Supplemental Materials and Methods

Patients and Samples
Institutional review board (The Rockefeller University and Weill Cornell Medical College) approval and written informed consent were obtained before enrolling patients to participate in this study. The study was performed in adherence with the Declaration of Helsinki Principles. Cutaneous SCC samples were obtained from debulking during Mohs micrographic surgery. All tumors were obtained from sun-exposed skin. Normal specimens were obtained from non-sun-exposed areas of patients without skin cancer.

LCM
SCC (n=10) and normal skin (n=10) were subjected to LCM. Frozen tissue sections were cut at 8.0µm in a -20°C cryostat and placed on membrane mounted metal frame slides (Molecular Machines and Industries, Haslett, MI), then stored at -80°C. Slides were stained with abbreviated Hematoxylin & Eosin (H&E) prior to LCM. LCM was performed following the manufacturer's protocol for the CellCut system (Molecular Machines and Industries). Laser captured tissues were collected in 100.0µl of RLT buffer (QIAGEN, Valencia, CA) containing 1% β-mercaptoethanol (Fisher Scientific, Fair Lawn, NJ) within 2 hours after starting H&E staining in order to prevent RNA degradation. The samples in RLT buffer were stored at -80°C until RNA extraction was performed. Normal skin samples used in this study as a reference came from our previous study (Kennedy-Crispin et al, 2012)

RNA extraction and quantification
Total RNA from LCM samples was extracted into 24.0µl of RNase free water using the RNeasy Micro Kit (QIAGEN) according to the manufacturer's protocol with on-column DNase digestion. Quantitative reverse transcribe polymerase chain reaction (qRT-PCR) for RPLP0/hARP using TaqMan EZ PCR Core Reagent (Applied Biosystems, Foster City, CA) was performed in order to estimate the concentration of RNA. Briefly, 1.0µl of total RNA was diluted into 2.0µl of RNase free water. One µl of diluted total RNA was applied into a well with 49.0µl of RT-PCR reaction buffer including 3.0ul of primers and probe mix. Serial dilutions of total RNA (ranging from 2000.0 pg/µl to 1.0 pg/µl) extracted from human skin tissues were prepared and used to generate the standard curve. The samples were amplified and quantified by 7900HT Fast Real-Time PCR System (Applied Biosystems) using the following thermal cycler conditions: 2 minutes at 50°C; 30 minutes at 60°C; 5 minutes at 95°C; and 45 cycles of 15 seconds at 95°C followed by 60 seconds at 62°C. Assays were performed in triplicate. The quality of extracted RNA was evaluated using Agilent Bioanalyzer (Agilent, Santa Clara, CA).

RNA amplification and hybridization
One ng of total RNA was subjected to Affymetrix two-cycle cDNA synthesis (Affymetrix, Santa Clara, CA), with a slight modification described previously
Biotin labeling of cRNA transcripts was done with the GeneChip IVT Labeling Kit (Affymetrix). Fifteen µg of biotin-labeled RNA was fragmented and hybridized to Human Genome U133 A2.0 arrays (Affymetrix) and washed, stained, and scanned according to the manufacturer’s protocol. The data have been deposited at the Gene Expression Omnibus repository (GSE42677).

SCC Cell lines
Two human cutaneous SCC cell lines were used in this study. A431 cell line was purchased from ATCC (Manassas, VA). A431 cells were established from an 85-year-old female. This cell line forms growing subcutaneous tumors in immunosuppressed mice (Giard DJ, et al. 1973). The histology showed a poorly differentiated SCC. This cell line is able to form lung metastasis when injected intravenously (Price et al. 1988). SCC13 cells were kindly provided by professor Rheinwald (Harvard Medical Center, MA). SCC13 cells were established from a tumor on a face of a 56-year-old female. This cell line formed a tumor in subcutaneous regions of nude mice. The histology showed large differentiating cysts with a more organized structure as well as regions of typical SCC, but these cells lack invasive capacity beyond the mouse dermis (Rheinwald and Beckett, 1981).

Cell culture
Dulbecco’s Modified Eagle Medium (DMEM), High Glucose (Gibco, Grand Island, NY) supplemented with 10% Fetal Bovine Serum (ATCC) was used to grow A431 and HaCaT cells. SCC13 cells were maintained in the Keratinocyte serum free medium supplemented with 25 µg/ml bovine pituitary extract, 0.2 ng/ml epidermal growth factor, and 0.4mmol/L CaCl₂ (all from Gibco). The cells were seeded at a density of 1,000 cells/cm² in the appropriate medium in 6-well plate at 37°C in a humidified atmosphere containing 5% CO₂. The cells were starved in empty media for 24 hours when they reached more than 90% confluence, followed by stimulation with one of following cytokines for 24 hours: IL-20 (100ng/ml, R&D, Minneapolis, MN), IL-24 (40ng/ml or 100ng/ml, R&D), TNF-α (10ng/ml), TGF-α (20ng/ml), and IFN-γ (20ng/ml). After cytokine treatment, the cells were lysed in RLT buffer (QIAGEN) containing 1% β-mercaptoethanol (Fisher Scientific), and total RNA was extracted.

Wound healing assay
A431 cells were seeded into a 12 well flask in 2 ml of DMEM supplemented with 10%FBS. When they reached more than 90% confluence, a wound was using a 200µl pipet tip. The cells were washed twice with PBS and 2ml of DMEM supplemented with either 0.1% or 10% FBS was added. An MMP7Ab (Ito et al. 2007) (R&D systems) was added to the media at the indicated concentrations (PBS only, 20ng/ml, 200ng/ml, and 2000ng/ml). The wounds were photographed at 0, 12, 24, and 36 hours. The area of wound was estimated by measuring pixels using the ImageJ program (NIH, Bethesda, MD). Two independent areas were photographed from single wound of each condition at each time point and
average of those two areas were taken. The experiment was repeated three times. A percent of wound closure was calculated using the following equation:

\[ \% \text{ wound closure} = \frac{[\text{pixels at 0h}] - [\text{pixels at each time point}]}{[\text{pixels at 0h}]} \]

**Pre-amplification quantitative RT-PCR**

Pre-amplification quantitative RT-PCR technique was used for measuring 23 MMPs, IL-20, IL-24, IL20 receptor (IL20R)1, IL20R2, and IL22R1 values in total RNA extracted from laser captured samples according to the company's instruction (Applied Biosystems). This technique allows us to evaluate up to 100 targets from as low as 1 ng of cDNA by quantitative PCR measurement. Briefly, five ng of total RNA was subjected to first-strand cDNA synthesis using High Capacity cDNA Reverse Transcription Kits (Applied Biosystems). The resulting cDNA was subjected to 14 cycles of pre-amplification using TaqMan PreAmp Master Mix Kit (Applied Biosystems) with desired pooled assay mix (Applied Biosystems). The Gene Amp PCR System 9700 (Applied Biosystems) was used for pre-amplification reaction with the following thermal cycler conditions: 10 min at 95°C and 14 cycles of 15 seconds at 95°C followed by 4 min at 60°C. 12.5µl of pre-amplified cDNA was then used for quantitative PCR reaction using TaqMan Gene Expression Master Mix (Applied Biosystems). The 7900HT Fast Real-Time PCR System was used for PCR reaction, and the thermal cycler conditions were as follows: 2 minutes at 50°C, 5 minutes at 95°C, and 40 cycles of 15 seconds at 95°C followed by 60 seconds at 60°C. All reactions were performed in duplicate. All data were normalized to RPLP0/hARP. Primers and probes used in this experiment are listed in Table S7.

**Quantitative RT-PCR**

Regular TaqMan RT-PCR method was used to detect the MMP7, MMP13, and IL-24 signals in total RNA extracted from cultured cells. Ten ng of total RNA was used for each reaction. The TaqMan EZ PCR core reagents (Applied Biosystems) were used with the 7900HT Fast Real-Time PCR System. Thermal cycler conditions were as follows: 2 minutes at 50°C, 30 minutes at 60°C, 5 minutes at 95°C, and 40 cycles of 15 seconds at 95°C followed by 60 seconds at 60°C. All reagents were purchased from Applied Biosystems. All data were normalized to RPLP0/hARP. For the analysis, a value of 0 (no amplification) was replaced with 25% of the minimum quantity for each gene in order to obtain logarithmic values. Primers and probes used in this experiment are listed in Table S8.

**Immunohistochemistry (IHC)**

Frozen skin sections were prepared. Tissue sections were incubated with primary antibodies at 4°C overnight. Secondary biotin-labeled horse anti-mouse antibody (Vector Laboratories, Burlingame, CA) was amplified with avidin-biotin complex (Vector Laboratories). We used the chromogen 3-Amino-9 ethylcarbazole (Sigma-Aldrich, St. Louis, MO). Antibodies used in this experiment are listed in Table S7.
**Statistical analysis**
cDNA microarray data were analyzed using R/Bioconductor packages (www.r-project.org). The Harshlight package (Suárez-Fariñas et al, 2005) was used to scan Affymetrix chips for spatial artifacts. Expression values were obtained using gcrlma algorithm. Probe-sets with standard deviation larger than 0.2 and expression values above 3 for at least 3 samples were included in the analysis. Expression values were linearly modeled in the limma package framework. For the comparison of interest, the moderated t-test was used to assess differential expression. P-values for each comparison were adjusted for multiple hypotheses using the Benjamini-Hochberg approach. Genes with false discovery rate (FDR)<0.05 and fold change (FCH)>3.0 were considered as differentially expressed genes (DEGs).

Statistical analysis of all RT-PCR data was performed using Graphpad Prism ver.5 (GraphPad Software, La Jolla, USA). One-way ANOVA followed by Tukey’s multiple comparison correction was performed. A $p<0.05$ was considered as statistically significant.
Supplemental References

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### Table S5. Canonical pathways found to be significant in SCC invasion signature gene set.

| Canonical pathway                           | p-value    | Molecules in the pathway                                                                 |
|-------------------------------------------|------------|-----------------------------------------------------------------------------------------|
| Leukocyte Extravasation Signaling         | 9.56x10^{-4} | MMP7, PXN, ICAM1, PRKCO, MMP3, CXCR4, MMP13, CLDN7, PIK3R3, GNAI2, WASL, TIMP1, VAV3, MAPK10, MMP12, CTNN, MMP17, ARHGAP8, PRR5-ARHGAP8 |
| Aryl Hydrocarbon Receptor Signaling       | 1.46x10^{-3} | CDKN2A, CCNE2, null, NFIC, ALDH8A1, EP300, JUN, ALDH1A3, ALDH3A2, ALDH1A1, NFIB, CDKN1B, ESR1, ALDH5A1 |
| HIF1α Signaling                           | 1.54x10^{-3} | NOS1, PIK3R3, MMP7, JUN, MMP3, MAPK10, MMP13, VEGFC, MMP12, MMP17, P4H, TIMP300          |
| RAR Activation                            | 2.17x10^{-3} | ADCY2, PRKCO, RB1, EP300, PIK3R3, CSF2RB, KAT2B, CSH3, ALAS1, JUN, DHR9, ALDH1A3, SMARCA2, MAPK10, NCOR1, PML, CITED2 |
| LPS/IL-1 Mediated Inhibition of RXR Function | 2.57x10^{-3} | null, ALDH8A1, IL1R1, ABCA1, PAPSS2, IL1R2, AC5SB2, JUN, ALDH1A3, ALDH3A2, CHST3, ALAS1, CHST11, HS3ST1, ALDH1A1, TNSRFSF1B, ALDH5A1 |
| Hepatic Fibrosis / Hepatic Stellate Cell Activation | 3.33x10^{-3} | IL8, ICAM1, FN1, IFN1R2, MMP13, VEGFC, FGFR2, IL1R1, CCL5, IL1R2, TIMP1, EDNRA, TNSRFSF1B |
| RAR Activation                            | 3.73x10^{-3} | MUC1, PXN, FN1, RHOC, FERMT2, PPP2R3B, VEGFC, PIK3R3, JUN, KRT18, PAPP2B, MAPK10, RPS6KA4, IRS2, RPS6KA5, PRR5-ARHGAP8 |
| Pathogenesis of Multiple Sclerosis        | 5.80x10^{-3} | CXCL10, CCL4, CCL5                                                                      |
| HMG1B1 Signaling                          | 8.09x10^{-3} | PIK3R3, IL8, KAT2B, ICAM1, JUN, RHOC, MAPK10, IFN1R2, IL1R1, TNSRFSF1B                   |
| Melanocyte Development and Pigmentation Signaling | 1.04x10^{-2} | TYRP1, PIK3R3, ADCY2, KIT, RPS6KA4, RPS6KA5, DCT, RPS6KA1, EP300                         |
| Bladder Cancer Signaling                  | 1.12x10^{-3} | CDKN2A, IL8, MMP7, MMP3, MMP13, VEGFC, RPS6KA5, MMP12, MMP17                             |
| Lysine Degradation                        | 1.14x10^{-4} | BLDH, SOLH, FGL2, MMP13, ELOVL6, ALDH1A3, ALDH3A2, CASP1, ALDH5A1, PLOD3, KNYU, GZMB, BMP1 |
| IL-17 Signaling                           | 1.55x10^{-3} | CXCL10, PIK3R3, IL8, JUN, MMP3, TIMP1, MAPK10, CXCL1                                    |
| VDR/RXR Activation                       | 1.94x10^{-3} | CXCL10, SPP1, PRKCO, IL1R1, NCCR1, CCL5, CDKN1B, EP300                                  |
| Glycerolipid Metabolism                   | 1.95x10^{-3} | AGPAT4, SPHK2, DHR9, ALDH1A3, ALDH3A2, PPAP2B, MGLL, AKR1B1, ALDH5A1                    |
| Agrin Interactions at Neuromuscular Junction | 2.52x10^{-2} | PXN, JUN, MAPK10, ITGA6, ITGA5, ITGA3, CTNN                                              |
| PPAR Signaling                            | 2.54x10^{-2} | PXN, JUN, MAPK10, ITGA6, ITGA5, ITGA3, CTNN                                              |
| Type I Diabetes Mellitus Signaling        | 3.14x10^{-2} | PIAS1, MAPK10, IFN1R2, HLA-DOB, IL1R1, TNSRFSF1B, NFKBIB, IRF1, GZMB                      |
| Methionine Metabolism                     | 3.65x10^{-2} | null, BHMT, ALAS1, MTR                                                                   |
| IL-6 Signaling                            | 3.69x10^{-2} | IL1R2, IL8, CSNK2A2, JUN, MAPK10, IL1R1, TNSRFSF1B, NFKBIB                              |
| Production of Nitric Oxide and Reactive Oxygen Species in Macrophages | 3.86x10^{-2} | PIK3R3, JUN, PRKCO, RHOC, MAPK10, IFN1R2, PPP2R3B, TNSRFSF1B, NFKBIB, PP2R1B, IRF1, SIRPA |
| Bile Acid Biosynthesis                    | 3.90x10^{-2} | DHR9, ALDH1A3, SRD5A1, ALDH3A2, ALDH5A1                                                |
| Inhibition of Angiogenesis by TSP1        | 4.08x10^{-2} | CD47, JUN, HSPG2, GUCY1A3                                                               |
| Death Receptor Signaling                  | 4.10x10^{-2} | TNSRFSF21, TNSRFSF10B, TNSRFSF10, TNSRFSF1B, NFKBIB, DIABLO                             |
| Induction of Apoptosis by HIV1            | 4.40x10^{-2} | CXCR4, MAPK10, TNSRFSF1B, NFKBIB, DIABLO, BAK1                                         |
| OX40 Signaling Pathway                    | 4.62x10^{-2} | JUN, MAPK10, HLA-DOB, NFKBIB, HLA-DOB, NFKBIB, HLA-DOB                                 |
| Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid Arthritis | 4.85x10^{-2} | SPP1, MAPK10, ITGA6, MMP13, IL1R1, ITGA3, PIK3R3, IL1R2, NFAT5, JUN, MAPK10, BMP7, TNSRFSF1B, BMP1 |
| Amyotrophic Lateral Sclerosis Signaling   | 4.88x10^{-2} | NOS1, PIK3R3, NEFL, CASP1, NEFM, GLUL, VEGFC, CAPN7                                     |
Table S6. Results of the proportional odds model

|     | Beta  | $e^{\text{Beta}}$ | SEM  | LCI  | UCI  | $P$   |
|-----|-------|-------------------|------|------|------|-------|
| MMP10 | 0.30  | 1.35              | 0.09 | 0.15 | 0.54 | <0.0001 |
| MMP1  | 0.23  | 1.25              | 0.07 | 0.11 | 0.38 | <0.0001 |
| MMP13 | 0.56  | 1.75              | 0.19 | 0.25 | 1.03 | <0.0001 |
| MMP7  | 0.23  | 1.26              | 0.08 | 0.09 | 0.40 | 0.0006 |
| MMP12 | 0.26  | 1.30              | 0.09 | 0.10 | 0.45 | 0.0008 |
| MMP3  | 0.24  | 1.27              | 0.08 | 0.09 | 0.42 | 0.0011 |
| MMP11 | 0.47  | 1.60              | 0.17 | 0.17 | 0.86 | 0.0015 |
| MMP17 | 1.03  | 2.81              | 0.38 | 0.34 | 1.88 | 0.0024 |
| MMP9  | 0.66  | 1.94              | 0.25 | 0.22 | 1.22 | 0.0025 |
| MMP25 | 0.54  | 1.72              | 0.23 | 0.14 | 1.05 | 0.0074 |
| MMP2  | 0.46  | 1.59              | 0.20 | 0.11 | 0.90 | 0.0083 |
| MMP16 | 0.19  | 1.20              | 0.08 | 0.04 | 0.36 | 0.0133 |
| MMP24 | 0.53  | 1.70              | 0.23 | 0.09 | 1.03 | 0.0175 |
| MMP19 | 0.46  | 1.59              | 0.22 | 0.06 | 0.94 | 0.0224 |
| MMP15 | 0.80  | 2.22              | 0.52 | -0.15 | 1.95 | 0.1021 |
| MMP27 | 0.24  | 1.27              | 0.16 | -0.07 | 0.57 | 0.1246 |
| MMP20 | 0.47  | 1.60              | 0.33 | -0.15 | 1.23 | 0.1384 |
| MMP14 | 0.61  | 1.84              | 0.43 | -0.20 | 1.53 | 0.1406 |
| MMP28 | -0.39 | 0.68              | 0.28 | -1.00 | 0.14 | 0.1487 |
| MMP21 | -0.12 | 0.89              | 0.09 | -0.30 | 0.05 | 0.1824 |
| MMP23B | -0.21 | 0.81              | 0.32 | -0.90 | 0.40 | 0.5094 |
| MMP8  | -0.12 | 0.89              | 0.27 | -0.71 | 0.46 | 0.6571 |
| MMP26 | NA    | NA                | NA   | NA   | NA   | NA    |

Proportional odds model indicates that gene expression of MMPs increases the odds of being in a higher path towards malignancy. A $p<0.05$ was considered as significant. MMP26 could not be evaluated since the expression of this gene in all normal epidermis and AK regions were not detected at all.
Table S7. Primers and probes used in this study

| Gene symbol | GenBank accession number | Sequence                        | Assay ID                |
|-------------|-------------------------|---------------------------------|-------------------------|
| RPLP0/hARP  | NM_001002               | Forward: CGCTGCTGAACATGCTCAA    | Hs00899658_m1           |
|             |                         | Reverse: TGTCGAACACCTGCTGGATG   | Hs01548727_m1           |
|             |                         | Probe: 6-FAM-TCCCCCCTTCTCTTTGCTGG-TAMRA | Hs00968305_m1           |
| MMP1        | NM_002412.1             |                                 | Hs01029057_m1           |
| MMP2        | NM_004521.1             |                                 | Hs004985.2              |
| MMP3        | NM_002413.1             |                                 | Hs00968305_m1           |
| MMP7        | NM_002414.1             |                                 | Hs01042796_m1           |
| MMP8        | NM_002415.1             |                                 | Hs01029057_m1           |
| MMP9        | NM_004985.2             |                                 | Hs00234579_m1           |
| MMP10       | NM_002416.1             |                                 | Hs00233987_m1           |
| MMP11       | NM_005931.2             |                                 | Hs00171829_m1           |
| MMP12       | NM_002417.2             |                                 | Hs00159178_m1           |
| MMP13       | NM_002418.1             |                                 | Hs00233992_m1           |
| MMP14       | NM_004986.1             |                                 | Hs00237119_m1           |
| MMP15       | NM_002419.1             |                                 | Hs00233997_m1           |
| MMP16       | NM_005932.2             |                                 | Hs00234676_m1           |
| MMP17       | NM_057239.4             |                                 | Hs00211754_m1           |
| MMP19       | NM_002420.1             |                                 | Hs00275699_m1           |
| MMP20       | NM_004762.2             |                                 | Hs01573770_m1           |
| MMP21       | NM_147191.1             |                                 | Hs00377680_m1           |
| MMP23B      | NM_006963.1             |                                 | Hs04187882_g1           |
| MMP24       | NM_006690.3             |                                 | Hs01084645_m1           |
| MMP25       | NM_022468.4             |                                 | Hs01554789_m1           |
| MMP26       | NM_021801.3             |                                 | Hs00983740_m1           |
| MMP27       | NM_022122.2             |                                 | Hs00223193_m1           |
| MMP28       | NM_024302.3             |                                 | Hs01020031_m1           |
| IL-20       | NM_018724.3             |                                 | Hs00218888_m1           |
| IL-24       | NM_006850.3             |                                 | Hs01114274_m1           |
| IL-20R1     | NM_014432.2             |                                 | Hs00205346_m1           |
| IL-20R2     | NM_144717.3             |                                 | Hs00376373_m1           |
| IL-22RA1    | NM_021258.3             |                                 | Hs00222035_m1           |

All primers and probes were purchased from Applied Biosystems
Table S8. Antibodies used for immunohistochemistry

| Antigen | Manufacturer   | Clone | Iso type | Dilution |
|---------|----------------|-------|----------|----------|
| MMP1    | abcam          | SB12e | IgG2b    | 1:100    |
| MMP3    | abcam          | SB14d | IgG1     | 1:50     |
| MMP7    | abcam          | ID2   | IgG2b    | 1:20     |
| MMP10   | abcam          | 5E4   | IgG1     | 1:25     |
| IL24    | R&D systems    | 283123| IgG2b    | 1:100    |

All antibodies used in this experiment were mouse monoclonal.
Figure S1. MMP expression across regions in SCC.

mRNA expression levels of MMPs were examined by preamplification qRT-PCR across microdissected tissues from cutaneous SCC. A p value for each MMP was obtained among four regions using one-way ANOVA with Tukey’s correction. The resultant p values are shown in parentheses. A line between two bar indicates statistical significance between two regions.
Figure S2. Correlation of FCH between genechip and pre-amp RT-PCR

FCH in Log$_2$ obtained from cDNA microarray (x-axis) and pre-amplification RT-PCR (y-axis) was correlated as evidenced by Pearson's $r=0.7882$ ($p<0.0001$), when the 11 genes detected in both methods were compared [33 dots from three comparisons (AK vs. SCC in situ, invasive SCC vs. AK, and invasive SCC vs. SCC in situ) for 11 targets].
Figure S3. IL-24 receptor subunits expression in the three cell lines. mRNA expression of IL-24 receptor subunits [(A) IL20RA, (B) IL20RB, and (C) IL22RA] were examined in the three cell lines (HaCaT, A431, and SCC13 cells). Total RNA was extracted from the cells treated with PBS for 4 hours. A p value for each receptor was obtained among the three cell types using repeated measures ANOVA with Tukey’s correction. The resultant p values are shown in parentheses. A line between two bar indicates statistical significance between two cell types.
Figure S4. Blocking of MMP7 delayed the wound closure of A431 cells. Scratch was made on A431 cells at 90% confluence and cells were cultured in 10% FBS containing media with or without indicated concentrations of anti MMP7 antibody (MMP7Ab) for 36 hours. Cells were photographed every 12 hours. (A-D) Representative images of wound after a 36 hour cultivation with (A) PBS, (B) 20ng/ml of MMP7Ab, (C) 200ng/ml of MMP7Ab, and (D) 2000ng/ml of MMP7Ab. Two white dotted lines depict the initial area of scratch. (E) The bar graph shows
mean of percent wound closure for each treatment after 36 hours. (F) The graph depicts the chronological change of the percent wound closure for each condition. An error bar shows SEM (n=3). **; p<0.01 between MMP7Ab2000 vs. PBS, MMP7Ab20, and MMP7Ab200 for a 36H treatment (repeated measures ANOVA with Tukey’s correction).
Table S1. Invasion signature gene set of cutaneous SCC (FCH>3.0 and FDR<0.05)
383 up- and 354 down-regulated probesets

| Probe     | Symbol                  | Description                  | FCH-AK vs NormalEpidermis | lgFCH-AK vs NormalEpidermis | P-AK vs NormalEpidermis | fdr-AK vs NormalEpidermis | Status-SCCinvasive vs NormalEpidermis | FCH-SCCinvasive vs NormalEpidermis | P-SCCinvasive vs NormalEpidermis | fdr-SCCinvasive vs NormalEpidermis | Status-SCCinvasive vs NormalEpidermis | FCH-SCCinvasive vs NormalEpidermis | P-SCCinvasive vs NormalEpidermis | fdr-SCCinvasive vs NormalEpidermis |
|-----------|-------------------------|------------------------------|---------------------------|-----------------------------|-------------------------|---------------------------|--------------------------------------|--------------------------------|-------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------------|--------------------------------|--------------------------------|
| Probe ID      | Gene Name                          | Gene Description                       | Log2 Ratio | Fold Change | p-value | q-value |
|--------------|------------------------------------|----------------------------------------|------------|-------------|---------|---------|
| 221825_at    | ANGEL2                             | angel homolog 2                        | 0.58       | -0.80       | 0.00    | 0.00    |
| 212289_at    | ANKRD12                            | ankyrin repeat d1                      | 0.57       | -0.82       | 0.01    | 0.01    |
| 216563_at    | ANKRD12                            | ankyrin repeat d1                      | 0.46       | -1.13       | 0.01    | 0.01    |
| 201012_at    | ANXA1                              | annexin A1                             | 0.93       | -0.10       | 0.81    | 0.86    |
| 217112_s_at  | ANXA9                              | annexin A9                             | 1.17       | 0.23        | 0.74    | 0.81    |
| 214875_s_at  | APLP2                              | amyloid beta (A/4)                     | 1.94       | 0.95        | 0.02    | 0.04    |
| 204205_at    | APOBEC3G                           | apolipoprotein B                       | 2.45       | 1.29        | 0.02    | 0.03    |
| 212583_at    | AQR                                | aquaporin homolo                       | 0.37       | -1.42       | 0.00    | 0.00    |
| 221030_s_at  | ARHGAP24                           | Rho GTPase act                         | 0.54       | -0.90       | 0.01    | 0.02    |
| 203910_at    | ARHGAP29                           | Rho GTPase act                         | 0.84       | -0.25       | 0.64    | 0.73    |
| 202208_s_at  | ARL4C                              | ADP-ribosylator                       | 1.91       | 0.93        | 0.01    | 0.01    |
| 210980_s_at  | ASAH1                              | N-acetylphosphosist                    | 0.59       | -0.76       | 0.00    | 0.00    |
| 219103_s_at  | ASP3                               | ArfGAP with SHC                       | 0.59       | -0.76       | 0.08    | 0.13    |
| 219918_s_at  | ASPM                               | ase (abnormal sp)                     | 0.59       | -0.76       | 0.23    | 0.33    |
| 217550_at    | ATF6                               | activating transc                      | 0.35       | -1.50       | 0.00    | 0.00    |
| 220920_at    | ATP10B                             | ATPase, class V                       | 1.40       | 0.49        | 0.23    | 0.34    |
| 201243_s_at  | ATP1B1                             | ATPase, Na+K+                         | 1.68       | 0.75        | 0.21    | 0.31    |
| 209281_s_at  | ATP2B1                             | ATPase, Ca++                          | 0.36       | -1.47       | 0.00    | 0.00    |
| 206043_s_at  | ATP2C2                             | ATPase, Ca++                          | 1.09       | 0.13        | 0.75    | 0.82    |
| 217603_at    | ATP6V0A2                           | ATPase, H+ tran                       | 0.47       | -1.09       | 0.03    | 0.06    |
| 200078_s_at  | ATP6V0B                            | ATPase, H+ tran                       | 2.65       | 1.41        | 0.00    | 0.00    |
| 213587_s_at  | ATP6V0E2                           | ATPase, H+ tran                       | 0.80       | -0.32       | 0.45    | 0.55    |
| 205197_s_at  | ATP7A                              | ATPase, Ca++                          | 0.52       | -0.94       | 0.00    | 0.00    |
| 208559_s_at  | ATRX                               | alpha thalassem                       | 0.36       | -1.49       | 0.00    | 0.00    |
| 208860_s_at  | ATRX                               | alpha thalassem                       | 0.43       | -1.20       | 0.01    | 0.01    |
| 213589_s_at  | B3GNT1                             | UDP-GlcNAc:bc                         | 0.67       | -0.58       | 0.04    | 0.08    |
| 210540_s_at  | B4GALT4                            | UDP-Gal:betaGl                        | 0.34       | -1.57       | 0.00    | 0.00    |
| 203728_at    | BAK1                               | BCL2-antagonist                       | 2.20       | 1.14        | 0.00    | 0.00    |
| 219498_s_at  | BCL11A                             | B-cell CLL/lymph                      | 0.76       | -0.40       | 0.31    | 0.42    |
| 219497_s_at  | BCL11A                             | B-cell CLL/lymph                      | 0.65       | -0.62       | 0.19    | 0.28    |
| 203140_s_at  | BCL6                               | B-cell CLL/lymph                      | 0.52       | -0.96       | 0.00    | 0.00    |
| 214499_s_at  | BCLAF1                             | BCL2-association                     | 0.47       | -1.10       | 0.01    | 0.01    |
| 205870_s_at  | BDKRB2                             | bradykinin recep                      | 1.87       | 0.90        | 0.04    | 0.08    |
| 215440_s_at  | BEX4                               | brain expressed,                      | 0.84       | -0.26       | 0.71    | 0.78    |
| 213709_at    | BHLH9                               | basic helix-loop-                      | 0.36       | -1.46       | 0.00    | 0.00    |
| 206119_at    | BHMt                               | betaine-homocyst                      | 2.46       | 1.30        | 0.00    | 0.00    |
| 210201_s_at  | BIN1                                | bridging integrat                     | 2.40       | 1.26        | 0.00    | 0.00    |
| 202179_at    | BLMH                               | bleomycin hydroy                      | 2.09       | 1.06        | 0.04    | 0.08    |
| 205574_s_at  | BMP1                               | bone morphopher                       | 1.42       | 0.50        | 0.18    | 0.27    |
| 207595_s_at  | BMP1                               | bone morphopher                       | 1.52       | 0.60        | 0.00    | 0.01    |
| 209591_s_at  | BMP7                               | bone morphopher                       | 0.77       | -0.38       | 0.47    | 0.58    |
| 203502_at    | BPGM                               | 2.3-bisphosphog                     | 1.42       | 0.51        | 0.24    | 0.34    |
| 208677_s_at  | BSG                                | basigin (Ok bloo)                     | 1.05       | 0.06        | 0.82    | 0.87    |
| 202946_at    | BTB3                               | BTB (POZ) dom                         | 0.38       | -1.41       | 0.00    | 0.00    |
| 204821_at    | BTNL3A                             | butyrophilin, sub                     | 0.40       | -1.34       | 0.01    | 0.01    |
| 209183_s_at  | C10orf10                           | chromosome 10                         | 1.14       | 0.19        | 0.74    | 0.81    |
| 219953_s_at  | C11orf17                           | chromosome 11                         | 0.93       | -0.11       | 0.70    | 0.78    |
| 218789_s_at  | C11orf71                           | chromosome 11                         | 0.54       | -0.89       | 0.04    | 0.07    |
| Gene ID     | Description                                                                 |
|------------|------------------------------------------------------------------------------|
| 218060_s_at| chromosome 16                                                                 |
| 221621_at  | chromosome 17                                                                 |
| 207996_s_at| chromosome 18                                                                 |
| 216712_at  | chromosome 1c                                                                 |
| 220011_at  | chromosome 1c                                                                 |
| 216935_at  | chromosome 1c                                                                 |
| 217087_at  | chromosome 1c                                                                 |
| 203502_at  | chromosome 1c                                                                 |
| 219463_at  | chromosome 20                                                                 |
| 215852_s_at| chromosome 20                                                                 |
| 217835_s_at| chromosome 20                                                                 |
| 219706_at  | chromosome 20                                                                 |
| 221878_at  | chromosome 20                                                                 |
| 209285_at  | chromosome 3c                                                                 |
| 219655_at  | chromosome 7c                                                                 |
| 61874_at   | chromosome 9c                                                                 |
| 209030_s_at| cell adhesion molecule                                                       |
| 205428_s_at| calbindin 2                                                                  |
| 221565_s_at| calcium homeos                                                               |
| 218309_at  | calcium/calmodulin                                                          |
| 213547_at  | cullin-associated                                                           |
| 221732_at  | calcium activator                                                           |
| 200625_s_at| CAP, adenylyltransfer                                                        |
| 203356_at  | calpain 7                                                                    |
| 203357_s_at| calpain 7                                                                    |
| 211366_s_at| caspase 1, apop                                                              |
| 211368_s_at| caspase 1, apop                                                              |
| 32128_at   | chemokine (C-C)                                                             |
| 204103_at  | chemokine (C-C)                                                             |
| 1405_s_at  | chemokine (C-C)                                                             |
| 204655_at  | chemokine (C-C)                                                             |
| 205034_at  | cyclin E2                                                                    |
| 220351_at  | cyclin, CCR1                                                                 |
| 206749_at  | CD1b molecule                                                                |
| 205831_at  | CD2 molecule                                                                 |
| 213055_at  | CD47 molecule                                                                |
| 203416_at  | CD53 molecule                                                                |
| 200984_s_at| CD59 molecule                                                                |
| 205988_at  | CD84 molecule                                                                |
| 217879_at  | cell division cyclin                                                         |
| 203252_at  | cyclin-dependent                                                            |
| 209112_at  | cyclin-dependent                                                            |
| 209644_s_at| cyclin-dependent                                                            |
| 204159_at  | cyclin-dependent                                                            |
| 219505_at  | c elephant syndrome                                                         |
| 218827_s_at| centrosomal profl                                                           |
| 203494_s_at| centrosomal profl                                                           |
| 212677_s_at| centrosomal profl                                                           |

**Table Values:**

| Gene ID     | Description                                                                 |
|------------|------------------------------------------------------------------------------|
| 218060_s_at| chromosome 16                                                                 |
| 221621_at  | chromosome 17                                                                 |
| 207996_s_at| chromosome 18                                                                 |
| 216712_at  | chromosome 1c                                                                 |
| 220011_at  | chromosome 1c                                                                 |
| 216935_at  | chromosome 1c                                                                 |
| 217087_at  | chromosome 1c                                                                 |
| 203502_at  | chromosome 1c                                                                 |
| 219463_at  | chromosome 20                                                                 |
| 215852_s_at| chromosome 20                                                                 |
| 217835_s_at| chromosome 20                                                                 |
| 219706_at  | chromosome 20                                                                 |
| 221878_at  | chromosome 20                                                                 |
| 209285_at  | chromosome 3c                                                                 |
| 219655_at  | chromosome 7c                                                                 |
| 61874_at   | chromosome 9c                                                                 |
| 209030_s_at| cell adhesion molecule                                                       |
| 205428_s_at| calbindin 2                                                                  |
| 221565_s_at| calcium homeos                                                               |
| 218309_at  | calcium/calmodulin                                                          |
| 213547_at  | cullin-associated                                                           |
| 221732_at  | calcium activator                                                           |
| 200625_s_at| CAP, adenylyltransfer                                                        |
| 203356_at  | calpain 7                                                                    |
| 203357_s_at| calpain 7                                                                    |
| 211366_s_at| caspase 1, apop                                                              |
| 211368_s_at| caspase 1, apop                                                              |
| 32128_at   | chemokine (C-C)                                                             |
| 204103_at  | chemokine (C-C)                                                             |
| 1405_s_at  | chemokine (C-C)                                                             |
| 204655_at  | chemokine (C-C)                                                             |
| 205034_at  | cyclin E2                                                                    |
| 220351_at  | cyclin, CCR1                                                                 |
| 206749_at  | CD1b molecule                                                                |
| 205831_at  | CD2 molecule                                                                 |
| 213055_at  | CD47 molecule                                                                |
| 203416_at  | CD53 molecule                                                                |
| 200984_s_at| CD59 molecule                                                                |
| 205988_at  | CD84 molecule                                                                |
| 217879_at  | cell division cyclin                                                         |
| 203252_at  | cyclin-dependent                                                            |
| 209112_at  | cyclin-dependent                                                            |
| 209644_s_at| cyclin-dependent                                                            |
| 204159_at  | cyclin-dependent                                                            |
| 219505_at  | c elephant syndrome                                                         |
| 218827_s_at| centrosomal profl                                                           |
| 203494_s_at| centrosomal profl                                                           |
| 212677_s_at| centrosomal profl                                                           |

**Table Values:**

| Gene ID     | Description                                                                 |
|------------|------------------------------------------------------------------------------|
| 218060_s_at| chromosome 16                                                                 |
| 221621_at  | chromosome 17                                                                 |
| 207996_s_at| chromosome 18                                                                 |
| 216712_at  | chromosome 1c                                                                 |
| 220011_at  | chromosome 1c                                                                 |
| 216935_at  | chromosome 1c                                                                 |
| 217087_at  | chromosome 1c                                                                 |
| 203502_at  | chromosome 1c                                                                 |
| 219463_at  | chromosome 20                                                                 |
| 215852_s_at| chromosome 20                                                                 |
| 217835_s_at| chromosome 20                                                                 |
| 219706_at  | chromosome 20                                                                 |
| 221878_at  | chromosome 20                                                                 |
| 209285_at  | chromosome 3c                                                                 |
| 219655_at  | chromosome 7c                                                                 |
| 61874_at   | chromosome 9c                                                                 |
| 209030_s_at| cell adhesion molecule                                                       |
| 205428_s_at| calbindin 2                                                                  |
| 221565_s_at| calcium homeos                                                               |
| 218309_at  | calcium/calmodulin                                                          |
| 213547_at  | cullin-associated                                                           |
| 221732_at  | calcium activator                                                           |
| 200625_s_at| CAP, adenylyltransfer                                                        |
| 203356_at  | calpain 7                                                                    |
| 203357_s_at| calpain 7                                                                    |
| 211366_s_at| caspase 1, apop                                                              |
| 211368_s_at| caspase 1, apop                                                              |
| 32128_at   | chemokine (C-C)                                                             |
| 204103_at  | chemokine (C-C)                                                             |
| 1405_s_at  | chemokine (C-C)                                                             |
| 204655_at  | chemokine (C-C)                                                             |
| 205034_at  | cyclin E2                                                                    |
| 220351_at  | cyclin, CCR1                                                                 |
| 206749_at  | CD1b molecule                                                                |
| 205831_at  | CD2 molecule                                                                 |
| 213055_at  | CD47 molecule                                                                |
| 203416_at  | CD53 molecule                                                                |
| 200984_s_at| CD59 molecule                                                                |
| 205988_at  | CD84 molecule                                                                |
| 217879_at  | cell division cyclin                                                         |
| 203252_at  | cyclin-dependent                                                            |
| 209112_at  | cyclin-dependent                                                            |
| 209644_s_at| cyclin-dependent                                                            |
| 204159_at  | cyclin-dependent                                                            |
| 219505_at  | c elephant syndrome                                                         |
| 218827_s_at| centrosomal profl                                                           |
| 203494_s_at| centrosomal profl                                                           |
| 212677_s_at| centrosomal profl                                                           |
| gene symbol | chromosome position | expression level | Fold change |
|-------------|---------------------|-----------------|-------------|
| CEP76       | 1.18                | -1.12           | 0.40        |
| CHA1F1A     | 0.62                | -0.68           | 0.38        |
| CHIOL1      | 0.76                | -0.40           | 0.33        |
| CHST11      | 1.67                | 0.74            | 2.52        |
| CHST3       | 1.81                | 0.86            | 2.33        |
| CHST8       | 2.65                | 1.41            | 2.87        |
| CIB1        | 1.40                | 0.49            | 2.49        |
| CITED2      | 0.77                | -0.38           | 0.49        |
| CITED2      | 0.95                | -0.07           | 0.45        |
| CKS1B       | 2.10                | 1.07            | 2.24        |
| CLCN3       | 0.40                | -1.31           | 0.36        |
| CLDN7       | 2.90                | 1.54            | 2.30        |
| CLIP1       | 0.49                | -1.03           | 0.40        |
| CLN8        | 0.84                | -0.25           | 0.67        |
| CLTA        | 2.50                | 1.32            | 2.71        |
| CLTCL1      | 2.03                | 1.02            | 2.58        |
| CNOT3       | 0.42                | -1.26           | 0.34        |
| COL17A1     | 1.43                | 0.52            | 1.55        |
| COL9A3      | 0.42                | -1.26           | 0.83        |
| CPEB3       | 0.36                | -1.49           | 0.41        |
| CPZ         | 1.51                | 0.59            | 2.10        |
| CREB3L2     | 0.75                | -0.42           | 2.16        |
| CROCC1      | 0.63                | -0.68           | 0.47        |
| CSF2RB      | 1.25                | 0.32            | 1.32        |
| CSNK2A2     | 1.34                | 0.42            | 0.53        |
| CST7        | 2.11                | 1.07            | 2.53        |
| CSTF2       | 2.69                | 1.43            | 2.49        |
| CTBS        | 0.34                | -1.56           | 0.43        |
| CTNS        | 2.39                | 1.26            | 2.70        |
| CTSH        | 1.86                | 0.89            | 2.52        |
| CTTN        | 2.36                | 1.24            | 2.17        |
| CUGBP2      | 0.48                | -1.05           | 0.86        |
| CXCL1       | 1.07                | 0.09            | 1.33        |
| CXCL10      | 3.63                | 1.86            | 5.26        |
| CXCR4       | 2.60                | 1.38            | 1.78        |
| CYB5R1      | 1.63                | 0.71            | 1.55        |
| CYFIP1      | 2.26                | 1.18            | 2.81        |
| CYLD        | 0.58                | -0.78           | 2.52        |
| CYLD        | 0.76                | -0.40           | 0.38        |
| CYorf15B    | 0.40                | -1.32           | 0.23        |
| CYP2J2      | 0.78                | -0.36           | 0.41        |
| CYTH1       | 2.53                | 1.34            | 2.57        |
| CYLD        | 0.76                | -0.40           | 0.38        |
| CYLD        | 0.40                | -1.32           | 0.23        |
| CYP2J2      | 0.78                | -0.36           | 0.41        |
| CYTH1       | 2.53                | 1.34            | 2.57        |
| DDB1        | 0.43                | -1.21           | 0.45        |
| DDB1        | 0.42                | -1.25           | 0.36        |
| DCT         | 1.24                | 0.31            | 0.31        |
| DDAH1       | 1.18                | 0.24            | 0.73        |
| DEX17       | 0.38                | -1.40           | 0.37        |
| DENN4D4C    | 0.67                | -0.58           | 0.35        |
| Gene ID | Description | Expression 1 | Expression 2 | Expression 3 | Expression 4 | Expression 5 | Expression 6 | Expression 7 | Expression 8 | Expression 9 | Expression 10 | Expression 11 | Expression 12 | Expression 13 | Expression 14 | Expression 15 | Expression 16 | Expression 17 | Expression 18 | Expression 19 | Expression 20 | Expression 21 | Expression 22 | Expression 23 | Expression 24 | Expression 25 | Expression 26 | Expression 27 | Expression 28 | Expression 29 | Expression 30 | Expression 31 | Expression 32 | Expression 33 | Expression 34 | Expression 35 | Expression 36 | Expressio
| Gene ID   | Description                                      | Gene ID   | Description                                      |
|----------|--------------------------------------------------|----------|--------------------------------------------------|
| 202837_s_at | ICAM1 intercellular adhesion molecule 1          | 201609_x_at | ICMT isoprenylcysteine carboxyl methyltransfer |
|          |                                                  | 201422_at | IFI30 interleukin 1 receptor, type II           |
|          |                                                  | 201642_at | IFNGR2 interferon gamma receptor 1              |
|          |                                                  | 202718_at | IGFBP2 insulin-like growth factor binding protein |
|          |                                                  | 201887_at | IL13RA1 interleukin 13 receptor                 |
|          |                                                  | 202948_at | IL1R1 interleukin 1 receptor                    |
|          |                                                  | 211372_at | IL1R2 interleukin 1 receptor                    |
|          |                                                  | 207526_at | IL1RL1 interleukin 1 receptor                   |
|          |                                                  | 206569_at | IL24 interleukin 24                             |
|          |                                                  | 205798_at | IL7R interleukin 7 receptor                     |
|          |                                                  | 202859_x_at | IL8 interleukin 8                               |
|          |                                                  | 207094_x_at | IL8RA interleukin 8                            |
|          |                                                  | 210511_at | INHA8 inhibin, beta A                           |
|          |                                                  | 221185_at | IFCG IQ motif contain                          |
|          |                                                  | 202531_at | IRF1 interferon regul     |
|          |                                                  | 209184_at | IRS2 insulin receptor 8                        |
|          |                                                  | 210339_at | IRX5 iroquois homeob     |
|          |                                                  | 33034_at  | ISG20 interferon stimuli                       |
|          |                                                  | 207191_at | ISLR immunoglobulin                            |
|          |                                                  | 201474_at | ITGA3 integrin, alpha 3                          |
|          |                                                  | 201389_at | ITGA5 integrin, alpha 5                          |
|          |                                                  | 215177_at | ITGA6 integrin, alpha 6                          |
|          |                                                  | 202747_at | ITMA2 integral membra                            |
|          |                                                  | 201465_at | JUN jun oncogene                              |
|          |                                                  | 203845_at | KAT2B K(lysine) acetyltransferase              |
|          |                                                  | 220727_at | KCNN10 potassium channel                        |
|          |                                                  | 220412_x_at | KCNK7 potassium channel                        |
|          |                                                  | 200922_at | KDELR1 KDEL (Lys-Asp+Lys)                      |
|          |                                                  | 204017_at | KDELR3 KDEL (Lys-Asp+Lys)                      |
|          |                                                  | 212689_at | KDM3A lysine (K)-specific                       |
|          |                                                  | 202386_at | KIAA0430 KIAA0430                               |
|          |                                                  | 213340_at | KIAA0495 KIAA0495                               |
|          |                                                  | 212314_at | KIAA0746 KIAA0746                               |
|          |                                                  | 220911_at | KIAA1305 KIAA1305                               |
|          |                                                  | 221901_at | KIAA1644 KIAA1644                               |
|          |                                                  | 52837_at  | KIAA1644 KIAA1644                               |
|          |                                                  | 202962_at | KIF13B kinesin family member                  |
|          |                                                  | 203390_at | KIF5C kinesin family member                   |
|          |                                                  | 205051_at | KIT v-kit Hardy-Zuck                            |
|          |                                                  | 209792_at | KLL10 kalikrein-related                        |
|          |                                                  | 207023_x_at | KRT10 keratin 10                             |
|          |                                                  | 201596_x_at | KRT18 keratin 18                              |
|          |                                                  | 201650_at | KRT19 keratin 19                               |
|          |                                                  | 210663_at | KNYU kynureninase (L-tryptophan)                |
|          |                                                  | 216641_at | LAD1 ladinin 1                                 |
|          |                                                  | 207509_s_at | LAIR2 leukocyte-associated immunoglobulin     |
|          |                                                  | 203726_s_at | LAM3 laminin, alpha 3                         |
| Gene ID   | Description                             | Value 1 | Value 2 | Value 3 | Value 4 | Value 5 | Value 6 | Value 7 | Value 8 | Value 9 | Value 10 | Value 11 | Value 12 | Value 13 | Value 14 | Value 15 | Value 16 | Value 17 | Value 18 | Value 19 | Value 20 | Value 21 | Value 22 | Value 23 | Value 24 | Value 25 | Value 26 | Value 27 | Value 28 | Value 29 | Value 30 | Value 31 | Value 32 | Value 33 | Value 34 | Value 35 | Value 36 | Value 37 | Value 38 | Value 39 | Value 40 | Value 41 | Value 42 | Value 43 | Value 44 | Value 45 | Value 46 | Value 47 | Value 48 | Value 49 | Value 50 | Value 51 | Value 52 | Value 53 | Value 54 | Value 55 | Value 56 | Value 57 | Value 58 | Value 59 | Value 60 | Value 61 | Value 62 | Value 63 | Value 64 | Value 65 | Value 66 | Value 67 | Value 68 | Value 69 | Value 70 | Value 71 | Value 72 | Value 73 | Value 74 | Value 75 | Value 76 | Value 77 | Value 78 | Value 79 | Value 80 |
| Gene ID          | Gene Name                  | Description                                                                 |
|-----------------|----------------------------|-------------------------------------------------------------------------------|
| 217875_s_at     | PMEPA1                     | prostate transmembrane protein, androgen induced                               |
| 206503_s_at     | PML                        | promyelocytic leukemia                                                       |
| 215412_s_at     | PMSL2                      | postmeiotic segregation                                                       |
| 210237_at       | PNN                        | picon, desmosor                                                             |
| 219380_x_at     | POLH                       | polymerase (DNA)                                                             |
| 217769_s_at     | POMP                       | proteasome mat                                                               |
| 219926_at       | POPDC3                     | popeye domain i                                                               |
| 212226_s_at     | PAPAP2B                    | phosphatidic aci                                                             |
| 204518_s_at     | PPII                       | peptidylprolyl iso                                                           |
| 216347_s_at     | PPP1R13B                   | protein phosphatase                                                          |
| 202886_s_at     | PPP2R1B                    | protein phosphatase                                                          |
| 219264_s_at     | PPP2R3B                    | protein phosphatase                                                          |
| 207572_x_at     | PRB1                       | proline-rich protein                                                         |
| 2113010_at      | PRKCBP                     | protein kinase C                                                             |
| 210038_at       | PRKQ                       | protein kinase C                                                             |
| 218613_at       | PSD3                       | pleckstrin and Sint                                                         |
| 202569_at       | PSMB10                     | proteasome (pro)                                                             |
| 209334_s_at     | PSDM9                      | proteasome (pro)                                                             |
| 205194_at       | PSPH                       | phosphoserine p                                                              |
| 208515_at       | PTC1H                      | patched homoloq                                                              |
| 210834_s_at     | PTGER3                     | prostaglandin E                                                              |
| 213933_at       | PTGER3                     | prostaglandin E                                                              |
| 20528_s_at      | PTGS1                      | prostaglandin-er                                                             |
| 211756_at       | PTHLH                      | parathyroid horm                                                             |
| 206300_s_at     | PTHLH                      | parathyroid horm                                                             |
| 210355_at       | PTHLH                      | parathyroid horm                                                             |
| 205914_at       | PSPH                       | phosphoserine p                                                              |
| 204644_at       | PTPTG                      | protein tyrosine                                                             |
| 2101087_at      | PXN                        | paxillin                                                                     |
| 202990_at       | PYGL                       | phosphorylase, j                                                             |
| 220209_at       | PYY2                       | peptide YY, 2 (sr)                                                           |
| 205174_s_at     | QPCT                       | glutamylpeptide                                                             |
| 200864_s_at     | RAB11A                     | RAB11A, memb                                                                |
| 207018_s_at     | RAB27B                     | RAB27B, memb                                                                |
| 219210_s_at     | RAB8B                      | RAB8B, membeY                                                                |
| 203020_at       | RABGAP1L                   | RAB GTPase ac                                                                |
| 215342_s_at     | RABGAP1L                   | RAB GTPase ac                                                                |
| 202583_s_at     | RANBP9                     | RAN binding protein                                                          |
| 221872_at       | RARRES1                    | retinoic acid receptor                                                       |
| 202033_s_at     | RB1C1C                     | RB1-inducible cl                                                            |
| 212332_at       | RBL2                       | retinoblastoma-ll                                                            |
| 212027_at       | RBM25                      | RNA binding mo                                                              |
| 203423_at       | RBP1                       | retinol binding pr                                                          |
| 218564_at       | RFWD3                      | ring finger and W                                                            |
| 2010183_at      | RS20                       | regulator of G-pr                                                            |
| 205158_at       | RNASE4                     | ribonuclease, Rf                                                           |
| 200868_s_at     | RNF114                     | ring finger protei                                                          |
| 219104_at       | RNF141                     | ring finger protei                                                          |
214697_at  ROD1 regulator of differentiation 1 (S. pombe)
207624_s_at  retinitis pigmentos
213959_s_at  RGRIP1-like
214041_x_at  RPL37A
203789_s_at  SEMA3C
204632_at  RPS6KA4
204633_at  RPS6KA5
204635_at  RPS6KA5
203408_at  RTN2
200660_at  S100A11
202598_at  S100A13
204268_at  S100A2
204276_at  S100A2
210027_at  S100A3
217728_at  S100A6
213283_s_at  SALL2
219691_at  SAMD9
204900_x_at  SAP30
203379_at  RPS6KA1
204541_at  SEC14L2
215009_s_at  SEC31
204541_at  SEC14L2
215009_s_at  SEC31
203789_s_at  SEMA3C
203528_at  SEMA4D
217977_at  SEPX1
200971_s_at  SERP1
209723_at  SERPINB9
218346_at  SESN1
220946_s_at  SETD2
221806_s_at  SETD5
219751_s_at  SETD6
22311_s_at  SFRS15
212179_at  SFRS18
213735_x_at  SFTPC
214199_s_at  SFTPD
207351_s_at  SH2D2A
219256_s_at  SH3TC1
213221_s_at  SK2
202254_at  SIPA1L1
202897_at  SIRPA
202896_s_at  SIRPA
202234_s_at  SLC16A1
209900_s_at  SLC16A1
202236_s_at  SLC16A1
205896_at  SLC22A4
221751_at  SLC2A3P1

