735    | FBN1        | Fbn1      | fibrillin 1 (Marfan syndrome)                                     | 0.61             | 1.26  | 0.0057           | 0.00098 |
| Hs.351808                           | Mm.292100 | FGL2        | Fgl2      | fibrinogen-like 2   | 0.70             | 1.42  | 0.00067          | 1.2E-05 |
| Hs.3849                             | Mm.3894   | FKBP10      | Fkbp10    | FK506 binding protein 10, 65 kDa                                  | 1.02             | 0.70  | 4.3E-07          | 0.03914 |
| Hs.333418                           | Mm.1870   | FXYD5       | Fxyd5     | FXYD domain containing ion transport regulator 5                  | 0.85             | 1.03  | 3.7E-05          | 0.00099 |
| Hs.114218                           | Mm.4769   | FZD6        | Fzd6      | frizzled homolog 6 (Drosophila)                                   | 0.80             | 1.10  | 8.9E-05          | 0.00206 |
| Hs.80206                            | Mm.27210  | G6PD        | G6pdx     | glucose-6-phosphate dehydrogenase                                 | 0.79             | 1.38  | 0.0001           | 3.7E-06 |
| Hs.111867                           | Mm.12090  | GLI2        | Gli2      | GLI-Kruppel family member GLI2                                    | 0.87             | 1.08  | 6.6E-05          | 0.02525 |
| Hs.215595                           | Mm.2344   | GNB1        | Gnb1      | guanine nucleotide binding protein (G protein), beta polypeptide  | 0.84             | 0.86  | 0.00045          | 0.00751 |
| Hs.172654                           | Mm.9336   | GNB4        | Gnb4      | guanine nucleotide binding protein (G protein), beta polypeptide  | 0.96             | 1.32  | 1.9E-06          | 0.00047 |
| Hs.122552                           | Mm.20858  | GTSE1       | Gtse1     | G-2 and S-phase expressed 1                                       | 1.01             | 1.21  | 3.2E-06          | 6.1E-05 |
| Hs.75307                            | Mm.18843  | H1FX        | Tgm2      | H1 histone family, member X                                       | 0.57             | 1.19  | 0.00617          | 9.1E-05 |
| Hs.89555                            | Mm.715    | HCK         | Hck       | hemopoietic cell kinase   | 0.86             | 1.21  | 2.4E-05          | 0.00099 |
| Hs.1162                             | Mm.3322   | HLA-DMB     | H2-DMb1   | major histocompatibility complex, class II, DM beta               | 0.73             | 1.03  | 0.00038          | 0.00613 |
| Hs.251064                           | Mm.2756   | HMGN1       | Hmgn1     | high-mobility group nucleosome binding domain 1                   | 1.04             | 0.68  | 1.4E-07          | 0.03601 |
| Hs.109706                           | Mm.1775   | HN1         | Hn1       | hematological and neurological expressed 1                        | 1.16             | 1.46  | 1.9E-09          | 2.1E-06 |
| Hs.376844                           | Mm.12236  | HNRPA1      | Zfp207    | heterogeneous nuclear ribonucleoprotein A1                        | 1.25             | 0.98  | 4.4E-11          | 0.00193 |
| Hs.110637                           | Mm.5      | HOXA10      | Hoxa10    | homeo box A10   | 0.62             | 1.16  | 0.00409          | 0.01575 |
| Hs.171545                           | Mm.6461   | HRB         | Hrb       | HIV-1 Rev binding protein   | 1.14             | 1.48  | 3.5E-09          | 1.2E-07 |
| Hs.180414                           | Mm.197551 | HSPA8       | Hspa8     | heat shock 70kDa protein 8  | 0.77             | 1.25  | 0.00017          | 3.1E-05 |
| Hs.168383                           | Mm.25455  | ICAM1       | Icam1     | intercellular adhesion molecule 1 (CD54), human rhinovirus recept | 0.71             | 1.52  | 0.0006           | 3.6E-08 |
| Hs.1742                             | Mm.56685  | IQGAP1      | Iqgap1    | IQ motif containing GTPase activating protein 1                   | 1.14             | 1.08  | 4.7E-09          | 0.00062 |
| Hs.149609                           | Mm.16234  | ITGA5       | Itga5     | integrin, alpha 5 (fibronectin receptor, alpha polypeptide)       | 0.70             | 0.77  | 0.0016           | 0.01743 |
| Hs.77515                            | Mm.26945  | ITPR3       | Itpr3     | inositol 1,4,5-triphosphate receptor, type 3                      | 0.87             | 1.36  | 0.00013          | 5.2E-06 |
| Hs.91143                            | Mm.22398  | JAG1        | Jag1      | jagged 1 (Alagille syndrome)                                      | 0.59             | 1.17  | 0.00822          | 0.00045 |

|           |           |            |          |  |      |      |         |         |
|-----------|-----------|------------|----------|--|------|------|---------|---------|
| Hs.8878   | Mm.42203  | KIF11      | Kif11    | kinesin family member 11   | 1.28 | 0.81 | 1.3E-11 | 0.02463 |
| Hs.20830  | Mm.197684 | KIFC1      | Kifc1    | kinesin family member C1   | 0.89 | 0.97 | 0.00025 | 0.01451 |
| Hs.180446 | Mm.16710  | KPNB1      | Kpnb1    | karyopherin (importin) beta 1  | 0.98 | 0.75 | 9.8E-07 | 0.0208  |