ROD1 regulator of differentiation 1 (S. pombe)
| Gene Accession | Gene Name                                      | Expression Ratio |
|----------------|-----------------------------------------------|------------------|
| 206770_s_at    | SLC35A3 solute carrier fam                    | 0.51 -0.98       |
| 218485_s_at    | SLC35C1 solute carrier fam                    | 2.29 1.20        |
| 213083_at      | SLC35D2 solute carrier fam                    | 2.60 1.38        |
| 212110_at      | SLC39A14 solute carrier fam                   | 1.30 0.38        |
| 204394_at      | SLC43A1 solute carrier fam                    | 0.64 -0.64       |
| 201195_s_at    | SLC7A5 solute carrier fam                     | 1.61 0.69        |
| 206544_s_at    | SMARCA2 SWI/SNF relact                       | 0.39 -1.37       |
| 201321_s_at    | SMARC2 SWI/SNF relact                        | 0.52 -0.93       |
| 212569_at      | SMCHD1 structural mainte                     | 0.46 -1.13       |
| 218404_at      | SNX10 sorting nexin 10                      | 0.73 -0.45       |
| 215223_s_at    | SOD2 superoxide dism                         | 1.97 0.98        |
| 204275_at      | SOLH small optic lobes                       | 0.59 -0.77       |
| 212560_at      | SOLR1 sortillin-related re                   | 0.76 -0.40       |
| 204146_at      | SOX4 SRY (sex determ)                        | 1.37 0.46        |
| 213168_at      | SP3 Sp3 transcriptionor                      | 0.37 -1.42       |
| 210117_at      | SPAG1 sperm associate                         | 0.37 -1.44       |
| 209857_at      | SPHK2 sphingosine kinase                     | 2.73 1.45        |
| 209875_at      | SPP1 secreted phosph                         | 1.45 0.53        |
| 212558_at      | SPRY1 sprouty homolog                        | 0.48 -1.08       |
| 217995_at      | SQRL sulfide quinone r                       | 2.16 1.11        |
| 210959_at      | SRS5A1 steroid-5-alpha-r                     | 1.49 0.58        |
| 208921_at      | SRI sorcin                                   | 1.95 0.97        |
| 219205_at      | SRR serine racemase                          | 1.13 0.17        |
| 202506_at      | SSFA2 sperm specific a                       | 0.41 -1.30       |
| 202440_at      | ST5 suppression of t                        | 1.61 0.68        |
| 221191_at      | STAG3L1 stromal antigen                      | 0.76 -0.40       |
| 218424_s_at    | STEAP3 STEAP family m                        | 2.83 1.50        |
| 202693_at      | STK17A serine/threonine                      | 0.67 -0.58       |
| 33736_at       | STOM1L stomatin (EPB72)                      | 2.40 1.26        |
| 221701_at      | STRA6 stimulated by ret                     | 1.68 0.75        |
| 221500_at      | STX16 syntaxin 16                            | 0.41 -1.27       |
| 201483_at      | SUP74H1 suppressor of Ty                     | 2.09 1.07        |
| 217704_x_at    | SUZ12P suppressor of ze                     | 0.37 -1.45       |
| 209306_at      | SWAP70 SWAP switching                       | 0.35 -1.53       |
| 204287_at      | SYNR1 synaptogyrin 1                         | 0.50 -1.01       |
| 202796_at      | SYNOP synaptodin                             | 1.32 0.40        |
| 211382_at      | TACC2 transforming, aci                     | 0.49 -1.03       |
| 210978_at      | TAGLN2 transforming gro                      | 2.26 1.18        |
| 220789_s_at    | TBRG4 transforming gro                      | 2.55 1.35        |
| 208494_at      | TCF5L transcription fact                     | 0.41 -1.28       |
| 204158_at      | TCRG1 T-cell, immune n                      | 1.80 0.85        |
| 205796_at      | TCP11L1 t-complex 11 (m)                    | 0.98 -0.03       |
| 205943_at      | TDO2 tryptophan,2,3-d                       | 0.95 -0.08       |
| 219719_s_at    | TDP1 tyrosyl-DNA pho                        | 1.35 0.43        |
| 214451_at      | TFFAP2B transcription fact                   | 1.17 0.23        |
| 206004_at      | TGM3 transglutaminase                       | 1.55 0.63        |
| 222122_s_at    | THOC2 THO complex 2                         | 0.49 -1.02       |
| 206555_s_at    | THUMP1D1 THUMP domain                       | 0.48 -1.06       |
| Gene ID     | Symbol   | Transcript Description                        | Gene ID     | Symbol   | Transcript Description                        |
|------------|----------|----------------------------------------------|------------|----------|----------------------------------------------|
| 201666_at  | TIMP1    | TIMP metallopeptidase inhibitor 1             | 40837_at   | TLE2     | transducin-like e                            |
| 206271_at  | TLR3     | toll-like receptor                           | 217947_at  | TM7SF3   | transmembrane                                |
| 203679_at  | TEMED1   | tumor necrosis                               | 220097_s_at| TEME104  | transmembrane                                |
| 215250_at  | TEMEM11  | tumor necrosis                               | 219253_at  | TEMEM185B| transmembrane                                |
| 217016_x_at| TEMEM212 | tumor necrosis                               | 52078_at   | TEMEM222 | transmembrane                                |
| 221259_s_at| TEMEM93  | tumor necrosis                               | 201207_at  | TNFAIP1  | tumor necrosis                               |
| 201208_s_at| TNFAIP1  | tumor necrosis                               | 209295_at  | TNRFSF10B| tumor necrosis                               |
| 203508_at  | TNRFSF1B | tumor necrosis                               | 214581_x_at| TNRFSF21 | tumor necrosis                               |
| 206287_s_at| TNRFSF10 | tumor necrosis                               | 213201_at  | TNN1     | tropolin T type 1                            |
| 221496_at  | TOB2     | tumor necrosis                               | 201512_s_at| TOMM70A  | translocase of ox                             |
| 201689_s_at| TPD52    | tumor necrosis                               | 210372_at  | TPD52L1  | tumor necrosis                               |
| 210986_at  | TPM1     | tumor necrosis                               | 206116_s_at| TPM1     | tropomin 1 (a)                               |
| 204079_at  | TPT2     | tumor necrosis                               | 210180_at  | TRA2B    | transforder 2 be                             |
| 213888_s_at| TRAF3IP3 | tumor necrosis                               | 206479_at  | TRPM1    | transient receptor                           |
| 205708_s_at| TRPM2    | tumor necrosis                               | 209390_at  | TSC1     | tuberous sclerosis                           |
| 203824_at  | TSPAN8   | tumor necrosis                               | 212928_at  | TSPY1L4  | TSPY-like 4                                  |
| 219758_at  | TTC26    | tumor necrosis                               | 208663_s_at| TTC3     | tetrafracteptide                             |
| 203049_s_at| TTC37    | tumor necrosis                               | 203048_s_at| TTC37    | tetrafracteptide                             |
| 215898_at  | TTL5     | tumor necrosis                               | 201090_x_at| TUBA1B   | tubulin, alpha 1b                            |
| 209191_at  | TUBB6    | tumor necrosis                               | 218184_at  | TULP4    | tubby like protein                           |
| 217497_at  | TYMP     | tumor necrosis                               | 205694_at  | TYRP1    | tyrosine-relate                              |
| 201534_s_at| UBL3     | ubiquitin-like 3                             | 208883_at  | UBR5     | ubiquitin protein                            |
| 214624_at  | UPIK1A   | ubiquitin protein                            | 212513_s_at| USP33    | ubiquitin specific                          |
| 222032_s_at| USP7     | ubiquitin specific                           | 202745_at  | USP8     | ubiquitin specific                          |
| Gene ID      | Log2 Ratio | Fold Change | p-value | FDR | Log2 FC | Fold Change | p-value | FDR |
|-------------|------------|-------------|---------|-----|---------|-------------|---------|-----|
| 205272_s_at | 2.98       | 0.00        | 0.00    | 0.00| 2.73    | 1.45        | 0.00    | 0.00|
| 213212_x_at | 0.53       | -0.91       | 0.02    | 0.04| 0.45    | -1.14       | 0.00    | 0.00|
| 216826_at   | 0.33       | -1.58       | 0.00    | 0.00| 0.34    | -1.58       | 0.00    | 0.00|
| 200856_x_at | 0.48       | -1.07       | 0.01    | 0.02| 0.52    | -0.93       | 0.02    | 0.04|
| 213739_at   | 0.40       | -1.31       | 0.00    | 0.00| 0.40    | -1.34       | 0.00    | 0.00|
| 223755_at   | 0.39       | -1.36       | 0.00    | 0.00| 0.34    | -1.55       | 0.00    | 0.00|
| 206848_at   | 0.82       | -0.29       | 0.50    | 0.61| 0.43    | -1.24       | 0.01    | 0.01|
| 214808_at   | 0.75       | -0.42       | 0.39    | 0.50| 0.45    | -1.15       | 0.02    | 0.04|
| 217554_at   | 0.60       | -0.74       | 0.08    | 0.13| 0.45    | -1.16       | 0.01    | 0.01|
| 219151_s_at | 0.60       | -0.74       | 0.07    | 0.13| 0.34    | -1.57       | 0.00    | 0.00|
| 215578_at   | 0.40       | -1.33       | 0.00    | 0.00| 0.36    | -1.47       | 0.00    | 0.00|
| 216410_at   | 0.33       | -1.58       | 0.00    | 0.00| 0.37    | -1.46       | 0.00    | 0.00|
| 212920_at   | 0.36       | -1.50       | 0.00    | 0.00| 0.36    | -1.49       | 0.00    | 0.00|
| 222159_at   | 0.37       | -1.45       | 0.00    | 0.00| 0.48    | -1.06       | 0.00    | 0.00|
| 204060_s_at | 0.73       | -0.46       | 0.32    | 0.43| 0.47    | -1.08       | 0.02    | 0.04|
| 213971_s_at | 0.45       | -1.17       | 0.00    | 0.00| 0.38    | -1.40       | 0.00    | 0.00|
| 220175_s_at | 0.58       | -0.78       | 0.00    | 0.00| 0.38    | -1.40       | 0.00    | 0.00|
| 217610_at   | 0.51       | -0.97       | 0.03    | 0.06| 0.35    | -1.50       | 0.00    | 0.00|
| 208078_s_at | 0.75       | -0.42       | 0.41    | 0.52| 0.35    | -1.50       | 0.01    | 0.01|
| 217553_x_at | 0.64       | -0.64       | 0.07    | 0.12| 0.35    | -1.53       | 0.00    | 0.00|
| 212182_at   | 0.38       | -1.40       | 0.00    | 0.00| 0.36    | -1.47       | 0.00    | 0.00|
| 222372_at   | 0.36       | -1.49       | 0.02    | 0.03| 0.40    | -1.34       | 0.03    | 0.05|
| 217550_x_at | 0.58       | -0.79       | 0.04    | 0.07| 0.34    | -1.56       | 0.00    | 0.00|
| 220333_at   | 0.45       | -1.15       | 0.00    | 0.00| 0.37    | -1.46       | 0.00    | 0.00|
| 214945_at   | 1.62       | 0.69        | 0.34    | 0.45| 0.41    | -1.30       | 0.08    | 0.13|
| 212842_x_at | 0.40       | -1.31       | 0.00    | 0.00| 0.41    | -1.29       | 0.00    | 0.00|
| 216694_at   | 0.38       | -1.38       | 0.00    | 0.00| 0.40    | -1.34       | 0.00    | 0.00|
| 210410_s_at | 0.45       | -1.16       | 0.00    | 0.01| 0.34    | -1.54       | 0.00    | 0.00|
| 215549_at   | 0.37       | -1.44       | 0.00    | 0.00| 0.40    | -1.33       | 0.00    | 0.00|
| 217690_at   | 0.65       | -0.62       | 0.20    | 0.29| 0.52    | -0.96       | 0.05    | 0.08|
| 215191_at   | 0.68       | -0.55       | 0.29    | 0.40| 0.34    | -1.55       | 0.00    | 0.01|
| 215204_at   | 0.97       | -0.04       | 0.93    | 0.95| 0.37    | -1.42       | 0.00    | 0.00|
| Probe   | Symbol     | Description               | FCH  | lgFCH | p      | q      |
|---------|------------|---------------------------|------|-------|--------|--------|
| 219574_at | 1-Mar membrane-assoc | 1-Mar membrane-assoc | 0.28 | -1.85 | 0.00   | 0.00   |
| 201737_s_at | 6-Mar membrane-assoc | 6-Mar membrane-assoc | 0.16 | -2.63 | 0.00   | 0.00   |
| 219488_at | A4GALT | alpha 1,4-galactosyltransferase | 3.44 | 1.78  | 0.00   | 0.00   |
| 201511_at | AAMP | angio-associate | 3.42 | 1.78  | 0.00   | 0.00   |
| 209460_at | ABAT | 4-aminobutyrate | 0.16 | -2.64 | 0.00   | 0.00   |
| 209459_s_at | ABAT | 4-aminobutyrate | 0.08 | -3.58 | 0.00   | 0.00   |
| 220159_at | ABCA11P | ATP-binding casein | 0.28 | -1.82 | 0.00   | 0.00   |
| 210082_at | ABCA4 | ATP-binding casein | 4.01 | 2.00  | 0.00   | 0.00   |
| 204719_at | ABCA8 | ATP-binding casein | 0.29 | -1.80 | 0.00   | 0.00   |
| 203196_at | ABCC4 | ATP-binding casein | 0.21 | -2.24 | 0.00   | 0.00   |
| 209380_s_at | ABCC5 | ATP-binding casein | 3.93 | 1.97  | 0.00   | 0.00   |
| 209247_s_at | ABCF2 | ATP-binding casein | 3.16 | 1.66  | 0.00   | 0.00   |
| 207593_at | ABCG4 | ATP-binding casein | 3.02 | 1.59  | 0.00   | 0.00   |
| 205566_at | ABHD2 | abhydrolase don | 3.20 | 1.68  | 0.00   | 0.00   |
| 202205_x_at | ACAA1 | acetyl-Coenzyme | 3.12 | 1.64  | 0.00   | 0.00   |
| 206069_s_at | ACADL | acyl-Coenzyme | 0.19 | -2.43 | 0.00   | 0.00   |
| 206068_s_at | ACADL | acyl-Coenzyme | 0.06 | -4.12 | 0.00   | 0.00   |
| 212477_at | ACAP2 | ArfGAP with coi | 3.28 | 1.71  | 0.00   | 0.00   |
| 210337_s_at | ACLY | ATP citrate lyase | 4.33 | 2.11  | 0.00   | 0.00   |
| 200793_s_at | ACO2 | aconitase Z, mt | 3.71 | 1.89  | 0.00   | 0.00   |
| 214763_at | ACOT11 | acyl-CoA thioesterase | 4.20 | 2.07  | 0.00   | 0.00   |
| 204393_s_at | ACPP | acid phosphatases | 3.78 | 1.92  | 0.01   | 0.01   |
| 201661_s_at | ACSL3 | acyl-CoA synthase | 0.31 | -1.71 | 0.00   | 0.00   |
| 202422_s_at | ACSL4 | acyl-CoA synthase | 0.18 | -2.45 | 0.00   | 0.00   |
| 208636_at | ACTN1 | actinin, alpha 1 | 3.37 | 1.75  | 0.00   | 0.00   |
| 20729_s_at | ACTR2 | ARF2 actin-related | 0.30 | -1.73 | 0.00   | 0.00   |
| 205209_at | ACVR1B | activin A receptor | 0.26 | -1.96 | 0.00   | 0.00   |
| 208288_at | ADAM28 | ADAM metallopro | 0.29 | -1.81 | 0.00   | 0.00   |
| 220208_at | ADAMTS13 | ADAM metallopro | 4.42 | 2.14  | 0.00   | 0.00   |
| 204497_at | ADCY9 | adenylyl cyclase | 4.09 | 2.03  | 0.00   | 0.00   |
| 204498_s_at | ADCY9 | adenylyl cyclase | 3.69 | 1.88  | 0.00   | 0.00   |
| 209614_at | ADH1B | alcohol dehydrogenase | 0.32 | -1.66 | 0.00   | 0.00   |
| 204120_s_at | ADK | adenosine kinase | 0.27 | -1.90 | 0.00   | 0.00   |
| 220538_at | ADM2 | adrenomedullin | 4.53 | 2.18  | 0.00   | 0.00   |
| 38447_at | ADRBK1 | adrenergic, beta | 11.08 | 3.47  | 0.00   | 0.00   |
| 201402_at | ADRBK1 | adrenergic, beta | 8.19 | 3.03  | 0.00   | 0.00   |
| 219361_s_at | AEN | apoptosis enhancer | 3.06 | 1.62  | 0.00   | 0.00   |
| 208042_at | AGGF1 | angiogenic factor | 0.21 | -2.27 | 0.00   | 0.00   |
| 209003_s_at | AHCY | adenosylhomocysteine | 3.47 | 1.80  | 0.00   | 0.00   |
| 203156_at | AKAP11 | A kinase (PRKA) | 0.32 | -1.65 | 0.00   | 0.00   |
| 222024_s_at | AKAP13 | A kinase (PRKA) | 0.29 | -1.80 | 0.00   | 0.00   |

Table S2. AK vs. normal epidermis (FCH>3.0 and FDR<0.05)
724 up- and 820 down-regulated probes
| EntrezID | Gene Symbol | Gene Name                                      | Data1 | Data2 | Data3 | Data4 |
|---------|-------------|-----------------------------------------------|-------|-------|-------|-------|
| 205771 | AKAP7       | A kinase (PRKA) anchor protein 7               | 0.15  | -2.77 | 0.00  | 0.00  |
| 215741 | AKAP8L      | A kinase (PRKA) anchor protein 8-like          | 4.25  | 2.09  | 0.00  | 0.00  |
| 215483 | AKAP9       | A kinase (PRKA) anchor protein (yotiao) 9      | 0.13  | -2.91 | 0.00  | 0.00  |
| 206561 | AKR1B10     | aldo-keto reductase family B10 member B10      | 21.41 | 4.42  | 0.00  | 0.00  |
| 201951 | ALCAM       | activated leukocyte cell adhesion molecule     | 0.13  | -2.93 | 0.00  | 0.00  |
| 204942 | ALDH3B2     | aldehyde dehydrogenase family B2              | 4.06  | 2.02  | 0.00  | 0.01  |
| 211552 | ALDH4A1     | aldehyde dehydrogenase family A1              | 5.76  | 2.53  | 0.00  | 0.00  |
| 215483 | ALDOB       | aldolase B, fructose-phosphate                | 3.56  | 1.83  | 0.00  | 0.00  |
| 206714 | ALOX15B     | arachidonate 15-lipoxygenase, type B          | 3.25  | 1.70  | 0.01  | 0.01  |
| 202204 | AMFR        | autocrine motility factor receptor             | 4.05  | 2.02  | 0.00  | 0.00  |
| 202203 | AMFR        | autocrine motility factor receptor             | 0.24  | -2.06 | 0.00  | 0.00  |
| 203002 | AMOTL2      | angiomotin like 2                              | 0.32  | -1.69 | 0.00  | 0.00  |
| 215314 | ANK3        | ankyrin 3, node                                  | 0.32  | -1.63 | 0.00  | 0.00  |
| 218769 | ANKRA2      | ankyrin repeat, f                                 | 0.30  | -1.74 | 0.00  | 0.00  |
| 214723 | ANKRD36     | ankyrin repeat d                               | 0.10  | -3.33 | 0.00  | 0.00  |
| 212731 | ANKRD46     | ankyrin repeat d                               | 0.32  | -1.64 | 0.00  | 0.00  |
| 218261 | AP1M2       | adaptor-related                                  | 3.12  | 1.64  | 0.00  | 0.00  |
| 204859 | APAF1       | apoptotic peptide                              | 0.23  | -2.15 | 0.00  | 0.00  |
| 209870 | APBA2       | amyloid beta (A4)                              | 5.53  | 2.47  | 0.00  | 0.00  |
| 210873 | APOBEC3A    | apolipoprotein B                               | 7.61  | 2.93  | 0.00  | 0.00  |
| 215579 | APOBEC3G    | apolipoprotein B                               | 3.81  | 1.93  | 0.00  | 0.00  |
| 204416 | APOC1       | apolipoprotein C                               | 3.17  | 1.66  | 0.00  | 0.00  |
| 213289 | APOOL       | apolipoprotein O                               | 0.33  | -1.60 | 0.00  | 0.00  |
| 218218 | APPL2       | adaptor protein                                 | 0.27  | -1.91 | 0.00  | 0.00  |
| 210090 | ARC         | activity-regulated                              | 3.17  | 1.66  | 0.00  | 0.00  |
| 205239 | AREG        | amphiregulin                                   | 10.27 | 3.36  | 0.00  | 0.00  |
| 202955 | ARFGEF1     | ADP-ribosylation                                | 3.73  | 1.90  | 0.00  | 0.00  |
| 218098 | ARFGEF2     | ADP-ribosylation                                | 0.31  | -1.67 | 0.00  | 0.00  |
| 201333 | ARHGFEF1    | Rho guanine nucleotide                          | 3.65  | 1.87  | 0.00  | 0.00  |
| 201228 | ARHI2       | ariadne homolog                                | 3.01  | 1.59  | 0.00  | 0.00  |
| 201229 | ARHI2       | ariadne homolog                                | 0.27  | -1.90 | 0.00  | 0.00  |
| 218185 | ARMC1       | armadillo repeat                               | 0.28  | -1.84 | 0.00  | 0.00  |
| 219094 | ARMC3       | armadillo repeat                               | 0.30  | -1.72 | 0.00  | 0.00  |
| 216964 | ARMCX1      | armadillo repeat                               | 0.13  | -3.00 | 0.00  | 0.00  |
| 217858 | ARMCX3      | armadillo repeat                               | 0.31  | -1.68 | 0.00  | 0.00  |
| 210971 | ARNTL       | aryl hydrocarbon                               | 0.22  | -2.19 | 0.00  | 0.00  |
| 201954 | ARPC1B      | actin related protein                          | 3.23  | 1.69  | 0.00  | 0.00  |
| 214490 | ARSF        | arylsulfatase F                                | 4.06  | 2.02  | 0.00  | 0.00  |
| 205784 | ARVCF       | armadillo repeat                               | 3.29  | 1.72  | 0.00  | 0.00  |
| 203427 | ASF1A       | ASF1 anti-silenc                               | 0.23  | -2.15 | 0.00  | 0.00  |
| 218115 | ASF1B       | ASF1 anti-silenc                               | 3.97  | 1.99  | 0.00  | 0.00  |
| 205517 | ASH2L       | ash2 (absent, sn)                              | 3.18  | 1.67  | 0.00  | 0.00  |
| 209135 | ASPH        | aspartate beta-h                               | 0.28  | -1.85 | 0.00  | 0.00  |
| 219068 | ATAD3A      | ATPase family, J                               | 4.15  | 2.05  | 0.00  | 0.00  |
| 222103 | ATF1        | activating transco                             | 0.30  | -1.76 | 0.00  | 0.00  |
| 203168 | ATF6B       | activating transco                             | 3.17  | 1.67  | 0.00  | 0.00  |
| Gene ID       | Gene Name             | Description                              | Ratio 1 | Ratio 2 | Ratio 3 | Ratio 4 |
|--------------|-----------------------|------------------------------------------|---------|---------|---------|---------|
| 216197_s_at  | ATF7IP                | activating transcription factor 7         | 0.21    | -2.28   | 0.00    | 0.00    |
| 202492_s_at  | ATG9A                 | ATG9 autophagy                           | 3.12    | 1.64    | 0.00    | 0.00    |
| 40489_s_at   | ATN1                  | tropin 1                                 | 5.70    | 2.51    | 0.00    | 0.00    |
| 203454_s_at  | ATOX1                 | ATPase, H+/K+ transporting               | 3.47    | 1.80    | 0.00    | 0.00    |
| 214070_s_at  | ATP10B                 | ATPase, class V                          | 4.99    | 2.32    | 0.00    | 0.00    |
| 213584_at    | ATP11A                 | ATPase, class VI                         | 0.21    | -2.26   | 0.00    | 0.00    |
| 207367_at    | ATP12A                 | ATPase, H+K+                              | 8.76    | 3.13    | 0.00    | 0.00    |
| 215716_s_at  | ATP2B1                 | ATPase, Ca++                             | 0.26    | -1.92   | 0.00    | 0.00    |
| 212930_at    | ATP2B1                 | ATPase, Ca++                             | 0.12    | -3.12   | 0.00    | 0.00    |
| 205198_s_at  | ATP7A                  | ATPase, Cu++                             | 0.32    | -1.66   | 0.00    | 0.00    |
| 213106_at    | ATP8A1                 | ATPase, aminocp                          | 0.24    | -2.07   | 0.00    | 0.00    |
| 214010_s_at  | ATP9B                  | ATPase, class II                         | 3.10    | 1.63    | 0.00    | 0.00    |
| 204516_at    | ATXN7                  | ataxin 7                                 | 0.32    | -1.64   | 0.00    | 0.00    |
| 205539_at    | AVIL                   | advillin                                 | 0.31    | -1.68   | 0.00    | 0.00    |
| 218631_at    | AVPR1I                 | arginine vasopre                         | 3.30    | 1.72    | 0.00    | 0.00    |
| 208260_at    | AVPR1B                 | arginine vasopre                         | 8.25    | 3.05    | 0.00    | 0.00    |
| 202984_s_at  | BAG5                   | BCL2-associated                          | 0.21    | -2.23   | 0.00    | 0.00    |
| 210419_at    | BARX2                  | BARX homeobox                            | 3.03    | 1.60    | 0.00    | 0.00    |
| 208132_x_at  | BAT2                   | HLA-B associate                          | 3.24    | 1.69    | 0.00    | 0.00    |
| 201355_s_at  | BAZ2A                  | bromodomain ac                           | 3.00    | 1.59    | 0.00    | 0.00    |
| 219487_at    | BBS10                  | Bardet-Biedl syn                         | 0.30    | -1.76   | 0.00    | 0.00    |
| 37547_at     | BBS9                   | Bardet-Biedl syn                         | 0.33    | -1.59   | 0.00    | 0.01    |
| 91920_at     | BCAN                   | brevican                                 | 6.85    | 2.78    | 0.00    | 0.00    |
| 205084_at    | BCAP29                 | B-cell receptor-a                        | 0.32    | -1.66   | 0.00    | 0.00    |
| 204032_at    | BCAR3                  | breast cancer an                         | 0.11    | -3.17   | 0.00    | 0.00    |
| 215990_s_at  | BCL6                   | B-cell CLL/lymp                          | 0.17    | -2.54   | 0.00    | 0.00    |
| 219072_at    | BCL7C                  | B-cell CLL/lymp                          | 3.67    | 1.88    | 0.00    | 0.00    |
| 204129_at    | BCL9                   | B-cell CLL/lymp                          | 3.61    | 1.85    | 0.00    | 0.00    |
| 219433_at    | BCOR                   | BCL6 co-repress                          | 0.30    | -1.73   | 0.00    | 0.00    |
| 211725_s_at  | BID                    | BH3 interacting r                        | 3.29    | 1.72    | 0.00    | 0.00    |
| 214439_x_at  | BIN1                   | bridging integrates                      | 4.33    | 2.12    | 0.00    | 0.00    |
| 202931_x_at  | BIN1                   | bridging integrates                      | 3.72    | 1.89    | 0.00    | 0.00    |
| 219191_s_at  | BIN2                   | bridging integrates                      | 4.72    | 2.24    | 0.00    | 0.00    |
| 210538_s_at  | BIRC3                  | baculoviral IAP r                        | 0.33    | -1.59   | 0.00    | 0.00    |
| 206725_x_at  | BMP1                   | bone morphogher                          | 3.29    | 1.72    | 0.00    | 0.00    |
| 205289_at    | BMP2                   | bone morphogher                          | 0.15    | -2.79   | 0.00    | 0.00    |
| 37170_at     | BMP2K                  | BMP2 inducible                          | 0.33    | -1.62   | 0.00    | 0.00    |
| 214716_at    | BMP2K                  | BMP2 inducible                          | 0.30    | -1.74   | 0.00    | 0.00    |
| 220203_at    | BMP9A                  | bone morphogher                          | 8.29    | 3.05    | 0.00    | 0.00    |
| 206044_s_at  | BRAF                   | v-raf murine sarc                        | 4.34    | 2.12    | 0.00    | 0.00    |
| 214820_at    | BRWD1                  | bromodomain ar                          | 0.26    | -1.93   | 0.00    | 0.00    |
| 207326_at    | BTC                    | betacellulin                             | 0.08    | -3.58   | 0.00    | 0.00    |
| 204901_at    | BTRC                   | beta-transducin r                        | 4.20    | 2.07    | 0.00    | 0.00    |
| 218299_at    | C11orf24               | chromosome 11                            | 5.23    | 2.39    | 0.00    | 0.00    |
| 204218_at    | C11orf51               | chromosome 11                            | 3.16    | 1.66    | 0.00    | 0.00    |
| 221208_s_at  | C11orf61               | chromosome 11                            | 0.32    | -1.66   | 0.00    | 0.00    |
| 220141_at    | C11orf63               | chromosome 11                            | 0.14    | -2.88   | 0.00    | 0.00    |
| Gene ID     | Description                      | Chromosome | Value1 | Value2 | Value3 | Value4 |
|------------|----------------------------------|------------|--------|--------|--------|--------|
| 64432_at   | C12orf47                        | 12         | 0.13   | -2.90  | 0.00   | 0.00   |
| 221777_at  | C12orf52                        | 12         | 3.07   | 1.62   | 0.00   | 0.00   |
| 218420_s_at| C13orf23                        | 13         | 3.25   | 1.70   | 0.00   | 0.00   |
| 219166_at  | C14orf104                       | 14         | 0.24   | -2.04  | 0.00   | 0.00   |
| 206500_s_at| C14orf106                       | 14         | 0.26   | -1.96  | 0.00   | 0.00   |
| 208109_s_at| C15orf5                         | 15         | 0.27   | -1.89  | 0.00   | 0.00   |
| 219556_at  | C16orf59                        | 16         | 4.33   | 2.12   | 0.00   | 0.00   |
| 206500_at  | C17orf5                         | 17         | 0.24   | -2.04  | 0.00   | 0.00   |
| 218420_s_at| C18orf25                        | 18         | 0.30   | -1.74  | 0.00   | 0.00   |
| 212929_at  | C19orf21                        | 19         | 6.91   | 2.79   | 0.00   | 0.00   |
| 55705_at   | C19orf22                        | 19         | 3.97   | 1.99   | 0.00   | 0.00   |
| 220178_at  | C19orf28                        | 19         | 3.03   | 1.60   | 0.00   | 0.00   |
| 206901_at  | C19orf57                        | 19         | 5.86   | 2.55   | 0.00   | 0.00   |
| 219556_at  | C1orf116                        | 1          | 3.31   | 1.73   | 0.00   | 0.00   |
| 212033_at  | C1orf144                        | 1          | 3.10   | 1.63   | 0.00   | 0.00   |
| 212033_at  | C1orf156                        | 1          | 0.23   | -2.11  | 0.00   | 0.00   |
| 220992_s_at| C1orf25                         | 1          | 0.33   | -1.62  | 0.00   | 0.00   |
| 218983_at  | C1RL                             | 1          | 0.19   | -2.41  | 0.00   | 0.00   |
| 221211_s_at| C21orf7                         | 21         | 0.28   | -1.81  | 0.00   | 0.00   |
| 220681_at  | C22orf26                        | 22         | 3.85   | 1.95   | 0.00   | 0.00   |
| 219617_at  | C2orf34                         | 2           | 0.26   | -1.93  | 0.00   | 0.00   |
| 220943_s_at| C2orf56                         | 2           | 0.28   | -1.82  | 0.00   | 0.00   |
| 215046_at  | C2orf67                         | 2           | 0.20   | -2.34  | 0.00   | 0.00   |
| 65472_at   | C2orf68                         | 2           | 0.29   | -1.80  | 0.00   | 0.00   |
| 218179_s_at| C4orf41                         | 4           | 0.33   | -1.61  | 0.00   | 0.00   |
| 218513_at  | C4orf43                         | 4           | 0.16   | -2.68  | 0.00   | 0.00   |
| 205500_at  | C5                               | 5           | 0.20   | -2.36  | 0.00   | 0.00   |
| 48030_i_at | C5orf4                          | 5           | 10.72  | 3.42   | 0.00   | 0.00   |
| 218674_at  | C5orf44                         | 5           | 0.21   | -2.22  | 0.00   | 0.00   |
| 204238_s_at| C6orf108                        | 6           | 3.03   | 1.60   | 0.00   | 0.00   |
| 221100_at  | C6orf15                         | 6           | 3.81   | 1.93   | 0.00   | 0.00   |
| 218195_at  | C6orf211                        | 6           | 0.14   | -2.80  | 0.00   | 0.00   |
| 220755_s_at| C6orf48                         | 6           | 3.28   | 1.71   | 0.00   | 0.00   |
| 206497_at  | C7orf44                         | 7           | 0.29   | -1.81  | 0.00   | 0.00   |
| 210109_at  | C7orf54                         | 7           | 0.33   | -1.60  | 0.00   | 0.00   |
| 221596_s_at| C7orf64                         | 7           | 0.21   | -2.24  | 0.00   | 0.00   |
| 221629_x_at| C8orf30A                        | 8           | 4.03   | 2.01   | 0.00   | 0.00   |
| 218500_at  | C8orf55                         | 8           | 3.47   | 1.80   | 0.00   | 0.00   |
| 210735_s_at| CA12                             | 12          | 4.80   | 2.26   | 0.00   | 0.00   |
| 204885_at  | CA3                             | 13          | 0.25   | -2.01  | 0.00   | 0.00   |
| 207504_at  | CA7                             | 15          | 3.49   | 1.80   | 0.00   | 0.00   |
| 211592_s_at| CACNA1C                          | 16          | 0.25   | -1.98  | 0.00   | 0.00   |
| 211802_x_at| CACNA1G                          | 17          | 3.64   | 1.87   | 0.00   | 0.00   |
| 207939_at  | CACNB4                          | 17          | 3.37   | 1.75   | 0.00   | 0.00   |
| 62987_r_at | CACNG4                          | 17          | 23.72  | 4.57   | 0.00   | 0.00   |
| 200757_s_at| CALU                             | 12          | 3.51   | 1.81   | 0.00   | 0.00   |
| 34846_at   | CAMK2B                           | 12          | 4.18   | 2.06   | 0.00   | 0.00   |
| 220162_s_at| CARD9                            | 12          | 3.12   | 1.64   | 0.00   | 0.00   |
| Gene ID   | Description                  | Value1 | Value2 | Value3 | Value4 |
|----------|------------------------------|--------|--------|--------|--------|
| 61297_at | CASK2 interacting protein 2  | 0.26   | -1.94  | 0.00   | 0.00   |
| 22201_at | caspase 8 assoc              | 0.22   | -2.16  | 0.00   | 0.00   |
| 215573_at| catalase                     | 0.32   | -1.64  | 0.00   | 0.00   |
| 208204_at| caveolin 3                   | 3.30   | 1.72   | 0.00   | 0.00   |
| 206788_at| core-binding fact            | 3.13   | 1.64   | 0.00   | 0.00   |
| 213626_at| carbonyl reducta             | 0.16   | -2.68  | 0.00   | 0.00   |
| 219611_at| coiled-coil domain           | 3.58   | 1.84   | 0.00   | 0.00   |
| 219644_at| coiled-coil domain           | 0.20   | -2.32  | 0.00   | 0.00   |
| 219387_at| coiled-coil domain           | 0.32   | -1.63  | 0.00   | 0.01   |
| 218545_at| coiled-coil domain           | 0.29   | -1.81  | 0.00   | 0.00   |
| 206150_at| CD27 molecule                | 0.28   | -1.82  | 0.00   | 0.00   |
| 203799_at| CD302 molecule               | 0.31   | -1.69  | 0.00   | 0.00   |
| 206488_at| CD36 molecule                | 9.27   | 3.21   | 0.00   | 0.00   |
| 209555_at| CD36 molecule                | 9.07   | 3.18   | 0.00   | 0.00   |
| 35150_at | cyclin T2                    | 0.33   | -1.62  | 0.00   | 0.00   |
| 222156_x_at | cell cycle progres            | 0.27   | -1.91  | 0.00   | 0.00   |
| 204440_at| CD83 molecule                | 3.05   | 1.61   | 0.01   | 0.01   |
| 205288_at| CDC14A cell divis            | 0.23   | -2.14  | 0.00   | 0.00   |
| 210742_at| CDC14A cell divis            | 0.16   | -2.62  | 0.00   | 0.00   |
| 211347_at| CDC14B cell divis            | 0.28   | -1.82  | 0.00   | 0.00   |
| 201853_at| CDC25B cell division cycl    | 5.19   | 2.37   | 0.00   | 0.00   |
| 203256_at| cadherin 3, type             | 6.55   | 2.71   | 0.00   | 0.00   |
| 204247_at| cyclin-dependen              | 3.71   | 1.89   | 0.00   | 0.00   |
| 222284_at| cyclin-dependen              | 3.22   | 1.69   | 0.00   | 0.00   |
| 207039_at| cyclin-dependen              | 3.37   | 1.75   | 0.00   | 0.00   |
| 219297_at| CDK2A/Centromere prote        | 0.24   | -2.09  | 0.00   | 0.00   |
| 213230_at| CDR2L cerebellar degener     | 4.83   | 2.27   | 0.00   | 0.00   |
| 206430_at| caudal type horn             | 4.46   | 2.16   | 0.00   | 0.00   |
| 219501_at| cell cycle exit an           | 4.06   | 2.02   | 0.00   | 0.00   |
| 204739_at| centromere prote             | 0.24   | -2.08  | 0.00   | 0.00   |
| 214804_at| centromere prote             | 0.29   | -1.79  | 0.00   | 0.00   |
| 218741_at| centromere prote             | 3.23   | 1.69   | 0.00   | 0.00   |
| 219294_at| centromere prote             | 0.18   | -2.48  | 0.00   | 0.00   |
| 218148_at| centromere prote             | 4.19   | 2.07   | 0.00   | 0.00   |
| 206003_at| centrosomal prot             | 0.28   | -1.86  | 0.00   | 0.00   |
| Gene Symbol | Description                                             | Log2 Fold Change | p-Value       | False Discovery Rate |
|-------------|----------------------------------------------------------|-----------------|---------------|---------------------|
| 215170_s_at | CEP152 centrosomal protein 152kDa                       | 0.25            | -2.00         | 0.00                |
| 221683_s_at | CEP290 centrosomal protein                              | 0.11            | -3.14         | 0.00                |
| 222151_s_at | CEP63 centrosomal protein                               | 0.13            | -2.95         | 0.00                |
| 220335_x_at| CES3 carboxylesterase                                   | 11.33           | 3.50          | 0.00                |
| 206380_s_at | CFP complement factor                                    | 0.21            | -2.24         | 0.00                |
| 215318_at  | CG012 hypothetical gene                                 | 0.31            | -1.71         | 0.00                |
| 206932_at  | CH25H cholesterol 25-hydroxycholesterol                 | 4.73            | 2.24          | 0.00                |
| 201182_s_at | CHD4 chromodomain h                                     | 0.30            | -1.73         | 0.00                |
| 220586_at  | CHD9 chromodomain h                                     | 0.33            | -1.61         | 0.00                |
| 210416_s_at| CHEK2 CHK2 checkpoint                                    | 3.83            | 1.94          | 0.00                |
| 213060_s_at| CHI3L2 chitinase 3-like                                   | 6.11            | 2.61          | 0.00                |
| 206932_at  | CHMP1B chromatin modifier                               | 5.92            | 2.57          | 0.00                |
| 211248_s_at| CHRD chordin                                            | 0.16            | -2.63         | 0.00                |
| 210221_at  | CHRNA3 cholinergic receptor alpha 3                      | 5.14            | 2.36          | 0.00                |
| 209834_at  | CHST3 carbohydrate (ch)                                 | 5.45            | 2.45          | 0.00                |
| 205007_s_at| CI2B calcium and integrin                                | 3.87            | 1.95          | 0.00                |
| 205101_at  | CIITA class II, major histocompatibility                 | 0.31            | -1.69         | 0.00                |
| 209571_at  | CIR1 corepressor inhibitor                              | 0.21            | -2.26         | 0.00                |
| 221233_x_at| CISH cytokine inducible                                 | 3.11            | 1.64          | 0.00                |
| 204170_s_at| CKS2 CDC28 protein k                                    | 3.03            | 1.60          | 0.01 0.03           |
| 212308_at  | CLASP2 cytoplasmic link                                 | 0.26            | -1.93         | 0.00                |
| 206164_at  | CLCA2 chloride channel                                  | 3.58            | 1.84          | 0.00                |
| 220026_at  | CLCA4 chloride channel                                  | 0.24            | -2.08         | 0.00                |
| 207551_s_at| SLCC1 chloride channel                                  | 0.30            | -1.72         | 0.00                |
| 214769_at  | CLCN4 chloride channel                                  | 0.32            | -1.65         | 0.00                |
| 204482_at  | CLDN5 claudin 5                                         | 0.23            | -2.15         | 0.00                |
| 214598_at  | CLDN8 claudin 8                                         | 0.06            | -4.13         | 0.00                |
| 210716_s_at| CLIP1 CAP-GLY domain                                    | 0.31            | -1.70         | 0.00                |
| 201640_x_at| CLPTM1 cleft lip and palate                             | 4.46            | 2.16          | 0.00                |
| 222043_at  | CLU clusterin                                           | 0.10            | -3.31         | 0.00                |
| 204577_s_at| CLUAP1 clusterin associant                              | 0.33            | -1.60         | 0.00                |
| 210571_s_at| CMAH cytidine monophosphorylase                         | 0.31            | -1.71         | 0.00                |
| 205518_s_at| CMAH cytidine monophosphorylase                         | 0.04            | -4.51         | 0.00                |
| 218111_s_at| CMAS cytidine monophosphorylase                         | 0.23            | -2.14         | 0.00                |
| 206417_at  | CNGA1 cyclic nucleotide                                 | 0.23            | -2.14         | 0.00                |
| 209874_s_at| CNNM2 cyclin M2                                         | 4.76            | 2.25          | 0.00                |
| 210867_at  | CNOT4 CCR4-NOT trans                                    | 0.20            | -2.29         | 0.00                |
| 202163_s_at| CNOT8 CCR4-NOT trans                                    | 0.32            | -1.67         | 0.00                |
| 220323_at  | CNTD2 cyclin N-terminal                                 | 4.34            | 2.12          | 0.00                |
| 206970_at  | CNTN2 contactin 2 (axor)                                 | 3.19            | 1.68          | 0.00                |
| 205229_s_at| COCH coagulation factor                                 | 0.18            | -2.45         | 0.00                |
| 211809_s_at| COL13A1 collagen, type XI                               | 0.25            | -2.00         | 0.00                |
| 208096_s_at| COL21A1 collagen, type X                                 | 0.23            | -2.10         | 0.00                |
| 222073_at  | COL4A3 collagen, type IV                                | 0.30            | -1.74         | 0.00                |
| 221729_at  | COL5A2 collagen, type V                                  | 0.27            | -1.88         | 0.01 0.01           |
| 221730_at  | COL5A2 collagen, type V                                  | 0.24            | -2.04         | 0.00                |
| 52255_s_at | COL5A3 collagen, type V                                  | 0.30            | -1.75         | 0.00                |
| 213280_at  | COL6A2 collagen, type VI                                 | 0.25            | -2.01         | 0.00                |
| Gene ID      | Gene Symbol | Description                                      | Log2 Fold Change | p-value | q-value |
|-------------|-------------|--------------------------------------------------|------------------|---------|---------|
| 221019_s_at | COLEC12     | collectin sub-family member 12                   | 0.33             | -1.61   | 0.00    |
| 206441_s_at | COMMD4      | COMM domain c                                    | 3.15             | 1.66    | 0.00    |
| 216204_at   | COMT        | catechol-O-methyltransferase                     | 3.38             | 1.76    | 0.00    |
| 217749_at   | COPG        | coatomer protein                                 | 0.33             | -1.61   | 0.00    |
| 219561_at   | COPZ2       | coatomer protein                                 | 3.03             | 1.60    | 0.00    |
| 203858_s_at | COX10       | COX10 homolog                                    | 3.10             | 1.63    | 0.00    |
| 211727_s_at | COX11       | COX11 homolog                                    | 0.27             | -1.88   | 0.00    |
| 217249_x_at | COX7A2      | cytochrome c ox                                  | 3.47             | 1.79    | 0.00    |
| 203118_s_at | CPNE3       | copine III                                       | 3.33             | -1.61   | 0.00    |
| 202575_at   | CRABP2      | cellular retinoic ε                              | 3.02             | 1.60    | 0.01    |
| 205081_at   | CRIP1       | cysteine-rich protein                            | 3.04             | 1.60    | 0.00    |
| 206767_at   | CRY1        | cryptochrome 11                                  | 3.12             | 1.64    | 0.00    |
| 215930_s_at | CTAGE5      | CTAGE family, n                                  | 0.23             | -2.11   | 0.00    |
| 201533_s_at | CTNNB1      | catenin (cadherin)                               | 0.27             | -1.91   | 0.00    |
| 200839_s_at | CTSB        | cathepsin B                                      | 3.09             | 1.63    | 0.00    |
| 202901_x_at | CTSS        | cathepsin S                                      | 0.19             | -2.39   | 0.00    |
| 212562_s_at | CTZ         | cathepsin Z                                      | 3.54             | 1.83    | 0.00    |
| 202158_s_at | CUGBP2      | CUG triplet repeat                               | 0.31             | -1.67   | 0.00    |
| 203078_at   | CUL2        | cullin 2                                         | 0.24             | -2.08   | 0.00    |
| 210257_x_at | CUL4B       | cullin 4B                                        | 0.30             | -1.73   | 0.00    |
| 215997_s_at | CUL4B       | cullin 4B                                        | 0.20             | -2.30   | 0.00    |
| 203533_s_at | CUL5        | cullin 5                                         | 0.23             | -2.10   | 0.00    |
| 218787_x_at | CWF19L1     | CWF19-like 1, α                                 | 3.66             | 1.87    | 0.00    |
| 833_at      | CX3CL1      | chemokine (C-X-C)                                | 4.69             | 2.23    | 0.00    |
| 205898_at   | CX3CR1      | chemokine (C-X-C)                                | 0.33             | -1.61   | 0.01    |
| 217200_x_at | CYB561      | cytochrome b-56                                  | 3.09             | 1.63    | 0.00    |
| 202435_s_at | CYP1B1      | cytochrome P45                                   | 0.31             | -1.71   | 0.01    |
| 219825_at   | CYP26B1     | cytochrome P45                                   | 0.18             | -2.51   | 0.00    |
| 205327_at   | CYP2A13     | cytochrome P45                                   | 3.38             | 1.76    | 0.00    |
| 202432_s_at | CYP39A1     | cytochrome P45                                   | 0.21             | -2.23   | 0.00    |
| 210096_at   | CYP4B1      | cytochrome P45                                   | 0.29             | -1.80   | 0.01    |
| 210452_x_at | CYP4F2      | cytochrome P45                                   | 6.39             | 2.68    | 0.00    |
| 209006_at   | CYTIP       | cytohesin 1 inter                               | 0.30             | -1.76   | 0.00    |
| 216606_s_at | DAAM1       | dishevelled asso                                 | 0.31             | -1.67   | 0.00    |
| 201624_at   | DARS        | aspartyl-tRNA synthetase                        | 0.31             | -1.71   | 0.00    |
| 202806_at   | DBN1        | drebrin 1                                        | 4.86             | 2.28    | 0.00    |
| 209004_at   | DCLR1A      | DNA cross-link n                                 | 3.06             | 1.62    | 0.00    |
| 205231_s_at | DCTN5       | dynactin 5 (p25)                                 | 3.20             | 1.68    | 0.00    |
| 204909_at   | DDX6        | DEAD (Asp-Glu+)                                  | 0.24             | -2.04   | 0.00    |
| 207356_at   | DEFB4       | defensin, beta 4                                 | 12.65            | 3.66    | 0.00    |
| 219763_at   | DENND1A     | DENN/MADD dc                                    | 3.12             | 1.64    | 0.00    |
| 214787_at   | DENND4A     | DENN/MADD dc                                    | 0.29             | -1.77   | 0.00    |
| Gene Symbol | Description | Log2 Fold Change | p-value | FDR |
|-------------|-------------|-----------------|---------|-----|
| 221887_s_at | DFNB31 deafness, autosomal recessive 31 | 3.24 | 1.69 | 0.00 |
| 217285_at | DGR17 DiGeorge syndrome | 3.51 | 1.81 | 0.00 |
| 201791_s_at | DHCR7 7-dehydrocholesterol | 4.64 | 2.22 | 0.00 |
| 201790_s_at | DHCR7 7-dehydrocholesterol | 3.71 | 1.89 | 0.00 |
| 214017_s_at | DHX34 DEAH (Asp-Glu-Ala-His) box polypeptide 34 | 3.15 | 1.65 | 0.00 |
| 212107_s_at | DHX9 DEAH (Asp-Glu-Ala-His) box polypeptide 9 | 0.25 | -1.99 | 0.00 |
| 220572_at | DKFZp547G183 hypothetical LOC55525 | 0.29 | -1.80 | 0.00 |
| 202571_s_at | DLGAP4 discs, large (Drosophila) homolog-associated protein 4 | 4.05 | 2.02 | 0.00 |
| 220262_s_at | DLK2 delta-like 2 homolog (Drosophila) | 3.05 | 1.61 | 0.00 |
| 203881_s_at | DMD dystrophin | 0.29 | -1.81 | 0.00 |
| 214229_at | DNAH17 dynein, axonemal, heavy chain 17 | 3.39 | 1.76 | 0.00 |
| 215266_at | DNAH3 dynein, axonemal, heavy chain 3 | 3.37 | 1.75 | 0.00 |
| 220395_at | DNAJA4 DnaJ (Hsp40) homolog, subfamily A, member 4 | 3.48 | 1.80 | 0.00 |
| 202843_at | DNAJB9 DnaJ (Hsp40) homolog, subfamily B, member 9 | 0.30 | -1.75 | 0.00 |
| 221781_s_at | DNAJC10 DnaJ (Hsp40) homolog, subfamily C, member 10 | 0.27 | -1.89 | 0.00 |
| 221782_s_at | DNAJC10 DnaJ (Hsp40) homolog, subfamily C, member 10 | 0.24 | -2.05 | 0.00 |
| 212911_at | DNAJC16 DnaJ (Hsp40) homolog, subfamily C, member 16 | 0.24 | -2.05 | 0.00 |
| 207912_at | DNASE1L2 deoxyribonuclease | 3.15 | 1.66 | 0.00 |
| 202533_s_at | DNML2 dynamin 2 | 4.95 | 2.31 | 0.00 |
| 205003_at | DOCK4 dedicator of cytokinesis 4 | 0.23 | -2.15 | 0.00 |
| 40612_at | DOPEY1 dopey family me | 0.28 | -1.83 | 0.00 |
| 213267_at | DOPEY1 dopey family me | 0.15 | -2.77 | 0.00 |
| 222360_at | DPH5 DPH5 homolog (S. cerevisiae) | 0.26 | -1.94 | 0.00 |
| 201431_s_at | DPFUSL3 dihydropyrimidinid | 0.23 | -2.11 | 0.00 |
| 214301_s_at | DPFUSL4 dihydropyrimidinid | 3.13 | 1.65 | 0.00 |
| 207648_at | DRR2 dystrophin relate | 4.23 | 2.08 | 0.00 |
| 204751_x_at | DSC2 desmocollin 2 | 6.01 | 2.59 | 0.00 |
| 216646_at | DSCC1 defective in siste | 3.04 | 1.60 | 0.00 |
| 205595_at | DSG3 desmoglein 3 (prx) | 7.64 | 2.93 | 0.00 |
| 221681_s_at | DSSP dentin sialophosphoprotein | 0.24 | -2.05 | 0.00 |
| 214253_s_at | DTNB dystrobrevin, bet | 5.39 | 2.43 | 0.00 |
| 205762_s_at | DUS4L dihydouridine | 3.00 | -1.73 | 0.00 |
| 204794_at | DUSP2 dual specificity phosphatase | 4.45 | 2.15 | 0.00 |
| 209457_at | DUSP5 dual specificity phosphatase | 3.28 | 1.72 | 0.00 |
| 220774_at | DYM dymeclin | 0.22 | -2.22 | 0.00 |
| 203763_at | DYNCL2J1 dynein, cytoplasmic | 0.31 | -1.69 | 0.00 |
| 203762_at | DYNCL2J1 dynein, cytoplasmic | 0.29 | -1.81 | 0.00 |
| 202971_s_at | DYRK2 dual specificity phosphatase | 0.16 | -2.66 | 0.00 |
| 2028_s_at | E2F1 E2F transcription factor | 3.08 | 1.62 | 0.00 |
| 38707_r_at | E2F4 E2F transcription factor | 15.49 | 3.95 | 0.00 |
| 213789_at | EBP emopamil binding protein | 3.14 | 1.65 | 0.00 |
| 206101_at | ECM2 extracellular matrix | 0.17 | -2.55 | 0.00 |
| 211129_x_at | EDA ectodysplasin A | 0.31 | -1.67 | 0.00 |
| 206758_at | EDN2 endothelin 2 | 3.58 | 1.84 | 0.00 |
| 204840_s_at | EEA1 early endosome | 0.17 | -2.59 | 0.00 |
| 210843_s_at | EFEMP1 EGF-containing | 0.26 | -1.92 | 0.00 |
| 205031_at | EFNB3 ephrin-B3 | 3.26 | 1.71 | 0.00 |
| Gene Id       | Description                                      | Value   | Fold Change | P-Value | q-Value |
|--------------|--------------------------------------------------|---------|-------------|---------|---------|
| 206254_at    | EGF epidermal growth factor                      | 0.24    | -2.06       | 0.00    | 0.00    |
| 201693_s_at  | EGR1 early growth response                       | 3.46    | 1.79        | 0.00    | 0.00    |
| 218935_at    | EHD3 EH-domain containing                       | 3.76    | 1.91        | 0.00    | 0.00    |
| 205222_at    | EHHADH enoyl-Coenzyme hydratase/3-hydroxyacyl    | 0.27    | -1.91       | 0.00    | 0.00    |
| 211698_at    | EID1 EP300 interacitin                           | 0.21    | -2.23       | 0.00    | 0.00    |
| 205321_at    | EIF2S3 eukaryotic transl                           | 0.27    | -1.90       | 0.00    | 0.00    |
| 210361_s_at  | EID1 EP300 interacitin                           | 0.21    | -2.23       | 0.00    | 0.00    |
| 205222_at    | EHHADH enoyl-Coenzyme hydratase/3-hydroxyacyl    | 0.27    | -1.91       | 0.00    | 0.00    |
| 210827_s_at  | ELD3 E74-like factor                            | 3.46    | 1.79        | 0.00    | 0.00    |
| 205222_at    | EHHADH enoyl-Coenzyme hydratase/3-hydroxyacyl    | 0.27    | -1.91       | 0.00    | 0.00    |
| 210827_s_at  | ELD3 E74-like factor                            | 3.46    | 1.79        | 0.00    | 0.00    |
| 205321_at    | ELD3 E74-like factor                            | 3.46    | 1.79        | 0.00    | 0.00    |
| 210827_s_at  | ELD3 E74-like factor                            | 3.46    | 1.79        | 0.00    | 0.00    |
| 205222_at    | EHHADH enoyl-Coenzyme hydratase/3-hydroxyacyl    | 0.27    | -1.91       | 0.00    | 0.00    |
| 210827_s_at  | ELD3 E74-like factor                            | 3.46    | 1.79        | 0.00    | 0.00    |
| 205222_at    | EHHADH enoyl-Coenzyme hydratase/3-hydroxyacyl    | 0.27    | -1.91       | 0.00    | 0.00    |
| 210827_s_at  | ELD3 E74-like factor                            | 3.46    | 1.79        | 0.00    | 0.00    |
| 205222_at    | EHHADH enoyl-Coenzyme hydratase/3-hydroxyacyl    | 0.27    | -1.91       | 0.00    | 0.00    |
| 210827_s_at  | ELD3 E74-like factor                            | 3.46    | 1.79        | 0.00    | 0.00    |
| 205222_at    | EHHADH enoyl-Coenzyme hydratase/3-hydroxyacyl    | 0.27    | -1.91       | 0.00    | 0.00    |
| 210827_s_at  | ELD3 E74-like factor                            | 3.46    | 1.79        | 0.00    | 0.00    |

**Note:** The table provides gene identifiers, descriptions, and expression values with corresponding fold changes, p-values, and adjusted q-values.
| Gene Symbol       | Description                                      | Expression | Log2 Fold Change | p-value | Adj. p-value |
|-------------------|--------------------------------------------------|------------|-----------------|---------|--------------|
| FAM115A_s_at      | family with sequence similarity 115, member A    | 0.30       | -1.75           | 0.00    | 0.00         |
| FAM125B_at        | family with sequence similarity 125, member B    | 3.41       | 1.77            | 0.00    | 0.00         |
| FAM134B_at        | family with sequence similarity 134, member B    | 0.25       | -1.98           | 0.00    | 0.00         |
| FAM160B2_at       | family with sequence similarity 160, member B2   | 4.56       | 2.19            | 0.00    | 0.00         |
| FAM172A_at        | family with sequence similarity 172, member A    | 0.21       | -2.22           | 0.00    | 0.00         |
| FAM174B_at        | family with sequence similarity 174, member B    | 0.18       | -2.48           | 0.00    | 0.00         |
| FAM184A_s_at      | family with sequence similarity 184, member A    | 0.29       | -1.80           | 0.00    | 0.00         |
| FAM189A2_at       | family with sequence similarity 189, member A2   | 0.19       | -2.40           | 0.00    | 0.00         |
| FAM20B_at         | family with sequence similarity 20, member B     | 0.28       | -1.83           | 0.00    | 0.00         |
| FAM3C_at          | family with sequence similarity 3, member C      | 0.27       | -1.87           | 0.00    | 0.00         |
| FAM48A_at         | family with sequence similarity 48, member A     | 0.17       | -2.55           | 0.00    | 0.00         |
| FAS_at            | Fas (TNF receptor superfamily, member 6)         | 0.23       | -2.13           | 0.00    | 0.00         |
| FASTK_at          | Fas-activated se                                 | 3.75       | 1.91            | 0.00    | 0.00         |
| FBXL18_at         | F-box and leucin                                 | 3.64       | 1.86            | 0.00    | 0.00         |
| FBX031_at         | F-box protein 31                                 | 3.03       | 1.60            | 0.00    | 0.00         |
| FCF1_at           | FCF1 small sub.                                 | 0.25       | -1.99           | 0.00    | 0.00         |
| FCGR2C_at         | Fc fragment of IgG                               | 4.13       | 2.05            | 0.00    | 0.00         |
| FGFR1_at          | fibroblast growth                                | 0.14       | -2.86           | 0.00    | 0.00         |
| FHL1_at           | four and a half L                                | 0.26       | -1.94           | 0.00    | 0.00         |
| FHL1_at           | four and a half L                                | 0.07       | -3.86           | 0.00    | 0.00         |
| FGTN_at           | fukutin                                          | 0.32       | -1.66           | 0.00    | 0.00         |
| FLJ10038_at       | hypothetical prot                                | 0.19       | -2.38           | 0.00    | 0.00         |
| FLJ11292_at       | hypothetical prot                                | 0.30       | -1.76           | 0.00    | 0.00         |
| FLJ13197_at       | hypothetical FLJ                                 | 0.24       | -2.07           | 0.00    | 0.00         |
| FLNB_at           | filamin B, beta                                  | 3.09       | 1.63            | 0.00    | 0.00         |
| FLT4_at           | fms-related tyros                               | 0.27       | -1.89           | 0.00    | 0.00         |
| FMO2_at           | flavin containing                                | 5.26       | 2.40            | 0.00    | 0.00         |
| FMO5_at           | flavin containing                                | 0.26       | -1.96           | 0.00    | 0.00         |
| FMR1_at           | fragile X mental i                              | 0.28       | -1.83           | 0.00    | 0.00         |
| FOSB_at           | FBJ murine oste                                  | 5.34       | 2.42            | 0.00    | 0.01         |
| FOSL1_at          | FOS-like antigen                                 | 5.02       | 2.33            | 0.00    | 0.00         |
| FOXC1_at          | forkhead box C1                                  | 4.76       | 2.25            | 0.00    | 0.00         |
| FOXE1_at          | forkhead box E1                                 | 5.41       | 2.44            | 0.00    | 0.00         |
| FOXN3_at          | forkhead box N3                                 | 5.04       | 2.33            | 0.00    | 0.00         |
| FPRT_at           | fucosyl-1-phosph                                 | 0.32       | -1.64           | 0.00    | 0.00         |
| FRPR1_at          | formyl peptide re                               | 3.65       | 1.87            | 0.00    | 0.00         |
| FRMD1_at          | FERM domain c1                                   | 3.18       | 1.67            | 0.00    | 0.00         |
| FRYL_at           | FRY-like                                         | 0.18       | -2.49           | 0.00    | 0.00         |
| FTCD_at           | formininotransfer                               | 3.05       | 1.61            | 0.00    | 0.00         |
| FUBP1_at          | far upstream ele                                 | 0.25       | -1.99           | 0.00    | 0.00         |
| FUBP1_at          | far upstream ele                                 | 0.17       | -2.54           | 0.00    | 0.00         |
| FUSP1_at          | FUS interacting i                                | 0.33       | -1.61           | 0.00    | 0.00         |
| FT2_at            | fucosyltransferase                              | 6.13       | 2.62            | 0.00    | 0.00         |
| FT3_at            | fucosyltransferase                              | 3.05       | 1.61            | 0.00    | 0.00         |
| FT6_at            | fucosyltransferase                              | 5.21       | 2.38            | 0.00    | 0.00         |
| FT6_at            | fucosyltransferase                              | 4.30       | 2.10            | 0.00    | 0.00         |
| ProbeID   | Description                              | Value 1 | Value 2 | Value 3 | Value 4 |
|-----------|------------------------------------------|---------|---------|---------|---------|
| 203988_s_at | FUT8, fucosyltransferase (alpha (1,6) fucosyltransferase) | 0.24    | -2.05   | 0.00    | 0.00    |
| 201630_at  | FXR1, fragile X mental | 0.15    | -2.76   | 0.00    | 0.00    |
| 218034_x_at | FXD5, FXYD domain | 4.22    | 2.08    | 0.00    | 0.00    |
| 212486_s_at | FYN, FYN oncogene | 0.29    | -1.77   | 0.00    | 0.00    |
| 209416_s_at | FZR1, fizzy/cell division | 3.06    | 1.62    | 0.00    | 0.00    |
| 214240_at  | GAL, galanin prepropeptide | 4.42    | 2.14    | 0.00    | 0.00    |
| 207357_s_at | GALNT10, UDP-N-acetyl-αl | 0.33    | -1.60   | 0.00    | 0.00    |
| 218885_s_at | GALNT12, UDP-N-acetyl-αl | 0.28    | -1.85   | 0.00    | 0.00    |
| 219271_at  | GALNT14, UDP-N-acetyl-αl | 9.48    | 3.25    | 0.00    | 0.00    |
| 219956_at  | GALNT6, UDP-N-acetyl-αl | 4.03    | 2.01    | 0.00    | 0.00    |
| 33579_i_at | GALR3, galanin receptor | 4.96    | 2.31    | 0.00    | 0.00    |
| 210446_at  | GATA1, GATA binding protein | 0.22    | -2.20   | 0.00    | 0.00    |
| 219512_at  | GCC1, GRIP and coiled | 3.21    | 1.68    | 0.00    | 0.00    |
| 221136_at  | GDF2, growth differentiation | 3.15    | 1.66    | 0.00    | 0.00    |
| 219539_at  | GEMIN6, gem (nuclear org) | 4.37    | 2.13    | 0.00    | 0.00    |
| 221028_s_at | GFOD2, glucose-fructose | 3.76    | 1.91    | 0.00    | 0.00    |
| 21114_at   | GG1, golgi associated | 3.02    | 1.59    | 0.00    | 0.00    |
| 64064_at   | GIMAP5, GTPase, INMAP f | 3.14    | 1.65    | 0.00    | 0.00    |
| 210320_at  | GIT1, G protein-couple | 3.05    | 1.61    | 0.00    | 0.00    |
| 213713_s_at | GLB1L2, galactosidase | 4.37    | 2.13    | 0.00    | 0.00    |
| 21552_at   | GLCE, glucuronic acid | 0.28    | -1.84   | 0.00    | 0.00    |
| 218458_at  | GMCL1, germ cell-less | 0.33    | -1.59   | 0.00    | 0.00    |
| 214071_at  | GNAL, guanine nucleotide | 0.24    | -2.08   | 0.00    | 0.00    |
| 206355_at  | GNAL, guanine nucleotide | 0.21    | -2.26   | 0.00    | 0.00    |
| 208519_x_at | GNRH2, gonadotropin-rel | 3.73    | 1.90    | 0.00    | 0.00    |
| 208797_s_at | GOLGA8A, golgi autoantigen | 0.20    | -2.32   | 0.00    | 0.00    |
| 204322_at  | GOLIM4, golgi integral me | 3.22    | 1.69    | 0.00    | 0.00    |
| 204324_s_at | GOLIM4, golgi integral me | 0.22    | -2.19   | 0.00    | 0.00    |
| 218692_at  | GOLSYN, Golgi-localized p | 0.14    | -2.89   | 0.00    | 0.00    |
| 219846_at  | GON4L, gon-4-like (C. el) | 0.29    | -1.77   | 0.00    | 0.00    |
| 213144_at  | GOSR2, golgi SNAP rece | 3.20    | 1.68    | 0.00    | 0.00    |
| 209769_s_at | GP1BB, glycoprotein | 3.46    | 1.79    | 0.00    | 0.00    |
| 206833_x_at | GP9, glycoprotein | 3.60    | 1.85    | 0.00    | 0.00    |
| 210007_s_at | GPD2, glycerol-3-phosp | 0.31    | -1.70   | 0.00    | 0.00    |
| 215554_at  | GLPD1, glycosyl/phospha | 0.17    | -2.55   | 0.00    | 0.00    |
| 213094_at  | GPR126, G protein-couple | 0.26    | -1.94   | 0.00    | 0.00    |
| 221958_s_at | GPR177, G protein-couple | 0.25    | -2.03   | 0.00    | 0.00    |
| 204793_at  | GPRAS1, G protein-couple | 0.24    | -2.07   | 0.00    | 0.00    |
| 203108_at  | GPRCSA, G protein-couple | 3.21    | 1.68    | 0.01    | 0.02    |
| 202831_at  | GPX2, glutathione perox | 16.12   | 4.01    | 0.00    | 0.00    |
| 213170_at  | GPX7, glutathione perox | 4.22    | 2.08    | 0.00    | 0.00    |
| 218706_s_at | GRAM3, GRAM domain c | 0.26    | -1.95   | 0.00    | 0.00    |
| 210761_s_at | GRB7, growth factor | 4.21    | 2.07    | 0.00    | 0.00    |
| 213845_at  | GRIK2, glutamate receptor | 0.27    | -1.89   | 0.00    | 0.00    |
| 216481_at  | GRIK2, glutamate receptor | 5.69    | 2.51    | 0.00    | 0.00    |
| 204395_s_at | GRK5, G protein-couple | 3.04    | 1.61    | 0.00    | 0.00    |
| 202849_x_at | GRK6, G protein-couple | 3.12    | 1.64    | 0.00    | 0.00    |
| Probe ID   | Description                               | Log2 Fold Change | p-Value | q-Value |
|------------|-------------------------------------------|------------------|---------|---------|
| 207929_at  | GRPR gastrin-releasing peptide receptor   | 3.28             | 0.00    | 0.00    |
| 209595_at  | GTF2F2 general transcription factor       | 0.28             | -1.81   | 0.00    |
| 205276_s_at| GTPBP1 GTP binding protein               | 0.26             | -1.93   | 0.00    |
| 221892_at  | H6PD hexose-6-phospholfructokinase        | 4.48             | 2.16    | 0.00    |
| 203821_at  | HADH hydroxyacyl-CoA dehydrogenase        | 9.23             | 3.21    | 0.00    |
| 209315_s_at| HBS1L HBS1-like (S. ce)                  | 0.20             | -2.31   | 0.00    |
| 216224_s_at| HDAC6 histone deacetylase                | 3.34             | 1.74    | 0.00    |
| 220042_x_at| HIVEP3 human immunodeficiency protein 1   | 3.19             | -1.66   | 0.00    |
| 214542_x_at| HIST1H2A histone cluster 1               | 7.25             | 2.86    | 0.00    |
| 208583_x_at| HIST1H2AJ histone cluster 1              | 9.76             | 3.29    | 0.00    |
| 218152_at  | HMG20A high-mobility group               | 0.32             | -1.64   | 0.00    |
| 207353_s_at| HMX1 H6 family homeobox                  | 3.21             | 1.68    | 0.00    |
| 216889_s_at| HNF4A hepatocyte nucleus                 | 3.11             | 1.64    | 0.00    |
| 221162_at  | HHLA1 HERV-H LTR-as                      | 3.73             | 1.90    | 0.00    |
| 212233_at  | HIPK1 homeodomain interactin             | 3.19             | 1.67    | 0.00    |
| 214604_at  | HOXD11 homeobox D11                     | 3.83             | 1.94    | 0.00    |
| Gene Symbol | Description | Fold Change | P-value | q-value |
|-------------|-------------|-------------|---------|---------|
| HP1BP3      | Heterochromatin binding protein 3 | 3.63        | 1.86    | 0.00    |
| HPGDS       | Hematopoietic growth factor | 0.33        | -1.61   | 0.02    | 0.04   |
| HPSE        | Heparanase | 4.88        | 2.29    | 0.00    | 0.00   |
| HPX         | Hemopexin  | 3.38        | 1.76    | 0.00    | 0.00   |
| HR          | Hairless homolog (mouse) | 3.29        | 1.72    | 0.00    | 0.00   |
| HRH3        | Histamine receptor H3 | 4.25        | 2.09    | 0.00    | 0.00   |
| HSD17B1     | Hydroxysteroid (17-beta) dehydrogenase 1 | 3.14 0.00 0.00 |
| HSD17B2     | Hydroxysteroid (17-beta) dehydrogenase 2 | 4.28 | 2.10 | 0.00  |
| HSF2        | Heat shock trans | 0.23 -2.11 | 0.00 | 0.00 |
| HSPA6       | Heat shock 70kDa | 3.13 | 1.65 | 0.00 |
| HSPB11      | Heat shock protein | 0.32 -1.64 | 0.00 | 0.00 |
| HTR4        | S-hydroxytryptan | 3.26 | 1.71 | 0.00 |
| HYAL4       | Hyaluronoglucos | 3.80 | 1.93 | 0.00 |
| HYMAI       | Hydatidiform mole associated and imprinted | 0.21 -2.23 | 0.00 | 0.00 |
| ICAM3       | Intercellular adhesion | 4.42 | 2.14 | 0.00 |
| ICK         | Intestinal cell | 0.25 -1.99 | 0.00 | 0.00 |
| ID1         | Inhibitor of DNA | 5.26 | 2.39 | 0.00 |
| ID4         | Inhibitor of DNA | 0.22 -2.20 | 0.00 | 0.01 |
| IDS         | Iduronate 2-sulf | 0.32 -1.66 | 0.00 | 0.00 |
| IFI27       | Interferon, alpha | 11.84 | 3.57 | 0.00 |
| IFI44       | Interferon-induce | 6.02 | 2.59 | 0.00 |
| IFI6        | Interferon, alpha | 4.25 | 2.09 | 0.00 |
| IFIT1       | Interferon-induce | 3.51 | 1.81 | 0.01 |
| IFITM1      | Interferon induc | 6.75 | 2.76 | 0.00 |
| IFITM1      | Interferon induc | 5.58 | 2.48 | 0.00 |
| IFITM2      | Interferon induc | 3.41 | 1.77 | 0.00 |
| IFITM3      | Interferon induc | 3.41 | 1.77 | 0.00 |
| IFT74       | Intraflagellar tran | 0.32 | -1.67 | 0.00 |
| IFT74       | Intraflagellar tran | 0.21 | -2.28 | 0.00 |
| IGF1R       | Insulin-like growt | 0.31 | -1.71 | 0.00 |
| IGFBP5      | Insulin-like growt | 0.16 | -2.65 | 0.00 |
| IGF5BP5     | Insulin-like growt | 0.16 | -2.69 | 0.00 |
| IGMHBP2     | Immunoglobulin | 10.30 | 3.37 | 0.00 |
| IKBKAP      | Inhibitor of kapp | 0.24 | -2.08 | 0.00 |
| IKBKG       | Inhibitor of kapp | 6.09 | 2.61 | 0.00 |
| IKBK2G      | Inhibitor of kapp | 3.98 | 1.99 | 0.00 |
| IL17RC      | Interleukin 17 rec | 6.54 | 2.71 | 0.00 |
| IL18BP      | Interleukin 18 bir | 4.35 | 2.12 | 0.00 |
| IL1B        | Interleukin 1, bet | 3.43 | 1.78 | 0.00 |
| IL1B        | Interleukin 1, bet | 3.25 | 1.70 | 0.00 |
| IL1F9       | Interleukin 1 fam | 3.49 | 1.80 | 0.01 |
| IL1RN       | Interleukin 1 recx | 4.29 | 2.10 | 0.00 |
| IL27RA      | Interleukin 27 rec | 5.31 | 2.41 | 0.00 |
| IL4R        | Interleukin 4 recx | 3.47 | 1.79 | 0.00 |
| IL7         | Interleukin 7 | 0.07 | -3.75 | 0.00 |
| INA         | Internexin neuro | 5.96 | 2.58 | 0.00 |
| INADL       | InaD-like (Drosophila) | 0.13 | -2.91 | 0.00 |
| INHBB       | Inhibin, beta B | 3.59 | 1.85 | 0.00 |
| Gene ID   | Description                                               | Fold Change | Log2 Fold Change | P-Value | Adjusted P-Value |
|----------|-----------------------------------------------------------|-------------|------------------|---------|------------------|
| INPP5K   | inositol polyphosphate-5-phosphatase K                    | 3.40        | 1.77             | 0.00    | 0.00             |
| INTS7    | integrator compli                                        | 0.30        | -1.72            | 0.00    | 0.00             |
| INVS     | inversin                                                 | 0.28        | -1.86            | 0.00    | 0.00             |
| IPW      | imprinted in Prader-Willi syndrome (non-protein coding)  | 0.29        | -1.77            | 0.00    | 0.00             |
| IQSEC1   | IQ motif and Sec                                         | 3.93        | 1.97             | 0.00    | 0.00             |
| IQSEC2   | IQ motif and Sec                                         | 3.30        | 1.72             | 0.00    | 0.00             |
| IRF9     | interferon regula                                        | 3.15        | 1.66             | 0.00    | 0.00             |
| IQSEC1   | IQ motif and Sec                                         | 3.93        | 1.97             | 0.00    | 0.00             |
| IQSEC2   | IQ motif and Sec                                         | 3.30        | 1.72             | 0.00    | 0.00             |
| ITGA2    | integrin, alpha 2                                        | 7.09        | 2.83             | 0.00    | 0.00             |
| ITGAM    | integrin, alpha M                                        | 0.33        | -1.73            | 0.00    | 0.00             |
| ITGAM    | integrin, alpha M                                        | 0.18        | -2.49            | 0.00    | 0.00             |
| ITGAM    | integrin, alpha M                                        | 0.14        | -2.88            | 0.00    | 0.00             |
| ITSN1    | intersectin 1 (SH)                                       | 0.26        | -1.94            | 0.00    | 0.00             |
| IVD      | isovaleryl Coenzyme                                      | 5.62        | 2.49             | 0.00    | 0.00             |
| IVL      | involucrin                                               | 4.95        | 2.31             | 0.01    | 0.03             |
| JAK2     | Janus kinase 2                                            | 0.23        | -2.10            | 0.00    | 0.00             |
| JMD4     | jumonji domain c                                         | 3.45        | 1.79             | 0.00    | 0.00             |
| JUN      | jun oncogene                                             | 3.79        | 1.92             | 0.00    | 0.00             |
| JUN      | jun oncogene                                             | 3.09        | 1.63             | 0.00    | 0.00             |
| JUNB     | jun B proto-onco                                         | 3.27        | 1.71             | 0.00    | 0.00             |
| JUND     | jun D proto-onco                                         | 3.31        | 1.73             | 0.00    | 0.00             |
| KBTBD10  | keich repeat and                                         | 0.29        | -1.81            | 0.00    | 0.00             |
| KCNAB1   | potassium voltaç                                         | 0.22        | -2.16            | 0.00    | 0.00             |
| KCN1     | potassium voltaç                                         | 4.77        | 2.26             | 0.00    | 0.00             |
| KCNQ1    | potassium voltaç                                         | 3.13        | 1.65             | 0.00    | 0.00             |
| KCNS1    | potassium voltaç                                         | 6.10        | 2.61             | 0.00    | 0.00             |
| KCTD12   | potassium chanr                                          | 0.25        | -1.98            | 0.00    | 0.00             |
| KCTD12   | potassium chanr                                          | 0.23        | -2.15            | 0.00    | 0.00             |
| KCTD13   | potassium chanr                                          | 0.32        | -1.64            | 0.00    | 0.00             |
| KCTD3    | potassium chanr                                          | 0.17        | -2.58            | 0.00    | 0.00             |
| KDM4C    | lysine (K)-specifi                                        | 0.32        | -1.66            | 0.00    | 0.00             |
| KDM5C    | lysine (K)-specifi                                        | 3.13        | 1.64             | 0.00    | 0.00             |
| KDM6A    | lysine (K)-specifi                                        | 0.20        | -2.36            | 0.00    | 0.00             |
| KDM6B    | lysine (K)-specifi                                        | 4.41        | 2.14             | 0.00    | 0.00             |
| KDM6B    | lysine (K)-specifi                                        | 3.35        | 1.74             | 0.00    | 0.00             |
| KIAA0141 | hypothetical LOC                                         | 0.31        | -1.69            | 0.00    | 0.00             |
| KIAA0146 | hypothetical LOC                                         | 0.27        | -1.89            | 0.00    | 0.00             |
| KIAA0240 | hypothetical LOC                                         | 0.33        | -1.59            | 0.00    | 0.00             |
| KIAA0368 | hypothetical LOC                                         | 0.26        | -1.96            | 0.00    | 0.00             |
| KIAA0485 | hypothetical LOC                                         | 0.25        | -2.02            | 0.00    | 0.00             |
| KIAA0528 | hypothetical LOC                                         | 0.28        | -1.85            | 0.00    | 0.00             |
| KIAA0582 | hypothetical LOC                                         | 0.12        | -3.10            | 0.00    | 0.00             |
| KIAA0754 | hypothetical LOC                                         | 0.14        | -2.83            | 0.00    | 0.00             |
| KIAA0776 | hypothetical LOC                                         | 0.23        | -2.15            | 0.00    | 0.00             |
| KIAA0802 | hypothetical LOC                                         | 5.07        | 2.34             | 0.00    | 0.00             |
| KIAA0895 | hypothetical LOC                                         | 0.06        | -4.08            | 0.00    | 0.00             |
| Gene ID | Description                        | Log2 Fold Change | p-value 1 | p-value 2 |
|--------|------------------------------------|-----------------|-----------|-----------|
| 215936_s_at | KIAA1033                          | 0.28            | -1.85     | 0.00      |
| 214098_at | KIAA1107                           | 0.27            | -1.87     | 0.00      |
| 212942_s_at | KIAA1199                          | 3.48            | 1.80      | 0.00      |
| 215367_at | KIAA1614                           | 3.19            | 1.67      | 0.00      |
| 220171_x_at | KIAA1704                          | 0.29            | -1.79     | 0.00      |
| 219570_at | KIF13A                            | 0.26            | -1.93     | 0.00      |
| 208128_x_at | KIF25                             | 4.07            | 2.03      | 0.00      |
| 203130_s_at | KIF5C                             | 0.32            | -1.65     | 0.00      |
| 209680_at | KIFC1                             | 3.09            | 1.63      | 0.00      |
| 221302_at | KLF15                             | 3.28            | 1.71      | 0.00      |
| 203543_s_at | KL9                               | 0.14            | -2.64     | 0.00      |
| 204176_at | KLHL20                            | 0.26            | -1.94     | 0.00      |
| 213610_s_at | KLHL23                           | 0.27            | -1.87     | 0.00      |
| 221986_s_at | KLHL24                           | 0.23            | -2.10     | 0.01      |
| 220238_s_at | KLHL7                            | 0.25            | -2.02     | 0.00      |
| 204733_at | KLK6                              | 7.72            | 2.95      | 0.00      |
| 206316_s_at | KNTC1                           | 0.30            | -1.76     | 0.00      |
| 204010_s_at | KRAS                             | 0.16            | -2.69     | 0.00      |
| 216713_at | KRIT1                             | 0.31            | -1.71     | 0.00      |
| 34031_i_at | KRIT1                             | 0.20            | -2.33     | 0.00      |
| 203203_s_at | KRR1                           | 0.23            | -2.10     | 0.00      |
| 209800_at | KRT16                             | 17.49           | 4.13      | 0.00      |
| 212236_x_at | KRT17                           | 7.36            | 2.88      | 0.00      |
| 205157_at | KRT17                             | 5.33            | 2.41      | 0.02      |
| 209125_at | KRT6A                             | 149.21          | 7.22      | 0.00      |
| 213680_at | KRT6B                             | 112.36          | 6.81      | 0.00      |
| 209126_x_at | KRT6B                           | 18.46           | 4.21      | 0.00      |
| 207065_at | KRT75                             | 7.12            | 2.83      | 0.00      |
| 208188_at | KRT9                              | 17.25           | 4.11      | 0.00      |
| 208532_x_at | KRTAP5-8                       | 6.46            | 2.69      | 0.00      |
| 216076_at | L3MBTL                           | 3.04            | 1.60      | 0.00      |
| 210306_at | L3MBTL                           | 0.19            | -2.39     | 0.00      |
| 219701_at | LACTB2                            | 0.28            | -1.84     | 0.00      |
| 210089_s_at | LAMA4                           | 0.29            | -1.77     | 0.00      |
| 216622_at | LAMB4                            | 0.26            | -1.83     | 0.00      |
| 215516_at | LAMB4                            | 0.15            | -2.76     | 0.00      |
| 202019_s_at | LANCL1                        | 3.50            | 1.81      | 0.00      |
| 214155_s_at | LARP4                         | 0.28            | -1.83     | 0.00      |
| 208953_at | LARP4B                          | 0.32            | -1.64     | 0.00      |
| 212442_s_at | LASS6                      | 0.23            | -2.13     | 0.00      |
| 212446_s_at | LASS6                      | 0.18            | -2.47     | 0.00      |
| 207734_at | LAX1                             | 0.24            | -2.06     | 0.00      |
| 212531_at | LCN2                             | 8.09            | 3.02      | 0.00      |
| 201030_x_at | LDHB                          | 3.03            | 1.60      | 0.01      |
| 202068_s_at | LDLR                            | 4.53            | 2.18      | 0.00      |
| 202067_s_at | LDLR                            | 3.94            | 1.98      | 0.00      |
| 200923_at | LGALS3BP                        | 4.20            | 2.07      | 0.00      |
| Gene Symbol | Description | Log2 Fold Change | p-value | Adjusted p-value |
|-------------|-------------|-----------------|---------|-----------------|
| 218326_s_at | LGR4 | leucine-rich repe | 0.21 | -2.26 | 0.00 | 0.00 |
| 214471_x_at | LH5 | luteinizing horm | 3.67 | 1.88 | 0.00 | 0.00 |
| 208333_at | LHX5 | LIM homeobox 5 | 3.13 | 1.65 | 0.00 | 0.00 |
| 205266_at | LIF | leukemia inhibitic | 0.26 | -1.94 | 0.00 | 0.00 |
| 211336_x_at | LILRB1 | leukocyte immun | 3.14 | 1.65 | 0.00 | 0.00 |
| 204356_at | LIMK1 | LIM domain kina | 3.37 | 1.75 | 0.00 | 0.00 |
| 206123_at | LLGL1 | lethal giant larva | 4.18 | 2.07 | 0.00 | 0.00 |
| 218574_s_at | LMCD1 | LIM and cysteine | 4.28 | 2.10 | 0.00 | 0.00 |
| 213703_at | LHB | luteinizing hormone beta polypeptide | 3.67 | 1.88 | 0.00 | 0.00 |
| 208333_at | LHX5 | LIM homeobox 5 | 3.13 | 1.65 | 0.00 | 0.00 |
| 205266_at | LIF | leukemia inhibitic | 0.26 | -1.94 | 0.00 | 0.00 |
| 211336_x_at | LILRB1 | leukocyte immun | 3.14 | 1.65 | 0.00 | 0.00 |
| 204356_at | LIMK1 | LIM domain kina | 3.37 | 1.75 | 0.00 | 0.00 |
| 206123_at | LLGL1 | lethal giant larva | 4.18 | 2.07 | 0.00 | 0.00 |
| 218574_s_at | LMCD1 | LIM and cysteine | 4.28 | 2.10 | 0.00 | 0.00 |
| 213703_at | LHB | luteinizing hormone beta polypeptide | 3.67 | 1.88 | 0.00 | 0.00 |
| 208333_at | LHX5 | LIM homeobox 5 | 3.13 | 1.65 | 0.00 | 0.00 |
| 205266_at | LIF | leukemia inhibitic | 0.26 | -1.94 | 0.00 | 0.00 |
| 211336_x_at | LILRB1 | leukocyte immun | 3.14 | 1.65 | 0.00 | 0.00 |
| 204356_at | LIMK1 | LIM domain kina | 3.37 | 1.75 | 0.00 | 0.00 |
| 206123_at | LLGL1 | lethal giant larva | 4.18 | 2.07 | 0.00 | 0.00 |
| 218574_s_at | LMCD1 | LIM and cysteine | 4.28 | 2.10 | 0.00 | 0.00 |
| 213703_at | LHB | luteinizing hormone beta polypeptide | 3.67 | 1.88 | 0.00 | 0.00 |
| 208333_at | LHX5 | LIM homeobox 5 | 3.13 | 1.65 | 0.00 | 0.00 |
| 205266_at | LIF | leukemia inhibitic | 0.26 | -1.94 | 0.00 | 0.00 |
| 211336_x_at | LILRB1 | leukocyte immun | 3.14 | 1.65 | 0.00 | 0.00 |
| 204356_at | LIMK1 | LIM domain kina | 3.37 | 1.75 | 0.00 | 0.00 |
| 206123_at | LLGL1 | lethal giant larva | 4.18 | 2.07 | 0.00 | 0.00 |
| 218574_s_at | LMCD1 | LIM and cysteine | 4.28 | 2.10 | 0.00 | 0.00 |
| 213703_at | LHB | luteinizing hormone beta polypeptide | 3.67 | 1.88 | 0.00 | 0.00 |
| 208333_at | LHX5 | LIM homeobox 5 | 3.13 | 1.65 | 0.00 | 0.00 |
| 205266_at | LIF | leukemia inhibitic | 0.26 | -1.94 | 0.00 | 0.00 |
| 211336_x_at | LILRB1 | leukocyte immun | 3.14 | 1.65 | 0.00 | 0.00 |
| 204356_at | LIMK1 | LIM domain kina | 3.37 | 1.75 | 0.00 | 0.00 |
| 206123_at | LLGL1 | lethal giant larva | 4.18 | 2.07 | 0.00 | 0.00 |
| 218574_s_at | LMCD1 | LIM and cysteine | 4.28 | 2.10 | 0.00 | 0.00 |
| 213703_at | LHB | luteinizing hormone beta polypeptide | 3.67 | 1.88 | 0.00 | 0.00 |
| 208333_at | LHX5 | LIM homeobox 5 | 3.13 | 1.65 | 0.00 | 0.00 |
| 205266_at | LIF | leukemia inhibitic | 0.26 | -1.94 | 0.00 | 0.00 |
| 211336_x_at | LILRB1 | leukocyte immun | 3.14 | 1.65 | 0.00 | 0.00 |
| Gene ID   | Gene Name                      | Description                                                                 | Log2 Fold Change | p-Value | Adjusted p-Value |
|----------|--------------------------------|------------------------------------------------------------------------------|------------------|---------|-----------------|
| 211081_s_at | MAP4K5                     | mitogen-activated protein kinase kinase kinase kinase 5                      | 0.17             | 2.55    | 0.00            |
| 211500_at  | MAPK11                     | mitogen-activated protein kinase 5                                           | 5.33             | 2.42    | 0.00            |
| 210570_x_at | MAPK9                     | mitogen-activated protein kinase 9                                           | 3.14             | 1.65    | 0.00            |
| 218411_s_at | MBIP                       | MAP3K12 bindin                                                               | 0.29             | -1.81   | 0.00            |
| 201151_s_at | MBLN1                     | muscleblind-like                                                            | 0.24             | -2.06   | 0.00            |
| 211037_s_at | MBOAT7                    | membrane bound O-acyltransferase domain containing 7                         | 3.74             | 1.90    | 0.00            |
| 207115_x_at | MBTD1                     | mbt domain cont                                                             | 0.24             | -2.07   | 0.00            |
| 213761_at  | MDM1                       | Mdm1 nuclear pr                                                             | 0.24             | -2.08   | 0.00            |
| 217542_at  | MDM2                       | Mdm2 p53 bindin                                                             | 0.32             | -1.63   | 0.00            |
| 218664_at  | MECR                       | mitochondrial tra                                                           | 4.35             | 2.12    | 0.00            |
| 203497_at  | MED1                       | mediator comple                                                             | 0.19             | -2.37   | 0.00            |
| 201986_at  | MED13                      | mediator comple                                                             | 0.32             | -1.63   | 0.00            |
| 212207_at  | MED13L                     | mediator comple                                                             | 0.24             | -2.06   | 0.00            |
| 216109_at  | MED13L                     | mediator comple                                                             | 0.22             | -2.16   | 0.00            |
| 207078_at  | MED6                       | mediator comple                                                             | 0.12             | -3.02   | 0.00            |
| 208328_s_at | MEF2A                      | myocyte enhanc                                                             | 0.32             | -1.66   | 0.00            |
| 212831_at  | MEGF9                       | multiple EGF-lik                                                            | 0.20             | -2.33   | 0.00            |
| 213899_at  | METAP2                     | methionyl amino                                                               | 0.33             | -1.59   | 0.00            |
| 220797_at  | METT10D                     | methyltransferas                                                            | 0.24             | -2.03   | 0.00            |
| 211424_x_at | METTL7A                   | methyltransferas                                                            | 0.22             | -2.19   | 0.00            |
| 219858_s_at | MFS6D                     | major facilitator t                                                        | 0.18             | -2.45   | 0.00            |
| 211386_at  | MGC12488                    | hypothetical prot                                                            | 0.24             | -2.06   | 0.00            |
| 203636_at  | MD1                        | midline 1 (Opitz/)                                                          | 3.89             | 1.96    | 0.00            |
| 221863_at  | MIER2                      | mesoderm induc                                                               | 5.05             | 2.34    | 0.00            |
| 214625_s_at | MINK1                     | misshapen-like k                                                            | 4.69             | 2.23    | 0.00            |
| 216845_x_at | MLL2                       | myeloid/lymphoid                                                            | 4.35             | 2.12    | 0.00            |
| 216382_s_at | MLL2                       | myeloid/lymphoid                                                            | 3.82             | 1.93    | 0.00            |
| 214939_x_at | MLLT4                     | myeloid/lymphoid                                                            | 3.56             | 1.83    | 0.00            |
| 218211_s_at | MLPH                       | melanophilin                                                                  | 3.25             | 1.70    | 0.00            |
| 203787_s_at | MMP11                      | matrix metallope                                                             | 3.05             | 1.61    | 0.00            |
| 202829_s_at | MMP14                      | matrix metallope                                                             | 3.08             | 1.62    | 0.00            |
| 203936_s_at | MMP9                       | matrix metallope                                                             | 3.42             | 1.78    | 0.02            |
| 218212_s_at | MOCS2                      | molybdenum cof                                                               | 0.33             | -1.62   | 0.00            |
| 219852_s_at | MORN1                      | MORN repeat cc                                                               | 8.32             | 3.06    | 0.00            |
| 201874_at  | MPZL1                      | myelin protein zt                                                             | 4.64             | 2.21    | 0.00            |
| 210594_x_at | MPZL1                     | myelin protein zt                                                             | 3.77             | 1.91    | 0.00            |
| 210224_at  | MR1                        | major histocomp                                                              | 0.31             | -1.70   | 0.00            |
| 215919_s_at | MRPS11                     | mitochondrial rib                                                             | 0.31             | -1.71   | 0.00            |
| 219666_at  | MS4A6A                      | membrane-span                                                                | 3.98             | 1.99    | 0.00            |
| 205887_x_at | MSH3                       | mutS homolog 3                                                                | 0.24             | -2.09   | 0.00            |
| 219281_at  | MSRA                        | methionine sulfoo                                                            | 3.86             | 1.95    | 0.00            |
| 204956_at  | MTAP                        | methy1thioaceteno                                                            | 0.23             | -2.10   | 0.00            |
| 203347_s_at | MTF2                       | metal response t                                                             | 0.19             | -2.39   | 0.00            |
| 220346_at  | MTHFD2L                     | methylenetetrahydric acid                                                   | 0.29             | -1.80   | 0.00            |
| 36920_at   | MTM1                        | myotubularin 1                                                                | 0.28             | -1.85   | 0.00            |
| 205076_s_at | MTR11                      | myotubularin rel                                                             | 3.90             | 1.96    | 0.00            |
| 203199_s_at | MTRR                       | 5-methyltetrahydric acid                                                   | 0.32             | -1.63   | 0.00            |
| 212093_s_at | MTU51                      | mitochondrial tur                                                             | 0.28             | -1.86   | 0.00            |
| Gene Symbol | Description | fold change | p-value | Adjusted p-value |
|-------------|-------------|-------------|---------|-----------------|
| 36907_at | MVK mevalonate kinase | 5.09 | 2.35 | 0.00 |
| 202086_at | MX1 myxovirus (influenza virus) | 14.56 | 3.86 | 0.00 |
| 204994_at | MX2 myxovirus (influenza virus) | 3.48 | 1.80 | 0.00 |
| 201710_at | MYBL2 v-myb myeloblastosis viral oncogene homolog (avian)-like | 3.34 | 1.74 | 0.00 |
| 208040_s_at | MYBPC3 myosin binding protein C, cardiac | 4.31 | 2.11 | 0.00 |
| 219946_x_at | MYH14 myosin, heavy chain 14 | 10.91 | 3.45 | 0.00 |
| 201710_at | MYOD1 myogenic differentiation 1 | 3.76 | 1.91 | 0.00 |
| 208040_s_at | MYOM2 myomesin (M-protein) 2, 165kDa | 0.26 | -1.94 | 0.00 |
| 219946_x_at | MYOZ1 myozenin 1 | 3.50 | 1.81 | 0.00 |
| 202259_s_at | N4BP2L2 NEDD4 binding protein 2-like | 0.28 | -1.85 | 0.00 |
| 204860_s_at | NAIP NLR family, apoptosis inhibitory protein | 0.17 | -2.58 | 0.00 |
| 204860_s_at | NAP1L2 nucleosome assembly protein 1-like 2 | 0.32 | -1.66 | 0.00 |
| 204749_at | NAP1L3 nucleosome assembly protein 1-like 3 | 0.17 | -2.56 | 0.00 |
| 222369_at | NAT11 N-acetyltransferase 11 (GCN5-related, putative) | 0.31 | -1.70 | 0.00 |
| 221207_s_at | NBEA neurobeachin | 0.29 | -1.77 | 0.00 |
| 227049_at | NBL1 neuroblastoma, | 3.87 | 1.95 | 0.00 |
| 209556_at | NCDN neurochondrin | 6.26 | 2.65 | 0.00 |
| 209557_s_at | NCDN neurochondrin | 5.85 | 2.55 | 0.00 |
| 205731_s_at | NCOA2 nuclear receptor | 0.21 | -2.23 | 0.00 |
| 217045_x_at | NCR2 natural cytotoxic | 4.14 | 2.05 | 0.00 |
| 217493_x_at | NCR2 natural cytotoxic | 3.59 | 1.85 | 0.00 |
| 218160_at | NDUFAB NADH dehydrogenase | 3.10 | 1.63 | 0.00 |
| 213116_at | NEK3 NIMA (never in mitosis gene a)-related kinase 3 | 0.26 | -1.95 | 0.00 |
| 204634_at | NEK4 NIMA (never in mitosis gene a)-related kinase 4 | 0.32 | -1.64 | 0.00 |
| 214738_s_at | NEK9 NIMA (never in mitosis gene a)-related kinase 9 | 3.05 | 1.61 | 0.00 |
| 214125_s_at | NENF neuron derived | 3.43 | 1.78 | 0.00 |
| 216878_s_at | NES nestin | 3.40 | 1.77 | 0.00 |
| 204889_s_at | NEURL neuralized homolog | 5.60 | 2.48 | 0.00 |
| 213438_s_at | NFAF neurofascin homolog | 0.25 | -2.03 | 0.00 |
| 210556_at | NFATC3 nuclear factor of activated T-cells | 0.22 | -2.19 | 0.00 |
| 213033_s_at | NFIB nuclear factor I/B | 0.27 | -1.88 | 0.00 |
| 213032_s_at | NFIB nuclear factor I/B | 0.16 | -2.65 | 0.00 |
| 211466_at | NFIB nuclear factor I/B | 0.14 | -2.87 | 0.00 |
| 210268_at | NFJX1 nuclear transcript | 0.21 | -2.24 | 0.00 |
| 204109_at | NFJYA nuclear transcript | 4.16 | 2.06 | 0.00 |
| 215228_s_at | NHLH2 nesclent helix loop | 0.16 | -2.67 | 0.00 |
| 219353_s_at | NHLRC2 NHL repeat cont | 0.15 | -2.73 | 0.00 |
| 207108_at | NIPBL Nipped-B homolog | 0.25 | -2.01 | 0.00 |
| 205004_at | NKR FKB repressing factor | 0.33 | -1.60 | 0.00 |
| 215338_s_at | NKTR natural killer tumor | 0.24 | -2.03 | 0.00 |
| 206578_at | NKX2-5 NK2 transcription factor | 4.95 | 2.31 | 0.00 |
| 205895_s_at | NOLC1 nuclear and co | 3.70 | 1.89 | 0.00 |
| 214011_s_at | NOP16 NOP16 nucleol | 3.81 | 1.93 | 0.00 |
| 201659_s_at | NP nucleoside phosphor | 5.75 | 2.52 | 0.00 |
| 211584_s_at | NPAT nuclear protein, | 0.32 | -1.65 | 0.00 |
| 219789_s_at | NPR3 natriuretic peptide | 0.26 | -1.96 | 0.00 |
| 205440_s_at | NPY1R neuropeptide Y | 0.13 | -2.95 | 0.00 |
| Gene symbol | Description | Log2 Fold Change |
|-------------|-------------|-----------------|
| NQO1        | NAD(P)H dehydrogenase, quinone 1 | 4.37 |
| NQO1        | NAD(P)H dehydrogenase, quinone 1 | 4.05 |
| NR0B2       | Nuclear receptor | 3.35 |
| NR2F2       | Nuclear receptor | 0.13 |
| NR3C2       | Nuclear receptor | 0.21 |
| NR4A1       | Nuclear receptor | 5.87 |
| NR4A1       | Nuclear receptor | 5.82 |
| NR4A1       | Nuclear receptor | 3.84 |
| NR4A2       | Nuclear receptor | 3.30 |
| NR4A3       | Nuclear receptor | 6.87 |
| NRIP1       | Nuclear receptor | 0.25 |
| NRP2        | Neurphilin 2 | 3.55 |
| NSDHL       | NAD(P) dependent steroid dehydrogenase-like | 3.88 |
| NT5M        | 5',3'-nucleotidase | 3.03 |
| NUCB2       | Nucleobindin 2 | 0.23 |
| NUDT13      | Nudix (nucleosid) | 0.13 |
| NUDT21      | Nudix (nucleosid) | 0.23 |
| NUDT6       | Nudix (nucleosid) | 0.30 |
| NUFIP1      | Nuclear fragile X | 0.33 |
| NUMA1       | Nuclear mitotic a | 0.30 |
| NUMB        | Numb homolog (I) | 0.28 |
| NUP160      | Nucleopirin 160l | 0.25 |
| NUP50       | Nucleopirin 50kl | 0.25 |
| OAS1        | 2',5'-oligoadenyl | 4.35 |
| OAS1        | 2',5'-oligoadenyl | 3.17 |
| OAS1        | 2',5'-oligoadenyl | 3.80 |
| OASL        | 2',5'-oligoadenyl | 3.19 |
| OAZ2        | Ornithine decarboxylase | 3.19 |
| OBZ2        | Odorant binding | 3.72 |
| OGFOD2      | 2-oxoglutarate a | 4.76 |
| ORC2L       | Origin recognition | 0.30 |
| ORC5L       | Origin recognition | 0.28 |
| OBP2A       | Odorant binding | 3.72 |
| OGFOD2      | 2-oxoglutarate a | 4.76 |
| ORC2L       | Origin recognition | 0.30 |
| OTUB1       | OTU domain, ub | 3.84 |
| OTUB2       | OTU domain, ub | 3.53 |
| OVO1        | Ovo-like 1(Drosos) | 3.82 |
| OXCT1       | 3-oxoacid CoA tr | 0.33 |
| OXR1        | Oxidation resistase | 0.26 |
| P4HB        | Prolyl 4-hydroxyl | 3.03 |
| PADI1       | Peptidyl arginine | 3.13 |
| PAIP1       | Poly(A) binding | 0.24 |
| PAK2        | P21 protein (Cdc) | 0.17 |
| PAOL4       | Poly(A) polymers | 0.30 |
| PAR6A       | Par-6 partitioning | 5.22 |
| PAWR        | PRKC, apoptosis | 4.36 |
| PAX8        | Paired box 8 | 6.84 |
| PBLD        | Phenazine biosy | 0.32 |
| Gene ID     | Description                                                                 | Log2 Fold Change | p-value | q-value |
|------------|------------------------------------------------------------------------------|------------------|---------|---------|
| 202876_at  | PBX2 pre-B-cell leukemia homeobox 2                                            | 0.24             | 0.00    | 0.00    |
| 212259_s_at| PBXIP1 pre-B-cell leukemia homeobox interacting protein 1                      | 3.36             | 0.00    | 0.00    |
| 220186_s_at| PCDH24 protocadherin 24                                                        | 4.33             | 0.00    | 0.00    |
| 210368_at  | PCDHGA8 protocadherin ge                                                        | 0.30             | 0.00    | 0.00    |
| 203378_at  | PCF11 PCF11, cleavage and polyadenylation factor subunit, homolog (S. cerevisiae) | 0.20             | 0.00    | 0.00    |
| 219940_s_at| PCD2 PCI domain cont                                                          | 3.15             | 0.00    | 0.00    |
| 205560_at  | PCSK5 proprotein convertase subtilisin/kexin type 5                            | 0.30             | 0.00    | 0.00    |
| 205559_s_at| PCSK5 proprotein convertase subtilisin/kexin type 5                            | 0.18             | 0.00    | 0.00    |
| 209700_x_at| PDE4DIP phosphodiesterase                                                       | 0.21             | 0.00    | 0.00    |
| 21957_at   | PKD3 pyruvate dehydrogenase                                                    | 3.55             | 0.00    | 0.00    |
| 218690_at  | PDLM4 PDZ and LIM do                                                           | 4.72             | 0.00    | 0.00    |
| 203242_s_at| PDLM5 PDZ and LIM do                                                           | 0.22             | 0.00    | 0.00    |
| 213684_s_at| PDLM5 PDZ and LIM do                                                           | 0.20             | 0.00    | 0.00    |
| 32029_at   | PDPK1 3-phosphoinositide                                                      | 3.76             | 0.00    | 0.00    |
| 204742_s_at| PDS5B PDS5, regulator                                                         | 0.28             | 0.00    | 0.00    |
| 215888_at  | PDS5B PDS5, regulator                                                         | 0.26             | 0.00    | 0.00    |
| 219630_at  | PDZK1IIP1 PDZK1 interactin                                                      | 6.80             | 0.00    | 0.00    |
| 209242_at  | PEG3 paternally expressed                                                      | 0.19             | 0.00    | 0.00    |
| 219132_at  | PEL12 pelino homolog                                                          | 0.13             | 0.00    | 0.00    |
| 204300_at  | PET112L PET112-like (yeast)                                                    | 4.29             | 0.00    | 0.00    |
| 204873_at  | PEX1 peroxisomal bioç                                                          | 0.16             | 0.00    | 0.00    |
| 201706_s_at| PEX19 peroxisomal bioç                                                         | 7.11             | 0.00    | 0.00    |
| 203969_at  | PEX3 peroxisomal bioç                                                          | 0.14             | 0.00    | 0.00    |
| 206380_x_at| PF4 platelet factor 4                                                          | 3.29             | 0.00    | 0.00    |
| 207931_s_at| PFKFB2 6-phosphofructo                                                         | 3.14             | 0.00    | 0.00    |
| 213469_at  | PGAP1 post-GPI attachr                                                        | 0.14             | 0.00    | 0.00    |
| 220576_at  | PGAP1 post-GPI attachr                                                        | 0.08             | 0.00    | 0.00    |
| 219225_at  | PGBD5 piggyBac transp                                                         | 7.12             | 0.00    | 0.00    |
| 201118_at  | PGD phosphoglucoza                                                          | 4.01             | 0.00    | 0.00    |
| 209652_s_at| PGF placental growth                                                        | 3.71             | 0.00    | 0.00    |
| 218410_s_at| PGP phosphoglucolₐ                                                        | 3.72             | 0.00    | 0.00    |
| 204049_s_at| PHACTR2 phosphatase ann                                                        | 0.21             | 0.00    | 0.00    |
| 218338_at  | PHC1 polyhomeotic ho                                                          | 3.57             | 0.00    | 0.00    |