| Hs.113503 | Mm.151329 | KPNB3      | Kpnb3    | karyopherin (importin) beta 3  | 0.97 | 0.81 | 1E-06   | 0.01176 |
| Hs.2785   | Mm.14046  | KRT17      | Krt1-17  | keratin 17   | 0.70 | 0.96 | 0.00233 | 0.00308 |
| Hs.182265 | Mm.1012   | KRT19      | Krt1-19  | keratin 19   | 1.01 | 1.10 | 3.3E-07 | 0.00035 |
| Hs.432855 | Mm.260684 | LAMC1      | LOC22651 | laminin, gamma 1 (formerly LAMB2)  | 0.75 | 1.14 | 0.00245 | 0.00028 |
| Hs.79356  | Mm.4554   | LAPTM5     | Laptm5   | Lysosomal-associated multispinning membrane protein-5                            | 1.02 | 0.66 | 2.6E-07 | 0.04783 |
| Hs.18069  | Mm.17185  | LGMM       | Lgmn     | legumain   | 0.74 | 1.04 | 0.00032 | 0.00116 |
| Hs.279943 | Mm.200426 | LMCD1      | Lmcd1    | LIM and cysteine-rich domains 1  | 0.94 | 1.30 | 3.3E-06 | 0.0003  |
| Hs.15984  | Mm.512    | LOC51186   | Wbp5     | pp21 homolog   | 0.56 | 1.60 | 0.00766 | 2.2E-09 |
| Hs.56729  | Mm.2183   | LSP1       | Lsp1     | lymphocyte-specific protein 1  | 1.08 | 0.99 | 3.9E-08 | 0.0017  |
| Hs.109276 | Mm.2632   | LXN        | Lxn      | latexin protein  | 0.76 | 1.02 | 0.00107 | 0.00703 |
| Hs.425427 | Mm.28560  | LYAR       | Lyar     | hypothetical protein FLJ20425  | 0.68 | 0.83 | 0.00092 | 0.00947 |
| Hs.401150 | Mm.15918  | MAP3K1     | Map3k1   | mitogen-activated protein kinase kinase kinase 1                                 | 0.53 | 1.48 | 0.01239 | 1.2E-07 |
| Hs.861    | Mm.8385   | MAPK3      | Mapk3    | mitogen-activated protein kinase 3   | 0.85 | 0.81 | 3E-05   | 0.01164 |
| Hs.234279 | Mm.259691 | MAPRE1     | Mapre1   | microtubule-associated protein, RP/EB family, member 1                           | 1.36 | 1.04 | 1.5E-13 | 0.00091 |
| Hs.75607  | Mm.30059  | MARCKS     | Marcks   | myristoylated alanine-rich protein kinase C substrate                            | 1.33 | 1.03 | 8.6E-13 | 0.001   |
| Hs.179565 | Mm.4502   | MCM3       | Mcnd     | MCM3 minichromosome maintenance deficient 3 (S. cerevisiae)                      | 1.09 | 1.02 | 2.1E-08 | 0.00363 |
| Hs.155462 | Mm.4933   | MCM6       | Mcnd6    | MCM6 minichromosome maintenance deficient 6 (MIS5 homolog, 6)                    | 1.25 | 1.34 | 1.1E-10 | 0.00021 |
| Hs.1695   | Mm.2055   | MMP12      | Mmp12    | matrix metalloproteinase 12 (macrophage elastase)                                | 0.67 | 0.79 | 0.00152 | 0.01451 |
| Hs.2256   | Mm.4825   | MMP7       | Mmp7     | matrix metalloproteinase 7 (matrilysin, uterine)                                 | 0.69 | 1.71 | 0.00091 | 6.5E-07 |
| Hs.151738 | Mm.4406   | MMP9       | Mmp9     | matrix metalloproteinase 9 (gelatinase B, 92kDa gelatinase, 92kDa)               | 0.83 | 1.24 | 0.00019 | 0.00069 |
| Hs.78934  | Mm.4619   | MSH2       | Msh2     | mutS homolog 2, colon cancer, nonpolyposis type 1 (E. coli)                      | 1.17 | 0.67 | 1.5E-09 | 0.04401 |
| Hs.3248   | Mm.18210  | MSH6       | Msh6     | mutS homolog 6 (E. coli)   | 0.88 | 1.04 | 1.3E-05 | 0.00087 |
| Hs.23643  | Mm.46254  | MST4       | Mst4     | Mst4-related kinase  | 0.96 | 1.68 | 3.5E-06 | 0.00015 |
| Hs.154672 | Mm.443    | MTHFD2     | Mthfd2   | methylene tetrahydrofolate dehydrogenase (NAD+ dependent), mitochondrial         | 0.95 | 0.88 | 3.7E-06 | 0.00581 |
| Hs.75789  | Mm.4063   | NRD1       | Ndr1     | N-myc downstream regulated gene 1  | 0.78 | 0.94 | 0.00023 | 0.00298 |
| Hs.155595 | Mm.336    | NEDD5      |          | 66 neural precursor cell expressed, developmentally down-regulated 5             | 1.24 | 0.76 | 6.3E-11 | 0.01938 |
| Hs.119908 | Mm.10303  | NOP5/NOP58 | Nol5     | nucleolar protein NOP5/NOP58   | 0.97 | 0.78 | 1.4E-06 | 0.01592 |
| Hs.355719 | Mm.6343   | NPM1       | Npm1     | nucleophosmin (nucleolar phosphoprotein B23, numatrin)                           | 0.92 | 0.72 | 4.6E-06 | 0.02577 |
| Hs.172182 | Mm.2642   | PABPC1     | Pabpc1   | poly(A) binding protein, cytoplasmic 1   | 0.62 | 1.31 | 0.00307 | 8.4E-06 |
| Hs.6793   | Mm.597    | PAFAH1B3   | Pafah1b3 | platelet-activating factor acetylhydrolase, isoform Ib, gamma subunit            | 0.80 | 1.14 | 0.00027 | 0.00042 |
| Hs.89901  | Mm.36865  | PDE4A      | Pde4a    | phosphodiesterase 4A, cAMP-specific (phosphodiesterase E2 domain)                | 0.71 | 1.09 | 0.00073 | 0.00174 |
| Hs.13501  | Mm.28659  | PES1       | Pes1     | pescadillo homolog 1, containing BRCT domain (zebrafish)                         | 0.93 | 0.78 | 3.1E-06 | 0.01507 |
| Hs.3343   | Mm.16898  | PHGDH      | Phgdh    | phosphoglycerate dehydrogenase   | 0.63 | 1.60 | 0.00292 | 2.9E-09 |
| Hs.154036 | Mm.23697  | PHLDA2     | Phlda2   | pleckstrin homology-like domain, family A, member 2                              | 0.86 | 1.22 | 0.0001  | 0.00168 |
| Hs.93837  | Mm.1860   | PITPNM1    | Pitpnm1  | Nir2; phosphatidylinositol transfer protein, membrane-associated 1               | 0.64 | 1.20 | 0.002   | 0.00017 |
| Hs.198281 | Mm.2635   | PKM2       | Pkm2     | pyruvate kinase, muscle  | 1.45 | 0.80 | 4.4E-16 | 0.01296 |
| Hs.93304  | Mm.9277   | PLA2G7     | Pla2g7   | phospholipase A2, group VII (platelet-activating factor acetylhydrolase)         | 0.89 | 1.16 | 1.9E-05 | 0.00015 |
| Hs.77436  | Mm.98232  | PLEK       | Plek     | pleckstrin   | 0.92 | 1.46 | 5.1E-06 | 1.2E-05 |
| Hs.418093 | Mm.7999   | PTGFRN     | Ptgrn    | prostaglandin F2 receptor negative regulator                                     | 0.98 | 0.90 | 1.8E-06 | 0.01475 |
| Hs.82643  | Mm.38233  | PTK9       | Ptk9     | PTK9 protein tyrosine kinase 9   | 0.80 | 1.19 | 9.7E-05 | 8.7E-05 |
| Hs.258609 | Mm.4715   | PTPRO      | Ptpro    | protein tyrosine phosphatase, receptor type, O                                   | 0.57 | 1.27 | 0.01364 | 0.00182 |
| Hs.8036   | Mm.260157 | RAB3D      |          | RAB3D, member RAS oncogene family  | 0.91 | 1.53 | 8.5E-06 | 3.3E-08 |
| Hs.241548 | Mm.205142 | RASA2      | Rasa2    | RAS p21 protein activator 2  | 0.63 | 1.00 | 0.00306 | 0.00241 |
| Hs.87     | Mm.2994   | RBL1       | Rbl1     | retinoblastoma-like 1 (p107)   | 0.64 | 1.15 | 0.00343 | 0.00049 |
| Hs.78944  | Mm.28262  | RGS2       | Rgs2     | regulator of G-protein signalling 2, 24kDa                                       | 1.11 | 0.80 | 1.2E-08 | 0.01522 |
| Hs.425293 | Mm.2424   | RPL10A     | Rpl10a   | ribosomal protein L10a   | 0.93 | 0.84 | 1.3E-05 | 0.00887 |
| Hs.406682 | Mm.3229   | RPL26      | Rpl26    | ribosomal protein L26  | 0.98 | 0.90 | 9E-07   | 0.00481 |
| Hs.182825 | Mm.16423  | RPL35      | Rpl35    | ribosomal protein L35  | 1.04 | 0.97 | 1.3E-07 | 0.00207 |
| Hs.433411 | Mm.11376  | RPL36      | Rpl36    | ribosomal protein L36  | 0.93 | 0.77 | 3.5E-06 | 0.01727 |
| Hs.153    | Mm.37835  | RPL7       | Rpl7     | ribosomal protein L7   | 0.58 | 1.17 | 0.00575 | 0.00018 |
| Hs.178551 | Mm.30066  | RPL8       | Rpl8     | ribosomal protein L8   | 0.73 | 1.08 | 0.00042 | 0.00047 |
| Hs.298262 | Mm.103634 | RPS19      | Rps19    | ribosomal protein S19  | 1.22 | 0.78 | 1.4E-10 | 0.01589 |
| Hs.180450 | Mm.16775  | RPS24      | Rps24    | ribosomal protein S24  | 1.03 | 0.77 | 1.8E-07 | 0.0177  |
| Hs.380843 | Mm.1139   | RPS6       | Rps6     | ribosomal protein S6   | 1.09 | 0.71 | 2.5E-08 | 0.03014 |
| Hs.301547 | Mm.5281   | RPS7       | Rps7     | ribosomal protein S7   | 0.95 | 0.74 | 2E-06   | 0.02157 |
| Hs.2934   | Mm.656    | RRM1       | Rrm1     | ribonucleotide reductase M1 polypeptide  | 0.77 | 0.72 | 0.00017 | 0.02707 |
| Hs.81256  | Mm.3925   | S100A4     | S100a4   | S100 calcium binding protein A4 (calcium protein, calvasculin, member 4)         | 0.96 | 0.98 | 1.4E-06 | 0.0038  |
| Hs.275243 | Mm.100144 | S100A6     | S100a6   | S100 calcium binding protein A6 (calcyclin)                                      | 1.20 | 1.20 | 1.8E-07 | 0.00012 |
| Hs.145279 | Mm.28805  | SET        | Set      | SET translocation (myeloid leukemia-associated)                                  | 1.03 | 0.76 | 1.7E-07 | 0.01866 |
| Hs.115232 | Mm.262677 | SF3A2      | Sf3a2    | splicing factor 3a, subunit 2, 66kDa   | 0.71 | 0.89 | 0.00066 | 0.00976 |
| Hs.109051 | Mm.22240  | SH3BGR13   | Sh3bgr13 | SH3 domain binding glutamic acid-rich protein like 3                             | 0.87 | 0.84 | 1.9E-05 | 0.00909 |
| Hs.75367  | Mm.7601   | SLA        | Sla      | Src-like-adaptor   | 0.75 | 1.08 | 0.00025 | 0.00276 |
| Hs.184601 | Mm.27943  | SLC7A5     | Slc7a5   | solute carrier family 7 (cationic amino acid transporter, y+ system)             | 0.72 | 1.21 | 0.00063 | 0.00062 |
| Hs.194693 | Mm.142455 | SLC7A7     | Slc7a7   | solute carrier family 7 (cationic amino acid transporter, y+ system)             | 0.93 | 1.57 | 5E-06   | 7.3E-09 |
| Hs.3068   | Mm.3909   | SMARCA3    | Smarca3  | SWI/SNF related, matrix associated, actin dependent regulator of transcription 3 | 0.67 | 0.67 | 0.00157 | 0.04082 |
| Hs.172280 | Mm.1050   | SMARCC1    | Smarcc1  | SWI/SNF related, matrix associated, actin dependent regulator of transcription 1 | 1.03 | 0.75 | 2E-07   | 0.02042 |
| Hs.332848 | Mm.27330  | SMARCE1    | Smarce1  | SWI/SNF related, matrix associated, actin dependent regulator of transcription 1 | 0.98 | 0.98 | 8.8E-07 | 0.00208 |
| Hs.173255 | Mm.243946 | SNRPA      | Snrpa    | small nuclear ribonucleoprotein polypeptide A                                    | 0.96 | 0.92 | 3.5E-06 | 0.00378 |
| Hs.82575  | Mm.1323   | SNRPB      | Snrpb    | small nuclear ribonucleoprotein polypeptide B''                                  | 1.00 | 0.75 | 4.8E-07 | 0.01985 |
| Hs.105465 | Mm.34095  | SNRPF      | Snrpf    | small nuclear ribonucleoprotein polypeptide F                                    | 1.13 | 1.08 | 6.4E-09 | 0.00046 |

|           |           |          |         |   |      |      |         |         |
|-----------|-----------|----------|---------|---|------|------|---------|---------|
| Hs.2316   | Mm.46607  | SOX9     | Sox9    | SRY (sex determining region Y)-box 9 (campomelic dysplasia, aut   | 0.58 | 1.52 | 0.00559 | 8E-08   |