| 217951_s_at| PHF3 PHD finger prote                                                        | 0.20             | 0.00    | 0.00    |
| 215718_s_at| PHF3 PHD finger prote                                                        | 0.14             | 0.00    | 0.00    |
| 205450_at  | PHKA1 phosphorylase k                                                          | 4.88             | 0.00    | 0.00    |
| 216102_at  | PHLB1 pleckstrin homolo                                                        | 4.47             | 0.00    | 0.00    |
| 203691_at  | PI3 peptidase inhibị                                                              | 34.53            | 0.00    | 0.00    |
| 41469_at   | PI3 peptidase inhibị                                                                | 31.72            | 0.00    | 0.00    |
| 205346_s_at| PIH2A phosphatidylinos                                                        | 3.03             | 0.00    | 0.00    |
| 37433_at   | PIAS2 protein inhibitor r                                                       | 0.14             | 0.00    | 0.00    |
| 213239_at  | PIBF1 progesterone im                                                          | 0.18             | 0.00    | 0.00    |
| 215242_at  | PIGC phosphatidylinos                                                        | 0.29             | 0.00    | 0.00    |
| 204369_at  | PIK3CA phosphoinosīdẹ                                                               | 0.16             | 0.00    | 0.00    |
| 217620_at  | PIK3CB phosphoinosīdẹ                                                               | 0.13             | 0.00    | 0.00    |
| 212240_at  | PIK3R1 phosphoinosīdẹ                                                               | 0.22             | 0.00    | 0.00    |
| 222218_s_at| PILRA paired immunogl                                                             | 0.23             | 0.00    | 0.00    |
| 222150_s_at| PION pigeon homolog                                                             | 0.26             | 0.00    | 0.00    |
| Gene Symbol | Gene Name | Description | Log2 Fold Change | p-Value | FDR |
|-------------|-----------|-------------|-----------------|---------|-----|
| PION        | pigeon homolog (Drosophila) | 0.21 -2.24 | 0.00 | 0.00 |
| PIP5K1B     | phosphatidylinos | 0.21 -2.25 | 0.00 | 0.00 |
| PITX1       | paired-like home | 8.36 3.06 | 0.00 | 0.00 |
| PKD2L1      | polycystic kidney | 5.06 2.34 | 0.00 | 0.00 |
| PKMYT1      | protein kinase, membrane associated tyrosine/threonine | 3.55 1.83 | 0.00 | 0.00 |
| PKN2        | protein kinase N | 0.30 -1.73 | 0.00 | 0.00 |
| PIP5K1B     | phosphatidylinos | 3.26 1.71 | 0.00 | 0.00 |
| PITX1       | paired-like home | 8.36 3.06 | 0.00 | 0.00 |
| PKD2L1      | polycystic kidney | 5.06 2.34 | 0.00 | 0.00 |
| PKMYT1      | protein kinase, membrane associated tyrosine/threonine | 3.55 1.83 | 0.00 | 0.00 |
| PKN2        | protein kinase N | 0.30 -1.73 | 0.00 | 0.00 |
| PIP5K1B     | phosphatidylinos | 3.26 1.71 | 0.00 | 0.00 |
| PITX1       | paired-like home | 8.36 3.06 | 0.00 | 0.00 |
| PKD2L1      | polycystic kidney | 5.06 2.34 | 0.00 | 0.00 |
| PKMYT1      | protein kinase, membrane associated tyrosine/threonine | 3.55 1.83 | 0.00 | 0.00 |
| PKN2        | protein kinase N | 0.30 -1.73 | 0.00 | 0.00 |
| PIP5K1B     | phosphatidylinos | 3.26 1.71 | 0.00 | 0.00 |
| PITX1       | paired-like home | 8.36 3.06 | 0.00 | 0.00 |
| PKD2L1      | polycystic kidney | 5.06 2.34 | 0.00 | 0.00 |
| PKMYT1      | protein kinase, membrane associated tyrosine/threonine | 3.55 1.83 | 0.00 | 0.00 |
| PKN2        | protein kinase N | 0.30 -1.73 | 0.00 | 0.00 |
| PIP5K1B     | phosphatidylinos | 3.26 1.71 | 0.00 | 0.00 |
| PITX1       | paired-like home | 8.36 3.06 | 0.00 | 0.00 |
| PKD2L1      | polycystic kidney | 5.06 2.34 | 0.00 | 0.00 |
| PKMYT1      | protein kinase, membrane associated tyrosine/threonine | 3.55 1.83 | 0.00 | 0.00 |
| PKN2        | protein kinase N | 0.30 -1.73 | 0.00 | 0.00 |
| PIP5K1B     | phosphatidylinos | 3.26 1.71 | 0.00 | 0.00 |
| PITX1       | paired-like home | 8.36 3.06 | 0.00 | 0.00 |
| PKD2L1      | polycystic kidney | 5.06 2.34 | 0.00 | 0.00 |
| PKMYT1      | protein kinase, membrane associated tyrosine/threonine | 3.55 1.83 | 0.00 | 0.00 |
| PKN2        | protein kinase N | 0.30 -1.73 | 0.00 | 0.00 |
| PIP5K1B     | phosphatidylinos | 3.26 1.71 | 0.00 | 0.00 |
| PITX1       | paired-like home | 8.36 3.06 | 0.00 | 0.00 |
| PKD2L1      | polycystic kidney | 5.06 2.34 | 0.00 | 0.00 |
| Gene Symbol | Description                          | Ratio 1 | Ratio 2 | Ratio 3 | Ratio 4 |
|-------------|--------------------------------------|---------|---------|---------|---------|
| 211531_at   | PRB1 proline-rich prote              | 5.41    | 2.44    | 0.00    | 0.00    |
| 210597_at   | PRB1 proline-rich prote              | 3.25    | 1.70    | 0.00    | 0.00    |
| 205628_at   | PRIM2 primase, DNA, p                | 0.23    | -2.12   | 0.00    | 0.00    |
| 204843_at   | PRKAR2A protein kinase, c            | 3.53    | 1.82    | 0.00    | 0.00    |
| 203680_at   | PRKAR2B protein kinase, c            | 0.26    | -1.95   | 0.00    | 0.00    |
| 207957_at   | PRKCB protein kinase C               | 0.22    | -2.19   | 0.00    | 0.00    |
| 202178_at   | PRKCI protein kinase C               | 3.09    | 1.63    | 0.00    | 0.00    |
| 204843_at   | PRKAR2A protein kinase, c            | 0.33    | -1.60   | 0.00    | 0.00    |
| 210476_at   | PRLR prolactin receptor              | 3.94    | 1.98    | 0.00    | 0.00    |
| 211223_at   | PROP1 PROP paired-like               | 3.09    | 1.63    | 0.00    | 0.00    |
| 214941_at   | PRPF40A PRP40 pre-mRNA               | 4.74    | 2.25    | 0.00    | 0.00    |
| 205402_at   | PRSS2 protease, serine,              | 6.90    | 2.79    | 0.00    | 0.00    |
| 204279_at   | PRM2 primase, DNA, p                | 3.18    | 1.67    | 0.00    | 0.00    |
| 208102_at   | PSD pleckstrin and Ss                | 3.24    | 1.69    | 0.00    | 0.00    |
| 203354_at   | PSD3 pleckstrin and Ss               | 0.31    | -1.68   | 0.00    | 0.00    |
| 205602_at   | PSG1 pregnancy specific             | 3.06    | 1.62    | 0.00    | 0.00    |
| 209337_at   | PSIP1 PC4 and SFRS1                 | 0.32    | -1.65   | 0.00    | 0.00    |
| 202525_at   | PRSS8 protease, serine,              | 3.08    | 1.92    | 0.00    | 0.00    |
| 205048_at   | PSD pleckstrin and Ss                | 0.22    | -2.16   | 0.00    | 0.00    |
| 203354_at   | PSD3 pleckstrin and Ss               | 4.03    | 2.01    | 0.00    | 0.00    |
| 204279_at   | PRM2 protease, serine,               | 0.10    | -3.29   | 0.00    | 0.00    |
| 211661_at   | PTAFR platelet-activatrin            | 3.22    | 1.69    | 0.00    | 0.00    |
| 218065_at   | PTCD2 pentatricopeptid             | 0.24    | -2.06   | 0.00    | 0.00    |
| 218967_at   | PTGER1 prostaglandin E1             | 0.11    | -3.20   | 0.00    | 0.00    |
| 214391_at   | PTGER1 prostaglandin E1             | 9.24    | 3.21    | 0.00    | 0.00    |
| 207650_at   | PTGER1 prostaglandin E1             | 4.55    | 2.19    | 0.00    | 0.00    |
| 211099_at   | PTGER3 prostaglandin E1             | 0.27    | -1.92   | 0.00    | 0.00    |
| 210374_at   | PTGER3 prostaglandin E1             | 0.23    | -2.12   | 0.00    | 0.00    |
| 210832_at   | PTGER3 prostaglandin E1             | 0.22    | -2.17   | 0.00    | 0.00    |
| 205911_at   | PTH1R parathyroid horn               | 0.20    | -2.33   | 0.00    | 0.00    |
| 204201_at   | PTPN13 protein tyrosine ζ            | 0.31    | -1.69   | 0.00    | 0.00    |
| 211320_at   | PTPRU protein tyrosine ζ             | 4.62    | 2.21    | 0.00    | 0.00    |
| 219844_at   | PYCRL pyrroline-5-carbox           | 3.31    | 1.73    | 0.00    | 0.00    |
| 212263_at   | QKI quaking homolog                 | 0.23    | -2.10   | 0.00    | 0.00    |
| 204182_at   | QSOX1 quiescin Q6 suffl             | 3.51    | 1.81    | 0.00    | 0.00    |
| 214999_at   | RAB11FIP3 RAB11 family int         | 0.17    | -2.57   | 0.00    | 0.00    |
| 208733_at   | RAB2A RAB2A, membe                 | 0.18    | -2.51   | 0.00    | 0.00    |
| 221014_at   | RAB33B RAB33B, memb                 | 0.26    | -1.93   | 0.00    | 0.00    |
| 207487_at   | RAB40B RAB40B, memb                 | 3.17    | 1.66    | 0.00    | 0.00    |
| 213466_at   | RAB40C RAB40C, memb                 | 5.55    | 2.47    | 0.00    | 0.00    |
| 204146_at   | RAD51AP1 RAD51 associated           | 0.24    | -2.09   | 0.00    | 0.00    |
| 209051_at   | RALGDS ral guanine nucle             | 6.42    | 2.68    | 0.00    | 0.00    |
| 210552_at   | RALGPS1 Ral GEF with Pfs          | 0.26    | -1.92   | 0.00    | 0.00    |
| 222038_at   | RALGPS2 Ral GEF with Pfs          | 0.29    | -1.81   | 0.00    | 0.00    |
| 202639_at   | RANBP3 RAN binding pro             | 3.35    | 1.74    | 0.00    | 0.00    |
| 212125_at   | RANGAP1 Ran GTPase act             | 3.85    | 1.94    | 0.00    | 0.00    |
| 215992_at   | RAPGEF2 Rap guanine nucle           | 0.11    | -3.14   | 0.00    | 0.00    |
| Gene ID      | Gene Symbol | Description                                      | Log2 Ratio | Fold Change | p-value | q-value |
|-------------|-------------|--------------------------------------------------|------------|-------------|---------|---------|
| 219112_at   | RAPGEF6     | Rap guanine nucleotide exchange factor 6         | 0.33       | -1.59       | 0.00    | 0.00    |
| 204189_at   | RARG        | Retinoic acid receptor                           | 3.59       | 1.85        | 0.00    | 0.00    |
| 214369_s_at | RASGRP2     | RAS guanyl releasing protein 2 (calcium and DAG-regulated) | 0.21       | -2.23       | 0.00    | 0.00    |
| 202034_x_at | RB1CC1      | R1-inducible c                                      | 0.29       | -1.79       | 0.00    | 0.00    |
| 219222_at   | RBKS        | Ribokinase                                        | 3.96       | 1.99        | 0.00    | 0.00    |
| 205296_at   | RBL1        | Retinoblastoma-ii                                 | 0.27       | -1.87       | 0.00    | 0.00    |
| 212331_at   | RBL2        | Retinoblastoma-ii                                 | 0.28       | -1.86       | 0.00    | 0.00    |
| 51228_at    | RBM12B      | RNA binding moi                                    | 0.20       | -2.30       | 0.00    | 0.00    |
| 219754_at   | RBM41       | RNA binding moi                                    | 0.24       | -2.05       | 0.00    | 0.00    |
| 217856_at   | RBM8A       | RNA binding moi                                    | 0.32       | -1.62       | 0.00    | 0.00    |
| 220201_at   | RC3H2       | Ring finger and C                                  | 3.37       | 1.75        | 0.00    | 0.00    |
| 218352_at   | RCBTB1      | Regulator of chrom                                 | 0.18       | -2.45       | 0.00    | 0.00    |
| 212612_at   | ROR1        | REST corepressor                                  | 0.33       | -1.61       | 0.00    | 0.00    |
| 206753_at   | RDH16       | Retinol dehydrodrog                               | 9.13       | 3.19        | 0.00    | 0.00    |
| 212917_x_at | RECQL       | RecQ protein-like                                  | 0.30       | -1.76       | 0.00    | 0.00    |
| 205025_at   | RELB        | v-rel reticuloend                                 | 5.50       | 2.46        | 0.00    | 0.00    |
| 216834_at   | RGS1        | Regulator of G-pr                                  | 7.26       | 2.86        | 0.00    | 0.00    |
| 204314_at   | RGS10       | Regulator of G-pr                                  | 3.70       | 1.89        | 0.00    | 0.00    |
| 202388_at   | RGS2        | Regulator of G-pr                                  | 0.26       | -1.96       | 0.00    | 0.00    |
| 219554_at   | RHC2        | Rh family, C glyc                                | 24.23      | 4.60        | 0.00    | 0.00    |
| 212651_at   | RHOBTB1     | Rho-related BTB                                   | 0.33       | -1.59       | 0.00    | 0.00    |
| 202975_s_at | RHOBTB3     | Rho-related BTB                                   | 0.30       | -1.76       | 0.00    | 0.00    |
| 202976_s_at | RHOBTB3     | Rho-related BTB                                   | 0.15       | -2.71       | 0.00    | 0.00    |
| 31846_at    | RHOD        | Ras homolog gen                                   | 5.21       | 2.38        | 0.00    | 0.00    |
| 214700_x_at | RIF1        | Rap1 interacting                                 | 0.23       | -2.10       | 0.00    | 0.00    |
| 218598_at   | RINT1       | RAD50 interacto                                   | 0.27       | -1.87       | 0.00    | 0.00    |
| 218979_at   | RMI1        | RMI1, RecQ mer                                    | 0.33       | -1.62       | 0.00    | 0.00    |
| 213566_at   | RNASE6      | Ribonuclease, R                                 | 3.09       | 1.63        | 0.00    | 0.00    |
| 203022_at   | RNASEH2A     | Ribonuclease H2                                    | 3.42       | 1.78        | 0.00    | 0.00    |
| 210056_at   | RND1        | Rho family GTPi                                    | 3.78       | 1.92        | 0.00    | 0.00    |
| 221063_x_at | RNF123      | Ring finger protein                               | 4.20       | 2.07        | 0.00    | 0.00    |
| 207735_at   | RNF125      | Ring finger protein                               | 0.10       | -3.33       | 0.00    | 0.00    |
| 220985_s_at | RNF170      | Ring finger protein                               | 0.28       | -1.87       | 0.00    | 0.00    |
| 218394_at   | ROGDI       | Rogdi homolog (E)                                 | 6.05       | 2.60        | 0.00    | 0.00    |
| 220436_at   | RP11-13B21.1 | Similar to cell rec                              | 0.23       | -2.10       | 0.00    | 0.00    |
| 205191_at   | RP2         | Retinitis pigmentc                                | 0.10       | -3.27       | 0.00    | 0.00    |
| 218499_at   | RP6-23H19.1 | Serine/threonine                                  | 0.28       | -1.81       | 0.00    | 0.00    |
| 218842_at   | RPAP3       | RNA polymerase                                    | 0.27       | -1.87       | 0.00    | 0.00    |
| 213223_at   | RPL28       | Ribosomal protein                                 | 4.86       | 2.28        | 0.00    | 0.00    |
| 219143_s_at | RPP25       | Ribonuclease P/|                                    | 3.42       | 1.77        | 0.00    | 0.00    |
| 213098_at   | ROQCD1      | RCD1 required f                                   | 3.40       | 1.76        | 0.00    | 0.00    |
| 209773_s_at | RRM2        | Ribonucleotide re                                 | 5.16       | 2.37        | 0.00    | 0.01    |
| 218758_s_at | RRP1        | Ribosomal RNA ŝ                                   | 3.66       | 1.87        | 0.00    | 0.00    |
| 214764_at   | RRP15       | Ribosomal RNA ŝ                                   | 0.25       | -2.02       | 0.00    | 0.00    |
| 33307_at    | RRP7A       | Ribosomal RNA ŝ                                   | 3.31       | 1.73        | 0.00    | 0.00    |
| 204133_at   | RRP9        | Ribosomal RNA ŝ                                   | 4.01       | 2.01        | 0.00    | 0.00    |
| 218166_s_at | RSF1        | Remodeling and                                      | 0.19       | -2.38       | 0.00    | 0.00    |
| 219507_at   | RSRC1       | Arginine/serine-ri                                 | 0.29       | -1.77       | 0.00    | 0.00    |
| Gene ID  | Symbol     | Description                          | Fold Change | Log2 AvgFC | Adjusted p-value | FDR q-value |
|---------|------------|--------------------------------------|-------------|------------|------------------|------------|
| 210222_s_at | RTN1 | reticulon 1 | 0.22 | -2.16 | 0.00 | 0.00 |
| 203485_at | RTN1 | reticulon 1 | 0.20 | -2.35 | 0.00 | 0.00 |
| 219684_at | RTP4 | receptor (chemosensory) transporter protein 4 | 4.85 | 2.28 | 0.00 | 0.00 |
| 213430_at | RUFY3 | RUN and FYVE domain containing 3 | 0.29 | -1.81 | 0.00 | 0.00 |
| 213939_s_at | RUFY3 | RUN and FYVE domain containing 3 | 0.26 | -1.97 | 0.00 | 0.00 |
| 203724_s_at | RUFY3 | RUN and FYVE domain containing 3 | 0.24 | -2.05 | 0.00 | 0.00 |
| 215321_at | RUNDC3B | RUN domain containing 3B | 0.31 | -1.69 | 0.00 | 0.00 |
| 209360_s_at | RUNX1 | runt-related transcription factor 1 | 10.47 | 3.39 | 0.00 | 0.00 |
| 213066_at | RUSC2 | RUN and SH3 domain containing 2 | 4.21 | 2.07 | 0.00 | 0.00 |
| 205863_at | S100A12 | S100 calcium binding protein A12 | 4.49 | 2.17 | 0.01 | 0.02 |
| 205916_at | S100A7 | S100 calcium binding protein A7 | 98.52 | 6.62 | 0.00 | 0.00 |
| 202917_s_at | S100A8 | S100 calcium binding protein A8 | 156.56 | 7.29 | 0.00 | 0.00 |
| 213430_at | S100A8 | S100 calcium binding protein A8 | 30.77 | 4.94 | 0.00 | 0.00 |
| 215321_at | S100A9 | S100 calcium binding protein A9 | 432.94 | 8.76 | 0.00 | 0.00 |
| 204351_at | S1PR1 | sphingosine-1-phosphate receptor 1 | 0.30 | -1.73 | 0.00 | 0.00 |
| 204642_at | SAFB2 | scaffold attachment factor B2 | 3.80 | 1.93 | 0.00 | 0.00 |
| 218702_at | SARS2 | serine dehydratase | 3.27 | 1.71 | 0.00 | 0.00 |
| 214370_at | SCD | stearoyl-CoA desaturase | 3.19 | 1.67 | 0.00 | 0.00 |
| 211708_s_at | SCD | stearoyl-CoA desaturase | 3.13 | 1.64 | 0.00 | 0.00 |
| 215548_s_at | SCFD1 | sec1 family domain | 0.28 | -1.83 | 0.00 | 0.00 |
| 215026_x_at | SCNN1A | sodium channel, \( \text{Na}^+ \) regulatory subunit | 4.02 | 2.01 | 0.00 | 0.00 |
| 205405_at | SETD2 | SET domain containing 2 | 0.24 | -2.06 | 0.00 | 0.00 |
| 214790_at | SECISBP2L | SECIS binding protein | 3.68 | 1.88 | 0.00 | 0.00 |
| 202319_at | SERPINA3 | serpin peptidase inhibitor, clade A (alpha-1 antitrypsin), member 3 | 4.05 | 2.02 | 0.00 | 0.00 |
| 209719_x_at | SERPINB3 | serpin peptidase | 68.72 | 6.10 | 0.00 | 0.00 |
| 209720_s_at | SERPINB3 | serpin peptidase | 24.85 | 4.64 | 0.00 | 0.00 |
| 211006_s_at | SERPINB4 | serpin peptidase | 24.06 | 4.59 | 0.00 | 0.00 |
| 202376_at | SERPINE1 | serpin peptidase | 20.39 | 4.35 | 0.00 | 0.00 |
| 207468_s_at | SERPINE1 | serpin peptidase | 4.05 | 2.02 | 0.00 | 0.00 |
| 216047_x_at | SETD2 | SET domain containing 2 | 3.68 | 1.88 | 0.00 | 0.00 |
| 202319_at | SENP6 | SUMO1/sentrin/SMT3 specific peptidase | 0.30 | -1.72 | 0.00 | 0.00 |
| 202036_s_at | SFRP1 | secreted frizzled | 4.30 | 2.11 | 0.00 | 0.01 |
| 202037_s_at | SFRP1 | secreted frizzled | 3.63 | 1.86 | 0.01 | 0.03 |
| 207468_s_at | SFRP5 | secreted frizzled | 3.94 | 1.98 | 0.00 | 0.00 |
| Gene Symbol | Gene Name                                      | VAF  | Fold Change | Log2 FC | p Value |
|-------------|-----------------------------------------------|------|-------------|---------|---------|
| 208863_s_at | SFRS1  splicing factor, arginine/serine-rich 1 | 0.24 | -2.03       | 0.00    | 0.00    |
| 217608_at  | SFRS12IP1 SFRS12-interact | 0.18 | -2.47       | 0.00    | 0.00    |
| 222310_at  | SFRS15 splicing factor, arginine/serine-rich 15 | 0.32 | -1.63       | 0.00    | 0.00    |
| 214838_at  | SFT2D2 SFT2 domain co | 3.71 | 1.89        | 0.00    | 0.00    |
| 38691_s_at | SFTPC surfactant protein | 3.91 | 1.97        | 0.00    | 0.00    |
| 214387_x_at| SFTPC surfactant protein | 3.28 | 1.71        | 0.00    | 0.00    |
| 207302_at  | SGCG sarcoglycan, gamma (35kDa dystrophin-associated glycoprotein) | 0.21 | -2.24       | 0.00    | 0.00    |
| 201739_at  | SGK1 serum/glucocorticoid regulated kinase 1 | 3.50 | 1.89        | 0.00    | 0.00    |
| 215519_x_at| SGS3 small G protein s | 3.03 | 1.60        | 0.00    | 0.00    |
| 203637_s_at| SH3GL3 SH3-domain GR | 5.99 | 2.58        | 0.00    | 0.00    |
| 205243_at  | SLC13A3 solute carrier family 13 (sodium-dependent dicarboxylate transporter), member 3 | 4.61 | 2.21        | 0.00    | 0.00    |
| 219613_s_at| SLC16A7 solute carrier family 16, member 7 (monocarboxylic acid transporter 2) | 3.70 | 1.89        | 0.00    | 0.00    |
| 210567_s_at| SLC16A7 solute carrier family 16, member 7 (monocarboxylic acid transporter 2) | 3.70 | 1.89        | 0.00    | 0.00    |
| 203971_at  | SLC31A1 solute carrier family 31 (copper transporters), member 1 | 3.66 | 1.87        | 0.00    | 0.00    |
| 209237_s_at| SLC35A3 solute carrier family 35 (UDP-N-acetylglucosamine (UDP-GlcNAc) transporter), member A3 | 0.22 | -2.17       | 0.00    | 0.00    |
| 220413_at  | SMEK1 SMEK homolog | 0.31 | -1.70       | 0.00    | 0.00    |
| 222270_at  | SMEK2 SMEK homolog | 0.15 | -2.79       | 0.00    | 0.00    |
| Gene ID   | Description               | Log2 Fold Change | p-value | FDR |
|-----------|---------------------------|------------------|---------|-----|
| 210057_at | SMG1 homolog, phosphatidylinositol 3-kinase-related kinase (C. elegans) | 0.12             | -3.10   | 0.00 | 0.00 |
| 219695_at | SMPD3 sphingomyelin pi | 7.00             | 2.81    | 0.00 | 0.00 |
| 213624_at | SMG1 homolog, phosphatidylinositol 3-kinase-related kinase (C. elegans) | 0.28             | -1.86   | 0.00 | 0.00 |
| 204104_at | SNAC2 small nuclear RNA activating complex, polypeptide 2, 45kDa | 3.27             | 1.71    | 0.00 | 0.00 |
| 22286_at | SNAC3 small nuclear RNA activating complex, polypeptide 3, 50kDa | 0.24             | -2.04   | 0.00 | 0.00 |
| 53912_at  | SNX11 sorting nexin 11 | 3.29             | 1.72    | 0.00 | 0.00 |
| 219793_at | SNX16 sorting nexin 16 | 0.18             | -2.45   | 0.00 | 0.00 |
| 204701_s_at | STOML1 stomatin (EPB72)-like | 3.35             | 1.75    | 0.00 | 0.00 |
| 212800_at | STX6 syntaxin 6 | 0.26             | -1.95   | 0.00 | 0.00 |
| 203457_at | STX7 syntaxin 7 | 0.29             | -1.77   | 0.00 | 0.00 |
| 220030_at | STYK1 serine/threonine kinase 1 | 3.19         | 1.67    | 0.01 | 0.02 |
| 204907_at | SULT4A1 sulfotransferase | 3.90             | 1.96    | 0.00 | 0.00 |
| 201836_s_at | SUPT7L suppressor of Ty | 0.32             | -1.66   | 0.00 | 0.00 |
| Probe ID   | Description                                      | Score1 | Score2 | Score3 | Score4 |
|------------|--------------------------------------------------|--------|--------|--------|--------|
| 209307_at  | SWAP70 SNIP1, SWAP switching complex subunit 70kDa | 0.31   | -1.67  | 0.00   | 0.00   |
| 216272_x_at| SYDE1 syntactin, synapse defective 1             | 3.73   | 1.90   | 0.00   | 0.00   |
| 209447_at  | SYE1 spectrin repeat c                            | 0.20   | -2.34  | 0.00   | 0.00   |
| 210612_s_at| SYNJ2 synaptojanin 2                              | 0.31   | -1.67  | 0.00   | 0.00   |
| 212730_at  | SYNM synemin, intermediate filament protein       | 0.31   | -1.70  | 0.01   | 0.02   |
| 215865_at  | SYT12 synaptotagmin X                             | 8.49   | 3.09   | 0.00   | 0.00   |
| 208552_s_at| TAC1 tachykinin, precursor                        | 0.20   | -2.33  | 0.00   | 0.00   |
| 214940_at  | TAF1B TATA box binding protein                    | 0.18   | -2.47  | 0.00   | 0.00   |
| 215865_at  | SYT12 synaptotagmin X                             | 8.49   | 3.09   | 0.00   | 0.00   |
| 221267_at  | TAF9B tachykinin, precursor                       | 0.20   | -2.33  | 0.00   | 0.00   |
| 204769_s_at| TAP2 transporter 2, AT                             | 0.31   | -1.67  | 0.00   | 0.00   |
| 213786_at  | TAX1BP1 Tax1 (human T-cell leukemia virus type I) | 0.32   | -1.65  | 0.00   | 0.00   |
| 212382_at  | TCF4 transcription factor                         | 0.32   | -1.65  | 0.00   | 0.00   |
| 203753_at  | TCF4 transcription factor                         | 0.32   | -1.72  | 0.00   | 0.00   |
| 221266_at  | TCF4 transcription factor                         | 0.32   | -1.72  | 0.00   | 0.00   |
| 212387_at  | TCF4 transcription factor                         | 0.32   | -1.96  | 0.00   | 0.00   |
| 212386_at  | TCF4 transcription factor                         | 0.32   | -1.97  | 0.00   | 0.00   |
| 216272_x_at| SYDE1 syntactin, synapse defective 1             | 3.73   | 1.90   | 0.00   | 0.00   |
| 209447_at  | SYE1 spectrin repeat c                            | 0.20   | -2.34  | 0.00   | 0.00   |
| 210612_s_at| SYNJ2 synaptojanin 2                              | 0.31   | -1.67  | 0.00   | 0.00   |
| 212730_at  | SYNM synemin, intermediate filament protein       | 0.31   | -1.70  | 0.01   | 0.02   |
| 215865_at  | SYT12 synaptotagmin X                             | 8.49   | 3.09   | 0.00   | 0.00   |
| 208552_s_at| TAC1 tachykinin, precursor                        | 0.20   | -2.33  | 0.00   | 0.00   |
| 214940_at  | TAF1B TATA box binding protein                    | 0.18   | -2.47  | 0.00   | 0.00   |
| 215865_at  | SYT12 synaptotagmin X                             | 8.49   | 3.09   | 0.00   | 0.00   |
| 221267_at  | TAF9B tachykinin, precursor                       | 0.20   | -2.33  | 0.00   | 0.00   |
| 204769_s_at| TAP2 transporter 2, AT                             | 0.31   | -1.65  | 0.00   | 0.00   |
| 213786_at  | TAX1BP1 Tax1 (human T-cell leukemia virus type I) | 0.32   | -1.65  | 0.00   | 0.00   |
| 212382_at  | TCF4 transcription factor                         | 0.32   | -1.65  | 0.00   | 0.00   |
| 203753_at  | TCF4 transcription factor                         | 0.32   | -1.72  | 0.00   | 0.00   |
| 221266_at  | TCF4 transcription factor                         | 0.32   | -1.72  | 0.00   | 0.00   |
| 212387_at  | TCF4 transcription factor                         | 0.32   | -1.96  | 0.00   | 0.00   |
| 212386_at  | TCF4 transcription factor                         | 0.32   | -1.97  | 0.00   | 0.00   |
| 216272_x_at| SYDE1 syntactin, synapse defective 1             | 3.73   | 1.90   | 0.00   | 0.00   |
| 209447_at  | SYE1 spectrin repeat c                            | 0.20   | -2.34  | 0.00   | 0.00   |
| 210612_s_at| SYNJ2 synaptojanin 2                              | 0.31   | -1.67  | 0.00   | 0.00   |
| 212730_at  | SYNM synemin, intermediate filament protein       | 0.31   | -1.70  | 0.01   | 0.02   |
| 215865_at  | SYT12 synaptotagmin X                             | 8.49   | 3.09   | 0.00   | 0.00   |
| 208552_s_at| TAC1 tachykinin, precursor                        | 0.20   | -2.33  | 0.00   | 0.00   |
| 214940_at  | TAF1B TATA box binding protein                    | 0.18   | -2.47  | 0.00   | 0.00   |
| 215865_at  | SYT12 synaptotagmin X                             | 8.49   | 3.09   | 0.00   | 0.00   |
| 221267_at  | TAF9B tachykinin, precursor                       | 0.20   | -2.33  | 0.00   | 0.00   |
| 204769_s_at| TAP2 transporter 2, AT                             | 0.31   | -1.65  | 0.00   | 0.00   |
| 213786_at  | TAX1BP1 Tax1 (human T-cell leukemia virus type I) | 0.32   | -1.65  | 0.00   | 0.00   |
| 212382_at  | TCF4 transcription factor                         | 0.32   | -1.65  | 0.00   | 0.00   |
| 203753_at  | TCF4 transcription factor                         | 0.32   | -1.72  | 0.00   | 0.00   |
| 221266_at  | TCF4 transcription factor                         | 0.32   | -1.72  | 0.00   | 0.00   |
| 212387_at  | TCF4 transcription factor                         | 0.32   | -1.96  | 0.00   | 0.00   |
| 212386_at  | TCF4 transcription factor                         | 0.32   | -1.97  | 0.00   | 0.00   |
| Gene Symbol | Description                  | Log2 Ratio | Fold Change | P-Value | Adj P-Value |
|-------------|-------------------------------|------------|-------------|---------|-------------|
| 218368_s_at | TNFRSF12A tumor necrosis f1  | 4.02       | 2.01        | 0.00    | 0.00        |
| 218356_at  | TNFRSF21 tumor necrosis f1   | 7.55       | 2.92        | 0.00    | 0.00        |
| 218335_x_at | TNIP2 TNFAIP3 interac         | 3.40       | 1.77        | 0.00    | 0.00        |
| 206393_at  | TNNI2 troponin I type 2       | 0.11       | -3.24       | 0.00    | 0.00        |
| 206817_x_at | TNRC4 trinucleotide rep       | 4.59       | 2.20        | 0.00    | 0.00        |
| 213254_at  | TNRC6B trinucleotide rep      | 0.27       | -1.90       | 0.00    | 0.00        |
| 217413_s_at | TNXB tenascin XB             | 3.02       | 1.60        | 0.00    | 0.00        |
| 208609_s_at | TNXB tenascin XB             | 0.32       | -1.63       | 0.00    | 0.00        |
| 202807_s_at | TOM1 target of myb f1 (c)    | 3.87       | 1.95        | 0.00    | 0.00        |
| 214840_at  | TOM1L2 target of myb f1-iii   | 5.23       | 2.39        | 0.00    | 0.00        |
| 201691_s_at | TPDS2 tumor protein D5        | 0.31       | -1.69       | 0.00    | 0.00        |
| 203375_s_at | TPP2 tripeptidyl peptid       | 0.29       | -1.79       | 0.00    | 0.00        |
| 215220_s_at | TPR translocated proxi       | 0.09       | -3.54       | 0.00    | 0.00        |
| 210052_s_at | TPX2 TPX2, microtubu          | 3.65       | 1.87        | 0.00    | 0.00        |
| 221807_s_at | TRABD TraB domain cor         | 3.97       | 1.99        | 0.00    | 0.00        |
| 209412_at  | TRAPPC10 trafficking protei   | 0.29       | -1.81       | 0.00    | 0.00        |
| 56829_at   | TRAPPC9 trafficking protei     | 7.78       | 2.96        | 0.00    | 0.00        |
| 36742_at   | TRIM15 tripartite motif-cc    | 3.92       | 1.97        | 0.00    | 0.00        |
| 213293_s_at | TRIM22 tripartite motif-cc    | 3.25       | 1.70        | 0.00    | 0.00        |
| 204732_s_at | TRIM23 tripartite motif-cc    | 0.19       | -2.37       | 0.00    | 0.00        |
| 206911_at  | TRIM25 tripartite motif-cc    | 4.01       | 2.00        | 0.00    | 0.00        |
| 212116_at  | TRIM27 tripartite motif-cc    | 3.73       | 1.90        | 0.00    | 0.00        |
| 203610_s_at | TRIM38 tripartite motif-cc    | 4.50       | 2.17        | 0.00    | 0.00        |
| 210709_s_at | TRIM5 tripartite motif-cc     | 0.33       | -1.59       | 0.00    | 0.00        |
| 221897_at  | TRIM52 tripartite motif-cc    | 0.27       | -1.90       | 0.00    | 0.00        |
| 208178_x_at | TRIO triple functional c      | 0.30       | -1.73       | 0.00    | 0.00        |
| 218877_s_at | TRMT11 tRNA methyltran       | 0.27       | -1.90       | 0.00    | 0.00        |
| 205802_at  | TRPC1 transient receptc      | 0.27       | -1.88       | 0.00    | 0.00        |
| 205803_s_at | TRPC1 transient receptc      | 0.17       | -2.59       | 0.00    | 0.00        |
| 206528_at  | TRPC6 transient receptc      | 0.26       | -1.94       | 0.00    | 0.00        |
| 217162_at  | TSPY1 testis specific pr      | 3.50       | 1.81        | 0.00    | 0.00        |
| 213922_at  | TTBK2 tau tubulin kinase      | 0.10       | -3.31       | 0.00    | 0.00        |
| 219421_at  | TTC33 tetratricopeptide      | 0.24       | -2.08       | 0.00    | 0.00        |
| 213172_at  | TTC9 tetratricopeptide       | 0.31       | -1.71       | 0.00    | 0.00        |
| 216323_x_at | TUBA3D tubulin, alpha 3d      | 3.18       | 1.67        | 0.00    | 0.00        |
| 214876_s_at | TUBGCP5 tubulin, gamma 5     | 0.18       | -2.51       | 0.00    | 0.00        |
| 203272_at  | TUSC2 tumor suppressc        | 3.78       | 1.92        | 0.00    | 0.00        |
| 213943_at  | TWIST1 twist homolog 1       | 0.24       | -2.05       | 0.00    | 0.00        |
| 216609_at  | TXN thioredoxin              | 0.27       | -1.90       | 0.00    | 0.00        |
| 209078_s_at | TXN2 thioredoxin 2           | 4.00       | 2.00        | 0.00    | 0.00        |
| 201266_at  | TXNRD1 thioredoxin redu       | 3.57       | 1.84        | 0.00    | 0.00        |
| 59631_at   | TXNRD3 thioredoxin redu       | 3.54       | 1.83        | 0.00    | 0.00        |
| 204858_s_at | TYMP thymidine phosp         | 9.16       | 3.20        | 0.00    | 0.00        |
| 218362_s_at | U2AF2 U2 small nuclear       | 4.56       | 2.19        | 0.00    | 0.00        |
| 218837_at  | UBE2D4 ubiquitin-conjugs     | 6.09       | 2.61        | 0.00    | 0.00        |
| 209041_s_at | UBE2G2 ubiquitin-conjugs     | 3.04       | 1.60        | 0.00    | 0.00        |
| 217799_x_at | UBE2H ubiquitin-conjugs      | 3.38       | 1.76        | 0.00    | 0.00        |
| 211008_s_at | UBE2I ubiquitin-conjugs      | 3.83       | 1.94        | 0.00    | 0.00        |
| Gene ID       | Description                  | Ratio 1 | Ratio 2 | P-value 1 | P-value 2 |
|--------------|------------------------------|---------|---------|-----------|-----------|
| 210685_s_at  | UBE4B                       | 0.33    | -1.62   | 0.00      | 0.00      |
| 221746_at    | UBL4A                       | 3.57    | 1.83    | 0.00      | 0.00      |
| 207253_s_at  | UBN1                        | 5.09    | 2.35    | 0.00      | 0.00      |
| 204598_at    | UBOX5                       | 3.17    | 1.66    | 0.00      | 0.00      |
| 215544_s_at  | UBOX5                       | 3.02    | 1.59    | 0.00      | 0.00      |
| 212840_at    | UBXN7                       | 0.30    | -1.73   | 0.00      | 0.00      |
| 203343_at    | UGDH                        | 0.31    | -1.69   | 0.00      | 0.00      |
| 202330_s_at  | UNG                         | 0.33    | -1.61   | 0.00      | 0.00      |
| 215886_x_at  | USP12                       | 2.65    | 1.70    | 0.00      | 0.00      |
| 207213_s_at  | USP2                        | 3.25    | 1.70    | 0.00      | 0.00      |
| 215013_s_at  | USP34                       | 0.33    | -1.62   | 0.00      | 0.00      |
| 212065_s_at  | USP34                       | 0.16    | -2.62   | 0.00      | 0.00      |
| 204761_at    | USP6NL                      | 0.27    | -1.91   | 0.00      | 0.00      |
| 205139_s_at  | UST                         | 0.22    | -2.21   | 0.00      | 0.00      |
| 202172_at    | VEZF1                       | 0.33    | -1.59   | 0.00      | 0.00      |
| 205946_at    | VIPR2                       | 6.12    | 2.61    | 0.00      | 0.00      |
| 220528_at    | VNN3                        | 5.61    | 2.49    | 0.00      | 0.00      |
| 204377_s_at  | VPRBP                       | 0.20    | -2.29   | 0.00      | 0.00      |
| 218396_at    | VPS13C                      | 0.21    | -2.24   | 0.00      | 0.00      |
| 203856_at    | VRK1                        | 0.27    | -1.89   | 0.00      | 0.00      |
| 202112_at    | VWF                         | 4.82    | 2.27    | 0.00      | 0.00      |
| 218766_s_at  | WARS2                       | 0.33    | -1.61   | 0.00      | 0.00      |
| 205809_s_at  | WASL                        | 0.30    | -1.73   | 0.00      | 0.00      |
| 203827_at    | WIP1                        | 0.32    | -1.67   | 0.00      | 0.01      |
| 214699_x_at  | WIP2                        | 3.04    | 1.60    | 0.00      | 0.00      |
| 205648_at    | WNT2                        | 0.25    | -2.00   | 0.00      | 0.00      |
| 71933_at     | WNT6                        | 3.56    | 1.83    | 0.00      | 0.00      |
| 212037_s_at  | WWF                         | 0.23    | -2.15   | 0.00      | 0.00      |
| 218911_at    | YEATS4                      | 0.14    | -2.89   | 0.00      | 0.00      |
| 209551_at    | YIPF4                       | 0.33    | -1.60   | 0.00      | 0.00      |
| 221180_at    | YSK4                        | 3.06    | 1.61    | 0.00      | 0.00      |
| 214614_at    | YTHDC1                      | 0.12    | -3.08   | 0.00      | 0.00      |
| 219830_at    | ZBED2                       | 5.15    | 2.36    | 0.00      | 0.01      |
| 205929_x_at  | ZBTB1                       | 0.29    | -1.80   | 0.00      | 0.00      |
| 205883_at    | ZBTB16                      | 0.15    | -2.72   | 0.00      | 0.00      |
| 220391_at    | ZBTB3                       | 0.18    | -2.47   | 0.00      | 0.00      |
| 218810_at    | ZC3H12A                     | 10.33   | 3.37    | 0.00      | 0.00      |
| 212419_at    | ZCCHC24                     | 4.46    | 2.16    | 0.00      | 0.00      |
| 221646_s_at  | ZDHHC11                     | 0.07    | -3.85   | 0.00      | 0.00      |
| 219296_at    | ZDHHC13                     | 0.24    | -2.08   | 0.00      | 0.00      |
| 207757_at    | ZFP2                        | 0.32    | -1.64   | 0.00      | 0.00      |
| 214678_s_at  | ZFX                         | 0.19    | -2.40   | 0.00      | 0.00      |
| 219929_s_at  | ZFYVE21                     | 0.21    | -2.24   | 0.00      | 0.00      |
| 214900_at    | ZKSCAN1                     | 0.30    | -1.73   | 0.00      | 0.00      |
| 206652_at    | ZMYM5                       | 0.21    | -2.25   | 0.00      | 0.00      |
| 219925_at    | ZMYM6                       | 0.22    | -2.21   | 0.00      | 0.00      |
| 202137_s_at  | ZMYND11                     | 0.23    | -2.11   | 0.00      | 0.00      |
| 209049_s_at  | ZMYND8                      | 0.27    | -1.90   | 0.00      | 0.00      |
| Gene Accession  | Gene Name            | Protein Type       | Fold Change | p-value  | q-value |
|----------------|----------------------|--------------------|-------------|----------|---------|
| 219571_s_at    | ZNF12                | zinc finger protein| 0.28        | -1.86    | 0.00    |
| 206928_at      | ZNF124               | zinc finger protein| 0.33        | -1.60    | 0.02    |
| 203319_s_at    | ZNF148               | zinc finger protein| 0.30        | -1.75    | 0.00    |
| 207417_s_at    | ZNF177               | zinc finger protein| 0.28        | -1.64    | 0.00    |
| 219495_s_at    | ZNF180               | zinc finger protein| 0.31        | -1.68    | 0.00    |
| 213452_at      | ZNF184               | zinc finger protein| 0.29        | -1.80    | 0.00    |
| 214823_at      | ZNF204               | zinc finger protein| 0.12        | -3.03    | 0.00    |
| 216983_s_at    | ZNF224               | zinc finger protein| 0.13        | -2.96    | 0.00    |
| 219171_s_at    | ZNF236               | zinc finger protein| 0.20        | -2.31    | 0.00    |
| 205917_at      | ZNF264               | zinc finger protein| 0.31        | -1.69    | 0.00    |
| 209989_at      | ZNF268               | zinc finger protein| 0.30        | -1.76    | 0.00    |
| 221213_s_at    | ZNF280D              | zinc finger protein| 0.31        | -1.67    | 0.00    |
| 212368_at      | ZNF292               | zinc finger protein| 0.20        | -2.35    | 0.00    |
| 222016_s_at    | ZNF323               | zinc finger protein| 4.67        | 2.22     | 0.00    |
| 205182_s_at    | ZNF324               | zinc finger protein| 3.39        | 1.76     | 0.00    |
| 213760_s_at    | ZNF330               | zinc finger protein| 4.17        | 2.06     | 0.00    |
| 206448_at      | ZNF365               | zinc finger protein| 3.22        | 1.69     | 0.00    |
| 215429_s_at    | ZNF428               | zinc finger protein| 4.19        | 2.07     | 0.00    |
| 222136_x_at    | ZNF43                | zinc finger protein| 0.25        | -2.02    | 0.00    |
| 215892_at      | ZNF440               | zinc finger protein| 0.23        | -2.10    | 0.00    |
| 213124_at      | ZNF473               | zinc finger protein| 4.74        | 2.25     | 0.00    |
| 204291_at      | ZNF518A              | zinc finger protein| 0.21        | -2.24    | 0.00    |
| 211721_s_at    | ZNF551               | zinc finger protein| 0.19        | -2.42    | 0.00    |
| 217527_at      | ZNF573               | zinc finger protein| 0.14        | -2.84    | 0.00    |
| 205594_at      | ZNF652               | zinc finger protein| 0.15        | -2.71    | 0.00    |
| 219239_s_at    | ZNF654               | zinc finger protein| 0.29        | -1.80    | 0.00    |
| 206180_x_at    | ZNF747               | zinc finger protein| 5.73        | 2.52     | 0.00    |
| 213659_at      | ZNF75D               | zinc finger protein| 0.28        | -1.83    | 0.00    |
| 219781_s_at    | ZNF771               | zinc finger protein| 8.26        | 3.05     | 0.00    |
| 214138_at      | ZNF79                | zinc finger protein| 3.66        | 1.87     | 0.00    |
| 67904_f_at     | ZNF814               | zinc finger protein| 0.33        | -1.59    | 0.00    |
| 219050_s_at    | ZNHT2                | zinc finger, HIT   | 3.37        | 1.75     | 0.00    |
| 217593_at      | ZSCAN18              | zinc finger and S  | 0.28        | -1.86    | 0.00    |
| 214580_x_at    |                    |                    | 133.48      | 7.06     | 0.00    |
| 210413_x_at    |                    |                    | 48.64       | 5.60     | 0.00    |
| 215504_x_at    |                    |                    | 13.33       | 3.74     | 0.00    |
| 216745_x_at    |                    |                    | 12.42       | 3.64     | 0.00    |
| 208539_x_at    |                    |                    | 11.00       | 3.46     | 0.00    |
| 218822_s_at    |                    |                    | 9.06        | 3.18     | 0.00    |
| 217619_x_at    |                    |                    | 8.37        | 3.06     | 0.00    |
| 222114_x_at    |                    |                    | 6.28        | 2.65     | 0.00    |
| 214463_x_at    |                    |                    | 5.96        | 2.58     | 0.00    |
| 216499_at      |                    |                    | 5.19        | 2.38     | 0.00    |
| 211691_x_at    |                    |                    | 5.08        | 2.35     | 0.00    |
| 216474_x_at    |                    |                    | 4.42        | 2.15     | 0.00    |
| 216535_at      |                    |                    | 4.28        | 2.10     | 0.00    |
| 217516_x_at    |                    |                    | 4.23        | 2.08     | 0.00    |
| 217055_x_at    |                    |                    | 4.15        | 2.05     | 0.00    |
| Gene ID   | Value 1 | Value 2 | Value 3 | Value 4 |
|----------|---------|---------|---------|---------|
| 217521_at | 4.08    | 2.03    | 0.00    | 0.00    |
| 208580_x_at | 3.72    | 1.89    | 0.00    | 0.00    |
| 210437_x_at | 3.64    | 1.87    | 0.00    | 0.00    |
| 215353_at  | 3.63    | 1.86    | 0.00    | 0.00    |
| 216806_at  | 3.62    | 1.86    | 0.00    | 0.00    |
| 215372_x_at | 3.57    | 1.83    | 0.00    | 0.00    |
| 205114_s_at | 3.53    | 1.82    | 0.00    | 0.00    |
| 216694_at  | 3.53    | 1.82    | 0.00    | 0.00    |
| 216371_at  | 3.51    | 1.81    | 0.00    | 0.00    |
| 210474_s_at | 3.49    | 1.80    | 0.00    | 0.00    |
| 216554_s_at | 3.44    | 1.78    | 0.00    | 0.00    |
| 215261_at  | 3.44    | 1.78    | 0.00    | 0.00    |
| 206063_x_at | 3.34    | 1.74    | 0.00    | 0.00    |
| 213690_s_at | 3.29    | 1.72    | 0.00    | 0.00    |
| 215949_x_at | 3.24    | 1.70    | 0.00    | 0.00    |
| 202362_at  | 3.19    | 1.68    | 0.00    | 0.00    |
| 216112_at  | 3.19    | 1.67    | 0.00    | 0.00    |
| 213448_at  | 3.18    | 1.67    | 0.00    | 0.00    |
| 215553_x_at | 3.17    | 1.66    | 0.00    | 0.00    |
| 216138_at  | 3.11    | 1.64    | 0.00    | 0.00    |
| 216152_at  | 3.11    | 1.64    | 0.00    | 0.00    |
| 210070_s_at | 3.10    | 1.63    | 0.00    | 0.00    |
| 216662_at  | 3.08    | 1.62    | 0.00    | 0.00    |
| 205144_at  | 3.07    | 1.62    | 0.00    | 0.00    |
| 221715_at  | 3.07    | 1.62    | 0.00    | 0.00    |
| 215489_x_at | 3.05    | 1.61    | 0.00    | 0.00    |
| 216542_x_at | 3.04    | 1.60    | 0.00    | 0.00    |
| 216473_x_at | 3.03    | 1.60    | 0.00    | 0.00    |
| 222282_at  | 0.33    | -1.59   | 0.00    | 0.00    |
| 212867_at  | 0.33    | -1.60   | 0.00    | 0.00    |
| 213156_at  | 0.33    | -1.60   | 0.00    | 0.00    |
| 206088_at  | 0.33    | -1.61   | 0.00    | 0.00    |
| 217588_at  | 0.33    | -1.60   | 0.00    | 0.00    |
| 215344_at  | 0.33    | -1.61   | 0.00    | 0.00    |
| 215786_at  | 0.33    | -1.62   | 0.00    | 0.00    |
| 216769_x_at | 0.33    | -1.62   | 0.00    | 0.00    |
| 219378_at  | 0.33    | -1.62   | 0.00    | 0.00    |
| 212499_s_at | 0.33    | -1.62   | 0.00    | 0.00    |
| 213686_at  | 0.32    | -1.63   | 0.00    | 0.00    |
| 206194_at  | 0.32    | -1.63   | 0.00    | 0.00    |
| 210491_at  | 0.32    | -1.66   | 0.00    | 0.00    |
| 215029_at  | 0.32    | -1.65   | 0.00    | 0.00    |
| 222111_at  | 0.32    | -1.66   | 0.00    | 0.00    |
| 215626_at  | 0.32    | -1.66   | 0.00    | 0.00    |
| 216069_at  | 0.31    | -1.67   | 0.00    | 0.00    |
| 31799_at   | 0.31    | -1.67   | 0.00    | 0.00    |
| 216783_at  | 0.31    | -1.70   | 0.00    | 0.00    |
| 216142_at  | 0.31    | -1.71   | 0.00    | 0.00    |
| Gene ID     | Value 1 | Value 2 | Value 3 | Value 4 |
|------------|---------|---------|---------|---------|
| 215388_s_at| 0.30    | -1.74   | 0.01    | 0.03    |
| 215956_at  | 0.30    | -1.76   | 0.00    | 0.00    |
| 213413_at  | 0.30    | -1.76   | 0.00    | 0.01    |
| 215390_at  | 0.29    | -1.77   | 0.00    | 0.00    |
| 217164_at  | 0.29    | -1.79   | 0.00    | 0.00    |
| 215164_at  | 0.29    | -1.80   | 0.00    | 0.00    |
| 214415_at  | 0.28    | -1.82   | 0.00    | 0.00    |
| 214871_x_at| 0.28    | -1.83   | 0.00    | 0.00    |
| 217621_at  | 0.28    | -1.83   | 0.00    | 0.00    |
| 215059_at  | 0.28    | -1.84   | 0.00    | 0.00    |
| 212913_at  | 0.28    | -1.85   | 0.00    | 0.00    |
| 220969_s_at| 0.28    | -1.86   | 0.00    | 0.00    |
| 214807_at  | 0.27    | -1.89   | 0.00    | 0.00    |
| 216214_at  | 0.27    | -1.92   | 0.00    | 0.00    |
| 216527_at  | 0.26    | -1.92   | 0.00    | 0.00    |
| 203852_s_at| 0.26    | -1.93   | 0.00    | 0.00    |
| 222344_at  | 0.26    | -1.93   | 0.00    | 0.00    |
| 222326_at  | 0.26    | -1.95   | 0.00    | 0.00    |
| 217336_at  | 0.26    | -1.96   | 0.00    | 0.00    |
| 222335_at  | 0.26    | -1.96   | 0.00    | 0.00    |
| 208154_at  | 0.26    | -1.97   | 0.00    | 0.00    |
| 215612_at  | 0.26    | -1.97   | 0.00    | 0.00    |
| 217137_x_at| 0.26    | -1.97   | 0.00    | 0.00    |
| 205084_s_at| 0.25    | -1.98   | 0.00    | 0.00    |
| 222341_x_at| 0.25    | -1.99   | 0.00    | 0.00    |
| 215287_at  | 0.25    | -2.00   | 0.00    | 0.00    |
| 221079_s_at| 0.25    | -2.00   | 0.00    | 0.00    |
| 208498_s_at| 0.24    | -2.04   | 0.00    | 0.00    |
| 215133_s_at| 0.24    | -2.06   | 0.00    | 0.00    |
| 214658_at  | 0.24    | -2.08   | 0.00    | 0.00    |
| 217671_at  | 0.23    | -2.09   | 0.00    | 0.00    |
| 220696_at  | 0.23    | -2.10   | 0.00    | 0.00    |
| 217019_at  | 0.23    | -2.12   | 0.00    | 0.00    |
| 216411_s_at| 0.23    | -2.15   | 0.00    | 0.00    |
| 216756_at  | 0.23    | -2.15   | 0.00    | 0.00    |
| 216022_at  | 0.22    | -2.17   | 0.00    | 0.00    |
| 215579_at  | 0.22    | -2.20   | 0.00    | 0.00    |
| 215599_at  | 0.21    | -2.26   | 0.00    | 0.00    |
| 217643_x_at| 0.20    | -2.30   | 0.00    | 0.00    |
| 216006_at  | 0.20    | -2.32   | 0.00    | 0.00    |
| 222368_at  | 0.20    | -2.31   | 0.00    | 0.00    |
| 215172_at  | 0.20    | -2.33   | 0.00    | 0.00    |
| 216278_at  | 0.20    | -2.35   | 0.00    | 0.00    |
| 215083_at  | 0.19    | -2.37   | 0.00    | 0.00    |
| 216173_at  | 0.19    | -2.39   | 0.00    | 0.00    |
| 222366_at  | 0.19    | -2.39   | 0.00    | 0.00    |
| 215212_at  | 0.18    | -2.48   | 0.00    | 0.00    |
| 220855_at  | 0.18    | -2.50   | 0.00    | 0.00    |
| Gene Symbol | Value 1 | Value 2 | Value 3 | Value 4 |
|-------------|---------|---------|---------|---------|
| 215629_s_at | 0.18    | -2.50   | 0.00    | 0.00    |
| 215392_at   | 0.17    | -2.57   | 0.00    | 0.00    |
| 217538_x_at | 0.17    | -2.58   | 0.00    | 0.00    |
| 217353_at   | 0.16    | -2.62   | 0.00    | 0.00    |
| 215555_at   | 0.16    | -2.67   | 0.00    | 0.00    |
| 220711_at   | 0.16    | -2.67   | 0.00    | 0.00    |
| 215635_at   | 0.16    | -2.68   | 0.00    | 0.00    |
| 213930_at   | 0.15    | -2.71   | 0.00    | 0.00    |
| 222308_x_at | 0.15    | -2.73   | 0.00    | 0.00    |
| 215385_at   | 0.14    | -2.85   | 0.00    | 0.00    |
| 216614_at   | 0.13    | -2.94   | 0.00    | 0.00    |
| 205728_at   | 0.13    | -2.99   | 0.00    | 0.00    |
| 222316_at   | 0.12    | -3.08   | 0.00    | 0.00    |
| 213158_at   | 0.11    | -3.15   | 0.00    | 0.00    |
| 220038_at   | 0.08    | -3.71   | 0.00    | 0.00    |
Table S3. SCC in situ vs. normal epidermis (FCH>3.0 and FDR<0.05)
1042 up- and 1200 down-regulated probedes

| Probe     | Symbol       | Description               | FCH  | logFCH | p     | q     |
|-----------|--------------|---------------------------|------|--------|-------|-------|
| 219574_at | 1-Mar membrane-assor | 0.28 | -1.83 | 0.00  | 0.00  |
| 201737_s_at | 6-Mar membrane-assor | 0.09 | -3.50 | 0.00  | 0.00  |
| 217757_at | A2M          | alpha-2-macroglobin       | 10.04| 3.33   | 0.00  | 0.00  |
| 219488_at | A4GALT       | alpha 1,4-galactosyltransferase | 3.37 | 1.75   | 0.00  | 0.00  |
| 201511_at | AAMP         | angio-associated          | 3.19 | 1.68   | 0.00  | 0.00  |
| 214829_at | AASS         | aminoacidoplate-se        | 0.27 | -1.89  | 0.00  | 0.00  |
| 205986_at | AATK         | apoptosis-associated      | 3.58 | 1.84   | 0.00  | 0.00  |
| 209459_s_at | ABAT      | 4-aminobutyrate            | 0.31 | -1.70  | 0.02  | 0.03  |
| 220159_at | ABCA11P      | ATP-binding cas           | 0.19 | -2.38  | 0.00  | 0.00  |
| 210082_at | ABCA4        | ATP-binding cas           | 3.97 | 1.99   | 0.00  | 0.00  |
| 213353_at | ABCA5        | ATP-binding cas           | 0.13 | -2.99  | 0.00  | 0.00  |
| 208161_s_at | ABCC3      | ATP-binding cas           | 0.24 | -2.04  | 0.00  | 0.00  |
| 203196_at | ABCC4        | ATP-binding cas           | 0.14 | -2.87  | 0.00  | 0.00  |
| 209247_s_at | ABCF2      | ATP-binding cas           | 3.59 | 1.84   | 0.00  | 0.00  |
| 207623_at | ABCF2        | ATP-binding cas           | 0.19 | -2.41  | 0.00  | 0.00  |
| 205666_at | ABHD2        | abhydrolase don           | 3.87 | 1.95   | 0.00  | 0.00  |
| 221679_at | ABHD6        | abhydrolase don           | 0.29 | -1.80  | 0.00  | 0.00  |
| 20856_at  | ABI2         | abl-interactor 2          | 3.05 | 1.61   | 0.00  | 0.00  |
| 202025_s_at | ACAA1      | acetyl-Coenzyme           | 4.03 | 2.01   | 0.00  | 0.00  |
| 221928_at | ACACB        | acetyl-Coenzyme           | 0.33 | -1.59  | 0.00  | 0.00  |
| 43427_at  | ACACB        | acetyl-Coenzyme           | 0.27 | -1.88  | 0.00  | 0.00  |
| 49452_at  | ACACB        | acetyl-Coenzyme           | 0.20 | -2.34  | 0.00  | 0.00  |
| 206069_s_at | ACADL      | acetyl-Coenzyme            | 0.17 | -2.58  | 0.00  | 0.00  |
| 206068_s_at | ACADL      | acetyl-Coenzyme            | 0.04 | -4.64  | 0.00  | 0.00  |
| 205355_at | ACADSB       | acetyl-Coenzyme           | 0.23 | -2.15  | 0.00  | 0.00  |
| 212476_at | ACAP2        | ArfGAP with coi           | 0.29 | -1.79  | 0.00  | 0.00  |
| 202323_s_at | ACBD3      | acetyl-Coenzyme            | 0.21 | -2.23  | 0.00  | 0.00  |
| 210337_at | ACLY         | ATP citrate lyase          | 4.71 | 2.23   | 0.00  | 0.00  |
| 200793_s_at | AC02       | aconitase 2, mitochondrial | 3.25 | 1.70   | 0.00  | 0.00  |
| 214763_at | ACOT11       | acyl-CoA thioester         | 7.60 | 2.93   | 0.00  | 0.00  |
| 215227_s_at | ACP1       | acid phosphatase          | 3.27 | 1.71   | 0.00  | 0.00  |
| 201661_s_at | ACSL3      | acyl-CoA synthase         | 0.21 | -2.27  | 0.00  | 0.00  |
| 202422_s_at | ACSL4      | acyl-CoA synthase         | 0.20 | -2.30  | 0.00  | 0.00  |
| 208636_at | ACTN1        | actinin, alpha 1           | 8.31 | 3.05   | 0.00  | 0.00  |
| 208637_s_at | ACTN1      | actinin, alpha 1           | 7.00 | 2.81   | 0.00  | 0.00  |
| 211160_at | ACTN1        | actinin, alpha 1           | 5.53 | 2.47   | 0.00  | 0.00  |
| 205209_at | ACVR1B       | activin A receptor         | 0.22 | -2.18  | 0.00  | 0.00  |
| 202624_s_at | ADAM10     | ADAM metallope            | 3.59 | 1.85   | 0.00  | 0.00  |
| 206046_at | ADAM23       | ADAM metallope            | 10.32| 3.37   | 0.00  | 0.00  |
| 205997_at | ADAM28       | ADAM metallope            | 0.33 | -1.61  | 0.00  | 0.00  |
| 208268_at | ADAM28       | ADAM metallope            | 0.28 | -1.86  | 0.00  | 0.00  |
| Gene Symbol | Description                  | Log2 Fold Change | Log10 Fold Change | p-value | adjusted p-value |
|-------------|-------------------------------|------------------|-------------------|---------|-----------------|
| ADAMTS13    | ADAM metallopeptidase         | 4.00             | 2.00              | 0.00    | 0.00            |
| ADAMP1      | ArfGAP with dual              | 3.48             | 1.80              | 0.00    | 0.00            |
| ADCY9       | adenylyl cyclase 3 (gamm)     | 4.14             | 2.05              | 0.00    | 0.00            |
| ADD3        | adducin 3 (gamm)              | 0.20             | -2.36             | 0.00    | 0.00            |
| ADD3        | adducin 3 (gamm)              | 0.18             | -2.49             | 0.00    | 0.00            |
| ADD3        | adducin 3 (gamm)              | 0.11             | -3.20             | 0.00    | 0.00            |
| ADD3        | adducin 3 (gamm)              | 0.10             | -3.27             | 0.00    | 0.00            |
| ADRB2       | adrenergic, beta              | 0.30             | -1.75             | 0.00    | 0.00            |
| ADRB2       | adrenergic, beta              | 10.06            | 3.33              | 0.00    | 0.00            |
| ADRB2       | adrenergic, beta              | 8.63             | 3.11              | 0.00    | 0.00            |
| ADRB2       | adrenergic, beta              | 3.83             | 1.94              | 0.00    | 0.00            |
| AFF1        | AF4/FMR2 family               | 0.28             | -1.84             | 0.00    | 0.00            |
| AGGF1       | angiogenic facto              | 3.46             | 1.79              | 0.00    | 0.00            |
| AGGF1       | angiogenic facto              | 0.26             | -1.96             | 0.00    | 0.00            |
| AHCY        | adenosilyhomocysto            | 4.01             | 2.00              | 0.00    | 0.00            |
| AHNAK       | AHNAK nucleop               | 0.23             | -2.11             | 0.00    | 0.00            |
| AKAP13      | A kinase (PRKAc)              | 0.28             | -1.83             | 0.00    | 0.00            |
| AKAP7       | A kinase (PRKAc)              | 0.22             | -2.21             | 0.00    | 0.00            |
| AKAP8L      | A kinase (PRKAc)              | 4.44             | 2.15              | 0.00    | 0.00            |
| AKAP9       | A kinase (PRKAc)              | 0.17             | -2.59             | 0.00    | 0.00            |
| AKR1B10     | aldo-keto reduct              | 11.41            | 3.51              | 0.00    | 0.00            |
| ALCAM       | activated leukocyto           | 0.12             | -3.03             | 0.00    | 0.00            |
| ALDH3A2     | aldehyde dehydr              | 0.31             | -1.70             | 0.00    | 0.00            |
| ALDH4A1     | aldehyde dehydr              | 5.28             | 2.40              | 0.00    | 0.00            |
| ALDH7A1     | aldehyde dehydr              | 0.32             | -1.64             | 0.00    | 0.00            |
| ALG12       | asparagine-linke             | 3.48             | 1.80              | 0.00    | 0.00            |
| ALG13       | asparagine-linke             | 0.32             | -1.67             | 0.00    | 0.00            |
| ALG13       | asparagine-linke             | 0.24             | -2.07             | 0.00    | 0.00            |
| ALOX5       | arachidonate 5-li            | 0.23             | -2.15             | 0.00    | 0.00            |
| ALOX3       | arachidonate 5-li            | 0.22             | -2.19             | 0.00    | 0.00            |
| AMFR        | autocrine motility           | 6.20             | 2.63              | 0.00    | 0.00            |
| AMIGO2      | adhesion molecul             | 6.21             | 2.64              | 0.00    | 0.00            |
| AMOTL2      | angiomentin like 2           | 0.23             | -2.14             | 0.00    | 0.00            |
| ANAPC2      | anaphase promc               | 0.28             | -1.85             | 0.00    | 0.00            |
| ANG         | angiogenin, ribor            | 0.17             | -2.57             | 0.00    | 0.00            |
| ANGEL2      | angel homolog 2              | 0.29             | -1.81             | 0.00    | 0.00            |
| ANGPTL4     | angiopoiitin-like            | 4.00             | 2.00              | 0.00    | 0.00            |
| ANKH        | ankylosis, progr             | 0.31             | -1.68             | 0.00    | 0.00            |
| ANKRA2      | ankyrin repeat, fi            | 0.28             | -1.85             | 0.00    | 0.00            |
| ANKRD10     | ankyrin repeat d             | 0.21             | -2.27             | 0.00    | 0.00            |
| ANKRD12     | ankyrin repeat d             | 0.24             | -2.04             | 0.00    | 0.00            |
| ANKRD36     | ankyrin repeat d             | 0.08             | -3.62             | 0.00    | 0.00            |
| ANKRD36B    | ankyrin repeat d             | 0.24             | -2.07             | 0.00    | 0.00            |
| ANKRD46     | ankyrin repeat d             | 0.26             | -1.95             | 0.00    | 0.00            |
| Gene ID     | Description                                      | Fold Change | Log2 Fold | p-Value | Adjusted p-Value |
|------------|--------------------------------------------------|-------------|-----------|---------|-----------------|
| 209369_at  | ANXA3 annexin A3                                  | 7.83        | 2.97      | 0.00    | 0.00            |
| 200415_s_at| AP1M2 adaptor-related Ϝ                              | 3.22        | 1.69      | 0.00    | 0.00            |
| 200413_s_at| AP2B1 adaptor-related Ϝ                              | 5.74        | 2.52      | 0.00    | 0.00            |
| 200413_s_at| AP2M1 adaptor-related Ϝ                              | 3.43        | 1.78      | 0.00    | 0.00            |
| 204859_s_at| APAF1 apoptotic peptidase                           | 0.30        | -1.75     | 0.00    | 0.00            |
| 200415_s_at| APBA2 amyloid beta (A4)                            | 4.50        | 2.17      | 0.00    | 0.00            |
| 214960_at  | API5 apoptosis inhibitor                            | 3.01        | 1.59      | 0.01    | 0.01            |
| 214102_at  | ARAP2 ArfGAP with RhoGAP domain, ankyrin repeat, PH domain and PH domain 2 | 0.32 | -1.64 | 0.00 | 0.00 |
| 201228_s_at| ARIH2 ariadne homolog                              | 3.09        | 1.63      | 0.00    | 0.00            |
| 218694_at  | ARMCK1 armadillo repeat                            | 0.26        | -1.97     | 0.00    | 0.00            |
| 201097_s_at| ARNTL aryl hydrocarbon                            | 0.23        | -2.12     | 0.00    | 0.00            |
| 205784_x_at| ARVCF armadillo repeat                             | 3.11        | 1.64      | 0.00    | 0.00            |
| 218804_at  | ANO1 anoctamin 1, cal                               | 0.13        | -2.91     | 0.00    | 0.00            |
| Gene Symbol | Gene Name                                      | Description                   | Log2 | Fold Change | p-Value | q-Value |
|-------------|------------------------------------------------|------------------------------|------|-------------|---------|---------|
| 206030_at   | ASPA                                          | aspartoacylase (Canavan disease) | 0.22 | -2.19       | 0.00    | 0.00    |
| 209135_at   | ASPH                                          | aspartate beta-h              | 0.25 | -1.99       | 0.00    | 0.00    |
| 21087_at    | ASPN                                          | asporin                       | 0.14 | -2.86       | 0.00    | 0.00    |
| 213387_at   | ATAD2B                                        | ATPase family, J             | 0.32 | -1.65       | 0.00    | 0.00    |
| 209135_at   | ATAD3A                                        | ATPase family, J             | 3.87 | 1.95        | 0.00    | 0.00    |
| 203168_at   | ATF6B                                         | activating transco            | 3.45 | 1.79        | 0.00    | 0.00    |
| 216197_at   | ATF7IP                                        | activating transco            | 0.32 | -1.65       | 0.00    | 0.00    |
| 204333_at   | ATG12                                         | ATG12 autophagy                | 3.03 | 1.60        | 0.00    | 0.00    |
| 219164_s_at | ATG2B                                         | ATG2 autophagy                | 0.25 | -1.98       | 0.00    | 0.00    |
| 40489_at    | ATN1                                          | atrophin 1                      | 6.42 | 2.68        | 0.00    | 0.00    |
| 203454_s_at | ATOX1                                         | ATX1 antioxidant               | 4.00 | 2.00        | 0.00    | 0.00    |
| 214070_s_at | ATP10B                                        | ATPase, class V                | 3.12 | 1.64        | 0.00    | 0.00    |
| 213582_at   | ATP1A                                         | ATPase, class V                | 0.16 | -2.61       | 0.00    | 0.00    |
| 207367_at   | ATP12A                                        | ATPase, H+/K+                  | 7.63 | 2.93        | 0.00    | 0.00    |
| 212297_at   | ATP1A3                                        | ATPase type 13                | 0.33 | -1.59       | 0.00    | 0.00    |
| 215716_s_at | ATP2B1                                        | ATPase, Ca++                   | 0.24 | -2.06       | 0.00    | 0.00    |
| 212930_s_at | ATP2B1                                        | ATPase, Ca++                   | 0.14 | -2.56       | 0.00    | 0.00    |
| 212041_at   | ATP6V0D1                                      | ATPase, H+ tran               | 3.02 | 1.60        | 0.00    | 0.00    |
| 200996_s_at | ATP6V0E1                                      | ATPase, H+ tran               | 3.25 | 1.70        | 0.00    | 0.00    |
| 205198_s_at | ATP1A                                         | ATPase, Cu++                   | 0.30 | -1.76       | 0.00    | 0.00    |
| 213106_at   | ATP8A1                                        | ATPase, aminocp               | 0.08 | -3.65       | 0.00    | 0.00    |
| 212062_at   | ATP9A                                         | ATPase, class II               | 3.18 | 1.67        | 0.00    | 0.00    |
| 214010_s_at | ATP9B                                         | ATPase, class II               | 3.46 | 1.79        | 0.00    | 0.00    |
| 204516_at   | ATXN7                                         | ataxin 7                       | 0.24 | -2.07       | 0.00    | 0.00    |
| 209964_s_at | ATXN7                                         | ataxin 7                       | 0.23 | -2.14       | 0.00    | 0.00    |
| 205539_at   | AVIL                                          | advillin                      | 0.21 | -2.29       | 0.00    | 0.00    |
| 208260_at   | AVPR1B                                        | arginine vasopressin          | 7.92 | 2.99        | 0.00    | 0.00    |
| 209309_at   | AZGP1                                         | alpha-2-glycoprc              | 0.18 | -2.47       | 0.00    | 0.01    |
| 204856_at   | B3GNT3                                        | UDP-GlcNAc:betaG1             | 3.57 | 1.84        | 0.00    | 0.00    |
| 221484_at   | B4GALT5                                       | UDP-Gal:betaGal               | 3.69 | 1.88        | 0.00    | 0.00    |
| 209364_at   | BAD                                           | BCL2-associated              | 3.11 | 1.64        | 0.00    | 0.00    |
| 202984_s_at | BAG5                                          | BCL2-associated              | 0.22 | -2.19       | 0.00    | 0.00    |
| 205294_at   | BAIAAP2                                       | BA1-associated                | 0.28 | -1.85       | 0.00    | 0.00    |
| 205345_at   | BARD1                                         | BRCA1 associated              | 0.21 | -2.24       | 0.00    | 0.00    |
| 202391_at   | BASP1                                         | brain abundant, 1             | 4.45 | 2.15        | 0.00    | 0.00    |
| 200041_s_at | BAT1                                          | HLA-B associate               | 0.28 | -1.83       | 0.00    | 0.00    |
| 212384_at   | BAT1                                          | HLA-B associate               | 0.24 | -2.07       | 0.00    | 0.00    |
| 201355_s_at | BAZA2A                                        | bromodomain ac               | 3.11 | 1.64        | 0.00    | 0.00    |
| 219487_at   | BBS10                                         | Bardet-Biedl syn              | 0.33 | -1.61       | 0.00    | 0.00    |
| 209595_s_at | BBS9                                          | Bardet-Biedl syn              | 3.73 | 1.90        | 0.00    | 0.00    |
| 91920_at    | BCAN                                          | brevican                      | 6.15 | 2.62        | 0.00    | 0.00    |
| 204032_at   | BCAR3                                         | breast cancer an             | 0.26 | -1.94       | 0.00    | 0.00    |
| 203685_at   | BCL2                                          | B-cell CLL/lympf             | 0.29 | -1.78       | 0.00    | 0.00    |
| 215990_s_at | BCL6                                          | B-cell CLL/lympf             | 0.15 | -2.75       | 0.00    | 0.00    |
| 204129_at   | BCL9                                          | B-cell CLL/lympf             | 3.57 | 1.83        | 0.00    | 0.00    |
| 217223_s_at | BCR                                           | breakpoint cluster            | 4.46 | 2.16        | 0.00    | 0.00    |
| 202315_s_at | BCR                                           | breakpoint cluster            | 3.63 | 1.86        | 0.00    | 0.00    |
| 211725_s_at | BID                                           | BHS interacting              | 3.73 | 1.90        | 0.00    | 0.00    |
| Gene ID   | Gene Symbol | Gene Name                        | Log2 Fold Change | P-Value | q-Value |
|----------|-------------|----------------------------------|-----------------|---------|---------|
| 204493_at| BID         | BH3 interacting \( \gamma \)     | 3.01            | 0.00    | 0.00    |
| 214439_x_at| BIN1     | bridging integrator              | 6.90            | 0.00    | 0.00    |
| 202931_x_at| BIN1     | bridging integrator              | 4.45            | 0.00    | 0.00    |
| 219191_s_at| BIRC3    | baculoviral IAP \( r \)         | 0.21            | 0.00    | 0.00    |
| 210334_x_at| BIRC5    | baculoviral IAP \( r \)         | 3.27            | 0.00    | 0.00    |
| 206725_x_at| BMP1     | bone morphogen                   | 3.81            | 0.00    | 0.00    |
| 205290_s_at| BMP2     | bone morphogen                   | 0.33            | 0.01    | 0.02    |
| 205289_at| BMP2      | bone morphogen                   | 0.16            | 0.00    | 0.00    |
| 220203_at| BMP6A     | bone morphogen                   | 8.46            | 0.00    | 0.00    |
| 201848_s_at| BNIP3    | BCL2/adenovirus                   | 3.32            | 0.00    | 0.00    |
| 206044_s_at| BRAF     | v-raf murine sarcoma             | 4.46            | 0.00    | 0.00    |
| 204520_x_at| BRD1     | bromodomain cc                   | 0.29            | 0.00    | 0.00    |
| 215460_x_at| BRD1     | bromodomain cc                   | 0.27            | 0.00    | 0.00    |
| 205550_s_at| BRE      | brain and reproduce              | 3.36            | 0.00    | 0.00    |
| 219280_at| BRWD1     | bromodomain ar                   | 0.31            | 0.00    | 0.00    |
| 218090_s_at| BRWD2    | bromodomain ar                   | 0.26            | 0.00    | 0.00    |
| 201641_at| BST2      | bone marrow str                  | 12.12           | 0.00    | 0.00    |
| 209430_at| BTAF1     | BTAF1 RNA pol\(\gamma\)         | 0.25            | 0.00    | 0.00    |
| 207326_at| BTC       | betacellulin                     | 0.04            | 0.00    | 0.00    |
| 215425_at| BTG3      | BTG family, men                  | 0.31            | 0.00    | 0.00    |
| 38241_at | BTN3A3    | butyrophilin, sub               | 0.23            | 0.00    | 0.00    |
| 204901_at| BTRC      | beta-transducin \( \gamma \)    | 4.15            | 0.00    | 0.00    |
| 218299_at| C11orf24  | chromosome 11                    | 6.58            | 0.00    | 0.00    |
| 52164_at | C11orf24  | chromosome 11                    | 3.33            | 0.00    | 0.00    |
| 204218_at| C11orf51  | chromosome 11                    | 4.57            | 0.00    | 0.00    |
| 221208_s_at| C11orf61 | chromosome 11                    | 0.17            | 0.00    | 0.00    |
| 220141_at| C11orf63  | chromosome 11                    | 0.23            | 0.00    | 0.00    |
| 221599_at| C11orf67  | chromosome 11                    | 0.28            | 0.00    | 0.00    |
| 64432_at | C12orf47  | chromosome 12                    | 0.13            | 0.00    | 0.00    |
| 218867_s_at| C12orf49 | chromosome 12                    | 3.75            | 0.00    | 0.00    |
| 219099_at| C12orf5   | chromosome 12                    | 4.59            | 0.00    | 0.00    |
| 221777_at| C12orf52  | chromosome 12                    | 3.65            | 0.00    | 0.00    |
| 219166_at| C14orf104 | chromosome 14                    | 0.30            | 0.00    | 0.00    |
| 206500_s_at| C14orf106| chromosome 14                    | 0.18            | 0.00    | 0.00    |
| 218820_at| C14orf132 | chromosome 14                    | 0.31            | 0.00    | 0.00    |
| 216791_s_at| C15orf29 | chromosome 15                    | 0.32            | 0.00    | 0.00    |
| 208109_s_at| C15orf5  | chromosome 15                    | 0.26            | 0.00    | 0.00    |
| 219556_at| C16orf59  | chromosome 16                    | 4.49            | 0.00    | 0.00    |
| 203830_at| C17orf75  | chromosome 17                    | 0.26            | 0.00    | 0.00    |
| 217539_at| C18orf25  | chromosome 18                    | 0.29            | 0.00    | 0.00    |
| 222266_at| C19orf2   | chromosome 19                    | 0.25            | 0.00    | 0.00    |
| 212925_at| C19orf21  | chromosome 19                    | 7.58            | 0.00    | 0.00    |
| 55705_at | C19orf22  | chromosome 19                    | 3.72            | 0.00    | 0.00    |
| 200076_s_at| C19orf50 | chromosome 19                    | 3.20            | 0.00    | 0.00    |
| 206901_at| C19orf57  | chromosome 19                    | 4.24            | 0.00    | 0.00    |
| 218429_s_at| C19orf66 | chromosome 19                    | 3.06            | 0.00    | 0.00    |
| 219856_at| C1orf116  | chromosome 1c                    | 3.21            | 0.00    | 0.00    |
| Gene ID   | Description                                       | Value1 | Value2 | Value3 | Value4 |
|-----------|---------------------------------------------------|--------|--------|--------|--------|
| 212003_at | C1orf144 chromosome 1 c                           | 4.87   | 2.29   | 0.00   | 0.00   |
| 212004_at | C1orf144 chromosome 1 c                           | 3.85   | 1.95   | 0.00   | 0.00   |
| 210711_at | C1orf217 chromosome 1 c                           | 0.19   | -2.40  | 0.00   | 0.00   |
| 220992_s_at | C1orf25 chromosome 1 c                           | 0.30   | -1.74  | 0.00   | 0.00   |
| 209006_s_at | C1orf63 chromosome 1 c                           | 0.22   | -2.18  | 0.00   | 0.00   |
| 202953_at | C1QB complement con                               | 3.09   | 1.63   | 0.00   | 0.00   |
| 212067_s_at | C1R complement con                             | 7.07   | 2.82   | 0.00   | 0.00   |
| 218983_at | C1RL complement con                               | 0.21   | -2.26  | 0.00   | 0.00   |
| 208747_s_at | C1S complement con                              | 7.88   | 2.98   | 0.00   | 0.00   |
| 219961_s_at | C20orf19 chromosome 20                           | 3.73   | 1.90   | 0.00   | 0.00   |
| 21211_s_at | C21orf7 chromosome 21                            | 0.29   | -1.78  | 0.00   | 0.00   |
| 209906_at | C22orf26 chromosome 22                            | 3.50   | 1.81   | 0.00   | 0.00   |
| 219560_at | C22orf29 chromosome 22                            | 4.22   | 2.08   | 0.00   | 0.00   |
| 220149_at | C2orf54 chromosome 2 c                            | 0.16   | -2.66  | 0.00   | 0.00   |
| 220943_s_at | C2orf56 chromosome 2 c                         | 0.24   | -2.08  | 0.00   | 0.00   |
| 215046_at | C2orf67 chromosome 2 c                            | 0.17   | -2.55  | 0.00   | 0.00   |
| 65472_at  | C2orf68 chromosome 2 c                            | 0.31   | -1.68  | 0.00   | 0.00   |
| 209906_at | C3AR1 complement con                              | 3.06   | 1.61   | 0.00   | 0.00   |
| 219474_at | C3orf52 chromosome 3 c                            | 0.31   | -1.68  | 0.00   | 0.00   |
| 219023_at | C4orf16 chromosome 4 c                            | 0.18   | -2.46  | 0.00   | 0.00   |
| 218513_at | C4orf43 chromosome 4 c                            | 0.17   | -2.56  | 0.00   | 0.00   |
| 205500_at | C5 complement con                                 | 0.16   | -2.64  | 0.00   | 0.00   |
| 201310_s_at | C5orf13 chromosome 5 c                         | 4.53   | 2.18   | 0.00   | 0.00   |
| 221823_at | C5orf30 chromosome 5 c                            | 0.28   | -1.86  | 0.00   | 0.00   |
| 48030_i_at | C5orf4 complement con                            | 12.89  | 3.69   | 0.00   | 0.00   |
| 218674_at | C5orf44 chromosome 5 c                            | 0.30   | -1.75  | 0.00   | 0.00   |
| 217924_at | C6orf106 chromosome 6 c                           | 4.58   | 2.20   | 0.00   | 0.00   |
| 210409_at | C6orf124 chromosome 6 c                           | 0.32   | -1.64  | 0.00   | 0.00   |
| 221100_at | C6orf15 chromosome 6 c                            | 3.18   | 1.67   | 0.00   | 0.00   |
| 218195_at | C6orf211 chromosome 6 c                           | 0.25   | -2.00  | 0.00   | 0.00   |
| 220759_s_at | C6orf48 chromosome 6 c                         | 3.82   | 1.93   | 0.00   | 0.00   |
| 215024_at | C7orf28B chromosome 7 c                           | 0.23   | -2.11  | 0.00   | 0.00   |
| 206497_at | C7orf44 chromosome 7 c                            | 0.30   | -1.73  | 0.00   | 0.00   |
| 209446_s_at | C7orf44 chromosome 7 c                       | 0.28   | -1.84  | 0.00   | 0.00   |
| 220949_s_at | C7orf49 chromosome 7 c                         | 3.20   | 1.68   | 0.00   | 0.00   |
| 221596_s_at | C7orf64 chromosome 7 c                         | 0.20   | -2.33  | 0.00   | 0.00   |
| 221629_x_at | C8orf30A chromosome 8 c                       | 3.77   | 1.92   | 0.00   | 0.00   |
| 204865_at | CA3 carbonic anhydr:                              | 0.21   | -2.28  | 0.00   | 0.00   |
| 211592_s_at | CACNA1C calcium channel,                        | 0.26   | -1.93  | 0.00   | 0.00   |
| 211802_x_at | CACNA1G calcium channel,                       | 4.24   | 2.08   | 0.00   | 0.00   |
| 207899_s_at | CACNA1G calcium channel,                       | 0.32   | -1.66  | 0.00   | 0.00   |
| 209530_at | CACNB3 calcium channel,                          | 3.03   | 1.60   | 0.00   | 0.00   |
| 62987_r_at | CACNG4 calcium channel,                          | 23.85  | 4.58   | 0.00   | 0.00   |
| 209031_at | CADM1 cell adhesion mc                          | 0.19   | -2.37  | 0.00   | 0.00   |
| 200622_x_at | CALM3 calmodulin 3 (ph)                        | 4.55   | 2.19   | 0.00   | 0.00   |
| 210020_x_at | CALM3 calmodulin-like 3                       | 4.06   | 2.02   | 0.00   | 0.00   |
| 64408_s_at  | CALML4 calmodulin-like 4                     | 0.27   | -1.90  | 0.00   | 0.00   |
| 200757_s_at | CALU calumenin                                   | 5.23   | 2.39   | 0.00   | 0.00   |
| Gene ID   | Description                                                      | Fold Change | p-value | q-value |
|-----------|------------------------------------------------------------------|-------------|---------|---------|
| 200755_at | CALU calumenin                                                   | 3.81        | 1.93    | 0.00    |
| 34846_at  | CAMK2B calcium/calmodulin                                        | 3.80        | 1.93    | 0.00    |
| 208683_at | CAPN2 calpain 2, (m/II)                                         | 5.85        | 2.55    | 0.00    |
| 200001_at | CAPNS1 calpain, small sub                                       | 6.20        | 2.63    | 0.00    |
| 204950_at | CARD8 caspase recruitin                                          | 0.28        | -1.82   | 0.00    |
| 216384_at | CARHSP1 calcium regulate                                        | 4.65        | 2.22    | 0.00    |
| 61297_at  | CASKIN2 CASK interacting                                        | 0.28        | -1.85   | 0.00    |
| 215573_at | CAT catalase                                                    | 0.31        | -1.67   | 0.00    |
| 208204_s_at | CAV3 caveolin 3                                                | 3.35        | 1.75    | 0.00    |
| 213626_at | CBR4 carbonyl reducta                                           | 0.17        | -2.55   | 0.00    |
| 219611_s_at | CCDC21 coiled-coil domain                                    | 3.29        | 1.72    | 0.00    |
| 219644_at | CCDC41 coiled-coil domain                                       | 0.18        | -2.50   | 0.00    |
| 218175_s_at | CCDC92 coiled-coil domain                                    | 4.20        | 2.07    | 0.00    |
| 209898_at | CCDC93 coiled-coil domain                                       | 0.26        | -1.94   | 0.00    |
| 205476_at | CCL20 chemokine (C-C)                                           | 6.79        | 2.76    | 0.00    |
| 204606_at | CCL21 chemokine (C-C)                                           | 0.32        | -1.65   | 0.01    |
| 207955_at | CCL27 chemokine (C-C)                                           | 0.02        | -5.60   | 0.00    |
| 208712_at | CCND1 cyclin D1                                                 | 0.20        | -2.31   | 0.00    |
| 208711_s_at | CCND1 cyclin D1                                                | 0.16        | -2.67   | 0.00    |
| 200951_s_at | CCND2 cyclin D2                                                | 4.30        | 2.10    | 0.00    |
| 204645_at | CCNT2 cyclin T2                                                 | 0.27        | -1.91   | 0.00    |
| 221156_x_at | CCGP1 cell cycle prolfe                                        | 0.25        | -1.98   | 0.00    |
| 221156_x_at | CCGP1 cell cycle prolfe                                        | 0.23        | -2.10   | 0.00    |
| 206983_at | CCR6 chemokine (C-C)                                            | 0.31        | -1.71   | 0.00    |
| 201743_at | CD14 CD14 molecule                                              | 4.28        | 2.10    | 0.00    |
| 204306_s_at | CD151 CD151 molecule                                          | 3.29        | 1.72    | 0.00    |
| 208653_s_at | CD164 CD164 molecule                                           | 6.06        | 2.60    | 0.00    |
| 219669_at | CD177 CD177 molecule                                            | 5.14        | 2.36    | 0.00    |
| 220428_at | CD207 CD207 molecule                                            | 0.21        | -2.23   | 0.00    |
| 209772_s_at | CD24 CD24 molecule                                             | 15.63       | 3.97    | 0.00    |
| 209771_x_at | CD24 CD24 molecule                                             | 5.77        | 2.53    | 0.00    |
| 216379_x_at | CD24 CD24 molecule                                             | 5.18        | 2.37    | 0.01    |
| 208651_x_at | CD24 CD24 molecule                                             | 4.58        | 2.19    | 0.00    |
| 208650_s_at | CD24 CD24 molecule                                             | 3.74        | 1.91    | 0.02    |
| 219025_at | CD248 CD248 molecule                                            | 3.48        | 1.80    | 0.00    |
| 203799_at | CD302 CD302 molecule                                            | 0.17        | -2.54   | 0.00    |
| 206488_s_at | CD36 CD36 molecule                                             | 12.44       | 3.64    | 0.00    |
| 209555_s_at | CD36 CD36 molecule                                             | 7.52        | 2.91    | 0.00    |
| 35150_at  | CD40 CD40 molecule,                                             | 6.79        | 2.76    | 0.00    |
| 222292_at | CD40 CD40 molecule,                                             | 0.12        | -3.07   | 0.00    |
| 217523_at | CD44 CD44 molecule,                                             | 0.21        | -2.25   | 0.00    |
| 211075_s_at | CD47 CD47 molecule                                             | 5.53        | 2.47    | 0.00    |
| 222061_at | CD58 CD58 molecule                                              | 0.13        | -2.97   | 0.00    |
| 200983_x_at | CD59 CD59 molecule                                             | 4.56        | 2.19    | 0.00    |
| 215334_s_at | CD8B CD8b molecule                                             | 0.33        | -1.60   | 0.00    |
| 205627_at | CDA cytidine deaminan                                           | 4.82        | 2.27    | 0.00    |
| 205288_at | CDC14A CDC14 cell divis                                          | 0.22        | -2.22   | 0.00    |
| 210742_at | CDC14A CDC14 cell divis                                          | 0.16        | -2.66   | 0.00    |
| Gene Symbol | Description | Log2 Fold Change | p-Value | q-Value |
|-------------|-------------|-----------------|---------|---------|
| 211347_at  | CDC14B      | 0.27            | -1.90  | 0.00    |
| 203213_at  | CDC2        | 0.29            | -1.81  | 0.00    |
| 201853_s_at| CDC25B      | 4.16            | 2.06   | 0.00    |
| 203377_s_at| CDC40       | 0.27            | -1.89  | 0.00    |
| 215296_at  | CDC42BPA    | 0.32            | -1.64  | 0.00    |
| 209288_s_at| CDC42EP3    | 3.60            | 1.85   | 0.00    |
| 209057_x_at| CDC5L       | 4.39            | 2.13   | 0.00    |
| 221520_s_at| CDCA8       | 3.31            | 1.73   | 0.00    |
| 209288_s_at| CDC40       | 0.27            | -1.89  | 0.00    |
| 203377_s_at| CDC40       | 0.27            | -1.89  | 0.00    |
| 213348_at  | CDCN1C      | 3.62            | 1.86   | 0.00    |
| 207039_s_at| CDCN2A      | 6.49            | 2.70   | 0.00    |
| 218929_at  | CDKN2AIP    | 0.17            | -2.56  | 0.00    |
| 212010_s_at| CDK3        | 4.13            | 2.07   | 0.00    |
| 213800_at  | CDK10A      | 0.17            | -2.24  | 0.00    |
| 219570_s_at| CEP152      | 0.21            | -2.25  | 0.00    |
| 218471_at  | CENPM       | 3.77            | 1.91   | 0.00    |
| 219555_s_at| CENPN       | 3.49            | 1.80   | 0.00    |
| 219294_at  | CENPO       | 0.21            | -2.24  | 0.00    |
| 219570_s_at| CEP152      | 0.21            | -2.25  | 0.00    |
| 221539_at  | CES3        | 8.70            | 3.12   | 0.00    |
| 209825_at  | CETF2       | 3.66            | 1.87   | 0.00    |
| 203493_at  | CEP5        | 0.29            | -1.81  | 0.00    |
| 222151_s_at| CEP63       | 0.17            | -2.58  | 0.00    |
| 220353_s_at| CES3        | 8.70            | 3.12   | 0.00    |
| 209144_at  | CG1102      | 3.66            | 1.87   | 0.00    |
| 201162_s_at| CHD4        | 0.32            | -1.63  | 0.00    |
| 201884_at  | CEAM5       | 10.17           | 3.35   | 0.00    |
| 203757_s_at| CEAM6       | 9.19            | 3.20   | 0.00    |
| 213800_at  | CFH         | 3.18            | 1.67   | 0.02    |
| 206380_at  | CFP         | 0.22            | -2.17  | 0.00    |
| 215181_s_at| CHD9        | 0.29            | -1.77  | 0.00    |
| 210416_at  | CHEK2       | 3.14            | 1.65   | 0.00    |
| 202229_s_at| CHERP       | 3.18            | 1.67   | 0.00    |
| 213060_s_at| CHIL2       | 3.96            | 1.99   | 0.00    |
| 204591_at  | CHL1        | 0.20            | -2.36  | 0.00    |
| 218178_s_at| CHMP1B      | 4.28            | 2.10   | 0.00    |
| 212624_s_at| CHN1        | 4.00            | 2.00   | 0.00    |
| 206149_at  | CHP2        | 0.12            | -3.11  | 0.00    |
| 202175_at  | CHPF        | 3.55            | 1.83   | 0.00    |
| 221675_s_at| CHRT1       | 0.18            | -2.47  | 0.00    |
| 211248_s_at| CHRD        | 0.19            | -2.42  | 0.00    |
| Gene Symbol | Description                                      | Fold Change | Log2 FC | FDR 1 % | FDR 2 % |
|-------------|--------------------------------------------------|-------------|---------|---------|---------|
| 203921_at   | **CHST2** carbohydrate (N-acetylglucosamine-6-O) sulfotransferase 2 | 4.24        | 2.08    | 0.00    | 0.00    |
| 209834_at   | **CHST3** carbohydrate (ch)                    | 6.08        | 2.60    | 0.00    | 0.00    |
| 205007_s_at | **CIB2** calcium and inte                     | 6.81        | 2.77    | 0.00    | 0.00    |
| 205008_s_at | **CIB2** calcium and inte                     | 3.98        | 1.99    | 0.00    | 0.00    |
| 209571_at   | **CIR1** corepressor inter                     | 0.25        | -1.98   | 0.00    | 0.00    |
| 211358_s_at | **CIIZ1** CDKN1A interac                       | 0.33        | -1.61   | 0.00    | 0.00    |
| 200998_s_at | **CKAP4** cytoskeleton-ass                     | 3.24        | 1.70    | 0.00    | 0.00    |
| 206164_at   | **CLCA2** chloride channel                     | 6.08        | 2.60    | 0.00    | 0.00    |
| 206165_s_at | **CLCA2** chloride channel                     | 3.98        | 1.99    | 0.00    | 0.04    |
| 206166_s_at | **CLCA2** chloride channel                     | 3.98        | 1.99    | 0.00    | 0.00    |
| 220026_at   | **CLCA4** chloride channel                     | 0.25        | -1.99   | 0.00    | 0.00    |
| 219947_at   | **CLEC4A** C-type lectin dor                  | 0.27        | -1.67   | 0.00    | 0.00    |
| 214683_s_at | **CLK1** CDC-like kinase                       | 0.28        | -1.85   | 0.00    | 0.00    |
| 210346_s_at | **CLK4** CDC-like kinase                       | 0.30        | -1.72   | 0.00    | 0.00    |
| 213839_at   | **CLMN** calmin (calponin)                     | 0.32        | -1.66   | 0.00    | 0.00    |
| 218111_s_at | **COBL** cordon-bleu horr                     | 5.33        | 2.42    | 0.00    | 0.00    |
| 202163_s_at | **CNOT4** CCR4-NOT transcription complex, subunit 4 | 0.16        | -2.49   | 0.00    | 0.00    |
| 210751_s_at | **CMAG** cycline monoph                       | 0.33        | -1.60   | 0.00    | 0.00    |
| 205518_s_at | **CMAH** cycline monoph                       | 0.03        | -5.04   | 0.00    | 0.00    |
| 218111_s_at | **CMAS** cycline monoph                       | 0.30        | -1.74   | 0.00    | 0.00    |
| 206417_at   | **CNGA1** cyclic nucleotide                   | 0.16        | -2.61   | 0.00    | 0.00    |
| 207342_at   | **CNGB1** cyclic nucleotide                   | 4.22        | 2.08    | 0.00    | 0.00    |
| 209874_x_at | **CNNM2** cyclin M2                           | 5.64        | 2.50    | 0.00    | 0.00    |
| 210867_at   | **CNOT4** CCR4-NOT trans                      | 0.16        | -2.66   | 0.00    | 0.00    |
| 202163_s_at | **CNOT8** CCR4-NOT trans                      | 0.33        | -1.60   | 0.00    | 0.00    |
| 208912_s_at | **CNP** 2',3'-cyclic nucleotide               | 3.09        | 1.63    | 0.00    | 0.00    |
| 220323_at   | **CNTD2** cyclin N-terminal                   | 5.19        | 2.38    | 0.00    | 0.00    |
| 213050_at   | **COBL** cordon-bleu horr                     | 0.20        | -2.36   | 0.00    | 0.00    |
| 205229_s_at | **COCH** coagulation factc                    | 0.16        | -2.66   | 0.00    | 0.00    |
| 211809_x_at | **COL13A1** collagen, type XI                 | 0.30        | -1.72   | 0.00    | 0.00    |
| 202310_s_at | **COL1A1** collagen, type I                   | 3.61        | 1.85    | 0.01    | 0.01    |
| 202404_s_at | **COL1A2** collagen, type I                   | 10.44       | 3.39    | 0.00    | 0.00    |
| 202403_s_at | **COL1A2** collagen, type I                   | 7.34        | 2.88    | 0.00    | 0.00    |
| 208096_s_at | **COL21A1** collagen, type X                  | 0.12        | -3.04   | 0.00    | 0.00    |
| 215076_s_at | **COL3A1** collagen, type III                 | 14.37       | 3.85    | 0.00    | 0.00    |
| 211161_s_at | **COL3A1** collagen, type III                 | 7.22        | 2.85    | 0.00    | 0.00    |
| 201852_s_at | **COL3A1** collagen, type III                 | 4.97        | 2.31    | 0.00    | 0.00    |
| 211980_at   | **COL4A1** collagen, type IV                  | 10.54       | 3.40    | 0.00    | 0.00    |
| 211964_at   | **COL4A2** collagen, type IV                  | 14.74       | 3.88    | 0.00    | 0.00    |
| 222073_at   | **COL4A3** collagen, type IV                  | 0.31        | -1.69   | 0.00    | 0.00    |
| Gene ID   | Description                                | Fold Change | Student t-Test | Other Test |
|----------|--------------------------------------------|-------------|----------------|------------|
| COL5A1   | collagen, type V, alpha 1                 | 5.43        | 2.44           | 0.00       | 0.00       |
| COL5A3   | collagen, type V, alpha 1                 | 0.15        | -2.76          | 0.00       | 0.00       |
| COL6A3   | collagen, type VI, alpha 3                | 18.65       | 4.22           | 0.00       | 0.00       |
| COMMD10  | COMM domain c                             | 4.72        | 2.24           | 0.00       | 0.00       |
| COMMD4   | COMM domain c                             | 3.16        | 1.66           | 0.00       | 0.00       |
| COPZ2    | coatamer protein                           | 3.03        | 1.60           | 0.00       | 0.00       |
| CORO1B   | coronin, actin bir                         | 3.70        | 1.89           | 0.00       | 0.00       |
| COX15    | COX15 homolog                             | 0.15        | -2.73          | 0.00       | 0.00       |
| COX4I1   | cytochrome c ox                           | 0.21        | -2.26          | 0.00       | 0.00       |
| COX7A2   | cytochrome c ox                           | 3.67        | 1.87           | 0.00       | 0.00       |
| CPA3     | carboxypeptidas                            | 4.18        | 2.06           | 0.02       | 0.04       |
| CPE      | carboxypeptidas                            | 3.32        | 1.73           | 0.00       | 0.00       |
| CRADD    | CASP2 and Ripk1 domain containing adaptor with death domain | 3.94    | 1.98           | 0.00       | 0.00       |
| CREB3    | cAMP responsive                           | 3.58        | 1.84           | 0.00       | 0.00       |
| CREZF    | CREB/ATF bZIP                              | 0.19        | -2.41          | 0.00       | 0.00       |
| CREM     | cAMP responsive                            | 3.60        | 1.93           | 0.00       | 0.00       |
| CRIP1    | cysteine-rich pro                          | 0.03        | -5.33          | 0.00       | 0.00       |
| CRISP3   | cysteine-rich sec                          | 3.05        | 1.61           | 0.01       | 0.02       |
| CRISPLD2 | cysteine-rich sec                          | 3.34        | 1.74           | 0.00       | 0.00       |
| CROCC    | ciliary rootlet coil                       | 0.32        | -1.67          | 0.00       | 0.00       |
| CRY1     | cryptochrome 11                           | 0.18        | -2.52          | 0.00       | 0.00       |
| CRY2     | cryptochrome 21                            | 0.29        | -1.81          | 0.00       | 0.00       |
| CRYL1    | crystallin, lambda                         | 3.49        | 1.80           | 0.00       | 0.00       |
| CSGALNACT1| chondroitin sulfap                         | 4.60        | 2.20           | 0.00       | 0.00       |
| CSNK1A1  | casein kinase 1,                           | 0.25        | -2.00          | 0.00       | 0.00       |
| CSPG5    | chondroitin sulfap                         | 0.25        | -2.01          | 0.00       | 0.00       |
| CSRP1    | cysteine and glyr                          | 3.39        | 1.76           | 0.00       | 0.00       |
| CSRP2    | cysteine and glyr                          | 4.05        | 2.02           | 0.00       | 0.00       |
| CSTB     | cystatin B (stefin)                        | 4.55        | 2.19           | 0.00       | 0.00       |
| CTAGE5   | CTAGE family, n                            | 0.25        | -2.00          | 0.00       | 0.00       |
| CTDS2P   | CTD (carboxy-te)                           | 3.05        | 1.61           | 0.00       | 0.00       |
| CTNNB1   | catenin (cadherin)                         | 0.25        | -1.99          | 0.00       | 0.00       |
| CTSB     | cathepsin B                                | 4.53        | 2.18           | 0.00       | 0.00       |
| CTSB     | cathepsin B                                | 3.80        | 1.92           | 0.00       | 0.00       |
| CTSC     | cathepsin C                                | 3.86        | 1.95           | 0.00       | 0.00       |
| CTSL1    | cathepsin L1                               | 4.24        | 2.08           | 0.00       | 0.00       |
| CTSS     | cathepsin S                                | 0.16        | -2.64          | 0.00       | 0.00       |
| CTSZ     | cathepsin Z                                | 3.40        | 1.77           | 0.00       | 0.00       |
| CTTN     | cortactin                                  | 0.24        | -2.09          | 0.00       | 0.00       |
| CUL2     | culin 2                                    | 0.25        | -2.02          | 0.00       | 0.00       |
| CUL3     | culin 3                                    | 0.33        | -1.61          | 0.00       | 0.00       |
| CUL5     | culin 5                                    | 0.22        | -2.20          | 0.00       | 0.00       |
| CWF19L1  | CWF19-like 1, α                           | 3.34        | 1.74           | 0.00       | 0.00       |
| CXCL1    | chemokine (C-X-)                           | 3.22        | 1.69           | 0.00       | 0.00       |
| CXCR1    | chemokine (C-X-)                           | 0.21        | -2.25          | 0.00       | 0.00       |
| CXCL3    | chemokine (C-X-)                           | 0.31        | -1.70          | 0.00       | 0.00       |
| CXCL9    | chemokine (C-X-)                           | 7.82        | 2.97           | 0.02       | 0.04       |
| CXorf21  | chromosome X c                             | 0.23        | -2.10          | 0.00       | 0.00       |
| Gene Symbol | Description | Fold Change | P Value | q Value |
|-------------|-------------|-------------|---------|---------|
| 219355_at  | CXorf57     | 0.19        | -2.39   | 0.00    |
| 203028_s_at| CYBA        | 6.41        | 2.68    | 0.00    |
| 39582_at   | CYLD        | 0.31        | -1.70   | 0.00    |
| 202435_s_at| CYP1B1      | 0.25        | -2.02   | 0.00    |
| 202436_s_at| CYP1B1      | 0.20        | -2.34   | 0.00    |
| 219825_at  | CYP26B1     | 0.19        | -2.42   | 0.00    |
| 205670_at  | CYP27B1     | 5.06        | 2.34    | 0.00    |
| 203028_s_at| CYBA        | 6.41        | 2.68    | 0.00    |
| 39582_at   | CYLD        | 0.31        | -1.70   | 0.00    |
| 202435_s_at| CYP1B1      | 0.25        | -2.02   | 0.00    |
| 202436_s_at| CYP1B1      | 0.20        | -2.34   | 0.00    |
| 219825_at  | CYP26B1     | 0.19        | -2.42   | 0.00    |
| 205670_at  | CYP27B1     | 5.06        | 2.34    | 0.00    |
| Gene ID    | Description                                    | Expression |
|-----------|------------------------------------------------|------------|
| 212817_at | DNAJB5 DnaJ (Hsp40) hcp                      | 3.23, 1.69 | 0.00, 0.00 |
| 202843_at | DNAJB9 DnaJ (Hsp40) hcp                      | 0.27, -1.90 | 0.00, 0.00 |
| 212911_at | DNAJC16 DnaJ (Hsp40) hcp                      | 0.16, -2.68 | 0.00, 0.00 |
| 205554_s_at | DNAE1L3 deoxyribonuclea                | 0.27, -1.91 | 0.00, 0.00 |
| 202253_s_at | DNM2 dynamin 2                               | 3.51, 1.81 | 0.00, 0.00 |
| 203187_at | DOCK1 dedicator of cyto                      | 0.18, -2.47 | 0.00, 0.00 |
| 219270_at | DOCK10 dedicator of cyto                     | 0.25, -2.03 | 0.00, 0.00 |
| 213482_at | DOCK3 dedicator of cyto                      | 0.25, -2.02 | 0.00, 0.00 |
| 221677_s_at | DONSON downstream neighbor of SON        | 0.28, -1.83 | 0.00, 0.00 |
| 40612_at  | DOPEY1 dopey family mem                      | 0.20, -2.31 | 0.00, 0.00 |
| 213267_at | DOPEY1 dopey family mem                      | 0.10, -3.33 | 0.00, 0.00 |
| 206590_x_at | DRD2 dopamine receptor                 | 3.69, 1.88 | 0.00, 0.00 |
| 205554_s_at | DRP2 dynamin 2                              | 4.05, 2.02 | 0.00, 0.00 |
| 204751_s_at | DSC2 desmocollin 2                      | 45.86, 5.52 | 0.00, 0.00 |
| 204750_s_at | DSG1 desmoglein 1                          | 0.20, -2.35 | 0.02, 0.03 |
| 205595_s_at | DSG3 desmoglein 3 (ψ)                     | 24.53, 4.62 | 0.00, 0.00 |
| 221681_s_at | DSPP dentin sialophosph  | 0.25, -2.02 | 0.00, 0.00 |
| 214253_s_at | DTNB dystrobrevin, bet                | 6.94, 2.79 | 0.00, 0.00 |
| 205762_s_at | DUS4L dihydouridine s  | 0.24, -2.06 | 0.00, 0.00 |
| 201537_s_at | DUSP3 dual specificity p                   | 3.04, 1.61 | 0.00, 0.00 |
| 206992_s_at | DUSP6 dual specificity p                   | 3.50, 1.81 | 0.00, 0.00 |
| 220774_at | DYM dynein                                | 0.15, -2.71 | 0.00, 0.00 |
| 203478_at | DYNC1I1 dynein, cytoplasm                   | 0.27, -1.88 | 0.00, 0.00 |
| 203763_at | DYNC2L1 dynein, cytoplasm                   | 0.30, -1.75 | 0.00, 0.00 |
| 202971_s_at | DYSF dystelrin, limb gii                | 4.62, 2.21 | 0.00, 0.00 |
| 204556_s_at | DZIP1 DAZ interacting  | 3.04, 1.60 | 0.00, 0.00 |
| 2028_s_at  | E2F1 E2F transcription factor             | 3.49, 1.80 | 0.00, 0.00 |
| 38707_r_at | E2F4 E2F transcription factor             | 15.50, 3.95 | 0.00, 0.00 |
| 211129_x_at | EDA ectodysplasin A                        | 0.31, -1.67 | 0.00, 0.00 |
| 220048_at | EDAR ectodysplasin A                      | 3.24, 1.69 | 0.00, 0.00 |
| 220926_s_at | EDEM3 ER degradation  | 0.32, -1.63 | 0.00, 0.00 |
| 206758_at | EDN2 endothelin 2                          | 4.51, 2.17 | 0.00, 0.00 |
| 204840_s_at | EEA1 early endosome                      | 0.17, -2.55 | 0.00, 0.00 |
| 210665_at | EED embryonic ectod              | 0.21, -2.29 | 0.00, 0.00 |
| 219833_s_at | EFHC1 EF-hand domain                     | 0.32, -1.67 | 0.00, 0.00 |
| 203591_s_at | EFHC2 EF-hand domain                     | 0.11, -3.15 | 0.00, 0.00 |
| 205301_at | EFNB3 ephrin-B3                           | 3.26, 1.70 | 0.00, 0.00 |
| 206115_at | EGR3 early growth res                  | 0.15, -2.73 | 0.00, 0.00 |
| 211755_at | EHBP1L1 EH domain bindi                  | 3.60, 1.85 | 0.00, 0.00 |
| 205341_at | EHD2 EH-domain conti                     | 3.50, 1.81 | 0.00, 0.00 |
| 219893_s_at | EHD3 EH-domain conti                     | 5.41, 2.44 | 0.00, 0.00 |
| 205222_at | EHHADH enoyl-Coenzyme                  | 0.31, -1.69 | 0.00, 0.00 |
| 211698_at | EID1 EP300 interactin                   | 0.31, -1.71 | 0.00, 0.00 |
| 205321_at | EIF2S3 eukaryotic transl                | 0.14, -2.79 | 0.00, 0.00 |
| 208708_x_at | EIF5 eukaryotic transl                 | 3.65, 1.87 | 0.00, 0.00 |
| Gene ID     | Gene Symbol | Description                                      | FC  | t-Value  | p-Value | Log2 FC | Log2 t-Value |
|------------|-------------|--------------------------------------------------|-----|---------|---------|---------|-------------|
| 208290_s_at| EIF5        | eukaryotic translation initiation factor 5       | 3.55| 1.83    | 0.00    | 0.01    |             |
| 210361_s_at| ELF2        | E74-like factor 2                                | 0.18| -2.47   | 0.00    | 0.00    |             |
| 210827_s_at| ELF3        | E74-like factor 3                                | 5.75| 2.52    | 0.00    | 0.00    |             |
| 203490_at  | ELF4        | E74-like factor 4                                | 4.98| 2.32    | 0.00    | 0.00    |             |
| 204095_s_at| ELL         | elongation factor                                | 3.56| 1.83    | 0.00    | 0.00    |             |
| 214446_at  | ELL2        | elongation factor                                | 3.31| 1.73    | 0.00    | 0.00    |             |
| 219518_s_at| ELL3        | elongation factor                                | 0.17| -2.58   | 0.00    | 0.00    |             |
| 219517_at  | ELL3        | elongation factor                                | 0.15| -2.73   | 0.00    | 0.00    |             |
| 210827_s_at| ELF3        | E74-like factor 3                                | 5.75| 2.52    | 0.00    | 0.00    |             |
| 203490_at  | ELF4        | E74-like factor 4                                | 4.98| 2.32    | 0.00    | 0.00    |             |
| 204095_s_at| ELL         | elongation factor                                | 3.56| 1.83    | 0.00    | 0.00    |             |
| 214446_at  | ELL2        | elongation factor                                | 3.31| 1.73    | 0.00    | 0.00    |             |