| Hs.22065  | Mm.28189  | SPEC1    | Spec1   | small protein effector 1 of Cdc42                                 | 0.87 | 0.87 | 1.9E-05 | 0.00636 |
| Hs.68061  | Mm.20944  | SPHK1    | Sphk1   | sphingosine kinase 1  | 1.30 | 1.04 | 5.5E-12 | 0.00086 |
| Hs.157441 | Mm.1302   | SPI1     | Sfp1    | spleen focus forming virus (SFFV) proviral integration oncogene s | 0.70 | 1.02 | 0.00073 | 0.00244 |
| Hs.199263 | Mm.198414 | STK39    | Stk39   | serine threonine kinase 39 (STE20/SPS1 homolog, yeast)            | 0.65 | 1.14 | 0.00443 | 0.00607 |
| Hs.166556 | Mm.3019   | TEAD2    | Tead2   | TEA domain family member 2  | 0.81 | 0.71 | 9.5E-05 | 0.04926 |
| Hs.165986 | Mm.88645  | TES      | Tes     | testis derived transcript (3 LIM domains)                         | 1.04 | 1.04 | 1.8E-07 | 0.00085 |
| Hs.82961  | Mm.4641   | TFF3     | Tff3    | trefoil factor 3 (intestinal)                                     | 0.55 | 1.57 | 0.00844 | 7.8E-09 |
| Hs.87409  | Mm.4159   | THBS1    | Thbs1   | thrombospondin 1  | 0.84 | 1.41 | 3.8E-05 | 6.8E-05 |
| Hs.239489 | Mm.2291   | TIA1     | Tia1    | TIA1 cytotoxic granule-associated RNA binding protein             | 0.99 | 1.14 | 6.3E-07 | 0.00028 |
| Hs.12956  | Mm.186    | TIP-1    | Tia1    | Tax interaction protein 1   | 0.85 | 0.93 | 2.5E-05 | 0.00332 |
| Hs.406660 | Mm.124    | TMPO     | Tmpo    | thymopoietin  | 0.80 | 0.76 | 0.00085 | 0.01885 |
| Hs.115770 | Mm.6426   | TNFSF11  | Tnfsf11 | tumor necrosis factor (ligand) superfamily, member 11             | 0.81 | 0.85 | 0.00012 | 0.03427 |
| Hs.236510 | Mm.790    | TPARL    | Tparl   | TPA regulated locus   | 1.26 | 1.48 | 2.7E-11 | 1.4E-07 |
| Hs.300772 | Mm.646    | TPM2     | Tpm2    | tropomyosin 2 (beta)  | 0.82 | 1.31 | 6.4E-05 | 9.1E-06 |
| Hs.373508 | Mm.3399   | TRAF2    | Traf2   | TNF receptor-associated factor 2                                  | 0.67 | 0.78 | 0.00127 | 0.01526 |
| Hs.151787 | Mm.873    | U5-116KD | Snrp116 | U5 snRNP-specific protein, 116 kD                                 | 0.91 | 0.74 | 6.2E-06 | 0.0215  |
| Hs.93183  | Mm.9684   | VASP     | Vasp    | vasodilator-stimulated phosphoprotein                             | 1.33 | 1.10 | 9.4E-13 | 0.00035 |
| Hs.166068 | Mm.4010   | VIL1     | Vil     | villin 1  | 0.77 | 0.81 | 0.00016 | 0.02849 |
| Hs.155191 | Mm.4551   | VIL2     | Vil2    | villin 2 (ezrin)  | 0.96 | 0.80 | 1.4E-06 | 0.01322 |
| Hs.85100  | Mm.2654   | WDR1     | Wdr1    | WD repeat domain 1  | 0.85 | 1.29 | 2.7E-05 | 1.3E-05 |
| Hs.136644 | Mm.28489  | WSB2     | Wsb2    | WD repeat and SOCS box containing protein 2                       | 0.76 | 1.20 | 0.00022 | 7.7E-05 |
| Hs.349530 | Mm.3308   | YWHAH    | Ywhah   | tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activatio     | 1.12 | 0.88 | 8.4E-09 | 0.00564 |

### Less Expressed in subclass A

|           |           |          |          |   |       |       |         |         |
|-----------|-----------|----------|----------|---|-------|-------|---------|---------|
| Hs.184168 | Mm.18651  | AASS     | Aass     | aminoadipate-semialdehyde synthase                                | -1.12 | -1.31 | 1.3E-08 | 8.6E-06 |
| Hs.21330  | Mm.6404   | ABCB1    | Abcb1b   | ATP-binding cassette, sub-family B (MDR/TAP), member 1            | -1.06 | -1.07 | 7.6E-08 | 0.00054 |
| Hs.73812  | Mm.14172  | ABCB4    | Abcb4    | ATP-binding cassette, sub-family B (MDR/TAP), member 4            | -1.23 | -0.93 | 1.1E-10 | 0.0033  |
| Hs.348900 | Mm.18759  | ACADS    | Acads    | acyl-Coenzyme A dehydrogenase, C-2 to C-3 short chain             | -0.92 | -1.03 | 4.2E-06 | 0.00101 |
| Hs.81934  | Mm.28430  | ACADSB   | Acadsb   | acyl-Coenzyme A dehydrogenase, short/branched chain               | -0.98 | -1.28 | 9E-07   | 1.8E-05 |
| Hs.82208  | Mm.18630  | ACADVL   | Acadvl   | acyl-Coenzyme A dehydrogenase, very long chain                    | -0.73 | -1.15 | 0.00038 | 0.00018 |
| Hs.154721 | Mm.4927   | ACO1     | Aco1     | aconitase 1, soluble  | -1.02 | -1.04 | 3.2E-07 | 0.00087 |
| Hs.379991 | Mm.8403   | ACOX1    | Acox1    | acyl-Coenzyme A oxidase 1, palmitoyl                              | -1.21 | -1.22 | 2.1E-10 | 5.3E-05 |
| Hs.1219   | Mm.25845  | ADH4     | Adh4     | alcohol dehydrogenase 4 (class II), pi polypeptide                | -1.09 | -1.46 | 2.8E-08 | 2.3E-07 |
| Hs.76392  | Mm.4514   | ALDH1A1  | Aldh1a1  | aldehyde dehydrogenase 1 family, member A1                        | -0.96 | -1.05 | 1.7E-06 | 0.00079 |
| Hs.195432 | Mm.2621   | ALDH2    | Aldh2    | aldehyde dehydrogenase 2 family (mitochondrial)                   | -1.27 | -0.92 | 1.8E-11 | 0.00388 |
| Hs.159608 | Mm.4210   | ALDH3A2  | Aldh3a2  | aldehyde dehydrogenase 3 family, member A2                        | -1.03 | -0.97 | 1.6E-07 | 0.00215 |
| Hs.74294  | Mm.30250  | ALDH7A1  | Aldh7a1  | aldehyde dehydrogenase 7 family, member A1                        | -1.24 | -1.43 | 6.6E-11 | 5.1E-07 |
| Hs.128749 | Mm.2787   | AMACR    | Amacr    | alpha-methylacyl-CoA racemase                                     | -1.10 | -1.18 | 1.9E-08 | 9.7E-05 |
| Hs.332764 | Mm.202665 | ANG      | Ang      | angiogenin, ribonuclease, RNase A family, 5                       | -1.00 | -0.69 | 4.1E-07 | 0.03371 |
| Hs.283923 | Mm.29738  | APOA5    | Apoa5    | apolipoprotein A-V  | -1.32 | -1.39 | 1E-12   | 1.4E-06 |
| Hs.110675 | Mm.8239   | APOC4    | Apoc4    | apolipoprotein C-IV   | -1.40 | -0.73 | 1.3E-14 | 0.02691 |
| Hs.75249  | Mm.29924  | ARL6IP   | Arl6ip   | ADP-ribosylation factor-like 6 interacting protein                | -1.04 | -1.23 | 2.2E-07 | 4.7E-05 |
| Hs.88251  | Mm.620    | ARSA     | Arsa     | arylsulfatase A   | -0.99 | -1.00 | 6E-07   | 0.00138 |
| Hs.153489 | Mm.234152 | ASB1     | Asb1     | ankyrin repeat and SOCS box-containing 1                          | -0.81 | -0.77 | 6.8E-05 | 0.03783 |
| Hs.12056  | Mm.6559   | ASGR1    | Asgr1    | asialoglycoprotein receptor 1                                     | -1.10 | -0.91 | 1.9E-08 | 0.00407 |
| Hs.71     | Mm.30061  | AZGP1    | Azgp1    | alpha-2-glycoprotein 1, zinc                                      | -1.07 | -0.84 | 4.4E-08 | 0.00848 |
| Hs.159440 | Mm.2859   | BAAT     | Baat     | bile acid Coenzyme A: amino acid N-acyltransferase (glycine N-cho | -1.42 | -1.14 | 3.5E-15 | 0.0002  |
| Hs.433307 | Mm.25848  | BCKDHA   | Bckdha   | branched chain keto acid dehydrogenase E1, alpha polypeptide (m   | -0.59 | -1.22 | 0.00429 | 5.4E-05 |
| Hs.76893  | Mm.29884  | BDH      | Bdh      | 3-hydroxybutyrate dehydrogenase (heart, mitochondrial)            | -1.38 | -1.14 | 4.4E-14 | 0.00021 |
| Hs.150557 | Mm.19788  | BTEB1    | Klf9     | basic transcription element binding protein 1                     | -1.13 | -1.31 | 5.9E-09 | 8.7E-06 |
| Hs.2253   | Mm.2081   | C2       | C2       | complement component 2  | -1.21 | -0.72 | 2.1E-10 | 0.02733 |
| Hs.1012   | Mm.14087  | C4BPA    | C4bp     | complement component 4 binding protein, alpha                     | -1.31 | -0.75 | 2.6E-12 | 0.02048 |
| Hs.155097 | Mm.1186   | CA2      | Car2     | carbonic anhydrase II   | -0.61 | -1.09 | 0.00312 | 0.0004  |
| Hs.177446 | Mm.116761 | CA5A     | Car5a    | carbonic anhydrase VA, mitochondrial                              | -1.01 | -1.60 | 3.6E-07 | 2.9E-09 |
| Hs.395771 | Mm.4215   | CAT      | Cat      | catalase  | -1.34 | -1.16 | 5.2E-13 | 0.00015 |
| Hs.5002   | Mm.21414  | CCS      | Ccs      | copper chaperone for superoxide dismutase                         | -0.95 | -1.03 | 1.8E-06 | 0.00096 |
| Hs.76171  | Mm.34537  | CEBPA    | Cebpa    | CCAAT/enhancer binding protein (C/EBP), alpha                     | -0.61 | -0.97 | 0.00314 | 0.002   |
| Hs.118554 | Mm.89572  | CGI-83   | Cgi-83   | penicillin G lactamase, beta 2                                    | -0.75 | -1.01 | 0.00031 | 0.0012  |
| Hs.211773 | Mm.87594  | CHES1    | Ches1    | checkpoint suppressor 1   | -0.80 | -1.29 | 9.1E-05 | 1.2E-05 |
| Hs.107809 | Mm.24376  | CLSTN3   | Clstn3   | calysntenin 3   | -0.60 | -1.17 | 0.00399 | 0.00018 |
| Hs.24697  | Mm.8396   | CMAH     | Cmah     | cytidine monophosphate-N-acetylneuraminic acid hydroxylase (CM    | -0.48 | -1.46 | 0.02823 | 2.6E-07 |
| Hs.274336 | Mm.29499  | CPT2     | Cpt2     | carnitine palmitoyltransferase II                                 | -1.03 | -1.22 | 1.7E-07 | 5.1E-05 |
| Hs.155566 | Mm.17493  | CRADD    | Cradd    | CASP2 and RIPK1 domain containing adaptor with death domain       | -0.86 | -1.05 | 2.2E-05 | 0.00072 |
| Hs.12068  | Mm.20396  | CRAT     | Crat     | carnitine acetyltransferase                                       | -1.11 | -0.87 | 1.3E-08 | 0.00674 |
| Hs.75183  | Mm.21758  | CYP2E1   | Cyp2e1   | cytochrome P450, family 2, subfamily E, polypeptide 1             | -0.80 | -1.11 | 9.8E-05 | 0.00032 |
| Hs.403436 | Mm.291743 | DCI      | Dci      | dodecenoyl-Coenzyme A delta isomerase (3,2 trans-enoyl-Coenzy     | -0.98 | -1.46 | 9.1E-07 | 2.5E-07 |
| Hs.9857   | Mm.29180  | DCXR     | Dcxr     | dicarbonyl/L-xylulose reductase                                   | -1.40 | -1.49 | 1.1E-14 | 1E-07   |
| Hs.180015 | Mm.5731   | DDT      | Ddt      | D-dopachrome tautomerase  | -0.76 | -0.90 | 0.00023 | 0.00478 |
| Hs.15898  |           | DEC2     |          | 2,4-dienoyl CoA reductase 2, peroxisomal                          | -1.38 | -1.38 | 3.8E-14 | 1.8E-06 |
| Hs.251415 | Mm.2774   | DIO1     | Dio1     | deiodinase, iodothyronine, type I                                 | -1.23 | -1.10 | 1.2E-10 | 0.00035 |
| Hs.88646  | Mm.10287  | DNASE1L3 | Dnase1l3 | deoxyribonuclease I-like 3  | -0.46 | -1.34 | 0.03119 | 8.3E-06 |
| Hs.44926  | Mm.1151   | DPP4     | Dpp4     | dipeptidylpeptidase 4 (CD26, adenosine deaminase complexing pr    | -1.08 | -1.13 | 3.8E-08 | 0.00022 |

|           |           |          |            |  |       |       |         |         |
|-----------|-----------|----------|------------|--|-------|-------|---------|---------|
| Hs.10755  | Mm.30994  | DPYS     | Dpys       | dihydropyrimidinase  | -1.32 | -1.05 | 1.5E-12 | 0.00078 |
| Hs.433278 | Mm.22758  | EBRP     | Ebrp-pendi | emopamil binding related protein, delta8-delta7 sterol isomerase re  | -0.75 | -1.20 | 0.00024 | 7.1E-05 |