... (Continued with more entries)
| Gene ID       | Symbol          | Description                                | Log2 Fold Change | p-value | FDR | Log2 Odds Ratio |
|--------------|----------------|--------------------------------------------|-----------------|---------|-----|----------------|
| 221249_s_at  | FAM117A        | family with sequence similarity 117, member A | 0.18            | -2.48   | 0.00|                 |
| 218532_s_at  | FAM134A        | family with sequence similarity 134, member A | 0.28            | -1.86   | 0.00|                 |
| 217047_s_at  | FAM13A         | family with sequence similarity 13, member A | 0.23            | -2.09   | 0.00|                 |
| 202973_x_at  | FAM13A         | family with sequence similarity 13, member A | 0.18            | -2.47   | 0.00|                 |
| 218337_at    | FAM160B2       | family with sequence similarity 160, member B2 | 3.91            | 1.97    | 0.00|                 |
| 205308_at    | FAM164A        | family with sequence similarity 164, member A | 0.24            | -2.08   | 0.00|                 |
| 51158_at     | FAM174B        | family with sequence similarity 174, member B | 0.19            | -2.38   | 0.00|                 |
| 202915_s_at  | FAM178A        | family with sequence similarity 178, member A | 0.33            | -1.60   | 0.00|                 |
| 213900_at    | FAM189A2       | family with sequence similarity 189, member A2 | 0.12            | -3.07   | 0.00|                 |
| 203482_at    | FAM20B         | family with sequence similarity 20, member B | 0.31            | -1.68   | 0.00|                 |
| 201889_at    | FAM3C          | family with sequence similarity 3, member C | 0.30            | -1.75   | 0.00|                 |
| 216682_s_at  | FAM48A         | family with sequence similarity 48, member A | 0.14            | -2.07   | 0.00|                 |
| 45749_at     | FAM65A         | family with sequence similarity 65, member A | 3.51            | 1.81    | 0.00|                 |
| 204781_s_at  | FAS            | Fas (TNF receptor superfamily, member 6)   | 0.27            | -1.87   | 0.00|                 |
| 215719_x_at  | FASTK          | Fas-activated serine/threonine kinase      | 3.26            | 1.71    | 0.00|                 |
| 205976_at    | FASTKD2        | FAST kinase domain                        | 0.32            | -1.64   | 0.00|                 |
| 203184_at    | FBN2           | fibrillin 2                               | 3.93            | 1.97    | 0.00|                 |
| 202989_at    | FBXL18         | F-box and leucine                         | 3.60            | 1.85    | 0.00|                 |
| 211734_s_at  | FCER1A         | Fc fragment of IgE                        | 0.26            | -1.93   | 0.00|                 |
| 215567_at    | FCF1           | FCF1 small subunit                        | 0.19            | -2.40   | 0.00|                 |
| 211396_at    | FNGR2C         | Fc fragment of IgG                        | 4.41            | 2.14    | 0.00|                 |
| 212373_at    | FEM1B          | fem-1 homolog C                           | 0.32            | -1.65   | 0.00|                 |
| 203562_at    | FEZ1           | fasciculation and                        | 4.18            | 2.06    | 0.00|                 |
| 222164_at    | FGFR1          | fibroblast growth                        | 0.10            | -3.28   | 0.00|                 |
| 201540_at    | FHL1           | four and a half L                         | 0.09            | -3.48   | 0.00|                 |
| 202949_s_at  | FHL2           | four and a half L                         | 3.61            | 1.85    | 0.00|                 |
| 214119_s_at  | FKBP1A         | FK506 binding protein                     | 5.72            | 2.52    | 0.00|                 |
| 210186_s_at  | FKBP1A         | FK506 binding protein                     | 5.07            | 2.34    | 0.00|                 |
| 205283_at    | FKTN           | fukutin                                   | 0.30            | -1.75   | 0.00|                 |
| 215645_at    | FLCN           | folliculin                                | 0.26            | -1.94   | 0.00|                 |
| 205511_at    | FLJ10038       | hypothetical prot                         | 0.12            | -3.07   | 0.00|                 |
| 208282_s_at  | FLJ11292       | hypothetical prot                         | 0.22            | -2.16   | 0.00|                 |
| 219871_at    | FLJ13197       | hypothetical FLJ                         | 0.20            | -2.30   | 0.00|                 |
| 208613_s_at  | FLNB           | filamin B, beta                          | 5.42            | 2.44    | 0.00|                 |
| 210142_x_at  | FLOT1          | flotillin 1                               | 4.77            | 2.26    | 0.00|                 |
| 208749_x_at  | FLOT1          | flotillin 1                               | 4.36            | 2.12    | 0.00|                 |
| 201350_at    | FLOT2          | flotillin 2                               | 3.28            | 1.72    | 0.00|                 |
| 210316_at    | FLT4           | fms-related tyrosine                      | 0.26            | -1.96   | 0.00|                 |
| 205668_at    | FMO1           | flavin containing                         | 0.27            | -1.87   | 0.00|                 |
| 211726_s_at  | FMO2           | flavin containing                         | 3.54            | 1.83    | 0.01| 0.01            |
| 215300_s_at  | FMO5           | flavin containing                         | 0.11            | -3.19   | 0.00|                 |
| 203689_s_at  | FMR1           | fragile X mental retardification          | 0.31            | -1.68   | 0.00|                 |
| 216442_x_at  | FN1            | fibronectin 1                             | 4.27            | 2.09    | 0.02| 0.03            |
| Gene Symbol | Gene Name                        | Log2 Fold Change | P Value | E Value |
|-------------|---------------------------------|-----------------|---------|---------|
| 210495_x_at| FN1 fibronectin 1                | 4.18            | 0.03    | 0.04    |
| 204420_at  | FOSL1 FOS-like antigen           | 3.93            | 1.97    | 0.00    |
| 213260_at  | FOXC1 forkhead box C1            | 5.90            | 2.56    | 0.00    |
| 206912_at  | FOXE1 forkhead box E1            | 9.97            | 3.32    | 0.00    |
| 205021_s_at| FOXN3 forkhead box N3            | 4.87            | 2.28    | 0.00    |
| 205022_s_at| FOXN3 forkhead box N3            | 0.31            | -1.68   | 0.00    |
| 210399_x_at| FUT2 fucosyltransferase 2 (secretor status included) | 7.23 | 2.85 | 0.00 |
| 210608_s_at| FUT2 fucosyltransferase          | 7.23            | 2.85    | 0.00    |
| 210488_s_at| FUT6 fucosyltransferase          | 5.02            | 2.33    | 0.00    |
| 211438_x_at| FXR1 fragile X mental retardation  | 2.76 | 1.10 | 0.00 |
| 211478_s_at| FXR1 fragile X mental retardation  | 2.76 | 1.10 | 0.00 |
| 204417_at  | G4BP1 GTPase activating protein 1 | 0.31            | -1.70   | 0.00    |
| 202192_s_at| GAS7 growth arrest spindle       | 0.30            | -1.76   | 0.00    |
| 209710_at  | GATA2 GATA binding protein       | 3.58            | 1.84    | 0.00    |
| 209602_s_at| GATA3 GATA binding protein       | 0.25            | -1.98   | 0.00    |
| 209603_at  | GATA3 GATA binding protein       | 0.24            | -2.07   | 0.00    |
| 216733_s_at| GATM glycine amidinotransferase  | 0.23            | -2.11   | 0.00    |
| 203178_at  | GCA grancalcin, EF-h              | 0.12            | -3.07   | 0.00    |
| Gene ID   | Description                                      | Log2 Fold Change | p-value | q-value |
|-----------|--------------------------------------------------|------------------|---------|---------|
| 36475_at  | GCAT glycine C-acetyltransferase (2-amino-3-ketobutyrate coenzyme A ligase) | 3.85             | 1.94    | 0.00    |
| 219539_at | GEMIN6 gem (nuclear org)                        | 3.69             | 1.88    | 0.00    |
| 202721_s_at | GFPT1 glutamine-fructose-6-phosphate transaminase 1 | 3.02             | 1.59    | 0.00    |
| 64064_at  | GIMAP5 GTPase, IMAP family member 5              | 3.46             | 1.79    | 0.00    |
| 219970_at | GIPC2 GIPC PDZ domain containing family, member 2 | 0.10             | -3.38   | 0.00    |
| 206540_at | GLB1L galactosidase, b                           | 4.40             | 2.14    | 0.00    |
| 215100_at | GLS glutaminase                                  | 0.31             | -1.71   | 0.00    |
| 205531_at | GLS2 glutaminase 2 (l)                           | 0.26             | -1.97   | 0.00    |
| 218506_s_at | GLYR1 glyoxylate reductase                       | 0.27             | -1.87   | 0.00    |
| 206355_at | GNAL guanine nucleotidases                       | 0.26             | -1.93   | 0.00    |
| 214071_at | GNAL guanine nucleotidases                       | 0.18             | -2.44   | 0.00    |
| 211871_x_at | GLYR1 glyoxylate reductase                       | 0.27             | -1.87   | 0.00    |
| 219970_at | GIPC2 GIPC PDZ domain containing family, member 2 | 0.10             | -3.38   | 0.00    |
| 206540_at | GLB1L galactosidase, b                           | 4.40             | 2.14    | 0.00    |
| 205531_at | GLS2 glutaminase 2 (l)                           | 0.26             | -1.97   | 0.00    |
| 218506_s_at | GLYR1 glyoxylate reductase                       | 0.27             | -1.87   | 0.00    |
| 206355_at | GNAL guanine nucleotidases                       | 0.26             | -1.93   | 0.00    |
| 214071_at | GNAL guanine nucleotidases                       | 0.18             | -2.44   | 0.00    |
| 211871_x_at | GLYR1 glyoxylate reductase                       | 0.27             | -1.87   | 0.00    |
| Gene ID   | Gene Symbol | Description                                           | log2 Fold Change | p-value 1  | p-value 2 |
|----------|-------------|-------------------------------------------------------|------------------|------------|-----------|
| 205276_s_at | GTPBP1     | GTP binding protein 1                                 | 4.91             | 0.00       | 0.00      |
| 204235_s_at | GULP1       | GULP, engulffme                                        | 0.16             | -2.68      | 0.00      |
| 204237_at | GULP1       | GULP, engulffme                                        | 0.14             | -2.88      | 0.00      |
| 205488_at | GZMA        | granzyme A (granzyme 1, cytotoxic T-lymphocyte-associated serine esterase 3) | 4.26             | 2.09       | 0.00      |
| 208579_x_at | H2BFS      | H2B histone family                                    | 5.15             | 2.37       | 0.00      |
| 221929_at | HSPD        | hexose-6-phosphol                                      | 0.17             | -2.58      | 0.00      |
| 213054_at | HAUS5       | HAUS augmin-ll                                        | 0.33             | -1.59      | 0.00      |
| 218062_s_at | HAUS6        | HAUS augmin-ll                                        | 0.18             | -2.45      | 0.00      |
| 217232_x_at | HBB        | hemoglobin, beti                                       | 3.21             | 1.68       | 0.01      |
| 38037_at | HBEGF       | heparin-binding I                                     | 8.28             | 3.05       | 0.00      |
| 203821_at | HBEGF       | heparin-binding I                                     | 4.88             | 2.29       | 0.00      |
| 209315_at | HBGS1       | HBGS1-like (S. ce)                                    | 0.19             | -2.42      | 0.00      |
| 209314_s_at | HBGS1       | HBGS1-like (S. ce)                                    | 0.18             | -2.50      | 0.00      |
| 214933_x_at | HCN2        | hyperpolarization                                      | 3.21             | 1.68       | 0.00      |
| 216224_s_at | HDAc6      | histone deacetyl                                       | 3.77             | 1.92       | 0.00      |
| 213069_at | HEG1        | HEG homolog 1                                          | 3.56             | 1.83       | 0.00      |
| 220065_at | HELLS       | helicase, lymphc                                       | 0.25             | -1.98      | 0.00      |
| 219863_at | HERC5       | herc domain and                                       | 4.72             | 2.24       | 0.00      |
| 219352_at | HERC6       | herc domain and                                       | 10.06            | 3.33       | 0.00      |
| 214308_s_at | HGD        | homogentisate 1                                       | 3.69             | 1.88       | 0.00      |
| 219687_at | HHAT        | hedgehog acyltr                                       | 3.81             | 1.93       | 0.00      |
| 221162_at | HHLA1       | HERV-H LTR-as                                         | 3.26             | 1.71       | 0.00      |
| 216911_s_at | HIC2       | hypermethylated                                       | 4.10             | 2.03       | 0.00      |
| 205425_at | HIP1        | huntingtin intera                                     | 0.33             | -1.59      | 0.00      |
| 212293_at | HIPK1       | homedomain in                                         | 0.23             | -2.13      | 0.00      |
| 202953_s_at | HISPPD1     | histidine acid ph                                   | 0.31             | -1.68      | 0.00      |
| 214542_x_at | HIST1H2AI  | histone cluster 1                                     | 7.39             | 2.89       | 0.00      |
| 208583_x_at | HIST1H2AJ  | histone cluster 1                                     | 11.39            | 3.51       | 0.00      |
| 208527_x_at | HIST1H2BE  | histone cluster 1                                     | 3.51             | 1.81       | 0.00      |
| 208490_x_at | HIST1H2BF  | histone cluster 1                                     | 4.81             | 2.27       | 0.00      |
| 209806_at | HIST1H2BK  | histone cluster 1                                     | 4.92             | 2.30       | 0.00      |
| 204512_at | HIVP1       | human immunod                                         | 0.28             | -1.85      | 0.00      |
| 220042_x_at | HIVP3     | human immunod                                         | 4.30             | 2.10       | 0.00      |
| 215536_at | HLA-DQ82   | major histocomp                                        | 0.33             | -1.62      | 0.02      |
| 204753_s_at | HLF         | hepatic leukemic                                       | 0.29             | -1.80      | 0.00      |
| 204754_at | HLF         | hepatic leukemic                                       | 0.26             | -1.96      | 0.00      |
| 204755_x_at | HLF         | hepatic leukemic                                       | 0.23             | -2.14      | 0.00      |
| 207353_s_at | HMX1        | H6 family homec                                      | 4.02             | 2.01       | 0.00      |
| 217755_at | HN1         | hematological ar                                      | 4.05             | 2.02       | 0.00      |
| 217732_x_at | HNMT       | histamine N-met                                      | 0.33             | -1.62      | 0.00      |
| 221919_at | HNRNPA1     | heterogeneous r                                        | 0.08             | -3.68      | 0.00      |
| 211930_at | HNRNPA3     | heterogeneous r                                        | 0.26             | -1.94      | 0.00      |
| 213359_at | HNRNPFD     | heterogeneous r                                        | 0.29             | -1.79      | 0.00      |
| 213472_at | HNRNPFH1    | heterogeneous r                                        | 0.21             | -2.27      | 0.00      |
| 202072_at | HNRINPL     | heterogeneous r                                        | 5.09             | 2.35       | 0.00      |
| 66053_at | HNRNPUL2    | heterogeneous r                                        | 0.24             | -2.05      | 0.00      |
| 212454_x_at | HNRPDL     | heterogeneous r                                        | 0.23             | -2.11      | 0.00      |
| 222222_s_at | HOMER3     | homer homolog :                                       | 4.78             | 2.26       | 0.00      |
| Gene ID       | Description                          | Fold Change | p-value | q-value |
|--------------|--------------------------------------|-------------|---------|---------|
| 208224_at    | HOXB1 homeobox B1                    | 3.76        | 1.91    | 0.00    |
| 205360_s_at  | HOXB6 homeobox B6                    | 0.31        | -1.69   | 0.00    |
| 204779_s_at  | HOXB7 homeobox B7                    | 9.15        | 3.19    | 0.00    |
| 216973_s_at  | HOXB7 homeobox B7                    | 3.83        | 1.94    | 0.00    |
| 219832_s_at  | HOXC13 homeobox C13                  | 3.57        | 1.83    | 0.00    |
| 206858_s_at  | HOXC6 homeobox C6                    | 0.19        | -2.44   | 0.00    |
| 221350_at    | HOXC8 homeobox C8                    | 0.15        | -2.73   | 0.00    |
| 214604_at    | HOXD11 homeobox D11                  | 7.40        | 2.89    | 0.00    |
| 205522_at    | HOXD4 homeobox D4                    | 4.76        | 2.25    | 0.00    |
| 220633_s_at  | HP1BP3 heterochromatin               | 3.15        | 1.66    | 0.00    |
| 214803_at    | HPGDS hematopoietic pr               | 0.11        | -3.24   | 0.00    |
| 54037_at     | HPS4 Hermansky-Pudl                  | 0.30        | -1.74   | 0.00    |
| 219403_s_at  | HPSE heparanase                      | 4.35        | 2.12    | 0.00    |
| 219984_s_at  | HRASLS HRAS-like suppr               | 0.23        | -2.15   | 0.00    |
| 219983_at    | HRASLS HRAS-like suppr               | 0.16        | -2.68   | 0.00    |
| 22163_x_at   | HRH3 histamine recept                | 3.79        | 1.92    | 0.00    |
| 217989_at    | HSD17B11 hydroxysteroid (h)         | 0.29        | -1.79   | 0.00    |
| 209512_at    | HSDL2 hydroxysteroid d              | 0.31        | -1.71   | 0.01    |
| 209657_s_at  | HSF2 heat shock trans                | 0.25        | -2.00   | 0.00    |
| 214163_at    | HSPB11 heat shock prote              | 0.28        | -1.86   | 0.00    |
| 219998_at    | HSPC159 galectin-related 1          | 0.28        | -1.85   | 0.00    |
| 207578_s_at  | HTR4 5-hydroxytryptan               | 3.46        | 1.79    | 0.00    |
| 204883_s_at  | HUS1 HUS1 checkpoint                | 3.02        | 1.59    | 0.00    |
| 220429_at    | HYAL4 hyaluronoglucos               | 4.35        | 2.12    | 0.00    |
| 215513_at    | HYMAI hydralidiform mol             | 0.09        | -3.51   | 0.00    |
| 204569_at    | ICK intestinal cell (M)             | 0.21        | -2.24   | 0.00    |
| 208937_s_at  | ID1 inhibitor of DNA                | 6.20        | 2.63    | 0.00    |
| 205293_s_at  | ID4 inhibitor of DNA                | 0.19        | -2.43   | 0.00    |
| 209291_at    | ID4 inhibitor of DNA                | 0.10        | -3.39   | 0.00    |
| 209292_at    | ID4 inhibitor of DNA                | 0.06        | -4.20   | 0.00    |
| 210029_at    | IDO1 indoleamine 2,3-               | 3.26        | 1.71    | 0.00    |
| 202438_x_at  | IDS iduronate 2-sulfate             | 0.24        | -2.04   | 0.00    |
| 209721_s_at  | IFFO1 intermediate fibrar           | 3.31        | 1.73    | 0.00    |
| 202411_at    | IFI27 interferon, alpha             | 15.40       | 3.94    | 0.00    |
| 209417_s_at  | IFI35 interferon-induce            | 3.04        | 1.60    | 0.00    |
| 214453_s_at  | IFF4 interferon-induce             | 14.78       | 3.89    | 0.00    |
| 204439_at    | IFF4L interferon-induce            | 8.23        | 3.04    | 0.00    |
| 204415_at    | IFI6 interferon, alpha             | 12.19       | 3.61    | 0.00    |
| 203153_at    | IFI8 interferon-induce             | 14.12       | 3.82    | 0.00    |
| 204747_at    | IFI3 interferon-induce             | 3.64        | 1.87    | 0.00    |
| 214022_s_at  | IFITM1 interferon induc            | 12.00       | 3.58    | 0.00    |
| 201601_x_at  | IFITM1 interferon induc            | 10.50       | 3.39    | 0.00    |
| 201315_x_at  | IFITM2 interferon induc            | 6.01        | 2.59    | 0.00    |
| 212023_x_at  | IFITM3 interferon induc            | 7.20        | 2.85    | 0.00    |
| 219174_at    | IFT74 intraflagellar tran          | 0.28        | -1.83   | 0.00    |
| 61732_r_at   | IFT74 intraflagellar tran          | 0.21        | -2.28   | 0.00    |
| 203620_at    | IGF1R insulin-like growth          | 0.25        | -2.02   | 0.00    |
| 203820_s_at  | IGF2BP3 insulin-like growth        | 3.06        | 1.61    | 0.00    |
| Gene ID | Gene Name | Description | Log2 Fold Change | P-Value 1 | P-Value 2 |
|--------|-----------|-------------|-----------------|-----------|-----------|
| 203851_at | IGFBP6 | insulin-like growth factor 6 | 4.81 | 2.27 | 0.00 | 0.00 |
| 201163_s_at | IGFBP7 | insulin-like growth factor 7 | 5.05 | 2.34 | 0.00 | 0.00 |
| 201162_at | IGFBP7 | insulin-like growth factor 7 | 3.91 | 1.97 | 0.00 | 0.00 |
| 31861_at | IGHMBP2 | immunoglobulin mu binding protein 2 | 10.02 | 3.33 | 0.00 | 0.00 |
| 217148_x_at | IGL@ | immunoglobulin lambda locus | 3.74 | 1.90 | 0.00 | 0.00 |
| 215255_at | IGSF9B | immunoglobulin superfamily, member 9B | 0.28 | -1.84 | 0.00 | 0.00 |
| 202490_at | IKBKAP | inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein | 0.27 | -1.91 | 0.00 | 0.00 |
| 36004_at | IKBKG | inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase gamma | 8.40 | 3.07 | 0.00 | 0.00 |
| 211612_s_at | IL13RA1 | interleukin 13 receptor, alpha 1 | 4.30 | 2.11 | 0.00 | 0.00 |
| 209929_s_at | IL13RA1 | interleukin 13 receptor, alpha 1 | 3.98 | 1.99 | 0.00 | 0.00 |
| 64440_at | IL17RC | interleukin 17 receptor C | 6.61 | 2.73 | 0.00 | 0.00 |
| 206295_at | IL18 | interleukin 18 (interferon-gamma-inducing factor) | 0.20 | -2.31 | 0.00 | 0.00 |
| 219323_s_at | IL18BP | interleukin 18 bir | 4.34 | 2.12 | 0.00 | 0.00 |
| 39402_at | IL1B | interleukin 1, bet | 5.28 | 2.40 | 0.00 | 0.00 |
| 205067_at | IL1B | interleukin 1, bet | 3.95 | 1.98 | 0.00 | 0.00 |
| 221470_s_at | IL1F7 | interleukin 1 fam | 0.11 | -3.16 | 0.00 | 0.00 |
| 205403_at | IL1R2 | interleukin 1 recx | 0.33 | -1.62 | 0.00 | 0.00 |
| 212659_s_at | IL1RN | interleukin 1 recx | 4.52 | 2.18 | 0.00 | 0.00 |
| 219115_s_at | IL20RA | interleukin 20 recx | 0.33 | -1.59 | 0.00 | 0.00 |
| 203233_at | IL4R | interleukin 4 recx | 3.90 | 1.96 | 0.00 | 0.00 |
| 206693_at | IL7 | interleukin 7 | 0.06 | -4.15 | 0.00 | 0.00 |
| 208930_s_at | ILF3 | interleukin enhar | 0.25 | -1.98 | 0.00 | 0.00 |
| 214705_at | INADL | InaD-like (Drosophila) | 0.07 | -3.86 | 0.00 | 0.00 |
| 205258_at | INHBB | inhibin, beta B | 9.33 | 3.22 | 0.00 | 0.00 |
| 203006_at | INPP5A | inositol polyphosphate-5-phosphatase, 40kDa | 0.31 | -1.68 | 0.00 | 0.00 |
| 203907_s_at | IQSEC1 | IQ motif and Sec | 3.71 | 1.89 | 0.00 | 0.00 |
| 208436_s_at | IRF7 | interferon regula | 3.16 | 1.66 | 0.00 | 0.00 |
| 209185_s_at | IRS2 | insulin receptor s | 0.32 | -1.64 | 0.00 | 0.00 |
| 205483_at | ISG15 | ISG15 ubiquitin-l | 6.34 | 2.67 | 0.00 | 0.00 |
| 204698_at | ISG20 | interferon stimu | 3.21 | 1.68 | 0.01 | 0.02 |
| 218170_at | ISOC1 | isochorismatase | 0.22 | -2.16 | 0.00 | 0.00 |
| 218893_at | ISOC2 | isochorismatase | 3.90 | 1.96 | 0.00 | 0.00 |
| 205032_at | ITG2A | integrin, alpha 2 | 3.79 | 1.92 | 0.00 | 0.00 |
| 205786_s_at | ITGAM | integrin, alpha M | 3.79 | 1.92 | 0.00 | 0.00 |
| 202746_at | ITM2A | integral membra | 0.20 | -2.33 | 0.00 | 0.00 |
| 202661_at | ITPR2 | inositol 1,4,5-trip | 0.29 | -1.79 | 0.00 | 0.00 |
| 211360_s_at | ITPR2 | inositol 1,4,5-trip | 0.22 | -2.19 | 0.00 | 0.00 |
| 202660_at | ITPR2 | inositol 1,4,5-trip | 0.20 | -2.31 | 0.00 | 0.00 |
| 20662_s_at | ITPR2 | inositol 1,4,5-trip | 0.14 | -2.82 | 0.00 | 0.00 |
| 216495_x_at | IVD | isovaleryl Coenzyme | 5.15 | 2.36 | 0.00 | 0.00 |
| 205841_at | JAK2 | Janus kinase 2 | 0.18 | -2.47 | 0.00 | 0.00 |
| 218560_s_at | JMD4 | jumonji domain c | 3.72 | 1.90 | 0.00 | 0.00 |
| 201468_s_at | JUN | jun oncogene | 4.97 | 2.31 | 0.00 | 0.00 |
| 201464_x_at | JUN | jun oncogene | 3.75 | 1.91 | 0.00 | 0.00 |
| 218418_s_at | KANK2 | KN motif and anl | 3.55 | 1.83 | 0.00 | 0.00 |
| 219106_s_at | KBTBD10 | kelch repeat and | 0.24 | -2.06 | 0.00 | 0.00 |
| 210078_s_at | KONAB1 | potassium voltač | 0.21 | -2.24 | 0.00 | 0.00 |
| Gene Symbol | Description                                      | Value 1 | Value 2 | Value 3 | Value 4 |
|------------|--------------------------------------------------|---------|---------|---------|---------|
| 213832_at  | KCND3 potassium voltage-gated channel            | 0.26    | -1.94   | 0.00    | 0.00    |
| 210119_at  | KCNJ15 potassium inwardly-rectifying channel     | 8.89    | 3.15    | 0.00    | 0.00    |
| 206765_at  | KCNJ2 potassium inwardly-rectifying channel      | 0.23    | -2.10   | 0.00    | 0.00    |
| 221584_s_at| KCNMA1 potassium large channel                   | 3.95    | 1.98    | 0.00    | 0.00    |
| 206231_at  | KCNN1 potassium voltage-gated channel            | 4.74    | 2.25    | 0.00    | 0.00    |
| 211217_s_at| KCNO1 potassium voltage-gated channel            | 3.04    | 1.60    | 0.00    | 0.00    |
| 207366_at  | KCNS1 potassium voltage-gated channel            | 3.02    | 1.59    | 0.00    | 0.00    |
| 212188_at  | KCTD12 potassium channel                         | 0.24    | -2.09   | 0.00    | 0.00    |
| 45653_at   | KCTD13 potassium channel                         | 0.23    | -2.14   | 0.00    | 0.00    |
| 217894_at  | KCTD3 potassium channel                          | 0.18    | -2.48   | 0.00    | 0.00    |
| 209984_at  | KDM4C lysine (K)-specific                         | 0.24    | -2.09   | 0.00    | 0.00    |
| 202383_at  | KDM5C lysine (K)-specific                         | 3.36    | 1.75    | 0.00    | 0.00    |
| 203991_s_at| KDM6A lysine (K)-specific                         | 0.29    | -1.78   | 0.00    | 0.00    |
| 212523_s_at| KIAA0146 KIAA0146                                 | 0.25    | -2.00   | 0.00    | 0.00    |
| 212057_at  | KIAA0182 KIAA0182                                 | 0.25    | -2.02   | 0.00    | 0.00    |
| 38892_at   | KIAA0240 KIAA0240                                 | 0.26    | -1.97   | 0.00    | 0.00    |
| 213208_at  | KIAA0240 KIAA0240                                 | 0.21    | -2.23   | 0.00    | 0.00    |
| 214356_s_at| KIAA0368 KIAA0368                                 | 0.32    | -1.63   | 0.00    | 0.00    |
| 212427_at  | KIAA0368 KIAA0368                                 | 0.14    | -2.89   | 0.00    | 0.00    |
| 203000_at  | KIAA0467 KIAA0467                                 | 0.23    | -2.09   | 0.00    | 0.00    |
| 214295_at  | KIAA0485 hypothetical LOC                         | 0.30    | -1.76   | 0.00    | 0.01    |
| 212943_at  | KIAA0528 KIAA0528                                 | 0.19    | -2.43   | 0.00    | 0.00    |
| 204075_s_at| KIAA0562 KIAA0562                                 | 0.09    | -3.47   | 0.00    | 0.00    |
| 209021_x_at| KIAA0652 KIAA0652                                 | 3.06    | 1.61    | 0.00    | 0.00    |
| 215268_at  | KIAA0754 KIAA0754                                 | 0.11    | -3.26   | 0.00    | 0.00    |
| 212633_at  | KIAA0776 KIAA0776                                 | 0.25    | -1.99   | 0.00    | 0.00    |
| 213358_at  | KIAA0802 KIAA0802                                 | 12.12   | 3.60    | 0.00    | 0.00    |
| 213424_at  | KIAA0895 KIAA0895                                 | 0.04    | -4.53   | 0.00    | 0.00    |
| 214098_at  | KIAA1107 KIAA1107                                 | 0.27    | -1.89   | 0.00    | 0.00    |
| 212942_s_at| KIAA1199 KIAA1199                                 | 6.02    | 2.59    | 0.00    | 0.00    |
| 204444_at  | KIF11 kinesin family mx                           | 0.33    | -1.59   | 0.01    | 0.02    |
| 220777_at  | KIF13A kinesin family mx                          | 0.18    | -2.52   | 0.00    | 0.00    |
| 208128_x_at| KIF25 kinesin family mx                           | 3.59    | 1.84    | 0.00    | 0.00    |
| 203087_s_at| KIF2A kinesin heavy ch                            | 3.34    | 1.74    | 0.00    | 0.00    |
| 203130_s_at| KIF5C kinesin family mx                           | 0.22    | -2.18   | 0.00    | 0.00    |
| 221302_at  | KLF15 Kruppel-like fact                          | 3.55    | 1.83    | 0.00    | 0.00    |
| 220266_s_at| KLF4 Kruppel-like fact                           | 0.20    | -2.35   | 0.00    | 0.00    |
| 209212_s_at| KLF5 Kruppel-like fact                           | 0.15    | -2.78   | 0.00    | 0.00    |
| 209211_at  | KLF5 Kruppel-like fact                           | 0.14    | -2.85   | 0.00    | 0.00    |
| 204334_at  | KLF7 Kruppel-like fact                           | 6.19    | 2.63    | 0.00    | 0.00    |
| 219930_at  | KLF8 Kruppel-like fact                           | 0.22    | -2.18   | 0.00    | 0.00    |
| 203543_s_at| KLF9 Kruppel-like fact                           | 0.15    | -2.79   | 0.00    | 0.00    |
| 204176_at  | KHL20 kelch-like 20 (Dn)                         | 0.23    | -2.12   | 0.00    | 0.00    |
| 221986_s_at| KHL24 kelch-like 24 (Dn)                         | 0.14    | -2.82   | 0.00    | 0.00    |
| 216699_s_at| KLK1 kallikrein 1                                | 0.33    | -1.60   | 0.00    | 0.00    |
| 205470_s_at| KLK11 kallikrein-related                        | 0.29    | -1.81   | 0.01    | 0.02    |
| 220782_x_at| KLK12 kallikrein-related                        | 10.34   | 3.37    | 0.00    | 0.00    |
| 205783_at  | KLK13 kallikrein-related                        | 4.73    | 2.24    | 0.00    | 0.00    |
| Gene ID     | Description                        | Log2 Fold Change | p-value | FDR   |
|------------|------------------------------------|-----------------|---------|-------|
| 204733_at  | KLK6 kallikrein-related            | 36.32           | 0.00    | 0.00  |
| 206316_s_at | KNTC1 kinetochore assoc             | 0.31            | -1.68   | 0.00  |
| 204010_s_at | KRAS v-Ki-ras2 Kirsten             | 0.13            | -2.90   | 0.00  |
| 34031_i_at | KRIT1 kallikrein-related           | 0.18            | -2.50   | 0.00  |
| 207935_s_at | KRT1 keratin 13                    | 30.54           | 4.93    | 0.00  |
| 209800_at  | KRT16 keratin 16                   | 46.49           | 5.54    | 0.00  |
| 205157_s_at | KRT17 keratin 17                   | 28.30           | 4.82    | 0.00  |
| 212236_x_at| KRT17 keratin 17                   | 25.51           | 4.67    | 0.00  |
| 205157_s_at | KRT17 keratin 17                   | 28.30           | 4.82    | 0.00  |
| 203203_s_at | KRR1 small sub                    | 0.20            | -2.31   | 0.00  |
| 207935_s_at | KRT13 keratin 13                   | 30.54           | 4.93    | 0.00  |
| 209800_at  | KRT16 keratin 16                   | 46.49           | 5.54    | 0.00  |
| 205157_s_at | KRT17 keratin 17                   | 28.30           | 4.82    | 0.00  |
| 212236_x_at| KRT17 keratin 17                   | 25.51           | 4.67    | 0.00  |
| 34031_i_at | KRIT1 kallikrein-related           | 0.18            | -2.50   | 0.00  |
| 207935_s_at | KRT13 keratin 13                   | 30.54           | 4.93    | 0.00  |
| 203203_s_at | KRR1 small sub                    | 0.20            | -2.31   | 0.00  |
| 207935_s_at | KRT13 keratin 13                   | 30.54           | 4.93    | 0.00  |
| 212236_x_at| KRT17 keratin 17                   | 25.51           | 4.67    | 0.00  |
| 205157_s_at | KRT17 keratin 17                   | 28.30           | 4.82    | 0.00  |
| 212236_x_at| KRT17 keratin 17                   | 25.51           | 4.67    | 0.00  |
| 218963_s_at | KRT23 keratin 23 (histor)          | 0.27            | -1.90   | 0.01  |
| 206677_at  | KRT31 keratin 31                   | 0.23            | -2.10   | 0.01  |
| 206969_at  | KRT34 keratin 34                   | 4.82            | 2.27    | 0.00  |
| 209125_at  | KRT6A keratin 6A                   | 408.60          | 8.68    | 0.00  |
| 213680_at  | L3MBTL l (3)mbt-like (Drosophila)  | 669.17          | 9.39    | 0.00  |
| 209126_x_at | KRT6B keratin 6B                   | 92.65           | 6.53    | 0.00  |
| 207065_at  | KRT75 keratin 75                   | 55.49           | 5.79    | 0.00  |
| 208186_at  | KRT9 keratin 9                     | 7.39            | 2.89    | 0.00  |
| 218732_x_at | KRTAP5-8 keratin associate         | 6.43            | 2.69    | 0.00  |
| 217388_s_at | KNYNU kynureninase (L-            | 9.95            | 3.31    | 0.00  |
| 204385_at  | KNYNU kynureninase (L-            | 4.62            | 2.21    | 0.00  |
| 220089_at  | L2HGDH L-2-hydroxyglutate          | 0.25            | -2.01   | 0.00  |
| 216076_at  | L3MBTL l (3)mbt-like (Drosophila)  | 3.63            | 1.86    | 0.00  |
| 210306_at  | L3MBTL l (3)mbt-like (Drosophila)  | 0.17            | -2.54   | 0.00  |
| 210089_s_at | LAMA4 laminin, alpha 4            | 0.29            | -1.77   | 0.00  |
| 209270_at  | LAMB3 laminin, beta 3             | 5.93            | 2.57    | 0.00  |
| 215516_at  | LAMB4 laminin, beta 4             | 0.06            | -4.19   | 0.00  |
| 207770_s_at | LAMC1 laminin, gamma              | 3.41            | 1.77    | 0.00  |
| 212193_s_at | LARP1 La ribonucleoprc            | 0.29            | -1.78   | 0.00  |
| 212446_s_at | LASS6 LAG1 homolog,              | 0.31            | -1.70   | 0.00  |
| 212442_s_at | LASS6 LAG1 homolog,              | 0.25            | -2.01   | 0.00  |
| 207734_at  | LAX1 lymphocyte trans            | 0.24            | -2.06   | 0.00  |
| 212531_at  | LCN2 lipocalin 2                  | 23.37           | 4.55    | 0.00  |
| 201030_x_at | LDHB lactate dehydrdrg            | 3.10            | 1.63    | 0.01  |
| 202068_s_at | LDLR low density lipop            | 4.34            | 2.12    | 0.00  |
| 202067_s_at | LDLR low density lipop            | 3.29            | 1.72    | 0.00  |
| 204454_at  | LDOC1 leucine zipper, d           | 0.23            | -2.11   | 0.00  |
| 201105_at  | LGALS1 lectin, galactosid         | 3.64            | 1.86    | 0.00  |
| 200923_at  | LGALS3BP lectin, galactosid       | 4.01            | 2.00    | 0.00  |
| 218326_s_at | LGR4 leucine-rich repe           | 0.25            | -1.99   | 0.00  |
| 214471_x_at | LHB luteinizing hormc           | 3.24            | 1.69    | 0.00  |
| 212658_at  | LHFPL2 lipoma HMGIC f            | 6.04            | 2.59    | 0.00  |
| 206140_at  | LHX2 LIM homeobox 2              | 4.35            | 2.12    | 0.02  |
| 205266_at  | LIIF leukemia inhibic            | 0.24            | -2.06   | 0.00  |
| 211336_x_at | LILRB1 leukocyte immur         | 3.71            | 1.89    | 0.00  |
| 212325_at  | LIMCH1 LIM and calponir         | 3.62            | 1.85    | 0.00  |
| 204356_at  | LIMK1 LIM domain kina            | 3.68            | 1.88    | 0.00  |
| Gene ID   | Description                        | Fold Change | p Value | q Value |
|----------|------------------------------------|-------------|---------|---------|
| 201847_at| LIPA                               | 4.98        | 0.00    | 0.00    |
| 201918_at| LIPG                               | 6.65        | 0.00    | 0.00    |
| 206123_at| LLGL1                              | 4.21        | 0.00    | 0.00    |
| 218574_s_at| LMCD1                          | 5.54        | 0.00    | 0.00    |
| 219136_s_at| LMF1                            | 0.25        | 0.00    | 0.00    |
| 46142_at| LMF1                               | 0.22        | 0.00    | 0.00    |
| 217548_at| LOC100129502                        | 0.30        | 0.00    | 0.00    |
| 214850_at| LOC100170939                        | 0.17        | 0.00    | 0.00    |
| 219136_s_at| LMF1                            | 0.25        | 0.00    | 0.00    |
| 217219_at| LOC26102                           | 3.83        | 0.00    | 0.00    |
| 217667_at| LOC72979                           | 0.27        | 0.00    | 0.00    |
| 214712_at| LOC730092                          | 0.28        | 0.00    | 0.00    |
| 215202_at| LOC91316                           | 0.32        | 0.00    | 0.00    |
| 215446_s_at| LOX                             | 5.71        | 0.00    | 0.00    |
| 202998_s_at| LOXL2                          | 3.78        | 0.00    | 0.00    |
| 204037_at| LPAR1                              | 0.28        | 0.00    | 0.00    |
| 201818_at| LPCAT1                             | 3.47        | 0.00    | 0.00    |
| 40472_s_at| LPCAT4                          | 0.27        | 0.00    | 0.00    |
| 215409_s_at| LPCAT4                          | 0.14        | 0.00    | 0.00    |
| 219145_at| LPHN1                              | 0.29        | 0.00    | 0.00    |
| 205867_s_at| LPHN3                          | 5.08        | 0.00    | 0.00    |
| 35974_at| LRMP                               | 0.33        | 0.00    | 0.00    |
| 204381_at| LRP3                               | 3.26        | 0.00    | 0.00    |
| 212850_s_at| LRP4                            | 0.13        | 0.00    | 0.00    |
| 34697_at| LRP6                               | 0.21        | 0.00    | 0.00    |
| 220220_at| LRRC37A4                           | 0.26        | 0.00    | 0.00    |
| 208140_s_at| LRRC48                         | 0.26        | 0.00    | 0.00    |
| 222231_s_at| LRRC59                         | 7.40        | 0.00    | 0.00    |
| 218097_s_at| LRRC61                         | 3.55        | 0.00    | 0.00    |
| 212976_at| LRRC8B                             | 0.28        | 0.00    | 0.00    |
| 215375_s_at| LRRFIP1                        | 0.29        | 0.00    | 0.00    |
| 216164_at| LRRN2                              | 3.38        | 0.00    | 0.00    |
| 212524_at| LSM4                               | 3.95        | 0.00    | 0.00    |
| 211018_at| LSS                                | 0.24        | 0.00    | 0.01    |
| 202729_s_at| LTBPI                         | 12.93       | 0.00    | 0.00    |
| 202729_s_at| LTBPI                         | 3.15        | 0.00    | 0.00    |
| 208835_at| LUCTL3                             | 0.21        | 0.00    | 0.00    |
| 201744_s_at| LUM                               | 3.66        | 0.01    | 0.01    |
| 205668_at| LY75                               | 0.11        | 0.00    | 0.00    |
| 213975_s_at| LYZ                              | 6.63        | 0.00    | 0.00    |
| 219188_s_at| MACROD1                        | 0.33        | 0.00    | 0.00    |
| AFFX-209348_s_at | MAF       | v-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian) | 0.25 | -1.99 | 0.00 | 0.00 |
|------------------|-----------|---------------------------------------------------------------|------|-------|------|------|
| AFFX-206144_at   | MAGI1     | membrane associated guanylate kinase, WW and PDZ domain containing 1 | 0.32 | -1.66 | 0.00 | 0.00 |
| AFFX-217282_at   | MAN1A2    | mannosidase, alpha                                             | 0.14 | -2.88 | 0.00 | 0.00 |
| AFFX-219999_at   | MAN2A2    | mannosidase, alpha                                             | 0.10 | -3.34 | 0.00 | 0.00 |
| AFFX-204389_at   | MAOA      | monoamine oxidase                                              | 0.23 | -2.14 | 0.00 | 0.00 |
| AFFX-214989_s_at | MAP2K3    | mitogen-activate                                              | 0.28 | -1.85 | 0.00 | 0.00 |
| AFFX-216765_at   | MAP2K5    | mitogen-activate                                              | 0.13 | -2.95 | 0.00 | 0.00 |
| AFFX-21206_x_at  | MAP2K7    | mitogen-activate                                              | 0.24 | -2.06 | 0.00 | 0.00 |
| AFFX-214786_at   | MAP3K1    | mitogen-activate                                              | 0.19 | -2.41 | 0.00 | 0.00 |
| AFFX-206362_x_at | MAP3K10   | mitogen-activate                                              | 3.08 | 1.62  | 0.00 | 0.00 |
| AFFX-206249_at   | MAP3K13   | mitogen-activate                                              | 0.33 | -1.59 | 0.00 | 0.00 |
| AFFX-205027_s_at | MAP3K8    | mitogen-activate                                              | 0.25 | -2.03 | 0.00 | 0.00 |
| AFFX-218311_at   | MAP4K3    | mitogen-activate                                              | 0.09 | -3.43 | 0.00 | 0.00 |
| AFFX-211081_s_at | MAP4K5    | mitogen-activate                                              | 0.06 | -4.19 | 0.00 | 0.00 |
| AFFX-211500_at   | MAPK11    | mitogen-activate                                              | 4.76 | 2.25  | 0.00 | 0.00 |
| AFFX-211561_x_at | MAPK14    | mitogen-activate                                              | 4.06 | 2.02  | 0.00 | 0.00 |
| AFFX-210570_x_at | MAPK9     | mitogen-activate                                              | 3.06 | 1.62  | 0.00 | 0.00 |
| AFFX-206401_s_at | MAPT      | microtubule-assoc.                                            | 0.28 | -1.83 | 0.00 | 0.00 |
| AFFX-214048_at   | MBD4      | methyl-CpG binc                                               | 0.23 | -2.10 | 0.00 | 0.00 |
| AFFX-218411_s_at | MBIP      | MAP3K12 bindin                                                | 0.25 | -2.01 | 0.00 | 0.00 |
| AFFX-201151_s_at | MBNL1     | muscleblind-like                                             | 0.29 | -1.77 | 0.00 | 0.00 |
| AFFX-211037_s_at | MBOAT7    | membrane boun                                                | 3.29 | 1.72  | 0.00 | 0.00 |
| AFFX-207115_x_at | MBTD1     | mbt domain cont                                              | 0.22 | -2.21 | 0.00 | 0.00 |
| AFFX-208568_at   | MC2R      | melanocortin 2                                              | 3.39 | 1.76  | 0.00 | 0.00 |
| AFFX-211340_s_at | MCAM      | melanoma cell a                                              | 16.54| 4.05  | 0.00 | 0.00 |
| AFFX-209087_x_at | MCAM      | melanoma cell a                                              | 7.52 | 2.91  | 0.00 | 0.00 |
| AFFX-209086_x_at | MCAM      | melanoma cell a                                              | 6.01 | 2.59  | 0.00 | 0.00 |
| AFFX-210869_s_at | MCAM      | melanoma cell a                                              | 5.34 | 2.42  | 0.00 | 0.00 |
| AFFX-220464_at   | MCF2L     | MCF.2 cell line d                                             | 0.22 | -2.16 | 0.00 | 0.00 |
| AFFX-212935_at   | MCF2L     | MCF.2 cell line d                                             | 0.17 | -2.55 | 0.00 | 0.00 |
| AFFX-35147_at    | MCF2L     | MCF.2 cell line d                                             | 0.15 | -2.77 | 0.00 | 0.00 |
| AFFX-209035_at   | MDK       | midkine (neurite)                                             | 3.37 | 1.75  | 0.00 | 0.00 |
| AFFX-213761_at   | MDM1      | Mdm1 nuclear pr                                              | 0.15 | -2.74 | 0.00 | 0.00 |
| AFFX-202616_s_at | MECP2     | methyl CpG binc                                              | 0.26 | -1.95 | 0.00 | 0.00 |
| AFFX-218664_at   | MECR      | mitochondrial tra                                             | 5.62 | 2.49  | 0.00 | 0.00 |
| AFFX-203497_at   | MED1      | mediator comple                                               | 0.23 | -2.15 | 0.00 | 0.00 |
| AFFX-212208_at   | MED13L    | mediator comple                                               | 0.33 | -1.59 | 0.00 | 0.00 |
| AFFX-212207_at   | MED13L    | mediator comple                                               | 0.23 | -2.12 | 0.00 | 0.00 |
| AFFX-216109_at   | MED13L    | mediator comple                                               | 0.12 | -3.06 | 0.00 | 0.00 |
| AFFX-202611_s_at | MED14     | mediator comple                                               | 0.25 | -1.98 | 0.00 | 0.00 |
| AFFX-221418_s_at | MED16     | mediator comple                                               | 3.70 | 1.89  | 0.00 | 0.00 |
| AFFX-221517_s_at | MED17     | mediator comple                                               | 0.33 | -1.59 | 0.00 | 0.00 |
| AFFX-51176_at    | MED27     | mediator comple                                               | 3.44 | 1.78  | 0.00 | 0.00 |
| AFFX-207078_at   | MED6      | mediator comple                                               | 0.08 | -3.69 | 0.00 | 0.00 |
| AFFX-208328_s_at | MEF2A     | myocyte enhanc                                               | 0.27 | -1.89 | 0.00 | 0.00 |
| AFFX-212831_at   | MEGF9     | multiple EGF-like                                             | 0.24 | -2.07 | 0.00 | 0.00 |
| AFFX-213899_at   | METAP2    | methionyl amino                                               | 0.33 | -1.61 | 0.00 | 0.00 |
| AFFX-220797_at   | METT10D   | methyltransferas                                             | 0.25 | -2.03 | 0.00 | 0.00 |
| Gene Symbol | Description | Log2 Fold Change | p-value (FDR) | p-value (adj) |
|-------------|-------------|-----------------|--------------|--------------|
| METTL3      | methyltransferase like 3 | 0.26 | -1.95 | 0.00 | 0.00 |
| METTL7A     | methyltransferase like 7A | 0.26 | -1.94 | 0.00 | 0.00 |
| METTL7A     | methyltransferase like 7A | 0.21 | -2.27 | 0.00 | 0.00 |
| MFAP2       | microfibril-ass | 6.55 | 2.71 | 0.00 | 0.00 |
| MFAP3L      | microfibril-ass | 0.23 | -2.15 | 0.00 | 0.00 |
| MFS6D       | major facilitator s | 0.19 | -2.38 | 0.00 | 0.00 |
| MGC12488    | hypothetical protein | 0.18 | -2.45 | 0.00 | 0.00 |
| MGP         | matrix Gla protein | 3.87 | 1.95 | 0.01 | 0.01 |
| MICAL2      | microtubule assc | 3.28 | 1.71 | 0.00 | 0.00 |
| MICAL2      | microtubule assc | 3.04 | 1.61 | 0.00 | 0.00 |
| MID1        | midline 1 (Opitz-BBB syndrome) | 6.06 | 2.60 | 0.00 | 0.00 |
| MIER2       | mesoderm induc | 4.67 | 2.22 | 0.00 | 0.00 |
| MINK1       | misshapen-like k | 4.35 | 2.12 | 0.00 | 0.00 |
| ML2         | myeloid/lymphoi | 4.68 | 2.23 | 0.00 | 0.00 |
| ML2         | myeloid/lymphoi | 3.11 | 1.64 | 0.00 | 0.00 |
| MLT11       | myeloid/lymphoi | 3.02 | 1.59 | 0.01 | 0.01 |
| MLT3        | myeloid/lymphoi | 0.29 | -1.81 | 0.00 | 0.00 |
| MLT4        | myeloid/lymphoi | 3.43 | 1.78 | 0.00 | 0.00 |
| MMD         | monocyte to max | 0.27 | -1.87 | 0.00 | 0.00 |
| MMP1        | matrix metallope | 16.61 | 4.05 | 0.01 | 0.02 |
| MMP10       | matrix metallope | 7.21 | 2.85 | 0.00 | 0.00 |
| MMP11       | matrix metallope | 5.57 | 2.48 | 0.00 | 0.00 |
| MMP14       | matrix metallope | 4.06 | 2.02 | 0.00 | 0.00 |
| MMP2        | matrix metallope | 5.85 | 2.55 | 0.00 | 0.00 |
| MMP3         | matrix metallope | 3.85 | 1.94 | 0.01 | 0.01 |
| MOCOS       | molybdenum cof | 3.22 | 1.69 | 0.00 | 0.00 |
| MORN1       | MORN repeat cc | 9.09 | 3.19 | 0.00 | 0.00 |
| PHOSPH8     | M-phase phosph | 0.27 | -1.90 | 0.00 | 0.00 |
| MPZL1       | myelin protein z | 8.32 | 3.06 | 0.00 | 0.00 |
| MPZL1       | myelin protein z | 5.33 | 2.41 | 0.00 | 0.00 |
| MPZL1       | myelin protein z | 4.65 | 2.22 | 0.00 | 0.00 |
| MPZL1       | myelin protein z | 3.21 | 1.68 | 0.00 | 0.00 |
| MPZL1       | myelin protein z | 3.79 | 1.92 | 0.00 | 0.00 |
| MR1         | major histocomp | 0.24 | -2.08 | 0.00 | 0.00 |
| MRPL42      | mitochondrial rib | 3.49 | 1.80 | 0.00 | 0.00 |
| MRPS11      | mitochondrial rib | 0.27 | -1.87 | 0.00 | 0.00 |
| MS4A6A      | membrane-span | 9.99 | 3.32 | 0.00 | 0.00 |
| MSH3        | mutS homolog 3 | 0.19 | -2.42 | 0.00 | 0.00 |
| MSL2        | male-specific letl | 0.23 | -2.14 | 0.00 | 0.00 |
| MSMB        | microseminoprot | 0.26 | -1.96 | 0.02 | 0.04 |
| MSRA        | methionine sulfo | 3.42 | 1.77 | 0.00 | 0.00 |
| MSRB2       | methionine sulfo | 3.24 | 1.70 | 0.00 | 0.00 |
| MT1X        | metallothionein 1 | 0.29 | -1.78 | 0.00 | 0.00 |
| MTAP        | methylthioadeno | 0.24 | -2.05 | 0.00 | 0.00 |
| MTF2        | metal response | 0.16 | -2.67 | 0.00 | 0.00 |
| MTHFD2L     | methylenetetrahy | 0.33 | -1.62 | 0.00 | 0.00 |
| MTM1        | myotubulatin 1 | 0.16 | -2.61 | 0.00 | 0.00 |
| MTRF1       | mitochondrial tra | 0.16 | -2.75 | 0.00 | 0.00 |
| Gene ID       | Description                                         | Log2 Fold Change | P-value | Adjusted P-value |
|--------------|-----------------------------------------------------|------------------|---------|------------------|
| 203199_s_at  | MTRR 5-methyltetrahyd                               | 0.28             | -1.82   | 0.00             |
| 36907_at     | MVK mevalonate kina                                 | 4.34             | 2.12    | 0.00             |
| 202086_at    | MX1 myxovirus (influenza)                           | 39.03            | 5.29    | 0.00             |
| 204994_at    | MX2 myxovirus (influenza)                           | 13.44            | 3.75    | 0.00             |
| 206877_at    | MXD1 MAX dimerization                              | 3.24             | 1.70    | 0.00             |
| 212509_s_at  | MXRA7 matrix-remodelling                            | 3.05             | 1.61    | 0.00             |
| 213422_s_at  | MXRA8 matrix-remodelling                            | 3.20             | 1.68    | 0.00             |
| 204796_at    | MYB v-myc myeloblas                                 | 0.17             | -2.58   | 0.00             |
| 213906_at    | MYBL1 v-myc myeloblas                               | 0.29             | -1.81   | 0.00             |
| 201710_at    | MYBL2 v-myc myeloblas                               | 3.68             | 1.88    | 0.00             |
| 208040_s_at  | MYBPC3 myosin binding z                             | 4.15             | 2.05    | 0.00             |
| 212372_at    | MYH10 myosin, heavy cl                              | 3.53             | 1.82    | 0.00             |
| 219946_x_at  | MYH14 myosin, heavy cl                              | 7.97             | 3.00    | 0.00             |
| 205940_at    | MYH3 myosin, heavy cl                               | 0.29             | -1.80   | 0.00             |
| 220319_s_at  | MYLIP myosin regulator                              | 0.23             | -2.12   | 0.00             |
| 202555_s_at  | MYLK myosin light chain                             | 6.87             | 2.78    | 0.00             |
| 212365_at    | MYO1B myosin IB                                     | 5.38             | 2.43    | 0.00             |
| 212364_at    | MYO1B myosin IB                                     | 3.13             | 1.65    | 0.00             |
| 204527_at    | MYOSA myosin VA (heavy)                              | 4.39             | 2.13    | 0.00             |
| 203215_s_at  | MYO6 myosin VI                                      | 0.29             | -1.79   | 0.00             |
| 206657_s_at  | MYOD1 myogenic differie                             | 3.59             | 1.84    | 0.00             |
| 219509_at    | MYOZ1 myozin 1                                      | 4.93             | 2.30    | 0.00             |
| 213375_s_at  | N4BP2L1 NEDD4 binding I                             | 0.16             | -2.63   | 0.00             |
| 202258_s_at  | N4BP2L2 NEDD4 binding I                             | 0.32             | -1.65   | 0.00             |
| 221899_at    | N4BP2L2 NEDD4 binding I                             | 0.25             | -1.98   | 0.00             |
| 214753_at    | N4BP2L2 NEDD4 binding I                             | 0.21             | -2.23   | 0.00             |
| 202259_s_at  | N4BP2L2 NEDD4 binding I                             | 0.19             | -2.39   | 0.00             |
| 204860_s_at  | NAIp NLR family, apopto                            | 0.20             | -2.34   | 0.00             |
| 220184_at    | NANO Nanog homeobo                                   | 0.27             | -1.90   | 0.00             |
| 219368_at    | NAP1L2 nucleosome ass                               | 0.09             | -3.44   | 0.00             |
| 204749_at    | NAP1L3 nucleosome ass                               | 0.28             | -1.84   | 0.00             |
| 219158_at    | NARG1 NMDA receptor I                               | 0.31             | -1.68   | 0.00             |
| 219379_at    | NARG1L NMDA receptor I                              | 0.21             | -2.26   | 0.00             |
| 218330_at    | NAV2 neuron navigator                               | 4.93             | 2.30    | 0.00             |
| 221207_s_at  | NBEA neurobeachin                                   | 0.32             | -1.66   | 0.00             |
| 211865_s_at  | NCAld neurocalcin delta                             | 3.27             | 1.71    | 0.00             |
| 209556_at    | NCDN neurochondrin                                  | 5.68             | 2.51    | 0.00             |
| 209557_s_at  | NCDN neurochondrin                                  | 5.15             | 2.36    | 0.00             |
| 203315_at    | NCK2 NCK adaptor prc                                | 3.20             | 1.68    | 0.00             |
| 216114_at    | NCKIPSD NCK interacting                             | 3.18             | 1.67    | 0.00             |
| 205731_s_at  | NCOA2 nuclear receptor                              | 0.23             | -2.13   | 0.00             |
| 209062_x_at  | NCOA3 nuclear receptor                              | 3.03             | 1.60    | 0.00             |
| 217045_x_at  | NCR2 natural cytotoxic                              | 4.30             | 2.11    | 0.00             |
| 217493_x_at  | NCR2 natural cytotoxic                              | 3.77             | 1.92    | 0.00             |
| 203245_s_at  | NCRNA00094 non-protein codi                         | 3.32             | 1.73    | 0.00             |
| 218610_at    | NDUF8 NADH dehydrog                                  | 4.12             | 2.04    | 0.00             |
| 214241_at    | NDUF8B NADH dehydrog                                | 0.25             | -1.98   | 0.00             |
| 214657_s_at  | NEAT1 nuclear paraspe                               | 0.25             | -1.99   | 0.00             |
| Gene Symbol | Description                                      | Log2 Fold Change | p-value | q-value |
|-------------|--------------------------------------------------|------------------|---------|---------|
| NEBL        | nebullette                                       | -1.67            | 0.01    | 0.01    |
| NEBL        | nebullette                                       | -1.79            | 0.02    | 0.04    |
| NEBL        | nebullette                                       | -2.12            | 0.00    | 0.00    |
| NEDD4       | neural precursor                                 | -1.68            | 0.00    | 0.00    |
| NEDD4L      | neural precursor                                 | 1.86             | 0.00    | 0.00    |
| NEK3        | NIMA (never in r)                                | -2.37            | 0.00    | 0.00    |
| NEK4        | NIMA (never in r)                                | -1.78            | 0.00    | 0.00    |
| NELL2       | NEL-like 2 (chick)                               | 3.61             | 0.00    | 0.00    |
| NENF        | neuron derived r                                 | 1.66             | 0.00    | 0.00    |
| NES         | nestin                                           | 2.67             | 0.00    | 0.00    |
| NETO2       | neuropilin (NRP)                                 | 2.68             | 0.00    | 0.00    |
| NEURL       | neuralized homo                                  | 2.39             | 0.00    | 0.00    |
| NFASC       | neurofascin hom                                  | -2.89            | 0.00    | 0.00    |
| NFATC1      | nuclear factor of                               | 1.59             | 0.00    | 0.00    |
| NFATC3      | nuclear factor of                               | -2.45            | 0.00    | 0.00    |
| NFIB        | nuclear factor l/E                               | -1.60            | 0.00    | 0.00    |
| NFIB        | nuclear factor l/E                               | -1.91            | 0.00    | 0.00    |
| NFIB        | nuclear factor l/E                               | -2.54            | 0.00    | 0.00    |
| NFIB        | nuclear factor l/E                               | -3.62            | 0.00    | 0.00    |
| NFIB        | nuclear factor l/E                               | 1.85             | 0.00    | 0.00    |
| NFIB        | nuclear factor l/E                               | -2.72            | 0.00    | 0.00    |
| NFIB        | nuclear factor l/E                               | 2.02             | 0.00    | 0.00    |
| NFIB        | nuclear transcript                               | 2.05             | 0.00    | 0.00    |
| NFIB        | nuclear transcript                               | 2.67             | 0.00    | 0.00    |
| NGDN        | neurogulin, EIF                                  | -2.26            | 0.00    | 0.00    |
| NHLH2       | nescient helix loc                               | -2.70            | 0.00    | 0.00    |
| NFX1        | nuclear transcript                               | 2.02             | 0.00    | 0.00    |
| NFXA        | nuclear transcript                               | -2.96            | 0.00    | 0.00    |
| NID1        | nidogen 1                                        | 2.57             | 0.00    | 0.00    |
| NINJ2       | ninjurin 2                                        | 1.82             | 0.00    | 0.00    |
| NIPA2       | non imprinted in                                 | 1.90             | 0.00    | 0.00    |
| NIPBL       | Nipped-B homol                                   | -1.78            | 0.00    | 0.00    |
| NIPBL       | Nipped-B homol                                   | -2.12            | 0.00    | 0.00    |
| NKRF        | NFKB repressing                                 | -1.88            | 0.00    | 0.00    |
| NKTR        | natural killer-tum                               | -1.96            | 0.00    | 0.00    |
| NKX2-5      | NK2 transcriptor                                 | 2.37             | 0.00    | 0.00    |
| NLGN4X      | neuroligin 4, X-lii                              | 2.55             | 0.00    | 0.00    |
| NM2B        | neuromedin B                                     | 2.28             | 0.00    | 0.00    |
| NMT2        | N-myristoyltransi                                | -1.84            | 0.00    | 0.00    |
| NMT2        | N-myristoyltransi                                | -2.21            | 0.00    | 0.00    |
| NMU         | neuromedin U                                     | -2.23            | 0.00    | 0.00    |
| NNTMT       | nicotinamide N-r                                 | 2.46             | 0.00    | 0.00    |
| NOTCH2NL    | Notch homolog 2                                  | -2.03            | 0.00    | 0.00    |
| NOV         | nephroblastoma                                   | -1.61            | 0.00    | 0.00    |
| NOV         | nephroblastoma                                   | -2.52            | 0.00    | 0.00    |
| NP          | nucleoside phosphatase                          | 2.39             | 0.00    | 0.00    |
| NPAT        | nuclear protein, i                               | -1.63            | 0.00    | 0.00    |
| NPL         | N-acetylneuramni                                 | 1.62             | 0.00    | 0.01    |
| NPR2        | natriuretic peptide                             | -1.63            | 0.00    | 0.00    |
| NPY1R       | neuropeptide Y r                                 | -3.61            | 0.00    | 0.00    |
| Gene Symbol | Description | Ratio | Log2 Fold Change | P-value | FDR |
|-------------|-------------|-------|-----------------|---------|-----|
| NQO1        | NAD(P)H dehydrogenase, quinone 1 | 5.46  | 2.45            | 0.00    | 0.00 |
| NQO1        | NAD(P)H dehydrogenase, quinone 1 | 3.97  | 1.99            | 0.00    | 0.00 |
| NQO1        | NAD(P)H dehydrogenase, quinone 1 | 3.93  | 1.97            | 0.01    | 0.02 |
| NR2F2       | nuclear receptor | 0.13  | -2.96           | 0.00    | 0.00 |
| NR3C2       | nuclear receptor | 0.23  | -2.10           | 0.00    | 0.00 |
| NR4A1       | nuclear receptor | 3.79  | 1.92            | 0.00    | 0.00 |
| NR4A1       | nuclear receptor | 3.70  | 1.89            | 0.00    | 0.00 |
| NR4A3       | nuclear receptor | 4.68  | 2.23            | 0.00    | 0.00 |
| NRIP3       | nuclear receptor | 3.08  | 1.63            | 0.00    | 0.00 |
| NRP1        | neuropilin 1 | 3.51  | 1.81            | 0.00    | 0.00 |
| NRP2        | neuropilin 2 | 3.71  | 1.89            | 0.00    | 0.00 |
| NRN1        | neurturin    | 0.28  | -1.64           | 0.00    | 0.00 |
| NSDHL       | NAD(P) dependx | 4.85  | 2.28            | 0.00    | 0.00 |
| NSMCE4A     | non-SMC elemei | 0.27  | -1.90           | 0.00    | 0.00 |
| NSUN6       | NOL1/NOP2/Sur | 0.16  | -2.68           | 0.00    | 0.00 |
| NTRK2       | neurotrophic tyrc | 0.28  | -1.82           | 0.01    | 0.02 |
| NUBP1       | nucleotide bindir | 3.44  | 1.78            | 0.00    | 0.00 |
| NUDT13      | nudx (nucleosidi) | 0.10  | -3.36           | 0.00    | 0.00 |
| NUDT21      | nudx (nucleosidi) | 0.23  | -2.13           | 0.00    | 0.00 |
| NUDT6       | nudx (nucleosidi) | 0.22  | -2.16           | 0.00    | 0.00 |
| NUFIP1      | nuclear fragile X | 0.23  | -2.11           | 0.00    | 0.00 |
| NUMA1       | nuclear mitotic a | 0.27  | -1.91           | 0.01    | 0.01 |
| NUMB        | numb homolog l | 0.25  | -2.03           | 0.00    | 0.00 |
| NUP160      | nucleoprin 160l | 0.27  | -1.89           | 0.00    | 0.00 |
| NUP50       | nucleoprin 50kf | 0.23  | -2.13           | 0.00    | 0.00 |
| NUP62CL     | nucleoprin 62kf | 0.30  | -1.74           | 0.00    | 0.00 |
| NUP1R1      | nuclear protein, l | 0.28  | -1.86           | 0.00    | 0.00 |
| OAS1        | 2',5'-oligoadenyl | 6.79  | 2.76            | 0.00    | 0.00 |
| OAS1        | 2',5'-oligoadenyl | 4.97  | 2.31            | 0.00    | 0.00 |
| OAS2        | 2',3'-oligoadenyl | 3.79  | 1.92            | 0.00    | 0.00 |
| OASL        | 2',3'-oligoadenyl | 8.43  | 3.08            | 0.00    | 0.00 |
| OASL        | 2',3'-oligoadenyl | 5.93  | 2.57            | 0.00    | 0.00 |
| OA2         | ornithine decarbi | 4.70  | 2.23            | 0.00    | 0.00 |
| OBFC1       | oligonucleotide/c | 4.32  | 2.11            | 0.00    | 0.00 |
| OBP2A       | odorant binding i | 3.93  | 1.98            | 0.00    | 0.00 |
| ODC1        | ornithine decarbi | 5.27  | 2.40            | 0.00    | 0.00 |
| OGFOD2      | 2-oxoglutarate a | 5.05  | 2.34            | 0.00    | 0.00 |
| OGFOD2      | 2-oxoglutarate a | 0.33  | -1.59           | 0.00    | 0.00 |
| ORC2L       | origin recognitori | 0.29  | -1.78           | 0.00    | 0.00 |
| ORC5L       | origin recognitori | 0.29  | -1.80           | 0.00    | 0.00 |
| OSBPL2      | oxysterol bindiñ | 0.33  | -1.59           | 0.00    | 0.00 |
| OSBPL8      | oxysterol bindiñ | 0.31  | -1.72           | 0.00    | 0.00 |
| OSR2        | odd-skipped rela | 6.60  | 2.72            | 0.00    | 0.00 |
| OTUB1       | OTU domain, ub | 3.79  | 1.92            | 0.00    | 0.00 |
| OVOl1       | ovo-like 1/Dros | 3.33  | 1.73            | 0.00    | 0.00 |
| OXCT1       | 3-oxoacid CoA tr | 0.26  | -1.92           | 0.00    | 0.00 |
| OXR1        | oxidation resist | 0.25  | -1.98           | 0.00    | 0.00 |
| Gene ID   | Gene Symbol | Description                                      | Fold Change | p-Value 1 | q-Value 1 | Fold Change | p-Value 2 | q-Value 2 |
|----------|-------------|--------------------------------------------------|-------------|-----------|-----------|-------------|-----------|-----------|
| 207091_at| P2RX7       | purinergic receptor P2X, ligand-gated ion channel 7 | 0.33        | -1.62     | 0.00      | 0.00        |           |           |
| 206637_at| P2RY14      | purinergic receptor P2Y, G-protein coupled, 14    | 0.33        | -1.62     | 0.00      | 0.00        |           |           |
| 214794_s_at| PAIP1      | poly(A) binding ç                              | 0.32        | -1.64     | 0.00      | 0.00        |           |           |
| 221688_at| PAIP2B      | poly(A) binding ç                              | 0.21        | -2.24     | 0.00      | 0.00        |           |           |
| 208876_s_at| PA2G4      | proliferation-associated 2G4, 38kDa             | 0.13        | -2.90     | 0.00      | 0.00        |           |           |
| 200906_s_at| PAIP1      | poly(A) binding ç                              | 0.32        | -1.64     | 0.00      | 0.00        |           |           |
| 200907_s_at| PAIP2B      | poly(A) binding ç                              | 0.21        | -2.24     | 0.00      | 0.00        |           |           |
| 214794_s_at| PA2G4      | proliferation-associated 2G4, 38kDa             | 0.13        | -2.90     | 0.00      | 0.00        |           |           |
| 208876_s_at| PA2G4      | proliferation-associated 2G4, 38kDa             | 0.13        | -2.90     | 0.00      | 0.00        |           |           |
| 200906_s_at| PAIP1      | poly(A) binding ç                              | 0.32        | -1.64     | 0.00      | 0.00        |           |           |
| 200907_s_at| PAIP2B      | poly(A) binding ç                              | 0.21        | -2.24     | 0.00      | 0.00        |           |           |
| 214794_s_at| PA2G4      | proliferation-associated 2G4, 38kDa             | 0.13        | -2.90     | 0.00      | 0.00        |           |           |
| 208876_s_at| PA2G4      | proliferation-associated 2G4, 38kDa             | 0.13        | -2.90     | 0.00      | 0.00        |           |           |
| 200906_s_at| PAIP1      | poly(A) binding ç                              | 0.32        | -1.64     | 0.00      | 0.00        |           |           |
| 200907_s_at| PAIP2B      | poly(A) binding ç                              | 0.21        | -2.24     | 0.00      | 0.00        |           |           |
| 214794_s_at| PA2G4      | proliferation-associated 2G4, 38kDa             | 0.13        | -2.90     | 0.00      | 0.00        |           |           |
| 208876_s_at| PA2G4      | proliferation-associated 2G4, 38kDa             | 0.13        | -2.90     | 0.00      | 0.00        |           |           |
| 200906_s_at| PAIP1      | poly(A) binding ç                              | 0.32        | -1.64     | 0.00      | 0.00        |           |           |
| 200907_s_at| PAIP2B      | poly(A) binding ç                              | 0.21        | -2.24     | 0.00      | 0.00        |           |           |
| 214794_s_at| PA2G4      | proliferation-associated 2G4, 38kDa             | 0.13        | -2.90     | 0.00      | 0.00        |           |           |
| 208876_s_at| PA2G4      | proliferation-associated 2G4, 38kDa             | 0.13        | -2.90     | 0.00      | 0.00        |           |           |
| 200906_s_at| PAIP1      | poly(A) binding ç                              | 0.32        | -1.64     | 0.00      | 0.00        |           |           |
| 200907_s_at| PAIP2B      | poly(A) binding ç                              | 0.21        | -2.24     | 0.00      | 0.00        |           |           |
| 214794_s_at| PA2G4      | proliferation-associated 2G4, 38kDa             | 0.13        | -2.90     | 0.00      | 0.00        |           |           |
| 208876_s_at| PA2G4      | proliferation-associated 2G4, 38kDa             | 0.13        | -2.90     | 0.00      | 0.00        |           |           |
| Gene Symbol | Description                      | Fold Change | P-value | Log2 Fold Change | P-value |
|-------------|----------------------------------|-------------|---------|------------------|---------|
| PDK3        | pyruvate dehydrogenase kinase    | 3.18        | 0.00    | 1.67             | 0.00    |
| PDLIM4      | PDZ and LIM domain              | 4.66        | 0.00    | 2.22             | 0.00    |
| PDLIM5      | PDZ and LIM domain              | 0.30        | 0.00    | -1.76            | 0.00    |
| PDLIM5      | PDZ and LIM domain              | 0.18        | 0.00    | -2.52            | 0.00    |
| PDK1        | 3-phosphoinositidase            | 3.86        | 0.00    | 1.95             | 0.00    |
| PDS5B       | PDS5, regulator of cohesion     | 0.29        | 0.00    | -1.80            | 0.00    |
| PDLIM4      | PDZ and LIM domain              | 0.25        | 0.00    | -2.01            | 0.00    |
| PDXC2       | pyridoxal-dependent             | 0.27        | 0.00    | -1.87            | 0.00    |
| PDXK        | pyridoxal (pyrido              | 3.18        | 0.00    | 1.67             | 0.00    |
| PDZD2       | PDZ domain con                  | 0.21        | 0.00    | -2.28            | 0.00    |
| PDZK1P1     | PDZ1 interacting               | 4.12        | 0.00    | 2.04             | 0.00    |
| PECAM1      | platelet/endothelial            | 3.76        | 0.00    | 1.91             | 0.00    |
| PEG3        | paternally expressed            | 0.13        | 0.00    | -2.94            | 0.00    |
| PEL12       | pellino homolog                | 0.22        | 0.00    | -2.16            | 0.00    |
| PER2        | period homolog                  | 0.31        | 0.00    | -1.69            | 0.00    |
| PET112L     | PET112-yeast                   | 3.45        | 0.00    | 1.79             | 0.00    |
| PEX1        | peroxisomal bio                  | 0.26        | 0.00    | -1.95            | 0.00    |
| PEX1        | peroxisomal bio                  | 0.09        | 0.00    | -3.47            | 0.00    |
| PEX19       | peroxisomal bio                  | 7.57        | 0.00    | 2.92             | 0.00    |
| PEX3        | peroxisomal bio                  | 0.10        | 0.00    | -3.33            | 0.00    |
| PF4         | platelet factor 4               | 3.39        | 0.00    | 1.76             | 0.00    |
| PFKFB2      | 6-phosphofructo                   | 3.53        | 0.00    | 1.82             | 0.00    |
| PFN2        | profilin 2                       | 4.11        | 0.00    | 2.04             | 0.00    |
| PGAP1       | post-GPI attachr               | 0.11        | 0.00    | -3.15            | 0.00    |
| PGAP1       | post-GPI attachr               | 0.08        | 0.00    | -3.67            | 0.00    |
| PGBD5       | piggyBac transsp              | 12.81       | 0.00    | 3.68             | 0.00    |
| PGD         | phosphogluconae                 | 5.04        | 0.00    | 2.33             | 0.00    |
| PGF         | placental growth               | 3.76        | 0.00    | 1.91             | 0.00    |
| PGP         | phosphoglycolat                   | 3.76        | 0.00    | 1.91             | 0.00    |
| PHACTR2     | phosphatase anx               | 3.43        | 0.00    | 1.78             | 0.00    |
| PHC1        | polyhomeotic ho                 | 3.11        | 0.00    | 1.64             | 0.00    |
| PHF3        | PHD finger prote                | 0.15        | 0.00    | -2.79            | 0.00    |
| PHF3        | PHD finger prote                | 0.14        | 0.00    | -2.89            | 0.00    |
| PHKA1       | phosphorylase k                 | 4.02        | 0.00    | 2.01             | 0.00    |
| PHLD1A      | pleckstrin homoi                | 4.05        | 0.00    | 2.02             | 0.00    |
| PHLD1A      | pleckstrin homoi                | 3.02        | 0.02    | 1.59             | 0.04    |
| PHLD1B      | pleckstrin homoi                | 5.39        | 0.00    | 2.43             | 0.00    |
| P13         | peptidase inhibi                 | 112.18      | 0.00    | 6.81             | 0.00    |
| P13         | peptidase inhibi                 | 100.96      | 0.00    | 6.66             | 0.00    |
| PIK2A       | phosphohydminos                | 3.36        | 0.00    | 1.75             | 0.00    |
| PIAS2       | protein inhibitor                | 3.79        | 0.00    | 1.92             | 0.00    |
| PIAS2       | protein inhibitor                | 0.12        | 0.00    | -3.12            | 0.00    |
| PIBF1       | progesterone im                  | 0.15        | 0.00    | -2.73            | 0.00    |
| PIGL        | phosphohydminos                | 0.31        | 0.00    | -1.71            | 0.00    |
| PIK3C2G     | phosphoinositide               | 0.28        | 0.00    | -1.86            | 0.00    |
| PIK3CA      | phosphoinositide               | 0.17        | 0.00    | -2.56            | 0.00    |
| PIK3CB      | phosphoinositide               | 0.12        | 0.00    | -3.02            | 0.00    |
| PIK3IP1     | phosphoinositide               | 3.77        | 0.00    | 1.92             | 0.00    |
| Entrez Gene ID | Symbol   | Description                        | Fold Change | log2 Fold Change | p-Value | q-Value |
|---------------|----------|------------------------------------|-------------|------------------|---------|---------|
| 213111        | PIKFYVE  | phosphoinositide kinase, FYVE finger containing | 0.30        | -1.73            | 0.00    | 0.00    |
| 222218        | PILRA    | paired immunogl                      | 0.23        | -2.10            | 0.00    | 0.00    |
| 220954        | PILRB    | paired immunogl                      | 0.33        | -1.59            | 0.00    | 0.00    |
| 221500        | PION     | pigeon homolog                       | 0.24        | -2.03            | 0.00    | 0.00    |
| 213142        | PION     | pigeon homolog                       | 0.22        | -2.19            | 0.00    | 0.00    |
| 205632        | PIPI5K1B | phosphatidylinos                      | 0.23        | -2.14            | 0.00    | 0.00    |
| 219155        | PITPNC1  | phosphatidylinos                      | 4.90        | 2.29             | 0.00    | 0.00    |
| 208502        | PITX1    | paired-like home                     | 11.90       | 3.57             | 0.00    | 0.00    |
| 208502        | PITX1    | paired-like home                     | 7.35        | 2.88             | 0.00    | 0.00    |
| 216667        | PJA1     | praja ring finger                    | 4.01        | 2.00             | 0.00    | 0.00    |
| 203688        | PKD2     | polycystic kidney                    | 0.32        | -1.63            | 0.00    | 0.00    |
| 221061        | PKD2L1   | polycystic kidney                    | 5.89        | 2.56             | 0.00    | 0.00    |
| 212629        | PKN2     | protein kinase N                     | 0.31        | -1.70            | 0.00    | 0.00    |
| 205724        | PKP1     | plakophilin 1 (ecr)                  | 5.42        | 2.44             | 0.00    | 0.00    |
| 214874        | PKP4     | plakophilin 4                         | 0.29        | -1.79            | 0.00    | 0.00    |
| 203168        | PLAG1    | pleiomorphic adr                     | 0.10        | -3.33            | 0.00    | 0.00    |
| 207943        | PLAG1    | pleiomorphic adr                     | 0.08        | -3.67            | 0.00    | 0.00    |
| 207002        | PLAG1    | pleiomorphic adr                     | 0.07        | -3.87            | 0.00    | 0.00    |
| 211924        | PLAU     | plasminogen act                      | 3.75        | 1.91             | 0.00    | 0.00    |
| 210454        | PLAU     | plasminogen act                      | 3.02        | 1.60             | 0.00    | 0.00    |
| 219011        | PLEKHA4  | pleckstrin homol                     | 5.84        | 2.55             | 0.00    | 0.00    |
| 219566        | PLEKHF1  | pleckstrin homol                     | 7.95        | 2.99             | 0.00    | 0.00    |
| 204436        | PLEKHO2  | pleckstrin homol                     | 3.52        | 1.82             | 0.00    | 0.00    |
| 204886        | PLK4     | polo-like kinase                    | 0.23        | -2.13            | 0.00    | 0.00    |
| 204519        | PLLP     | plasma membrane                     | 0.16        | -2.61            | 0.00    | 0.00    |
| 205190        | PLAT1    | plastin 1 (I isoform)                | 0.22        | -2.21            | 0.00    | 0.00    |
| 202446        | PLSCR1   | phospholipid scr                    | 3.05        | 1.61             | 0.00    | 0.00    |
| 56197         | PLSCR3   | phospholipid scr                    | 5.37        | 2.43             | 0.00    | 0.00    |
| 218828        | PLSCR3   | phospholipid scr                    | 3.03        | 1.60             | 0.00    | 0.00    |
| 210139        | PMP22    | peripheral myel                   | 0.26        | -1.96            | 0.00    | 0.00    |
| 179           | PMS2L11  | postmeiotic segr                    | 12.27       | 3.62             | 0.00    | 0.00    |
| 212036        | PNN      | pinin, desmoscor                   | 0.18        | -2.47            | 0.00    | 0.00    |
| 39854         | PNPLA2   | patatin-like phos                  | 7.57        | 2.92             | 0.00    | 0.00    |
| 220675        | PNPLA3   | patatin-like phos                  | 0.21        | -2.25            | 0.00    | 0.00    |
| 219756        | PO1F1    | premature ovaris                   | 0.11        | -3.18            | 0.00    | 0.00    |
| 215281        | POGZ     | pogo transposat                    | 0.29        | -1.80            | 0.00    | 0.00    |
| 214226        | POL3S    | polymerase 3                       | 3.16        | 1.66             | 0.00    | 0.00    |
| 202306        | POLR2G   | polymerase (RNA)                 | 3.64        | 1.87             | 0.00    | 0.00    |
| 60815         | POLR2J4  | polymerase (RNA)                 | 0.11        | -3.22            | 0.00    | 0.00    |
| 218866        | POLR3X   | polymerase (RNA)                 | 3.13        | 1.65             | 0.00    | 0.00    |
| 220632        | POMT2    | protein-O-mannic                 | 3.35        | 1.74             | 0.00    | 0.00    |
| 214981        | POSTN    | peristin, osteob                | 0.14        | -2.82            | 0.00    | 0.00    |
| 210809        | POSTN    | peristin, osteob                | 0.10        | -3.34            | 0.00    | 0.00    |
| 211660        | POU2F2   | POU class 2 hor                | 3.08        | 1.62             | 0.00    | 0.00    |
| 215355        | POU2F3   | POU class 2 hor                | 0.09        | -3.50            | 0.00    | 0.00    |
| 207019        | POU2F3   | POU class 2 hor                | 0.08        | -3.66            | 0.00    | 0.00    |
| 208345        | POU3F1   | POU class 3 hor                | 0.32        | -1.63            | 0.00    | 0.00    |
| 216332        | POU6F1   | POU class 6 hor                | 3.29        | 1.72             | 0.00    | 0.00    |
| Gene ID   | Description                                      | Value1 | Value2 | Value3 | Value4 |
|-----------|--------------------------------------------------|--------|--------|--------|--------|
| 210771_at | PPARA peroxisome proliferator activated receptor | 0.33   | -1.59  | 0.00   | 0.00   |
| 219195_at | PPARC peroxisome proliferator activated receptor | 0.15   | -2.76  | 0.00   | 0.00   |
| 209433_s_at | PPAT phosphoribosyl pyrophosphate synthetase | 0.25   | -2.02  | 0.00   | 0.00   |
| 214374_s_at | PIFIP1 PTPRF interacting protein, binding protein | 1.4     | -2.60  | 0.00   | 0.00   |
| 217602_at | PPIA peptidylprolyl isomerase | 0.06   | -4.09  | 0.00   | 0.00   |
| 204517_at | PPIC peptidylprolyl isomerase | 3.16   | 1.66   | 0.00   | 0.00   |
| 201490_s_at | PPAT phosphoribosyl pyrophosphate synthetase | 0.31   | -1.70  | 0.00   | 0.00   |
| 217602_at | PPAT phosphoribosyl pyrophosphate synthetase | 0.32   | -1.63  | 0.00   | 0.00   |
| 209433_s_at | PPAT phosphoribosyl pyrophosphate synthetase | 0.32   | -1.64  | 0.00   | 0.00   |
| 209195_at | PPARGC1A peroxisome proliferator activated receptor gamma coactivator 1 alpha | 0.15   | -2.76  | 0.00   | 0.00   |
| 214374_s_at | PIFIP1 PTPRF interacting protein, binding protein | 0.14   | -2.60  | 0.00   | 0.00   |
| 217602_at | PPIA peptidylprolyl isomerase | 0.06   | -4.09  | 0.00   | 0.00   |
| 204517_at | PPIC peptidylprolyl isomerase | 3.16   | 1.66   | 0.00   | 0.00   |
| 201490_s_at | PPAT phosphoribosyl pyrophosphate synthetase | 0.31   | -1.70  | 0.00   | 0.00   |
| 217602_at | PPIA peptidylprolyl isomerase | 0.32   | -1.63  | 0.00   | 0.00   |
| 209433_s_at | PPAT phosphoribosyl pyrophosphate synthetase | 0.32   | -1.64  | 0.00   | 0.00   |
| 202165_at | PP1R1A protein phosphatase 1, regulatory (inhibitor) subunit 1A | 0.33   | -1.60  | 0.00   | 0.00   |
| 202484_at | PP1R3C protein phosphatase 1, regulatory (inhibitor) subunit 3C | 0.24   | -2.04  | 0.00   | 0.00   |
| 209632_at | PP2R3A protein phosphatase 2 (formerly 2A), regulatory subunit B'', alpha | 0.06   | -4.09  | 0.00   | 0.00   |
| 217602_at | PPIA peptidylprolyl isomerase | 0.06   | -4.09  | 0.00   | 0.00   |
| 201490_s_at | PPAT phosphoribosyl pyrophosphate synthetase | 0.31   | -1.70  | 0.00   | 0.00   |
| 217602_at | PPIA peptidylprolyl isomerase | 0.32   | -1.63  | 0.00   | 0.00   |
| 209433_s_at | PPAT phosphoribosyl pyrophosphate synthetase | 0.32   | -1.64  | 0.00   | 0.00   |
| 202165_at | PP1R1A protein phosphatase 1, regulatory (inhibitor) subunit 1A | 0.33   | -1.60  | 0.00   | 0.00   |
| 202484_at | PP1R3C protein phosphatase 1, regulatory (inhibitor) subunit 3C | 0.24   | -2.04  | 0.00   | 0.00   |