| Hs.76394  | Mm.24452  | ECHS1    | Echs1      | enoyl Coenzyme A hydratase, short chain, 1, mitochondrial            | -1.06 | -0.81 | 1.7E-07 | 0.01126 |
| Hs.343911 | Mm.4337   | EI24     | Ei24       | etoposide induced 2.4 mRNA   | -0.86 | -0.96 | 2E-05   | 0.00236 |
| Hs.80975  | Mm.10211  | ENTPD5   | Entpd5     | ectonucleoside triphosphate diphosphohydrolase 5                     | -1.25 | -0.72 | 4.2E-11 | 0.0265  |
| Hs.113    | Mm.15295  | EPHX2    | Ephx2      | epoxide hydrolase 2, cytoplasmic                                     | -1.17 | -1.64 | 1.3E-09 | 4E-10   |
| Hs.1321   | Mm.42224  | F12      | F12        | coagulation factor XII (Hageman factor)                              | -1.44 | -0.85 | 1.3E-15 | 0.00766 |
| Hs.68601  | Mm.30105  | F13B     | F13b       | coagulation factor XIII, B polypeptide                               | -1.46 | -1.33 | 1.9E-16 | 6.6E-06 |
| Hs.73875  | Mm.3798   | FAH      | Fah        | fumarylacetoacetate hydrolase (fumarylacetoacetase)                  | -1.36 | -1.09 | 1.8E-13 | 0.0004  |
| Hs.160318 | Mm.1491   | FXYD1    | Fxyd1      | FXYD domain containing ion transport regulator 1 (phospholemma       | -0.63 | -1.28 | 0.00224 | 1.7E-05 |
| Hs.432132 | Mm.3283   | G0S2     | G0s2       | putative lymphocyte G0/G1 switch gene                                | -0.54 | -1.30 | 0.00982 | 1.2E-05 |
| Hs.242    | Mm.18064  | G6PC     | G6pc       | glucose-6-phosphatase, catalytic (glycogen storage disease type I,   | -1.09 | -1.58 | 2.2E-08 | 6.2E-09 |
| Hs.75641  | Mm.2420   | GALT     | Galt       | galactose-1-phosphate uridylyltransferase                            | -1.09 | -1.47 | 2.4E-08 | 1.7E-07 |
| Hs.184141 | Mm.2475   | GCDH     | Gcdh       | glutaryl-Coenzyme A dehydrogenase                                    | -1.02 | -1.21 | 2.5E-07 | 6.2E-05 |
| Hs.208    | Mm.22329  | GCGR     | Gcgr       | glucagon receptor  | -0.87 | -1.03 | 1.9E-05 | 0.00098 |
| Hs.78619  | Mm.20461  | GGH      | Ggh        | gamma-glutamyl hydrolase (conjugase, folylpolyglutamyl hy            | -0.91 | -0.86 | 7.6E-06 | 0.00712 |
| Hs.333303 | Mm.21198  | GJB1     | Gjb1       | gap junction protein, beta 1, 32kDa (connexin 32, Charcot-Marie-Tr   | -1.26 | -1.16 | 2.3E-11 | 0.00014 |
| Hs.170171 | Mm.2338   | GLUL     | Glul       | glutamate-ammonia ligase (glutamine synthase)                        | -0.76 | -0.66 | 0.00021 | 0.04256 |
| Hs.5920   | Mm.30193  | GNE      | Uae1       | UDP-N-acetylglucosamine-2-epimerase/N-acetylmannosamine kin.         | -1.36 | -0.94 | 1.3E-13 | 0.00293 |
| Hs.144914 | Mm.29395  | GNMT     | Gnmt       | glycine N-methyltransferase  | -1.11 | -1.17 | 1.4E-08 | 0.00012 |
| Hs.170197 | Mm.18916  | GOT2     | Got2       | glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate amii   | -1.10 | -1.21 | 1.8E-08 | 6.2E-05 |
| Hs.13405  | Mm.40282  | GPHN     | Gphn       | gephyrin   | -0.97 | -1.51 | 1.1E-06 | 6.3E-08 |
| Hs.108118 | Mm.34901  | G RTP1   | Grtp1      | growth hormone regulated TBC protein 1                               | -0.91 | -1.27 | 1E-05   | 1.9E-05 |
| Hs.378199 | Mm.197422 | GSTA2    | Gsta2      | glutathione S-transferase A2   | -1.08 | -0.67 | 3.5E-08 | 0.04135 |
| Hs.26403  | Mm.29652  | GSTZ1    | Gstz1      | glutathione transferase zeta 1 (maleylacetoacetate isomerase)        | -0.71 | -1.26 | 0.00061 | 2.6E-05 |
| Hs.102910 | Mm.10182  | GTF2H4   | Gtf2h4     | general transcription factor IIH, polypeptide 4, 52kDa               | -0.95 | -0.90 | 2.3E-06 | 0.00483 |
| Hs.82614  | Mm.25781  | GYS2     | Gys2       | glycogen synthase 2 (liver)  | -0.83 | -1.04 | 4.2E-05 | 0.0008  |
| Hs.171280 | Mm.6994   | HADH2    | Hadh2      | hydroxyacyl-Coenzyme A dehydrogenase, type II                        | -1.07 | -1.05 | 4.7E-08 | 0.00072 |
| Hs.8110   | Mm.2491   | HADHSC   | Hadhsc     | L-3-hydroxyacyl-Coenzyme A dehydrogenase, short chain                | -1.04 | -0.90 | 1.5E-07 | 0.00472 |
| Hs.1802   | Mm.29188  | HLA-DOB  | H2-Ob      | major histocompatibility complex, class II, DO beta                  | -0.83 | -1.42 | 4.7E-05 | 1.3E-06 |
| Hs.93564  | Mm.228    | HOMER2   | Homer2     | homer homolog 2 (Drosophila)   | -1.16 | -0.89 | 1.7E-09 | 0.00549 |
| Hs.2899   | Mm.6584   | HPD      | Hpd        | 4-hydroxyphenylpyruvate dioxygenase                                  | -1.22 | -1.53 | 1.8E-10 | 2.6E-08 |
| Hs.75441  | Mm.2108   | HSD17B4  | Ttr        | hydroxysteroid (17-beta) dehydrogenase 4                             | -1.33 | -0.96 | 9.1E-13 | 0.00228 |
| Hs.187579 | Mm.12882  | HSD17B7  | Hsd17b7    | hydroxysteroid (17-beta) dehydrogenase 7                             | -0.79 | -0.91 | 0.0001  | 0.00437 |
| Hs.825    | Mm.140811 | HSD3B2   | Hsd3b1     | hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-i   | -0.47 | -1.56 | 0.02586 | 9.7E-09 |
| Hs.75253  | Mm.14825  | IDH3G    | Idh3g      | isocitrate dehydrogenase 3 (NAD+) gamma                              | -0.92 | -1.10 | 5.2E-06 | 0.00034 |
| Hs.89560  | Mm.3054   | IDUA     | Idua       | iduronidase, alpha-L-  | -0.88 | -1.43 | 2E-05   | 6.2E-07 |
| Hs.20315  | Mm.6718   | IFIT1    | Ifit1      | interferon-induced protein with tetratricopeptide repeats 1          | -0.83 | -0.66 | 4.3E-05 | 0.04832 |
| Hs.839    | Mm.3135   | IGFALS   | Igfals     | insulin-like growth factor binding protein, acid labile subunit      | -0.61 | -1.51 | 0.00488 | 6.3E-08 |
| Hs.374664 | Mm.2594   | INHBC    | Inhbc      | inhibin, beta C  | -1.21 | -1.46 | 2.6E-10 | 2.3E-07 |
| Hs.374536 | Mm.29877  | IVD      | Ubap1      | isovaleryl Coenzyme A dehydrogenase                                  | -1.13 | -0.91 | 7.9E-09 | 0.00424 |
| Hs.12337  | Mm.285    | KDR      | Kdr        | kinase insert domain receptor (a type III receptor tyrosine kinase)  | -0.78 | -0.82 | 0.00014 | 0.01107 |
| Hs.81454  | Mm.22451  | KHK      | Khk        | ketoheokinase (fructokinase)   | -1.24 | -0.95 | 5.3E-11 | 0.00274 |
| Hs.272215 | Mm.41389  | KLF15    | Klf15      | Kruppel-like factor 15   | -0.92 | -1.50 | 6.9E-06 | 7.2E-08 |
| Hs.348401 | Mm.1593   | LCAT     | Lcat       | lecithin-cholesterol acyltransferase                                 | -0.84 | -1.15 | 3.8E-05 | 0.00017 |
| Hs.167877 | Mm.16973  | LECT2    | Lect2      | leukocyte cell-derived chemotaxin 2                                  | -0.98 | -0.67 | 1.8E-06 | 0.03995 |
| Hs.9994   | Mm.362    | LIPC     | Lipc       | lipase, hepatic  | -0.59 | -1.71 | 0.00472 | 2E-11   |
| Hs.446467 | Mm.7221   | LRP1     | Lrp1       | low density lipoprotein-related protein 1 (alpha-2-macroglobulin rec | -0.84 | -1.32 | 4E-05   | 1.5E-05 |
| Hs.153863 | Mm.27935  | MADH6    | Madh6      | MAD, mothers against decapentaplegic homolog 6 (Drosophila)          | -1.18 | -0.80 | 9.2E-10 | 0.01783 |
| Hs.119983 | Mm.260161 | MASP2    | Masp2      | mannan-binding lectin serine protease 2                              | -1.46 | -0.96 | 3.6E-16 | 0.0024  |
| Hs.2314   | Mm.281805 | MBL2     | Mbl1       | mannose-binding lectin (protein C) 2, soluble (opsonic defect)       | -0.81 | -0.82 | 6.7E-05 | 0.01079 |
| Hs.417710 | Mm.34532  | MGC15416 |            | hypothetical protein MGC15416  | -0.64 | -1.25 | 0.00239 | 2.9E-05 |
| Hs.172665 | Mm.29584  | MTHFD1   | Mthfd1     | methylenetetrahydrofolate dehydrogenase (NADP+ dependent), m         | -1.13 | -0.82 | 5.8E-09 | 0.01025 |
| Hs.195799 | Mm.2941   | MTP      | Mtp        | microsomal triglyceride transfer protein (large polypeptide, 88kDa)  | -1.00 | -0.83 | 2.2E-05 | 0.00941 |
| Hs.155212 | Mm.4299   | MUT      | Mut        | methylmalonyl Coenzyme A mutase                                      | -1.37 | -1.38 | 6.2E-14 | 1.9E-06 |
| Hs.243960 | Mm.26722  | NDRG2    | Ndr2       | NDRG family member 2   | -1.15 | -1.37 | 3.2E-09 | 2.7E-06 |
| Hs.20894  | Mm.181862 | NDST1    | Ndst1      | N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 1            | -0.87 | -0.93 | 1.9E-05 | 0.00323 |
| Hs.1565   | Mm.16553  | NEDD4    | Nedd4      | neural precursor cell expressed, developmentally down-regulated 4    | -0.81 | -0.75 | 6.5E-05 | 0.02094 |
| Hs.33287  | Mm.260021 | NFIB     |            | nuclear factor I/B   | -0.83 | -1.29 | 4.1E-05 | 1.4E-05 |
| Hs.35841  | Mm.9394   | NFIX     | Nfix       | nuclear factor I/X (CCAAT-binding transcription factor)              | -0.64 | -1.54 | 0.00223 | 2.1E-08 |
| Hs.146406 | Mm.12915  | NIT1     | Nit1       | nitrilase 1  | -1.32 | -0.95 | 1.6E-12 | 0.0028  |
| Hs.347353 | Mm.22690  | NR1H3    | Nr1h3      | nuclear receptor subfamily 1, group H, member 3                      | -1.28 | -0.93 | 1.1E-11 | 0.00389 |
| Hs.75485  | Mm.13694  | OAT      | Oat        | ornithine aminotransferase (gyrate atrophy)                          | -0.81 | -1.02 | 7.7E-05 | 0.00111 |
| Hs.117050 | Mm.2611   | OTC      | Otc        | ornithine carbamoyltransferase                                       | -1.52 | -0.71 | 1.7E-13 | 0.02916 |
| Hs.1870   | Mm.2422   | PAH      | Pah        | phenylalanine hydroxylase  | -1.37 | -0.90 | 8E-14   | 0.00459 |
| Hs.1872   | Mm.42246  | PCK1     | Pck1       | phosphoenolpyruvate carboxykinase 1 (soluble)                        | -1.12 | -1.12 | 1E-08   | 0.0003  |
| Hs.285218 | Mm.5062   | PCTP     | Pctp       | phosphatidylcholine transfer protein                                 | -1.10 | -0.67 | 1.5E-08 | 0.04124 |
| Hs.92261  | Mm.29768  | PDK2     | Pdk2       | pyruvate dehydrogenase kinase, isoenzyme 2                           | -1.31 | -0.81 | 3.1E-09 | 0.01215 |
| Hs.12592  | Mm.10723  | PER3     | Per3       | period homolog 3 (Drosophila)  | -0.83 | -0.79 | 4.4E-05 | 0.01445 |
| Hs.31034  | Mm.20615  | PEX11A   | Pex11a     | peroxisomal biogenesis factor 11A                                    | -0.91 | -1.39 | 1.4E-05 | 1.4E-06 |
| Hs.90061  | Mm.9052   | PGRMC1   | Pgrmc1     | progesterone receptor membrane component 1                           | -1.17 | -0.95 | 1.1E-09 | 0.00263 |