**Note:** The values represent log2 fold changes and significance levels.
| Gene Symbol | Description                             | Log2 Ratio | Fold Change | Adjusted P-Value | Benjamini-Hochberg P-Value |
|------------|-----------------------------------------|------------|-------------|-----------------|-------------------------|
| PTCD2      | Pentatricopeptide domain 2              | 0.19       | -2.40       | 0.00            | 0.00                    |
| PTCRA      | Pre-T cell antigen                     | 3.35       | 1.75        | 0.00            | 0.00                    |
| PTER       | Phosphotriesterase                     | 0.11       | -3.15       | 0.00            | 0.00                    |
| PGDS       | Prostaglandin D3                       | 3.63       | 1.86        | 0.00            | 0.00                    |
| PTGER1     | Prostaglandin E1                       | 7.50       | 2.91        | 0.00            | 0.00                    |
| PTGER1     | Prostaglandin E1                       | 4.27       | 2.09        | 0.00            | 0.00                    |
| PTGER3     | Prostaglandin E3                       | 0.28       | -1.82       | 0.00            | 0.00                    |
| PTGER3     | Prostaglandin E3                       | 0.27       | -1.88       | 0.00            | 0.00                    |
| PTGER3     | Prostaglandin E3                       | 0.26       | -1.93       | 0.00            | 0.00                    |
| PTGER3     | Prostaglandin E3                       | 0.19       | -2.38       | 0.00            | 0.00                    |
| PTGER3     | Prostaglandin E3                       | 0.15       | -2.71       | 0.00            | 0.00                    |
| PTGER3     | Prostaglandin E3                       | 0.18       | -2.50       | 0.00            | 0.00                    |
| PTGER3     | Prostaglandin E3                       | 0.14       | -2.74       | 0.00            | 0.00                    |
| PTGER3     | Prostaglandin E3                       | 0.21       | -2.29       | 0.00            | 0.00                    |
| PTK6       | PTK6 protein tyrosine kinase            | 0.29       | -1.78       | 0.00            | 0.00                    |
| PTMA       | Prothymosin, alpha                     | 0.30       | -1.72       | 0.00            | 0.00                    |
| PTPN13     | Protein tyrosine 1                     | 0.17       | -2.57       | 0.00            | 0.00                    |
| PTPN3      | Protein tyrosine 1                     | 0.31       | -1.68       | 0.00            | 0.00                    |
| PTPN6      | Protein tyrosine 1                     | 0.31       | -1.70       | 0.00            | 0.00                    |
| PTPRCA     | Protein tyrosine 1                     | 3.07       | 1.62        | 0.00            | 0.00                    |
| PTPROF     | Protein tyrosine 1                     | 0.24       | -2.05       | 0.00            | 0.00                    |
| PTPRN2     | Protein tyrosine 1                     | 3.84       | 1.94        | 0.00            | 0.00                    |
| PTPRU      | Protein tyrosine 1                     | 3.85       | 1.94        | 0.00            | 0.00                    |
| PXDN       | Peroxidase homolog                     | 9.17       | 3.20        | 0.00            | 0.00                    |
| PXDN       | Peroxidase homolog                     | 7.02       | 2.81        | 0.00            | 0.00                    |
| PYCRL      | Pyrroline-5-carboxylate reductase       | 3.94       | 1.98        | 0.00            | 0.00                    |
| QDPR       | Quinoid dihydrodrop                     | 3.35       | 1.75        | 0.00            | 0.00                    |
| QKI        | Quaking homolog                        | 0.21       | -2.29       | 0.00            | 0.00                    |
| QSK        | Serine/threonine phosphatase           | 3.27       | 1.71        | 0.00            | 0.00                    |
| QSOX1      | Quiescin Q6 sulfhydrol                 | 4.46       | 2.16        | 0.00            | 0.00                    |
| RAB11FIP3  | RAB11 family int                      | 0.15       | -2.74       | 0.00            | 0.00                    |
| RAB14      | RAB14, member                          | 0.31       | -1.68       | 0.00            | 0.00                    |
| RAB14      | RAB14, member                          | 0.21       | -2.26       | 0.00            | 0.00                    |
| RAB20      | RAB20, member                          | 4.37       | 2.13        | 0.00            | 0.00                    |
| RAB2A      | RAB2A, member                          | 0.25       | -2.02       | 0.00            | 0.00                    |
| RAB31      | RAB31, member                          | 5.48       | 2.45        | 0.00            | 0.00                    |
| RAB31      | RAB31, member                          | 3.09       | 1.63        | 0.00            | 0.00                    |
| RAB32      | RAB32, member                          | 4.54       | 2.18        | 0.00            | 0.00                    |
| RAB33B     | RAB33B, membri                         | 0.16       | -2.66       | 0.00            | 0.00                    |
| RAB40B     | RAB40B, membri                         | 3.36       | 1.75        | 0.00            | 0.00                    |
| RAB40C     | RAB40C, membri                         | 5.36       | 2.43        | 0.00            | 0.00                    |
| RAC2       | Ras-related C3 br                      | 4.17       | 2.06        | 0.00            | 0.00                    |
| RAD52      | RAD52 homolog                          | 0.25       | -2.00       | 0.00            | 0.00                    |
| RA14       | Retinoic acid induc                     | 0.20       | -2.36       | 0.00            | 0.00                    |
| RALGDS     | Ral guanine nucleol                    | 3.37       | 1.75        | 0.00            | 0.00                    |
| RALGDS     | Ral guanine nucleol                    | 0.19       | -2.36       | 0.00            | 0.00                    |
| RALGPS1    | Ral GEF with Phe                       | 0.22       | -2.22       | 0.00            | 0.00                    |
| Gene ID   | Description                                                   | Fold Change | p-value | q-value |
|----------|---------------------------------------------------------------|-------------|---------|---------|
| 220338_at | RALGPS2 Ral GEF with PH domain and SH3 binding motif 2       | 0.23        | -2.15   | 0.00    |
| 202639_s_at | RANBP3 RAN binding pro                                         | 3.63        | 1.86    | 0.00    |
| 212125_at | RANGAP1 Ran GTPase act                                         | 3.55        | 1.83    | 0.00    |
| 215992_s_at | RAPGEF2 Rap guanine nuc                                         | 0.06        | -4.02   | 0.00    |
| 210051_at | RAPGEF3 Rap guanine nuc                                         | 3.28        | 1.71    | 0.00    |
| 205651_x_at | RAPGEF4 Rap guanine nuc                                         | 0.20        | -2.32   | 0.00    |
| 218657_at | RAPGEFL1 Rap guanine nuc                                         | 0.22        | -2.16   | 0.00    |
| 204189_at | RARG retinoic acid recr                                        | 3.07        | 1.62    | 0.00    |
| 212706_at | RASA4 RAS p21 protein                                          | 0.18        | -2.47   | 0.00    |
| 214369_s_at | RASGRP2 RAS guanyl rele                                         | 0.19        | -2.44   | 0.00    |
| 202034_x_at | RB1CC1 RB1-inducible cc                                        | 0.23        | -2.13   | 0.00    |
| 212222_at | RBKS ribokinase                                               | 6.21        | 2.64    | 0.00    |
| 205296_at | RBL1 retinoblastoma-ii                                         | 0.29        | -1.77   | 0.00    |
| 212331_at | RBM12B RNA binding mo                                          | 0.22        | -2.20   | 0.00    |
| 209997_at | RBM4 RNA binding mo                                           | 3.48        | 1.80    | 0.00    |
| 219754_at | RBM41 RNA binding mo                                          | 0.24        | -2.07   | 0.00    |
| 209396_at | RBM5 RNA binding mo                                           | 0.33        | -1.62   | 0.00    |
| 217556_at | RBM8A RNA binding mo                                          | 0.17        | -2.60   | 0.00    |
| 209487_at | RBPMS RNA binding pro                                         | 4.99        | 2.32    | 0.00    |
| 203498_at | RCAN2 regulator of calci                                       | 0.26        | -1.92   | 0.00    |
| 218352_at | RCBTB1 regulator of chro                                       | 0.14        | -2.88   | 0.00    |
| 205332_at | RCE1 RCE1 homolog,                                             | 3.21        | 1.68    | 0.00    |
| 212612_at | RCor1 REST corepress                                          | 0.31        | -1.71   | 0.00    |
| 206753_at | RDH16 retinol dehydrog                                         | 5.74        | 2.52    | 0.00    |
| 212917_x_at | RECLQ RecQ protein-like                                        | 0.31        | -1.67   | 0.00    |
| 204365_s_at | REEP1 receptor access                                         | 3.85        | 1.95    | 0.00    |
| 205205_at | RELB v-rel reticuloend                                         | 3.50        | 1.81    | 0.00    |
| 215201_at | REP51 RALBP1 associ                                             | 0.23        | -2.12   | 0.00    |
| 214409_at | RFPL3S RFPL3 antisens                                        | 0.30        | -1.72   | 0.00    |
| 212646_at | RFTN1 raftlin, lipid raft li                                   | 4.25        | 2.09    | 0.00    |
| 218430_s_at | RFX7 regulatory factor                                         | 0.30        | -1.74   | 0.00    |
| 209568_at | RGL1 ral guanine nucx                                          | 3.00        | 1.59    | 0.00    |
| 204316_at | RGS10 regulator of G-pr                                        | 4.03        | 2.01    | 0.00    |
| 203823_at | RGS3 regulator of G-pr                                         | 3.05        | 1.61    | 0.00    |
| 20971_s_at | RGS5 regulator of G-pr                                         | 3.49        | 1.81    | 0.00    |
| 219554_at | RHCG Rh family, C glyc                                        | 56.79       | 5.83    | 0.00    |
| 212651_at | RHOBTB1 Rho-related BTB                                         | 0.28        | -1.85   | 0.00    |
| 202975_s_at | RHOBTB3 Rho-related BTB                                         | 0.15        | -2.73   | 0.00    |
| 202976_s_at | RHOBTB3 Rho-related BTB                                         | 0.09        | -3.45   | 0.00    |
| 31846_at  | RHOD ras homolog gen                                          | 5.31        | 2.41    | 0.00    |
| 222148_s_at | RHOT1 ras homolog gen                                         | 0.27        | -1.89   | 0.00    |
| 218323_at | RHOT1 ras homolog gen                                         | 0.24        | -2.09   | 0.00    |
| 205414_s_at | RICH2 Rho-type GTPas                                          | 0.31        | -1.70   | 0.00    |
| 214700_x_at | RIF1 RAP1 interacting                                         | 0.22        | -2.18   | 0.00    |
| 206137_at | RIMS2 regulating synap                                         | 4.48        | 2.16    | 0.00    |
| Gene ID     | Description                                                                 | Log2 Fold Change | p-value | FDR |
|-------------|------------------------------------------------------------------------------|------------------|---------|-----|
| 218598_at   | RINT1 RAD50 interactor                                                      | 0.28             | -1.81   | 0.00|
| 209545_s_at | RIPK2 receptor-interact                                                      | 3.30             | 1.72    | 0.00|
| 220329_s_at | RMND1 required for mei                                                       | 0.28             | -1.84   | 0.00|
| 218497_s_at | RNASEH1 ribonuclease H1                                                      | 3.10             | 1.63    | 0.00|
| 203022_at   | RNASEH2A ribonuclease H2                                                     | 5.67             | 2.50    | 0.00|
| 210056_at   | RND1 Rho family GTPi                                                        | 4.67             | 2.22    | 0.00|
| 221063_x_at | RNF123 ring finger protein                                                   | 3.96             | 1.99    | 0.00|
| 207735_at   | RNF125 ring finger protein                                                   | 0.08             | -3.69   | 0.00|
| 219263_at   | RNF128 ring finger protein                                                   | 0.20             | -2.32   | 0.01|
| 204040_at   | RNF144A ring finger protein                                                  | 3.84             | 1.94    | 0.00|
| 211387_x_at | RNGTT RNA guanylyltransfer                                                  | 0.22             | -2.17   | 0.00|
| 219550_at   | ROBO3 roundabout axo                                                        | 0.28             | -1.85   | 0.00|
| 218394_at   | ROGDI rogdi homolog (C)                                                     | 7.10             | 2.83    | 0.00|
| 210426_x_at | RORA RAR-related orpi                                                       | 0.19             | -2.38   | 0.00|
| 220436_at   | RP11-138L21.1 similar to cell rec                                           | 0.21             | -2.24   | 0.00|
| 205191_at   | RP2 retinitis pigment                                                       | 0.12             | -3.07   | 0.00|
| 218499_at   | RP6-213H19.1 serine/threonine                                                | 0.21             | -2.23   | 0.00|
| 221943_x_at | RPL38 ribosomal protein                                                      | 0.33             | -1.60   | 0.00|
| 219143_s_at | RPP25 ribonuclease P25                                                       | 3.01             | 1.59    | 0.00|
| 217723_x_at | RPS12 ribosomal protein                                                      | 3.70             | 1.89    | 0.00|
| 221524_s_at | RRA6D Ras-related GTF                                                       | 0.32             | -1.64   | 0.00|
| 221523_s_at | RRA6D Ras-related GTF                                                       | 0.21             | -2.28   | 0.00|
| 212590_at   | RRS2 related RAS vira                                                        | 6.80             | 2.77    | 0.00|
| 212598_at   | RRS2 related RAS vira                                                        | 3.48             | 1.80    | 0.00|
| 218960_s_at | RRBP1 ribosomal binding                                                      | 4.63             | 2.21    | 0.00|
| 209773_s_at | RRM2 ribonucleotide re                                                        | 3.95             | 1.98    | 0.02|
| 218758_at   | RRP1 ribosomal RNA                                                        | 3.22             | 1.69    | 0.00|
| 214764_at   | RRP15 ribosomal RNA                                                         | 0.19             | -2.43   | 0.00|
| 33307_at    | RRP7A ribosomal RNA                                                         | 4.06             | 2.02    | 0.00|
| 202937_x_at | RRP7A ribosomal RNA                                                         | 3.45             | 1.79    | 0.00|
| 213797_at   | RAD2 radical S-adenosine                                                    | 3.12             | 1.64    | 0.00|
| 213694_at   | RSBN1 round spermatid                                                        | 0.20             | -2.32   | 0.00|
| 203485_at   | RTN1 reticulin 1                                                             | 0.19             | -2.40   | 0.00|
| 210222_s_at | RTN1 reticulin 1                                                             | 0.17             | -2.56   | 0.00|
| 219684_at   | RTP4 receptor (chemo)                                                        | 9.42             | 3.24    | 0.00|
| 210251_s_at | RUFY3 RUN and FYVE                                                          | 0.23             | -2.11   | 0.00|
| 213939_s_at | RUFY3 RUN and FYVE                                                          | 0.22             | -2.21   | 0.00|
| 213430_at   | RUFY3 RUN and FYVE                                                          | 0.18             | -2.44   | 0.00|
| 203724_s_at | RUFY3 RUN and FYVE                                                          | 0.12             | -3.04   | 0.00|
| 215321_at   | RUND3B RUN domain cor                                                        | 0.13             | -2.97   | 0.00|
| 209360_at   | RUNX1 runt-related trans                                                     | 18.69            | 4.22    | 0.00|
| 213066_at   | RUSC2 RUN and SH3 dr                                                         | 3.32             | 1.73    | 0.00|
| 205087_at   | RWDD3 RWD domain co                                                         | 0.30             | -1.76   | 0.00|
| 205863_at   | S100A12 S100 calcium bis                                                     | 19.42            | 4.28    | 0.00|
| 205916_at   | S100A7 S100 calcium bis                                                      | 78.27            | 6.29    | 0.00|
| 202917_s_at | S100A8 S100 calcium bis                                                      | 141.07           | 7.14    | 0.00|
| 214370_at   | S100A8 S100 calcium bis                                                      | 10.73            | 3.42    | 0.00|
| Gene ID     | Symbol | Description                                      | Log2 Fold Change | Fold Change | P Value | FDR Value |
|-------------|--------|--------------------------------------------------|------------------|-------------|---------|-----------|
| 203535_at   | S100A9 | S100 calcium binding protein A9                  | 540.01           | 9.08        | 0.00    | 0.00      |
| 204351_at   | S100P  | S100 calcium binding protein P                   | 8.23             | 3.04        | 0.00    | 0.00      |
| 204642_at   | S1PR1  | Sphingosine-1-phosphate receptor 1               | 0.32             | -1.67       | 0.00    | 0.00      |
| 213635_at   | SAFB   | Scaffold attachment factor                       | 0.29             | -1.78       | 0.00    | 0.00      |
| 201543_at   | SAR1A  | SAR1 homolog A                                  | 3.89             | 1.96        | 0.00    | 0.00      |
| 204351_at   | S100P  | S100 calcium binding protein P                   | 8.23             | 3.04        | 0.00    | 0.00      |
| 213257_at   | SARM1  | Sterile alpha and                               | 0.32             | -1.63       | 0.00    | 0.00      |
| 218702_at   | SARS2  | Seryl-IRNA synth                                | 3.10             | 1.63        | 0.00    | 0.00      |
| 215754_at   | SCARB2 | Scavenger receptor                              | 0.30             | -1.73       | 0.00    | 0.00      |
| 201646_at   | SCARB2 | Scavenger receptor                              | 0.29             | -1.78       | 0.00    | 0.00      |
| 201543_at   | SAR1A  | SAR1 homolog A                                  | 3.89             | 1.96        | 0.00    | 0.00      |
| 204351_at   | S100P  | S100 calcium binding protein P                   | 8.23             | 3.04        | 0.00    | 0.00      |
| 213257_at   | SARM1  | Sterile alpha and                               | 0.32             | -1.63       | 0.00    | 0.00      |
| 218702_at   | SARS2  | Seryl-IRNA synth                                | 3.10             | 1.63        | 0.00    | 0.00      |
| 215754_at   | SCARB2 | Scavenger receptor                              | 0.30             | -1.73       | 0.00    | 0.00      |
| 201646_at   | SCARB2 | Scavenger receptor                              | 0.29             | -1.78       | 0.00    | 0.00      |
| 201543_at   | SAR1A  | SAR1 homolog A                                  | 3.89             | 1.96        | 0.00    | 0.00      |
| 204351_at   | S100P  | S100 calcium binding protein P                   | 8.23             | 3.04        | 0.00    | 0.00      |
| 213257_at   | SARM1  | Sterile alpha and                               | 0.32             | -1.63       | 0.00    | 0.00      |
| 218702_at   | SARS2  | Seryl-IRNA synth                                | 3.10             | 1.63        | 0.00    | 0.00      |
| 215754_at   | SCARB2 | Scavenger receptor                              | 0.30             | -1.73       | 0.00    | 0.00      |
| 201646_at   | SCARB2 | Scavenger receptor                              | 0.29             | -1.78       | 0.00    | 0.00      |
| 201543_at   | SAR1A  | SAR1 homolog A                                  | 3.89             | 1.96        | 0.00    | 0.00      |
| 204351_at   | S100P  | S100 calcium binding protein P                   | 8.23             | 3.04        | 0.00    | 0.00      |
| 213257_at   | SARM1  | Sterile alpha and                               | 0.32             | -1.63       | 0.00    | 0.00      |
| 218702_at   | SARS2  | Seryl-IRNA synth                                | 3.10             | 1.63        | 0.00    | 0.00      |
| 215754_at   | SCARB2 | Scavenger receptor                              | 0.30             | -1.73       | 0.00    | 0.00      |
| 201646_at   | SCARB2 | Scavenger receptor                              | 0.29             | -1.78       | 0.00    | 0.00      |
| Gene ID     | Description                              | Log2 Fold Change | p-value | FDR   |
|------------|------------------------------------------|-----------------|---------|-------|
| 221768_at | splicing factor proline/glutamine-rich (polypyrimidine tract binding protein associated) | 0.28            | -1.85   | 0.00  |
| 202037_s_at | secreted frizzled | 15.42           | 3.95    | 0.00  |
| 202036_s_at | secreted frizzled | 12.74           | 3.67    | 0.00  |
| 202035_s_at | secreted frizzled | 6.93            | 2.79    | 0.00  |
| 207468_s_at | secreted frizzled | 3.93            | 1.98    | 0.00  |
| 20863_s_at | splicing factor, a | 0.25            | -2.01   | 0.00  |
| 200685_at | splicing factor, arginine/serine-rich 11 | 0.32            | -1.64   | 0.00  |
| 213742_at | splicing factor, arginine/serine-rich 11 | 0.17            | -2.55   | 0.00  |
| 202774_s_at | splicing factor, arginine/serine-rich 8 (suppressor-of-white-apricot homolog, Drosophila) | 0.28            | -1.83   | 0.00  |
| 212176_at | splicing factor, arginine/serine-rich 18 | 0.33            | -1.62   | 0.00  |
| 213649_at | splicing factor, arginine/serine-rich 7, 35kDa | 0.29            | -1.78   | 0.00  |
| 207302_at | sarcoglycan, gamma (35kDa dystrophin-associated glycoprotein) | 0.19            | -2.38   | 0.00  |
| 217257_at | SH3 domain binding glutamic acid-rich protein like 3 | 3.39            | 1.76    | 0.00  |
| 205063_at | survival of motor | 0.17            | -2.56   | 0.00  |
| 204967_at | signal-induced proliferation-associated 1 like 3 | 4.99            | 2.32    | 0.00  |
| 218878_at | solute carrier family m | 3.64            | 1.87    | 0.00  |
| 205421_at | extraneuronal monoamine transporter | 0.24            | -2.06   | 0.00  |
| 205243_at | solute carrier fan | 4.33            | 2.11    | 0.00  |
| 202239_at | solute carrier fan | 3.33            | 1.74    | 0.00  |
| 201768_at | solute carrier fan | 0.24            | -2.09   | 0.00  |
| 201807_s_at | solute carrier fan | 0.26            | -1.96   | 0.00  |
| 207057_at | solute carrier fan | 0.05            | -4.32   | 0.00  |
| 205857_at | solute carrier fan | 0.32            | -1.63   | 0.01  |
| 211576_s_at | solute carrier fan | 3.04            | 1.60    | 0.00  |
| 209681_at | solute carrier fan | 0.29            | -1.81   | 0.00  |
| 205421_at | solute carrier fan | 0.24            | -2.06   | 0.00  |
| 209237_s_at | solute carrier fan | 3.87            | 1.95    | 0.00  |
| 201918_at | solute carrier fan | 0.28            | -1.85   | 0.00  |
| 212683_at | solute carrier fan | 0.30            | -1.72   | 0.00  |
| 219344_at | solute carrier fan | 4.96            | 2.31    | 0.00  |
| 201249_at | solute carrier fan | 4.25            | 2.09    | 0.00  |
| 202497_x_at | solute carrier fan | 0.32            | -1.65   | 0.00  |
| 219885_at | solute carrier fan | 3.35            | 1.74    | 0.00  |
| Gene ID   | Description                                      | Log2 FC | Fold Change | p-value | q-value |
|----------|--------------------------------------------------|---------|-------------|---------|---------|
| 219991_at| SLC2A9 solute carrier fan                       | 9.27    | 3.21        | 0.00    | 0.00    |
| 207035_at| SLC30A3 solute carrier fan                       | 6.49    | 2.70        | 0.00    | 0.00    |
| 209865_at| SLC35A3 solute carrier fan                       | 0.23    | -2.13       | 0.00    | 0.00    |
| 218926_s_at| SLC41A3 solute carrier fan                      | 5.22    | 2.38        | 0.00    | 0.00    |
| 222364_at| SLC44A1 solute carrier fan                       | 0.18    | -2.44       | 0.00    | 0.00    |
| 214719_at| SLC46A3 solute carrier fan                       | 5.22    | 2.38        | 0.00    | 0.00    |
| 209865_at| SLC30A3 solute carrier fan                       | 0.23    | -2.13       | 0.00    | 0.00    |
| 207771_at| SLC5A2 solute carrier fan                        | 3.45    | 1.79        | 0.00    | 0.00    |
| 213164_at| SLC5A3 solute carrier fan                        | 0.30    | -1.75       | 0.00    | 0.00    |
| 21123_at | SLC5A5 solute carrier fan                        | 4.39    | 2.13        | 0.00    | 0.00    |
| 204087_s_at| SLC5A6 solute carrier fan                      | 3.17    | 1.66        | 0.00    | 0.00    |
| 208494_at| SLC6A7 solute carrier fan                        | 3.14    | 1.65        | 0.00    | 0.00    |
| 202752_x_at| SLC7A8 solute carrier fan                      | 5.72    | 2.52        | 0.00    | 0.00    |
| 216604_s_at| SLC7A8 solute carrier fan                      | 4.82    | 2.27        | 0.00    | 0.00    |
| 216009_s_at| SLC7A8 solute carrier fan                      | 4.34    | 2.27        | 0.00    | 0.00    |
| 216603_at| SLC7A8 solute carrier fan                        | 3.00    | 1.59        | 0.00    | 0.00    |
| 208015_at| SMAD1 SMAD family me                            | 0.18    | -2.51       | 0.00    | 0.00    |
| 205398_s_at| SMAD3 SMAD family me                           | 4.18    | 2.06        | 0.00    | 0.00    |
| 205257_s_at| SMAD4 SMAD family me                           | 0.29    | -1.77       | 0.00    | 0.00    |
| 205187_at| SMAD5 SMAD family me                            | 0.05    | -4.32       | 0.00    | 0.00    |
| 206542_s_at| SMARCA2 SWI/SNF relaetc                         | 0.14    | -2.82       | 0.00    | 0.00    |
| 208793_x_at| SMARCA4 SWI/SNF relaetc                         | 4.19    | 2.07        | 0.00    | 0.00    |
| 209258_s_at| SMAD1 SMAD family me                           | 0.14    | -2.82       | 0.00    | 0.00    |
| 212921_at| SMCHD1 structural mainte                       | 0.27    | -1.89       | 0.00    | 0.00    |
| 213624_at| SMD3 SMAD family me                             | 0.21    | -2.26       | 0.00    | 0.00    |
| 222270_at| SMEK2 SMEK homolog                              | 0.15    | -2.74       | 0.00    | 0.00    |
| 210057_at| SMG1 SMG1 homolog                               | 0.08    | -3.70       | 0.00    | 0.00    |
| 219695_at| SMPO3 sphingomyelin pi                          | 5.02    | 2.33        | 0.00    | 0.00    |
| 213624_at| SMD3 SMEK homolog                               | 0.15    | -2.71       | 0.00    | 0.00    |
| 205596_s_at| SMURF2 SMAD specific E                          | 0.29    | -1.79       | 0.00    | 0.00    |
| 212921_at| SMYD2 SET and MYND                              | 0.25    | -2.02       | 0.00    | 0.00    |
| 204104_at| SNAPC2 small nuclear Rho                       | 3.38    | 1.76        | 0.00    | 0.00    |
| 222286_at| SNAPC3 small nuclear Rho                       | 0.16    | -2.65       | 0.00    | 0.00    |
| 209481_at| SNRK SNF related kinase                        | 0.27    | -1.90       | 0.00    | 0.00    |
| 207474_at| SNRK SNF related kinase                        | 0.19    | -2.39       | 0.00    | 0.00    |
| 218493_at| SNRNP25 small nuclear rib                       | 3.06    | 1.62        | 0.00    | 0.00    |
| 53912_at | SNX11 sorting nexin 11                         | 4.03    | 2.01        | 0.00    | 0.00    |
| 209843_s_at| SOX10 SRY (sex determ)                        | 3.10    | 1.63        | 0.00    | 0.00    |
| 202936_s_at| SOX9 SRY (sex determ)                         | 5.89    | 2.56        | 0.00    | 0.00    |
| 202935_at| SOX9 SRY (sex determ)                          | 4.06    | 2.02        | 0.00    | 0.00    |
| Gene ID   | Description                                      | Fold Change | Log2 Fold Change | Adjusted P Value |
|----------|--------------------------------------------------|-------------|-----------------|------------------|
| 210985_s_at | SP100 SP100 nuclear antigen                      | 0.31        | -1.70           | 0.00             |
| 208012_x_at | SP110 SP110 nuclear b                            | 3.85        | 1.94            | 0.00             |
| 214791_at | SP140L SP140 nuclear b                           | 4.05        | 2.02            | 0.00             |
| 205406_s_at | SPA17 sperm autoantig                           | 3.80        | 1.92            | 0.00             |
| 219109_at | SPAG16 sperm associate                          | 0.31        | -1.67           | 0.00             |
| 200665_s_at | SPARC secreted protein,                         | 3.92        | 1.97            | 0.00             |
| 200795_at | SPARCL1 SPARC-like 1 (hh)                        | 7.49        | 2.91            | 0.00             |
| 204433_s_at | SPATA2 spermatogenesisi                        | 3.15        | 1.66            | 0.00             |
| 215694_at | SPATASL1 spermatogenesisi                       | 0.30        | -1.74           | 0.00             |
| 220298_s_at | SPATA6 spermatogenesisi                         | 0.20        | -2.33           | 0.00             |
| 219583_s_at | SPATA7 spermatogenesisi                        | 0.21        | -2.24           | 0.00             |
| 213442_x_at | SPDEF SAM pointed dor                           | 7.69        | 2.94            | 0.00             |
| 213441_x_at | SPDEF SAM pointed dor                           | 6.70        | 2.75            | 0.00             |
| 220192_x_at | SPDEF SAM pointed dor                           | 5.85        | 2.55            | 0.00             |
| 214404_x_at | SPDEF SAM pointed dor                           | 3.71        | 1.89            | 0.00             |
| 212526_at | SPG20 spastic parapleg                             | 0.21        | -2.29           | 0.00             |
| 217813_s_at | SPIN1 spindlin 1                                 | 0.19        | -2.42           | 0.00             |
| 206239_at | SPINK1 serine peptidase                           | 0.17        | -2.56           | 0.00             |
| 200657_x_at | SPN sialorphorin                                  | 3.39        | 1.76            | 0.00             |
| 202523_s_at | SPOCK2 sialorphorin                               | 4.67        | 2.22            | 0.00             |
| 208927_at | SPOP speckle-type PO                              | 0.33        | -1.60           | 0.00             |
| 203458_at | SPR sepiapterin redu                              | 4.90        | 2.29            | 0.00             |
| 214549_x_at | SPRR1A small proline-rict                        | 21.89       | 4.45            | 0.00             |
| 213796_at | SPRR1A small proline-rict                        | 12.48       | 3.64            | 0.00             |
| 220664_at | SPRR2C small proline-rict                        | 5.37        | 2.42            | 0.00             |
| 218990_s_at | SPRR3 small proline-rict                         | 15.33       | 3.94            | 0.00             |
| 204011_at | SPRY2 sprouty homolog                              | 0.20        | -2.32           | 0.00             |
| 221489_s_at | SPRY4 sprouty homolog                             | 7.49        | 2.91            | 0.00             |
| 214925_s_at | SPTAN1 spectrin, alpha, r                         | 0.17        | -2.59           | 0.00             |
| 214145_s_at | SPTB spectrin, beta, epsilon                     | 3.19        | 1.67            | 0.00             |
| 220185_at | SPTBN4 spectrin, beta, n                          | 3.88        | 1.96            | 0.00             |
| 220456_at | SPTLC3 serine palmitoyltransferase f              | 0.22        | -2.17           | 0.00             |
| 212061_at | SR140 U2-associated S                             | 0.24        | -2.05           | 0.00             |
| 38766_at  | SRCAP Snf2-related CRI                           | 3.73        | 1.90            | 0.00             |
| 201248_s_at | SREBF2 sterol regulatory                          | 3.45        | 1.79            | 0.00             |
| 213329_at | SRGAP2 SLIT-ROBO Rhc                             | 0.20        | -2.32           | 0.00             |
| 201859_at | SRGN seryglin                                     | 6.39        | 2.68            | 0.00             |
| 202199_s_at | SRPK1 SFRS protein kir                            | 3.24        | 1.70            | 0.00             |
| 220406_at | SRRT serrate RNA effe                             | 0.30        | -1.73           | 0.00             |
| 202817_s_at | SS18 synovial sarcomi                             | 0.22        | -2.19           | 0.00             |
| 219241_x_at | SSH3 slingshot homc                              | 3.79        | 1.92            | 0.00             |
| 203114_at | SSSCA1 Sjogren syndrom                            | 4.57        | 2.19            | 0.00             |
| 217650_x_at | ST3GAL2 ST3 beta-galactc                          | 0.22        | -2.18           | 0.00             |
| 36487_at  | STAB1 stablin 1                                   | 3.35        | 1.74            | 0.00             |
| 205743_at | STAC SH3 and cystein                             | 3.16        | 1.66            | 0.00             |
| 209023_s_at | STAG2 stromal antigen :                          | 0.19        | -2.37           | 0.00             |
| 204548_at | STAR steroidogenic ac                            | 0.29        | -1.81           | 0.00             |
| 200887_s_at | STAT1 signal transduce                            | 3.55        | 1.83            | 0.00             |
| ID          | Gene Symbol | Description                                      | log2 Fold Change | p-value | q-value |
|-------------|-------------|--------------------------------------------------|------------------|---------|---------|
| 208992_s_at | STAT3       | signal transducer and activator of transcription 3 (acute-phase response factor) | 4.73             | 0.00    | 0.00    |
| 208991_at   | STAT3       | signal transducer and activator of transcription 3 (acute-phase response factor) | 3.19             | 0.00    | 0.00    |
| 204595_s_at | STC1        | stanniocalcin 1 | 3.74             | 0.01    | 0.01    |
| 41657_at    | STK11       | serine/threonine kinase 11 | 5.61             | 0.00    | 0.00    |
| 211085_s_at | STK4        | serine/threonine kinase 4 | 0.28             | 0.00    | 0.00    |
| 203457_at   | STX7        | syntaxin 7 | 0.29             | 0.00    | 0.00    |
| 203310_at   | STXB8P3     | syntaxin binding | 0.32             | 0.00    | 0.00    |
| 220994_s_at | STXB8P6     | syntaxin binding | 0.20             | 0.00    | 0.00    |
| 214835_s_at | SUCLG2      | succinate-CoA ligase | 0.33             | 0.00    | 0.00    |
| 219425_at   | SULT4A1     | sulfotransferase | 3.25             | 0.00    | 0.00    |
| 203056_s_at | SUPT3H      | suppressor of Ty 1 | 3.11             | 0.00    | 0.00    |
| 219388_at   | SUSD4       | sushi domain co | 14.01            | 0.01    | 0.01    |
| 216272_x_at | SYDE1       | synapse defective 1 | 4.23             | 0.00    | 0.00    |
| 44702_at    | SYDE1       | synapse defective 1 | 3.54             | 0.00    | 0.00    |
| 209025_s_at | SYNCRIP     | synaptotagmin b | 3.53             | 0.00    | 0.00    |
| 209471_at   | SYNE1       | spectrin repeat c | 0.10             | 0.00    | 0.00    |
| 202761_s_at | SYNE2       | spectrin repeat c | 0.24             | 0.00    | 0.00    |
| 210612_s_at | SYNJ2       | synaptotagmin 2 | 0.29             | 0.00    | 0.00    |
| 215865_at   | SYT12       | synaptotagmin X | 7.01             | 0.00    | 0.00    |
| 205613_at   | SYT17       | synaptotagmin X | 0.16             | 0.00    | 0.00    |
| 214903_at   | SYT2        | synaptotagmin II | 3.19             | 0.00    | 0.00    |
| 206552_s_at | TAC1        | tachykinin, prec. | 0.17             | 0.00    | 0.00    |
| 202289_s_at | TACC2       | transforming, acidic | 0.30             | 0.00    | 0.00    |
| 214960_at   | TAF1B       | TATA box binding | 0.26             | 0.00    | 0.00    |
| 221617_at   | TAF9B       | TAF9B RNA pol | 0.33             | 0.00    | 0.00    |
| 204769_s_at | TAP2        | transporter 2, AT | 5.04             | 0.00    | 0.00    |
| 221294_s_at | TARDBP      | TAR DNA bindin | 0.23             | 0.00    | 0.00    |
| 212350_at   | TBC1D1      | TBC1 (tre-2/USF) | 3.13             | 0.00    | 0.00    |
| 203387_s_at | TBC1D4      | TBC1 domain fa | 0.30             | 0.00    | 0.00    |
| 203386_at   | TBC1D4      | TBC1 domain fa | 0.23             | 0.00    | 0.00    |
| 204526_s_at | TBC1D8      | TBC1 domain fa | 0.26             | 0.00    | 0.00    |
| 219771_at   | TBC1D8B     | TBC1 domain fa | 0.33             | 0.00    | 0.00    |
| 212956_at   | TBC1D9      | TBC1 domain fa | 3.09             | 0.02    | 0.02    |
| 219682_s_at | TBX3        | T-box 3 | 0.28             | 0.00    | 0.00    |
| 212762_s_at | TCF7L2      | transcription factor | 0.19             | 0.00    | 0.00    |
| 213780_at   | TCHH        | trichohyalin | 23.96             | 0.00    | 0.00    |
| 205513_at   | TCN1        | transcobalamin | 26.45             | 0.00    | 0.00    |
| 204043_at   | TCN2        | transcobalamin | 3.12             | 0.00    | 0.00    |
| 202384_s_at | TCOF1       | Treacher Collins | 0.28             | 0.00    | 0.00    |
| 205797_s_at | TCP11L1     | t-complex 11 (m) | 3.14             | 0.00    | 0.00    |
| 218584_at   | TCTN1       | tectonic family m | 4.04             | 0.00    | 0.00    |
| 208089_s_at | TDRD3       | tudor domain cox | 0.25             | 0.00    | 0.00    |
| 212064_at   | TEX261      | testis expressed | 3.71             | 0.00    | 0.00    |
| 212063_at   | TEX261      | testis expressed | 3.04             | 0.00    | 0.00    |
| 203176_s_at | TFAM        | transcription factor | 0.33             | 0.00    | 0.00    |
| 204654_s_at | TFAP2A      | transcription factor | 0.13             | 0.00    | 0.00    |
| 205688_at   | TFAP4       | transcription factor | 3.28             | 0.00    | 0.00    |
| 203588_s_at | TFDP2       | transcription factor | 3.62             | 0.00    | 0.00    |
| ProbeID   | Gene Symbol | Description                      | Fold Change | p-value | | Log2 Fold Change | p-value |
|-----------|-------------|----------------------------------|-------------|---------|----------------|---------|
| 204731_at | TGFBR3      | transforming growth factor, beta receptor III | 0.27        | -1.91   | 0.00           | 0.01    |
| 206008_at | TGM1        | transglutaminase                 | 4.34        | 2.12    | 0.01           | 0.01    |
| 1316_at   | THRA        | thyroid hormone                  | 0.24        | -2.05   | 0.00           | 0.00    |
| 201146_s_at | TIMP3     | TIMP metalloprotease             | 13.03       | 3.70    | 0.00           | 0.00    |
| 203222_s_at | TLE1       | transducin-like e                | 0.29        | -1.78   | 0.00           | 0.00    |
| 216997_x_at | TLE4       | transducin-like e                | 0.28        | -1.83   | 0.00           | 0.00    |
| 204924_at | TLR2        | toll-like receptor e             | 3.64        | 1.86    | 0.00           | 0.00    |
| 213882_at | TM2D1       | TM2 domain con                   | 0.24        | -2.09   | 0.00           | 0.00    |
| 209387_s_at | TM4SF1    | transmembrane                    | 12.06       | 3.59    | 0.00           | 0.00    |
| 215034_s_at | TM4SF1    | transmembrane                    | 11.73       | 3.55    | 0.00           | 0.00    |
| 20386_at  | TM4SF1      | transmembrane                    | 7.57        | 2.92    | 0.00           | 0.00    |
| 219892_at | TM6SF1      | transmembrane                    | 0.33        | -1.61   | 0.00           | 0.00    |
| 209386_at | TM4SF1      | transmembrane                    | 7.57        | 2.92    | 0.00           | 0.00    |
| 219580_s_at | TM4SF1    | transmembrane                    | 0.24        | -2.06   | 0.00           | 0.00    |
| 220240_s_at | TMCO3     | transmembrane                    | 3.12        | 1.64    | 0.00           | 0.00    |
| 200929_at | TMED10      | transmembrane                    | 5.16        | 2.37    | 0.00           | 0.00    |
| 218334_s_at | TMEM132A  | transmembrane                    | 8.04        | 3.01    | 0.00           | 0.00    |
| 218477_at | TMEM14A     | transmembrane                    | 3.73        | 1.90    | 0.00           | 0.00    |
| 213272_s_at | TMEM159   | transmembrane                    | 0.22        | -2.16   | 0.00           | 0.00    |
| 218749_x_at | TMEM161A  | transmembrane                    | 10.25       | 3.36    | 0.00           | 0.00    |
| 221512_at | TMEM222     | transmembrane                    | 3.22        | 1.69    | 0.00           | 0.00    |
| 219462_at | TMEM53      | transmembrane                    | 3.34        | 1.74    | 0.00           | 0.00    |
| 213024_at | TMF1        | TATA element r                   | 0.27        | -1.88   | 0.00           | 0.00    |
| 207602_at | TMPRSS11D   | transmembrane                    | 15.23       | 3.93    | 0.00           | 0.00    |
| 218960_at | TMPRSS4     | transmembrane                    | 5.55        | 2.47    | 0.00           | 0.00    |
| 221032_s_at | TMPRSS5   | transmembrane                    | 4.70        | 2.23    | 0.00           | 0.00    |
| 217733_s_at | TMSB10    | thymosin beta 1 f                | 3.46        | 1.79    | 0.00           | 0.00    |
| 216368_s_at | TNFRSF12A | tumor necrosis f                 | 5.04        | 2.33    | 0.00           | 0.00    |
| 218856_at | TNFRSF21    | tumor necrosis f                 | 22.84       | 4.51    | 0.00           | 0.00    |
| 219423_x_at | TNFRSF25  | tumor necrosis f                 | 0.27        | -1.88   | 0.00           | 0.00    |
| 211841_s_at | TNFRSF25  | tumor necrosis f                 | 0.24        | -2.06   | 0.00           | 0.00    |
| 202688_at | TNFSF10     | tumor necrosis f                 | 3.60        | 1.85    | 0.00           | 0.00    |
| 218228_at | TNKS2       | tankyrase, TRF1                  | 0.30        | -1.75   | 0.00           | 0.00    |
| 206393_at | TNNI2       | troponin I type 2                | 0.11        | -3.19   | 0.00           | 0.00    |
| 215389_s_at | TNNI2     | troponin T type 2                | 0.18        | -2.51   | 0.00           | 0.00    |
| 221507_at | TNPO2       | transportin 2                    | 0.27        | -1.88   | 0.00           | 0.00    |
| 206817_x_at | TNRCC4    | trinucleotide rep                | 5.49        | 2.46    | 0.00           | 0.00    |
| 213254_at | TNRCC6B     | trinucleotide rep                | 0.32        | -1.63   | 0.00           | 0.00    |
| 217953_at | TNS3        | tensin 3                         | 4.14        | 2.05    | 0.00           | 0.00    |
| 217413_s_at | TXNB      | tenascin XB                      | 3.24        | 1.70    | 0.00           | 0.00    |
| 208609_at | TXNB        | tenascin XB                      | 0.28        | -1.82   | 0.00           | 0.00    |
| 202807_s_at | TOM1       | target of myb1 (c                | 3.03        | 1.60    | 0.00           | 0.00    |
| 214840_at | TOM1L2      | target of myb1 (lil               | 4.23        | 2.08    | 0.00           | 0.00    |
| 217960_s_at | TOMM22    | translocase of alpha             | 3.39        | 1.76    | 0.00           | 0.00    |
| 204071_s_at | TOPORS     | topoisomerase I                  | 0.29        | -1.79   | 0.00           | 0.00    |
| 210609_s_at | TP53I3     | tumor protein p5                 | 3.38        | 1.76    | 0.00           | 0.00    |
| 201691_s_at | TPDS2      | tumor protein D5                 | 0.18        | -2.47   | 0.00           | 0.00    |
| Gene ID   | Gene Name                  | Description                                      | Log2 Fold Change | p-Value | q-Value | Log2 Fold Change | p-Value | q-Value |
|----------|----------------------------|--------------------------------------------------|-----------------|--------|--------|-----------------|--------|--------|
| 210987_x_at | TPM1                       | tropomyosin 1 (α)                               | 3.12            | 1.64   | 0.01   | 0.01            |        |        |
| 209344_at  | TPM4                       | tropomyosin 4                                   | 4.82            | 2.27   | 0.00   | 0.00            |        |        |
| 203375_s_at | TPF2                       | tripedyl peptid                              | 0.23            | -2.10  | 0.00   | 0.00            |        |        |
| 218876_at  | TPRP1                      | tubulin polymerizer                            | 0.08            | -3.73  | 0.00   | 0.00            |        |        |
| 215220_s_at | TPR                        | translocated pro                              | 0.07            | -3.81  | 0.00   | 0.00            |        |        |
| 215382_x_at | TPSA1                      | tyrosine alpha/beta                         | 3.19            | 1.67   | 0.01   | 0.02            |        |        |
| 210052_s_at | TPX2                      | TPX2, microtubuli                           | 4.92            | 2.30   | 0.00   | 0.00            |        |        |
| 213593_s_at | TRA2A                      | transformer 2 α                              | 0.20            | -2.30  | 0.00   | 0.00            |        |        |
| 221807_s_at | TRABD                      | TraB domain cor                             | 3.79            | 1.92   | 0.00   | 0.00            |        |        |
| 204352_at  | TRAF5                      | TNF receptor-ass                             | 0.33            | -1.59  | 0.00   | 0.00            |        |        |
| 209412_at  | TRAPPC10                   | trafficking protein                           | 0.30            | -1.76  | 0.00   | 0.00            |        |        |
| 205269_at  | TRAPPC10                   | trafficking protein                           | 0.15            | -2.76  | 0.00   | 0.00            |        |        |
| 203511_s_at | TRAPPC3                    | trafficking protein                           | 3.91            | 1.97   | 0.00   | 0.00            |        |        |
| 56829_at   | TRAPPC9                    | trafficking protein                           | 6.69            | 2.74   | 0.00   | 0.00            |        |        |
| 221672_s_at | TRAPPC9                    | trafficking protein                           | 3.44            | 1.78   | 0.00   | 0.00            |        |        |
| 219725_at  | TREM2                      | triggering receptor                           | 3.58            | 1.84   | 0.00   | 0.00            |        |        |
| 213293_s_at | TRIM22                     | tripartite motif-cc                          | 4.11            | 2.04   | 0.00   | 0.00            |        |        |
| 204732_s_at | TRIM23                     | tripartite motif-cc                          | 0.25            | -2.00  | 0.00   | 0.00            |        |        |
| 206911_at  | TRIM25                     | tripartite motif-cc                          | 4.21            | 2.07   | 0.00   | 0.00            |        |        |
| 212116_at  | TRIM27                     | tripartite motif-cc                          | 4.44            | 2.15   | 0.00   | 0.00            |        |        |
| 213855_at  | TRIM3                      | tripartite motif-cc                          | 0.30            | -1.76  | 0.00   | 0.00            |        |        |
| 214815_at  | TRIM33                     | tripartite motif-cc                          | 0.26            | -1.93  | 0.00   | 0.00            |        |        |
| 212435_at  | TRIM33                     | tripartite motif-cc                          | 0.21            | -2.25  | 0.00   | 0.00            |        |        |
| 203610_s_at | TRIM38                     | tripartite motif-cc                          | 7.54            | 2.92   | 0.00   | 0.00            |        |        |
| 221897_at  | TRIM52                     | tripartite motif-cc                          | 0.26            | -1.97  | 0.00   | 0.00            |        |        |
| 210760_x_at | TRIP11                     | thyroid hormone                              | 6.28            | 2.65   | 0.00   | 0.00            |        |        |
| 218877_s_at | TRMT11                     | tRNA methyltran                              | 0.17            | -2.60  | 0.00   | 0.00            |        |        |
| 205082_at  | TRPC1                      | transient receptor                           | 0.15            | -2.72  | 0.00   | 0.00            |        |        |
| 205083_s_at | TRPC1                      | transient receptor                           | 0.15            | -2.78  | 0.00   | 0.00            |        |        |
| 206528_at  | TRPC6                      | transient receptor                           | 0.27            | -1.91  | 0.00   | 0.00            |        |        |
| 209108_at  | TSPAN6                     | tetraspanin 6                                 | 3.06            | 1.61   | 0.00   | 0.00            |        |        |
| 217162_at  | TSPY1                      | testis specific protein                      | 3.77            | 1.91   | 0.00   | 0.00            |        |        |
| 213922_at  | TTBK2                      | tau tubulin kinase                           | 0.11            | -3.25  | 0.00   | 0.00            |        |        |
| 219421_at  | TTCC33                     | tetraticopeptide                              | 0.27            | -1.92  | 0.00   | 0.00            |        |        |
| 213172_at  | TCC9                       | tetraticopeptide                              | 0.29            | -1.80  | 0.00   | 0.00            |        |        |
| 213646_x_at | TUBA1B                     | tubulin, alpha 1b                            | 3.04            | 1.61   | 0.00   | 0.00            |        |        |
| 216323_x_at | TUBA3D                     | tubulin, alpha 3d                            | 3.02            | 1.59   | 0.00   | 0.00            |        |        |
| 211714_x_at | TUBB                      | tubulin, beta                                | 3.54            | 1.82   | 0.00   | 0.00            |        |        |
| 214876_s_at | TUBGCP5                    | tubulin, gamma                               | 0.17            | -2.53  | 0.00   | 0.00            |        |        |
| 203272_s_at | TUSC2                      | tumor suppressor                             | 3.77            | 1.91   | 0.00   | 0.00            |        |        |
| 216609_at  | TXN                        | thioredoxin                                   | 0.18            | -2.48  | 0.00   | 0.00            |        |        |
| 209078_s_at | TXN2                      | thioredoxin                                   | 4.70            | 2.23   | 0.00   | 0.00            |        |        |
| 221253_s_at | TXNDC5                     | thioredoxin dom                               | 3.35            | 1.75   | 0.00   | 0.00            |        |        |
| 201266_at  | TXNRD1                     | thioredoxin redu                               | 3.21            | 1.68   | 0.00   | 0.00            |        |        |
| 211177_s_at | TXNRD2                     | thioredoxin redu                               | 3.04            | 1.61   | 0.00   | 0.00            |        |        |
| 59631_at   | TXNRD3                     | thioredoxin redu                               | 6.37            | 2.67   | 0.00   | 0.00            |        |        |
| 221906_at  | TXNRD3                     | thioredoxin redu                               | 3.01            | 1.59   | 0.00   | 0.00            |        |        |
| 204858_s_at | TYPMP                     | thymidine phosp                              | 14.22           | 3.83   | 0.00   | 0.00            |        |        |
| GeneID   | Description                                    | Value1 | Value2 | Value3 | Value4 |
|---------|------------------------------------------------|--------|--------|--------|--------|
| 218382_s_at | U2AF2 (U2 small nuclear auxiliary factor 2) | 6.07   | 2.60   | 0.00   | 0.00   |
| 209947_at  | UBP2L (ubiquitin-associated protein 2-like)  | 0.32   | -1.63  | 0.00   | 0.00   |
| 218837_s_at | UBE2D4 (ubiquitin-conjugating enzyme E2D 4) | 7.29   | 2.87   | 0.00   | 0.00   |
| 217799_x_at | UBE2H (ubiquitin-conjugating enzyme E2H) | 3.43   | 1.78   | 0.00   | 0.00   |
| 211008_s_at | UBE2I (ubiquitin-conjugating enzyme E2I) | 3.36   | 1.75   | 0.00   | 0.00   |
| 203109_at  | UBE2M (ubiquitin-conjugating enzyme E2M)  | 3.86   | 1.95   | 0.00   | 0.00   |
| 221746_at  | UBL4A (ubiquitin-like 4A)               | 3.57   | 1.83   | 0.00   | 0.00   |
| 207253_s_at | UBN1 (ubiquitin-associated protein 2-like) | 5.12   | 2.36   | 0.00   | 0.00   |
| 215544_s_at | UBOX5 (ubiquitin-conjugating enzyme E2H) | 3.41   | 1.77   | 0.00   | 0.00   |
| 212074_at  | UCN8A (unc-84 homolog A)               | 0.31   | -1.68  | 0.00   | 0.00   |
| 221746_at  | UBL4A (ubiquitin-like 4A)               | 0.32   | -1.63  | 0.00   | 0.00   |
| 212074_at  | UCN8A (unc-84 homolog A)               | 3.41   | 1.77   | 0.00   | 0.00   |
| 206487_at  | UCN8A (unc-84 homolog A)               | 3.41   | 1.77   | 0.00   | 0.00   |
| 207253_s_at | UBOX5 (ubiquitin-conjugating enzyme E2H) | 3.41   | 1.77   | 0.00   | 0.00   |
| 202330_s_at | UNG (uracil-DNA glycosylase) | 0.21   | -2.27  | 0.00   | 0.00   |
| 203234_at  | UPP1 (uridine phosphorylase 1)           | 9.76   | 3.29   | 0.00   | 0.00   |
| 202412_s_at | USP1 (ubiquitin specific)              | 0.23   | -2.14  | 0.00   | 0.00   |
| 215886_x_at | USP12 (ubiquitin specific)            | 0.21   | -2.23  | 0.00   | 0.00   |
| 212980_at  | USP34 (ubiquitin specific)             | 0.28   | -1.82  | 0.00   | 0.00   |
| 212065_s_at | USP34 (ubiquitin specific)            | 0.26   | -1.95  | 0.00   | 0.00   |
| 205139_s_at | UST (ubiquitin specific)              | 0.17   | -2.56  | 0.00   | 0.00   |
| 214785_at  | VPS13A (vacuolar protein)              | 0.21   | -2.26  | 0.00   | 0.00   |
| 213936_at  | VPS13C (vacuolar protein)              | 0.23   | -2.14  | 0.00   | 0.00   |
| 220221_at  | VPS13D (vacuolar protein)              | 0.28   | -1.84  | 0.00   | 0.00   |
| 203797_at  | VSNL1 (visinin-like 1)                 | 3.85   | 1.95   | 0.01   | 0.01   |
| 202112_at  | VWF (von Willebrand factor)            | 9.73   | 3.28   | 0.00   | 0.00   |
| 205809_s_at | WASL (Wiskott-Aldrich syndrome-like)    | 0.27   | -3.10  | 0.00   | 0.00   |
| 203992_at  | WDR77 (WD repeat domain)               | 3.22   | 1.69   | 0.00   | 0.00   |
| 205648_at  | WNT2 (wingless-type MII)               | 0.25   | -2.01  | 0.00   | 0.00   |
| 206268_s_at | WARS (tryptophanyl-tRNA synthetase)    | 5.53   | 2.47   | 0.00   | 0.00   |
| 206269_at  | WARS (tryptophanyl-tRNA synthetase)    | 3.66   | 1.87   | 0.00   | 0.00   |
| 205809_s_at | WASL (Wiskott-Aldrich syndrome-like)  | 0.32   | -1.64  | 0.00   | 0.00   |
| 204377_s_at | VIPRB (viral protein)                 | 0.13   | -2.90  | 0.00   | 0.00   |
| 214785_at  | VPS13A (vacuolar protein)              | 0.21   | -2.26  | 0.00   | 0.00   |
| 218996_at  | WARS (tryptophanyl-tRNA synthetase)    | 0.23   | -2.14  | 0.00   | 0.00   |
| 220221_at  | WAF13D (vacuolar protein)              | 0.28   | -1.84  | 0.00   | 0.00   |
| 203797_at  | VSNL1 (visinin-like 1)                 | 3.85   | 1.95   | 0.01   | 0.01   |
| 202112_at  | VWF (von Willebrand factor)            | 9.73   | 3.28   | 0.00   | 0.00   |
| 205809_s_at | WASL (Wiskott-Aldrich syndrome-like)  | 0.32   | -1.64  | 0.00   | 0.00   |
| 204377_s_at | VIPRB (viral protein)                 | 0.13   | -2.90  | 0.00   | 0.00   |
| 214785_at  | VPS13A (vacuolar protein)              | 0.21   | -2.26  | 0.00   | 0.00   |
| 218996_at  | WARS (tryptophanyl-tRNA synthetase)    | 0.23   | -2.14  | 0.00   | 0.00   |
| 220221_at  | WAF13D (vacuolar protein)              | 0.28   | -1.84  | 0.00   | 0.00   |
| Gene Symbol | Description | Log2 Fold Change | FDR | NES | P-value |
|-------------|-------------|-----------------|-----|-----|---------|
| 212343_at   | YIPF6       | 0.31            | -1.68| 0.00| 0.00    |
| 214814_at   | YTHDC1      | 0.12            | -3.12| 0.00| 0.00    |
| 219836_at   | ZBED2       | 8.21            | 3.04 | 0.00| 0.00    |
| 205092_x_at | ZBTB1       | 0.21            | -2.28| 0.00| 0.00    |
| 205883_at   | ZBTB16      | 0.08            | -3.67| 0.00| 0.00    |
| 220391_at   | ZBTB3       | 0.25            | -2.03| 0.00| 0.00    |
| 218810_at   | ZC3H12A     | 6.03            | 2.59 | 0.00| 0.00    |
| 213064_at   | ZC3H14      | 0.33            | -1.60| 0.00| 0.00    |
| 219062_s_at | ZCCHC2      | 0.32            | -1.63| 0.00| 0.00    |
| 212419_at   | ZCCHC24     | 6.02            | 2.59 | 0.00| 0.00    |
| 211965       | ZF36L1      | 0.33            | -1.61| 0.00| 0.00    |
| 221646_s_at | ZF36L2      | 0.32            | -1.64| 0.01| 0.01    |
| 219296_s_at | ZF36L3      | 0.30            | -1.72| 0.00| 0.00    |
| 219292_s_at | ZF36L4      | 0.21            | -2.23| 0.00| 0.00    |
| 219290_s_at | ZF36L5      | 0.24            | -2.08| 0.00| 0.00    |
| 217872_s_at | ZM440       | 0.27            | -1.88| 0.00| 0.00    |
| 217875_s_at | ZMAT5       | 4.27            | 2.10 | 0.00| 0.00    |
| 221924      | ZMIZ2       | 0.30            | -1.72| 0.00| 0.00    |
| 206529_s_at | ZMYM5       | 0.13            | -2.96| 0.00| 0.00    |
| 219925_s_at | ZMYM6       | 0.19            | -2.39| 0.00| 0.00    |
| 202137_s_at | ZMYN11      | 0.21            | -2.23| 0.00| 0.00    |
| 209049_s_at | ZMYN8       | 0.24            | -2.06| 0.00| 0.00    |
| 205739_x_at | ZNF107      | 0.29            | -1.78| 0.00| 0.00    |
| 219571_s_at | ZNF12       | 0.21            | -2.28| 0.00| 0.00    |
| 219495_s_at | ZNF180      | 0.32            | -1.65| 0.00| 0.00    |
| 214823_at   | ZNF204      | 0.08            | -3.69| 0.00| 0.00    |
| 207128_s_at | ZNF223      | 0.25            | -2.01| 0.00| 0.00    |
| 220019_s_at | ZNF224      | 0.31            | -1.70| 0.00| 0.00    |
| 216983_s_at | ZNF224      | 0.13            | -2.97| 0.00| 0.00    |
| 205791_x_at | ZNF230      | 0.17            | -2.54| 0.00| 0.00    |
| 219171_s_at | ZNF236      | 0.22            | -2.18| 0.00| 0.00    |
| 212774_at   | ZNF238      | 0.24            | -2.04| 0.00| 0.00    |
| 203247_s_at | ZNF24       | 0.28            | -1.84| 0.00| 0.00    |
| 215239_x_at | ZNF273      | 0.15            | -2.70| 0.00| 0.00    |
| 221213_s_at | ZNF280D     | 0.20            | -2.33| 0.00| 0.00    |
| 212368_at   | ZNF292      | 0.15            | -2.72| 0.00| 0.00    |
| 203521_s_at | ZNF318      | 0.32            | -1.63| 0.00| 0.00    |
| 222016_s_at | ZNF323      | 5.45            | 2.45 | 0.00| 0.00    |
| 215358_x_at | ZNF37B      | 0.27            | -1.89| 0.00| 0.00    |
| 215429_s_at | ZNF428      | 5.09            | 2.35 | 0.00| 0.00    |
| 222136_x_at | ZNF43       | 0.30            | -1.74| 0.00| 0.00    |
| 215892_at   | ZNF440      | 0.22            | -2.21| 0.00| 0.00    |
| 213124_at   | ZNF473      | 3.07            | 1.62 | 0.00| 0.00    |
| Gene ID    | Description          | Fold Change | Log2 Fold Change | q-value | Benjamini-adjusted p-value |
|-----------|----------------------|-------------|------------------|---------|---------------------------|
| 204291_at | ZNF518A zinc finger protein | 0.16        | -2.61            | 0.00    | 0.00                      |
| 211721_s_at | ZNF551 zinc finger protein | 0.17        | -2.56            | 0.00    | 0.00                      |
| 217627_at | ZNF573 zinc finger protein | 0.12        | -3.04            | 0.00    | 0.00                      |
| 205594_at | ZNF652 zinc finger protein | 0.10        | -3.35            | 0.00    | 0.00                      |
| 206180_x_at | ZNF747 zinc finger protein | 5.89        | 2.56             | 0.00    | 0.00                      |
| 219995_s_at | ZNF750 zinc finger protein | 0.20        | -2.31            | 0.00    | 0.00                      |
| 219781_s_at | ZNF771 zinc finger protein | 8.61        | 3.11             | 0.00    | 0.00                      |
| 214138_at | ZNF79 zinc finger protein | 3.86        | 1.95             | 0.00    | 0.00                      |
| 60794_f_at | ZNF814 zinc finger protein | 0.31        | -1.68            | 0.00    | 0.00                      |
| 219050_s_at | ZNHIT2 zinc finger, HIT t | 3.79        | 1.92             | 0.00    | 0.00                      |
| 218312_s_at | ZSCAN18 zinc finger and S | 0.30        | -1.76            | 0.00    | 0.00                      |
| 217593_at | ZSCAN18 zinc finger and S | 0.16        | -2.65            | 0.00    | 0.00                      |
| 214580_x_at | 281.05 8.14          | 0.00        |                  |         |                           |
| 210413_x_at | 37.70 5.24           | 0.00        |                  |         |                           |
| 208539_x_at | 30.87 4.95           | 0.00        |                  |         |                           |
| 215504_x_at | 10.90 3.45           | 0.00        |                  |         |                           |
| 214463_x_at | 8.92 3.16            | 0.00        |                  |         |                           |
| 218822_s_at | 8.68 3.12            | 0.00        |                  |         |                           |
| 216745_x_at | 8.67 3.12            | 0.00        |                  |         |                           |
| 217619_x_at | 7.02 2.81            | 0.00        |                  |         |                           |
| 222114_x_at | 5.84 2.55            | 0.00        |                  |         |                           |
| 219489_s_at | 5.59 2.48            | 0.00        |                  |         |                           |
| 208580_x_at | 5.43 2.44            | 0.00        |                  |         |                           |
| 216474_x_at | 5.39 2.43            | 0.00        |                  |         |                           |
| 211691_x_at | 5.34 2.42            | 0.00        |                  |         |                           |
| 205114_s_at | 5.34 2.42            | 0.00        |                  |         |                           |
| 216499_at | 4.85 2.28            | 0.00        |                  |         |                           |
| 57540_at | 4.85 2.28            | 0.00        |                  |         |                           |
| 216535_at | 4.59 2.20            | 0.00        |                  |         |                           |
| 209372_x_at | 4.40 2.14            | 0.00        |                  |         |                           |
| 217516_x_at | 4.39 2.13            | 0.00        |                  |         |                           |
| 217055_x_at | 4.14 2.05            | 0.00        |                  |         |                           |
| 216565_x_at | 4.09 2.03            | 0.00        |                  |         |                           |
| 205717_x_at | 4.05 2.02            | 0.00        |                  |         |                           |
| 216554_s_at | 3.89 1.96            | 0.00        |                  |         |                           |
| 202362_at | 3.86 1.95            | 0.00        |                  |         |                           |
| 216694_at | 3.82 1.93            | 0.00        |                  |         |                           |
| 213690_s_at | 3.82 1.93            | 0.00        |                  |         |                           |
| 213655_at | 3.68 1.88            | 0.00        |                  |         |                           |
| 213689_x_at | 3.58 1.84            | 0.00        |                  |         |                           |
| 210474_s_at | 3.57 1.84            | 0.00        |                  |         |                           |
| 217981_s_at | 3.39 1.76            | 0.00        |                  |         |                           |
| 216138_at | 3.38 1.76            | 0.00        |                  |         |                           |
| 221792_at | 3.33 1.74            | 0.00        |                  |         |                           |
| 215489_x_at | 3.32 1.73            | 0.00        |                  |         |                           |
| 215949_x_at | 3.31 1.73            | 0.00        |                  |         |                           |
| 213808_at | 3.30 1.72            | 0.00        |                  |         |                           |
| 216371_at | 3.29 1.72            | 0.00        |                  |         |                           |
| Gene ID | Name | Fold Change | P-value | Log2 Fold Change |
|--------|------|-------------|---------|-----------------|
| 216112_at | 3.22 | 1.69 | 0.00 | 0.00 |
| 205144_at | 3.18 | 1.67 | 0.00 | 0.00 |
| 220167_s_at | 3.16 | 1.66 | 0.00 | 0.00 |
| 210387_at | 3.15 | 1.65 | 0.00 | 0.00 |
| 215353_at | 3.14 | 1.65 | 0.00 | 0.00 |
| 216043_x_at | 3.12 | 1.64 | 0.00 | 0.00 |
| 206889_at | 3.05 | 1.61 | 0.00 | 0.00 |
| 208811_s_at | 3.05 | 1.61 | 0.00 | 0.00 |
| 221719_at | 3.03 | 1.60 | 0.00 | 0.00 |
| 216542_x_at | 3.03 | 1.60 | 0.00 | 0.00 |
| 216853_x_at | 3.01 | 1.59 | 0.00 | 0.00 |
| 210598_at | 0.33 | -1.59 | 0.00 | 0.00 |
| 222365_at | 0.33 | -1.59 | 0.00 | 0.00 |
| 217679_x_at | 0.33 | -1.59 | 0.00 | 0.00 |
| 220987_s_at | 0.33 | -1.60 | 0.00 | 0.00 |
| 205955_at | 0.33 | -1.60 | 0.00 | 0.00 |
| 217621_at | 0.33 | -1.61 | 0.00 | 0.00 |
| 31799_at | 0.33 | -1.61 | 0.00 | 0.00 |
| 207953_at | 0.33 | -1.62 | 0.00 | 0.00 |
| 220605_at | 0.32 | -1.62 | 0.00 | 0.00 |
| 222319_at | 0.32 | -1.63 | 0.00 | 0.00 |
| 217713_x_at | 0.32 | -1.65 | 0.00 | 0.00 |
| 217317_s_at | 0.32 | -1.66 | 0.00 | 0.00 |
| 222277_at | 0.32 | -1.66 | 0.00 | 0.00 |
| 215370_at | 0.32 | -1.67 | 0.00 | 0.00 |
| 213648_at | 0.31 | -1.68 | 0.00 | 0.00 |
| 215147_at | 0.31 | -1.68 | 0.00 | 0.00 |
| 216022_at | 0.31 | -1.68 | 0.00 | 0.00 |
| 215802_at | 0.31 | -1.68 | 0.00 | 0.00 |
| 220809_at | 0.31 | -1.69 | 0.00 | 0.00 |
| 220912_at | 0.31 | -1.70 | 0.00 | 0.00 |
| 206655_s_at | 0.30 | -1.72 | 0.00 | 0.00 |
| 222344_at | 0.30 | -1.72 | 0.00 | 0.00 |
| 222335_at | 0.30 | -1.73 | 0.00 | 0.00 |
| 216000_at | 0.30 | -1.73 | 0.00 | 0.00 |
| 217617_at | 0.30 | -1.73 | 0.00 | 0.00 |
| 209084_s_at | 0.30 | -1.75 | 0.00 | 0.00 |
| 214871_x_at | 0.30 | -1.75 | 0.00 | 0.00 |
| 221833_at | 0.29 | -1.78 | 0.00 | 0.00 |
| 206548_at | 0.29 | -1.81 | 0.00 | 0.00 |
| 216214_at | 0.29 | -1.81 | 0.00 | 0.00 |
| 215059_at | 0.29 | -1.81 | 0.00 | 0.00 |
| 215929_at | 0.29 | -1.81 | 0.00 | 0.00 |
| 222149_x_at | 0.29 | -1.81 | 0.00 | 0.00 |
| 215164_at | 0.28 | -1.82 | 0.00 | 0.00 |
| 215597_x_at | 0.28 | -1.83 | 0.00 | 0.00 |
| 216769_x_at | 0.28 | -1.83 | 0.00 | 0.00 |
| 217588_at | 0.28 | -1.83 | 0.00 | 0.00 |
| Gene          | Value1 | Value2 | Value3 | Value4 |
|--------------|--------|--------|--------|--------|
| 222358_x_at  | 0.28   | -1.83  | 0.00   | 0.00   |
| 217152_at    | 0.28   | -1.86  | 0.00   | 0.00   |
| 217519_at    | 0.28   | -1.86  | 0.00   | 0.00   |
| 217014_s_at  | 0.27   | -1.88  | 0.00   | 0.00   |
| 221079_s_at  | 0.27   | -1.87  | 0.00   | 0.00   |
| 215304_at    | 0.27   | -1.88  | 0.00   | 0.00   |
| 216783_at    | 0.27   | -1.90  | 0.00   | 0.00   |
| 222371_at    | 0.27   | -1.90  | 0.00   | 0.00   |
| 216211_at    | 0.27   | -1.91  | 0.00   | 0.00   |
| 214807_at    | 0.27   | -1.92  | 0.00   | 0.00   |
| 215956_at    | 0.27   | -1.92  | 0.00   | 0.00   |
| 216142_at    | 0.26   | -1.93  | 0.00   | 0.00   |
| 213156_at    | 0.26   | -1.93  | 0.00   | 0.00   |
| 214857_at    | 0.26   | -1.96  | 0.00   | 0.00   |
| 216069_at    | 0.25   | -1.98  | 0.00   | 0.00   |
| 216497_at    | 0.25   | -2.00  | 0.00   | 0.00   |
| 220696_at    | 0.25   | -2.00  | 0.00   | 0.00   |
| 213158_at    | 0.25   | -2.02  | 0.00   | 0.00   |
| 216411_s_at  | 0.25   | -2.02  | 0.00   | 0.00   |
| 222341_x_at  | 0.25   | -2.02  | 0.00   | 0.00   |
| 214375_at    | 0.24   | -2.06  | 0.00   | 0.00   |
| 222111_at    | 0.24   | -2.06  | 0.00   | 0.00   |
| 217659_at    | 0.24   | -2.07  | 0.00   | 0.00   |
| 222275_at    | 0.24   | -2.06  | 0.00   | 0.00   |
| 215172_at    | 0.23   | -2.10  | 0.00   | 0.00   |
| 215390_at    | 0.23   | -2.11  | 0.00   | 0.00   |
| 215576_at    | 0.23   | -2.12  | 0.00   | 0.00   |
| 206088_at    | 0.23   | -2.13  | 0.00   | 0.00   |
| 220612_at    | 0.23   | -2.14  | 0.00   | 0.00   |
| 203240_at    | 0.22   | -2.18  | 0.00   | 0.00   |
| 213931_at    | 0.22   | -2.19  | 0.00   | 0.00   |
| 221834_at    | 0.22   | -2.21  | 0.00   | 0.00   |
| 222290_at    | 0.22   | -2.22  | 0.00   | 0.00   |
| 215029_at    | 0.21   | -2.23  | 0.00   | 0.00   |
| 208154_at    | 0.21   | -2.25  | 0.00   | 0.00   |
| 217604_at    | 0.21   | -2.26  | 0.00   | 0.00   |
| 203852_s_at  | 0.21   | -2.28  | 0.00   | 0.00   |
| 220969_s_at  | 0.21   | -2.28  | 0.00   | 0.00   |
| 217137_x_at  | 0.20   | -2.31  | 0.00   | 0.00   |
| 216173_at    | 0.20   | -2.33  | 0.00   | 0.00   |
| 217019_at    | 0.20   | -2.33  | 0.00   | 0.00   |
| 215287_at    | 0.20   | -2.34  | 0.00   | 0.00   |
| 215133_s_at  | 0.20   | -2.34  | 0.00   | 0.00   |
| 217164_at    | 0.19   | -2.40  | 0.00   | 0.00   |
| 216756_at    | 0.19   | -2.41  | 0.00   | 0.00   |
| 222313_at    | 0.19   | -2.43  | 0.00   | 0.00   |
| 215212_at    | 0.18   | -2.50  | 0.00   | 0.00   |
| 215344_at    | 0.18   | -2.51  | 0.00   | 0.00   |
| Gene Symbol | Log2 Fold Change | P-value | Adjusted P-value |
|-------------|-----------------|---------|-----------------|
| 222282_at   | 0.17            | -2.55   | 0.00            |
| 222214_at   | 0.17            | -2.58   | 0.00            |
| 216006_at   | 0.17            | -2.60   | 0.00            |
| 217671_at   | 0.17            | -2.60   | 0.00            |
| 214234_s_at | 0.16            | -2.67   | 0.00            |
| 217643_x_at | 0.16            | -2.69   | 0.00            |
| 214235_at   | 0.15            | -2.71   | 0.00            |
| 215629_s_at | 0.15            | -2.74   | 0.00            |
| 213686_at   | 0.15            | -2.75   | 0.00            |
| 215123_at   | 0.14            | -2.80   | 0.00            |
| 216278_at   | 0.14            | -2.80   | 0.00            |
| 215378_at   | 0.14            | -2.82   | 0.00            |
| 215322_at   | 0.14            | -2.84   | 0.00            |
| 217338_at   | 0.14            | -2.87   | 0.00            |
| 217536_x_at | 0.14            | -2.87   | 0.00            |
| 215626_at   | 0.14            | -2.88   | 0.00            |
| 213930_at   | 0.14            | -2.89   | 0.00            |
| 216527_at   | 0.14            | -2.89   | 0.00            |
| 215555_at   | 0.13            | -2.90   | 0.00            |
| 217353_at   | 0.13            | -2.90   | 0.00            |
| 222366_at   | 0.13            | -2.90   | 0.00            |
| 220728_at   | 0.13            | -2.98   | 0.00            |
| 215083_at   | 0.12            | -3.08   | 0.00            |
| 215768_at   | 0.12            | -3.12   | 0.00            |
| 215385_at   | 0.11            | -3.13   | 0.00            |
| 212913_at   | 0.11            | -3.16   | 0.00            |
| 220711_at   | 0.11            | -3.19   | 0.00            |
| 222308_x_at | 0.11            | -3.18   | 0.00            |
| 215599_at   | 0.11            | -3.24   | 0.00            |
| 222316_at   | 0.10            | -3.27   | 0.00            |
| 205728_at   | 0.10            | -3.29   | 0.00            |
| 213397_x_at | 0.10            | -3.30   | 0.00            |
| 205871_at   | 0.10            | -3.30   | 0.00            |
| 222368_at   | 0.10            | -3.32   | 0.00            |
| 220855_at   | 0.10            | -3.34   | 0.00            |
| 215392_at   | 0.10            | -3.36   | 0.00            |
| 214415_at   | 0.09            | -3.44   | 0.00            |
| 215635_at   | 0.08            | -3.64   | 0.00            |
| 216614_at   | 0.06            | -4.02   | 0.00            |
| 208498_s_at | 0.06            | -4.08   | 0.00            |
| 220038_at   | 0.06            | -4.12   | 0.00            |
Table S4. SCC invasion vs. normal epidermis (FCH>3.0 and FDR<0.05)
1325 up- and 1461 down-regulated probes