| Hs.172887 | Mm.27066  | PHYH     | Phyh       | phytanoyl-CoA hydroxylase (Refsum disease)                           | -1.04 | -1.42 | 1.2E-07 | 7.5E-07 |
| Hs.271167 | Mm.8543   | PIPOX    | Pso        | pipecolic acid oxidase   | -1.43 | -1.27 | 2.5E-15 | 2.1E-05 |

|           |           |          |          |  |       |       |         |         |
|-----------|-----------|----------|----------|--|-------|-------|---------|---------|
| Hs.1898   | Mm.30107  | PON1     | Pon1     | paraoxonase 1  | -1.14 | -1.18 | 3.4E-09 | 9.6E-05 |
| Hs.167246 | Mm.3863   | POR      | Por      | P450 (cytochrome) oxidoreductase   | -1.24 | -1.28 | 5.8E-11 | 1.6E-05 |
| Hs.198468 | Mm.10707  | PPARGC1  | Ppargc1  | peroxisome proliferative activated receptor, gamma, coactivator 1        | -1.13 | -1.43 | 1.2E-08 | 5.9E-07 |
| Hs.120    | Mm.6587   | PRDX6    | Prdx6    | peroxiredoxin 6  | -1.18 | -0.98 | 8.7E-10 | 0.0023  |
| Hs.2351   | Mm.2786   | PROC     | Proc     | protein C (inactivator of coagulation factors Va and VIIIa)              | -0.94 | -0.88 | 2.6E-06 | 0.00551 |
| Hs.123641 | Mm.37213  | PTPRB    | Ptprb    | protein tyrosine phosphatase, receptor type, B                           | -0.88 | -1.02 | 3E-05   | 0.00112 |
| Hs.168670 | Mm.144235 | PXF      | Pxf      | peroxisomal farnesylated protein   | -1.14 | -1.17 | 5.2E-09 | 0.00013 |
| Hs.430299 | Mm.21853  | PXMP2    | Pxmp2    | peroxisomal membrane protein 2, 22kDa                                    | -0.77 | -0.86 | 0.00017 | 0.00698 |
| Hs.3210   | Mm.220955 | REN      | Ren1     | renin  | -0.71 | -1.20 | 0.00055 | 0.0001  |
| Hs.77854  | Mm.2118   | RGN      | Rgn      | regucalcin (senescence marker protein-30)                                | -1.45 | -0.90 | 3.9E-16 | 0.00468 |
| Hs.20084  | Mm.3470   | RXRA     | Rxra     | retinoid X receptor, alpha   | -1.21 | -1.13 | 2.7E-10 | 0.00022 |
| Hs.75760  | Mm.1779   | SCP2     | Scp2     | sterol carrier protein 2   | -0.95 | -1.42 | 0.00023 | 6.6E-07 |
| Hs.334841 | Mm.196558 | SELENBP1 | Selenbp1 | selenium binding protein 1   | -1.42 | -0.82 | 5.3E-15 | 0.01051 |
| Hs.166975 | Mm.43331  | SFRS5    | Sfrs5    | splicing factor, arginine/serine-rich 5                                  | -0.84 | -0.90 | 8.6E-05 | 0.00462 |
| Hs.8889   | Mm.3379   | SHMT1    | Shmt1    | serine hydroxymethyltransferase 1 (soluble)                              | -0.91 | -0.87 | 2.1E-05 | 0.0067  |
| Hs.75317  | Mm.5045   | SLC16A2  | Slc16a2  | solute carrier family 16 (monocarboxylic acid transporters), membe       | -1.11 | -1.29 | 1.3E-08 | 1.4E-05 |
| Hs.380    | Mm.2861   | SLC1A2   | Slc1a2   | solute carrier family 1 (glial high affinity glutamate transporter), mer | -0.65 | -0.93 | 0.00754 | 0.0032  |
| Hs.117367 | Mm.594    | SLC22A1  | Slc22a1  | solute carrier family 22 (organic cation transporter), member 1          | -1.00 | -0.96 | 4.2E-07 | 0.00329 |
| Hs.50868  | Mm.15093  | SLC22A1L | Slc22a1l | solute carrier family 22 (organic cation transporter), member 1-like     | -1.20 | -1.00 | 4.3E-10 | 0.00141 |
| Hs.77239  | Mm.42185  | SLC22A4  | Slc22a4  | solute carrier family 22 (organic cation transporter), member 4          | -0.87 | -1.22 | 7.6E-05 | 0.0002  |
| Hs.11729  | Mm.6611   | SLC27A2  | Slc27a2  | solute carrier family 27 (fatty acid transporter), member 2              | -1.27 | -1.02 | 1.7E-11 | 0.00145 |
| Hs.305971 | Mm.34147  | SLC2A10  | Slc2a10  | solute carrier family 2 (facilitated glucose transporter), member 10     | -0.66 | -1.34 | 0.00182 | 5E-06   |
| Hs.167584 | Mm.18443  | SLC2A2   | Slc2a2   | solute carrier family 2 (facilitated glucose transporter), member 2      | -1.35 | -1.02 | 2.1E-13 | 0.00111 |
| Hs.197366 | Mm.29279  | SMO      | Smo      | smoothened homolog (Drosophila)  | -0.46 | -1.42 | 0.03361 | 9.4E-07 |
| Hs.108924 | Mm.29030  | SORBS1   | Sorbs1   | sorbin and SH3 domain containing 1                                       | -0.64 | -1.32 | 0.00213 | 7.3E-06 |
| Hs.118725 | Mm.20294  | SPS2     | Sps2     | selenophosphate synthetase 2   | -0.77 | -1.27 | 0.00016 | 1.9E-05 |
| Hs.94952  | Mm.112    | TCEA3    | Tcea3    | transcription elongation factor A (SII), 3                               | -0.88 | -1.36 | 1.4E-05 | 3E-06   |
| Hs.183671 | Mm.21545  | TDO2     | Tdo2     | tryptophan 2,3-dioxygenase   | -0.90 | -1.23 | 8.2E-06 | 4.6E-05 |
| Hs.351863 | Mm.15312  | TST      | Tst      | thiosulfate sulfurtransferase (rhodanese)                                | -1.08 | -1.02 | 3.4E-08 | 0.00118 |
| Hs.427202 | Mm.2108   | TTR      | Ttr      | transthyretin (prealbumin, amyloidosis type I)                           | -1.09 | -1.11 | 2.5E-06 | 0.00032 |
| Hs.285681 | Mm.34213  | WBSCR14  | Wbscr14  | Williams Beuren syndrome chromosome region 14                            | -1.41 | -1.34 | 6.1E-15 | 4.6E-06 |
| Hs.108219 | Mm.22182  | WNT11    | Wnt11    | wingless-type MMTV integration site family, member 11                    | -1.12 | -1.24 | 2.9E-08 | 5.5E-05 |
| Hs.159456 | Mm.38250  | ZNF288   | Zfp288   | zinc finger protein 288  | -1.07 | -1.42 | 4.9E-08 | 7.5E-07 |