| Probe  | Symbol | Description | FCH     | lgFCH   | p      | q      |
|--------|--------|-------------|---------|---------|--------|--------|
| 219574_at | 1-Mar membrane-assoc | 0.32 | -1.63 | 0.00 | 0.00 |
| 213256_at | 3-Mar membrane-assoc | 0.21 | -2.27 | 0.00 | 0.00 |
| 201737_s_at | 6-Mar membrane-assoc | 0.09 | -3.43 | 0.00 | 0.00 |
| 200778_s_at | 2-Sep septin 2 | 3.09 | 1.63 | 0.00 | 0.00 |
| 208999_at | 8-Sep septin 8 | 0.30 | -1.74 | 0.00 | 0.00 |
| 201307_at | 11-Sep septin 11 | 3.25 | 1.70 | 0.01 | 0.01 |
| 217757_at | A2M alpha-2-macrogli | 5.41 | 2.44 | 0.00 | 0.00 |
| 219488_at | A4GALT alpha 1,4-galact | 3.77 | 1.91 | 0.00 | 0.00 |
| 205969_at | AADAC arylacetamide dx | 0.16 | -2.62 | 0.00 | 0.00 |
| 201511_at | AAMP angio-associatec | 3.16 | 1.66 | 0.00 | 0.00 |
| 214829_at | AASS aminoadipate-se | 0.32 | -1.62 | 0.00 | 0.00 |
| 205986_at | AATK apoptosis-associ | 3.27 | 1.71 | 0.00 | 0.00 |
| 203504_s_at | ABCA1 ATP-binding cas | 0.28 | -1.82 | 0.00 | 0.00 |
| 220159_at | ABCA11P ATP-binding cas | 0.31 | -1.70 | 0.00 | 0.00 |
| 210082_at | ABCA4 ATP-binding cas | 7.64 | 2.93 | 0.00 | 0.00 |
| 213353_at | ABCA5 ATP-binding cas | 0.11 | -3.16 | 0.00 | 0.00 |
| 204719_at | ABCA8 ATP-binding cas | 0.24 | -2.09 | 0.00 | 0.00 |
| 208161_s_at | ABCC3 ATP-binding cas | 0.33 | -1.59 | 0.00 | 0.00 |
| 203196_at | ABCC4 ATP-binding cas | 0.18 | -2.51 | 0.00 | 0.00 |
| 205142_x_at | ABCD1 ATP-binding cas | 3.21 | 1.68 | 0.00 | 0.00 |
| 202850_at | ABCD3 ATP-binding cas | 0.28 | -1.84 | 0.00 | 0.00 |
| 209247_s_at | ABCD4 ATP-binding cas | 0.33 | -1.61 | 0.00 | 0.00 |
| 207623_at | ABCF2 ATP-binding cas | 3.82 | 1.94 | 0.00 | 0.00 |
| 207623_at | ABCF2 ATP-binding cas | 0.13 | -2.99 | 0.00 | 0.00 |
| 207593_at | ABCG4 ATP-binding cas | 3.48 | 1.80 | 0.00 | 0.00 |
| 205566_at | ABHD2 abhydrolase don | 4.80 | 2.26 | 0.00 | 0.00 |
| 221679_s_at | ABHD6 abhydrolase don | 0.26 | -1.96 | 0.00 | 0.00 |
| 209028_s_at | ABI1 abl-interactor 1 | 0.31 | -1.69 | 0.00 | 0.00 |
| 202025_x_at | ACA11 acetyl-Coenzyme | 4.14 | 2.05 | 0.00 | 0.00 |
| 43427_at | ACACB acetyl-Coenzyme | 0.33 | -1.59 | 0.00 | 0.00 |
| 49452_at | ACACB acetyl-Coenzyme | 0.25 | -1.98 | 0.00 | 0.00 |
| 206069_s_at | ACADL acyl-Coenzyme | 0.16 | -2.61 | 0.00 | 0.00 |
| 206069_s_at | ACADL acyl-Coenzyme | 0.04 | -4.54 | 0.00 | 0.00 |
| 205355_at | ACADSB acyl-Coenzyme | 0.19 | -2.42 | 0.00 | 0.00 |
| 212476_at | ACAP2 ArfGAP with coi | 0.29 | -1.77 | 0.00 | 0.00 |
| 202323_s_at | ACBD3 acyl-Coenzyme | 0.29 | -1.80 | 0.00 | 0.00 |
| 210337_s_at | ACLY ATP citrate lyase | 5.08 | 2.34 | 0.00 | 0.00 |
| 200793_s_at | ACO2 aconitase 2, milt | 4.26 | 2.09 | 0.00 | 0.00 |
| 214763_at | ACOT11 acyl-CoA thioest | 10.54 | 3.40 | 0.00 | 0.00 |
| 221641_s_at | ACOT9 acyl-CoA thioest | 3.67 | 1.88 | 0.00 | 0.00 |
| 215227_x_at | ACP1 acid phosphatas | 3.03 | 1.60 | 0.00 | 0.00 |
| Gene Symbol | Description                              | Log2 Ratio | Fold Change | P-Value | q-Value |
|-------------|------------------------------------------|------------|-------------|---------|---------|
| 206465_at   | ACSBG1 acyl-CoA synthetase              | 0.15       | 0.00        | 0.00    | 0.00    |
| 201661_s_at | ACSL3 acyl-CoA synthetase               | 0.28       | -1.84       | 0.00    | 0.00    |
| 202422_s_at | ACSL4 acyl-CoA synthetase               | 0.28       | -1.85       | 0.00    | 0.00    |
| 208636_at   | ACTN1 actinin, alpha 1                  | 14.27      | 3.84        | 0.00    | 0.00    |
| 208637_x_at | ACTN1 actinin, alpha 1                  | 8.62       | 3.11        | 0.00    | 0.00    |
| 21160_x_at  | ACTN1 actinin, alpha 1                  | 8.06       | 3.01        | 0.00    | 0.00    |
| 205209_at   | ACVR1B activin A receptor               | 0.19       | -2.43       | 0.00    | 0.00    |
| 202604_x_at | ADAM10 ADAM metalloipe                 | 3.93       | 1.98        | 0.00    | 0.00    |
| 206046_at   | ADAM23 ADAM metalloipe                 | 11.11      | 3.47        | 0.00    | 0.00    |
| 208268_at   | ADAM28 ADAM metalloipe                 | 0.30       | -1.76       | 0.00    | 0.00    |
| 220208_at   | ADAMTS13 ADAM metalloipe               | 4.15       | 2.05        | 0.00    | 0.00    |
| 220705_s_at | ADAMTS7 ADAM metalloipe                | 3.04       | 1.60        | 0.00    | 0.00    |
| 213217_at   | ADCY2 adenylate cyclase                 | 0.18       | -2.51       | 0.00    | 0.00    |
| 204947_at   | ADCY9 adenylate cyclase                 | 3.80       | 1.93        | 0.00    | 0.00    |
| 204948_s_at | ADCY9 adenylate cyclase                 | 3.74       | 1.90        | 0.00    | 0.00    |
| 201034_at   | ADD3 adducin 3 (garnn)                  | 0.32       | -1.66       | 0.00    | 0.00    |
| 201753_s_at | ADD3 adducin 3 (garnn)                  | 0.27       | -1.92       | 0.00    | 0.00    |
| 201752_s_at | ADD3 adducin 3 (garnn)                  | 0.24       | -2.05       | 0.00    | 0.00    |
| 205882_x_at | ADD3 adducin 3 (garnn)                  | 0.23       | -2.13       | 0.00    | 0.00    |
| 209212_at   | ADM adrenomedullin                     | 4.52       | 2.18        | 0.00    | 0.00    |
| 220538_at   | ADM2 adrenomedullin                    | 5.40       | 2.43        | 0.00    | 0.00    |
| 38447_at    | ADRBK1 adrenergic, beta                | 11.31      | 3.50        | 0.00    | 0.00    |
| 201402_at   | ADRBK1 adrenergic, beta                | 8.72       | 3.13        | 0.00    | 0.00    |
| 201792_at   | AEBP1 AE binding prote                 | 3.92       | 1.97        | 0.00    | 0.00    |
| 201924_at   | AFF1 AF4/FMR2 familt                   | 0.27       | -1.89       | 0.00    | 0.00    |
| 222362_at   | AGFG2 ArfGAP with FG                   | 0.27       | -1.88       | 0.00    | 0.00    |
| 208042_at   | AGGF1 angiogenic facto                 | 0.27       | -1.87       | 0.00    | 0.00    |
| 219693_at   | AGPAT4 1-acylglycerol-3-               | 3.01       | 1.59        | 0.00    | 0.00    |
| 209003_s_at | AHCY adenosylhomocyst | 3.86       | 1.95        | 0.00    | 0.00    |
| 220016_at   | AHNAK AHNAK nucleosp | 0.21       | -2.25       | 0.00    | 0.00    |
| 209901_x_at | AIF1 allograft inflamm | 3.16       | 1.66        | 0.00    | 0.00    |
| 205613_at   | AIM2 absent in melan | 14.61      | 3.87        | 0.00    | 0.00    |
| 215789_s_at | AJAP1 adherens junclo                 | 4.85       | 2.28        | 0.00    | 0.00    |
| 206460_at   | AJAP1 adherens junclo                 | 3.18       | 1.67        | 0.00    | 0.00    |
| 208967_s_at | AK2 adenylate kinase                  | 3.15       | 1.66        | 0.00    | 0.00    |
| 208325_s_at | AKAP13 A kinase (PRKA)                | 0.30       | -1.73       | 0.00    | 0.00    |
| 222024_s_at | AKAP13 A kinase (PRKA)                | 0.21       | -2.23       | 0.00    | 0.00    |
| 205771_s_at | AKAP7 A kinase (PRKA)                | 0.18       | -2.48       | 0.00    | 0.00    |
| 215741_x_at | AKAP8L A kinase (PRKA)               | 4.43       | 2.15        | 0.00    | 0.00    |
| 215483_at   | AKAP9 A kinase (PRKA)                 | 0.08       | -3.57       | 0.00    | 0.00    |
| 201272_at   | AKR1B1 aldo-keto reducts              | 3.04       | 1.61        | 0.00    | 0.00    |
| 206561_s_at | AKR1B10 aldo-keto reducts             | 17.57      | 4.14        | 0.00    | 0.00    |
| 218487_at   | ALAD aminolevulinate,                | 0.33       | -1.59       | 0.00    | 0.00    |
| 205833_s_at | ALAS1 aminolevulinate,               | 3.36       | 1.75        | 0.00    | 0.00    |
| 201951_at   | ALCAM activated leukoøc | 0.17       | -2.60       | 0.00    | 0.00    |
| 217791_s_at | ALDH1A1 aldehyde dehydr | 3.29       | 1.72        | 0.00    | 0.00    |
| 203180_at   | ALDH1A3 aldehyde dehydr | 4.38       | 2.13        | 0.00    | 0.00    |
| 202053_s_at | ALDH3A2 aldehyde dehydr | 0.23       | -2.13       | 0.00    | 0.00    |
| Gene ID    | Description                                              | Log2 Fold Change | p-value | q-value |
|-----------|----------------------------------------------------------|------------------|---------|---------|
| 202054_s_at | ALDH3A2 aldehyde dehydrogenase 3 family, member A2       | 0.19             | -2.39   | 0.00    |
| 211552_s_at | ALDH4A1 aldehyde dehydrogenase 4 family, member A1      | 5.16             | 2.37    | 0.00    |
| 203608_at  | ALDH5A1 aldehyde dehydrogenase 5 family, member A1      | 0.20             | -2.33   | 0.00    |
| 220148_at  | ALDH8A1 aldehyde dehydrogenase 8 family, member A1      | 0.26             | -1.96   | 0.00    |
| 218444_at  | ALG12 asparagine-linked glycosylation 12, alpha-1,6-mannosyltransferase homolog (S. cerevisiae) | 3.45             | 1.79    | 0.00    |
| 205583_s_at | ALG13 asparagine-linked glycosylation 13 homolog (S. cerevisiae) | 0.20             | -1.82   | 0.00    |
| 205584_at  | ALG13 asparagine-linked glycosylation 13 homolog (S. cerevisiae) | 0.27             | -1.90   | 0.00    |
| 217077_x_at | ALMS1 Alstrom syndrome 1                               | 0.27             | -1.92   | 0.00    |
| 207206_s_at | ALOX12 arachidonate 12                                   | 3.08             | 1.62    | 0.01    |
| 206714_at  | ALOX15B arachidonate 15                                  | 0.14             | -2.64   | 0.00    |
| 222383_s_at | ALOXE3 arachidonate lipc                               | 0.13             | -2.98   | 0.00    |
| 201196_s_at | AMFR autocrine motility                                 | 3.15             | 1.66    | 0.00    |
| 202203_s_at | AMFR autocrine motility                                 | 2.76             | 2.33    | 0.00    |
| 202204_s_at | AMFR autocrine motility                                 | 2.76             | 2.33    | 0.00    |
| 221825_at  | ANG indulin                                            | 24.55            | 4.62    | 0.00    |
| 203002_at  | ANG2 angiotensin-like                                   | 0.21             | -2.26   | 0.00    |
| 218555_at  | ANAPC2 anaphase promc                                   | 0.28             | -1.86   | 0.00    |
| 201196_s_at | ANG dendrimer                                          | 0.28             | -1.86   | 0.00    |
| 210873_x_at | ANKRD12 ankyrin repeat di                               | 0.29             | -1.77   | 0.00    |
| 212289_at  | ANKRD12 ankyrin repeat di                               | 0.22             | -2.08   | 0.00    |
| 216550_x_at | ANKRD12 ankyrin repeat di                               | 0.22             | -2.08   | 0.00    |
| 214723_x_at | ANKRD36 ankyrin repeat di                               | 0.09             | -3.54   | 0.00    |
| 220940_at  | ANKRD36B ankyrin repeat di                              | 0.20             | -2.33   | 0.00    |
| 212731_at  | ANKRD46 ankyrin repeat di                               | 0.26             | -1.94   | 0.00    |
| 218804_at  | ANO1 anoctamin 1, cal                                   | 0.19             | -2.41   | 0.00    |
| 201012_at  | ANXA1 annexin A1                                       | 4.35             | 2.12    | 0.00    |
| 209369_at  | ANXA3 annexin A3                                       | 10.94            | 3.45    | 0.00    |
| 211712_s_at | ANXA9 annexin A9                                       | 0.13             | -2.95   | 0.00    |
| 218261_at  | AP1M2 adaptor-related ť                                 | 3.21             | 1.68    | 0.00    |
| 200615_s_at | AP2B1 adaptor-related ť                                 | 7.28             | 2.96    | 0.00    |
| 200613_at  | AP2M1 adaptor-related ť                                 | 4.39             | 2.13    | 0.00    |
| 209870_s_at | APBA2 amyloid beta (A4)                                 | 3.95             | 1.98    | 0.00    |
| 211404_s_at | APLP2 amyloid beta (A4)                                 | 5.82             | 2.54    | 0.00    |
| 208702_x_at | APLP2 amyloid beta (A4)                                 | 4.06             | 2.02    | 0.00    |
| 214875_x_at | APLP2 amyloid beta (A4)                                 | 3.58             | 1.84    | 0.00    |
| 210873_x_at | APOBEC3A apolipoprotein B                               | 25.04            | 4.65    | 0.00    |
| 204205_at  | APOBEC3G apolipoprotein B                               | 6.96             | 2.80    | 0.00    |
| 215570_at  | APOBEC3G apolipoprotein B                               | 4.10             | 2.04    | 0.00    |
| 212884_x_at | APOE apolipoprotein E                                  | 0.33             | -1.60   | 0.00    |
| 203382_s_at | APOE apolipoprotein E                                  | 0.18             | -2.44   | 0.00    |
| 203381_s_at | APOE apolipoprotein E                                  | 0.18             | -2.52   | 0.00    |
| 209546_s_at | APOL1 apolipoprotein L                                  | 5.06             | 2.34    | 0.00    |
| 219716_at  | APOL6 apolipoprotein L                                  | 5.54             | 2.47    | 0.00    |
| Gene Symbol          | Description                              | Fold Change | p-Value | q-Value |
|----------------------|------------------------------------------|-------------|---------|---------|
| APOO                 | apolipoprotein O                         | 4.49        | 2.17    | 0.00    |
| APP                  | amyloid beta (A4)                        | 3.88        | 1.96    | 0.00    |
| APPL2                | adaptor protein                          | 0.12        | -3.02   | 0.00    |
| AQR                  | aquarius homolo                          | 0.30        | -1.76   | 0.00    |
| ARAP2                | ArfGAP with Rho                          | 0.16        | -2.66   | 0.00    |
| AREG                 | amphiregulin                             | 26.87       | 4.75    | 0.00    |
| ARFGEF1              | ADP-ribosylation                         | 4.70        | 2.23    | 0.00    |
| ARFGEF2              | ADP-ribosylation                         | 0.26        | -1.94   | 0.00    |
| ARGLU1               | arginine and glut                        | 0.24        | -2.07   | 0.00    |
| ARHGAP12             | Rho GTPase act                           | 0.27        | -1.91   | 0.00    |
| ARHGAP22             | Rho GTPase act                           | 3.62        | 1.86    | 0.00    |
| ARHGAP24             | Rho GTPase act                           | 0.30        | -1.72   | 0.00    |
| ARHGAP25             | Rho GTPase act                           | 5.82        | 2.54    | 0.00    |
| ARHGAP29             | Rho GTPase act                           | 0.20        | -2.33   | 0.00    |
| ARHGAP5              | Rho GTPase act                           | 0.27        | -1.90   | 0.00    |
| ARID3B               | AT rich interactiv                      | 3.38        | 1.76    | 0.00    |
| ARL14                | ADP-ribosylation                         | 9.32        | 3.22    | 0.00    |
| ARL2BP               | ADP-ribosylation                         | 3.31        | 1.73    | 0.00    |
| ARL4C                | ADP-ribosylation                         | 3.36        | 1.75    | 0.00    |
| ARMC8                | armadillo repeat                         | 0.24        | -2.06   | 0.00    |
| ARMCX1               | armadillo repeat                         | 0.24        | -2.07   | 0.00    |
| ARNTL                | aryl hydrocarbon                         | 0.20        | -2.33   | 0.00    |
| ARNTL2               | aryl hydrocarbon                         | 4.32        | 2.11    | 0.00    |
| ARPC1B               | actin related prot                       | 12.43       | 3.64    | 0.00    |
| ARPC4                | actin related prot                       | 3.75        | 1.91    | 0.00    |
| ARVCF                | armadillo repeat                         | 3.62        | 1.86    | 0.00    |
| ASAH1                | N-acylsphingosir                         | 0.33        | -1.60   | 0.00    |
| ASAP3                | ArfGAP with SHC                         | 0.18        | -2.44   | 0.00    |
| ASF1A                | ASF1 anti-silenc                         | 0.17        | -2.58   | 0.00    |
| ASF1B                | ASF1 anti-silenc                         | 4.00        | 2.00    | 0.00    |
| ASPA                 | aspartoacylase (                         | 0.18        | -2.45   | 0.00    |
| ASPH                 | aspartate beta-h                         | 0.30        | -1.75   | 0.00    |
| ASPM                 | asp (abnormal sq)                       | 0.33        | -1.62   | 0.01    |
| ATAD2B               | ATPase family, J                       | 0.23        | -2.13   | 0.00    |
| ATAD2A               | ATPase family, J                       | 4.72        | 2.24    | 0.00    |
| ATF6                 | activating trans                         | 0.30        | -1.76   | 0.00    |
| ATF7IP               | activating trans                         | 0.14        | -2.83   | 0.00    |
| ATG12                | ATG12 autophag                         | 3.83        | 1.94    | 0.00    |
| ATG2B                | ATG2 autophag                          | 0.21        | -2.29   | 0.00    |
| ATNO1                | atrophin 1                               | 5.88        | 2.56    | 0.00    |
| ATOX1                | ATX1 antioxidant                         | 4.93        | 2.30    | 0.00    |
| ATP10B               | ATPase, class V                          | 0.27        | -1.87   | 0.00    |
| ATP1A                | ATPase, class V                          | 0.19        | -2.42   | 0.00    |
| ATP12A               | ATPase, H+/K+                            | 17.76       | 4.15    | 0.00    |
| ATP1B1               | ATPase, Na+/K+                           | 3.34        | 1.74    | 0.01    |
| ATP2B1               | ATPase, Ca++ tr                          | 0.30        | -1.75   | 0.00    |
| ATP2B1               | ATPase, Ca++ tr                          | 0.17        | -2.57   | 0.00    |
| ATP2B1               | ATPase, Ca++ tr                          | 0.12        | -3.06   | 0.00    |
| Gene ID     | Description                                                                 | Log2 Fold Change | p-value | q-value |
|------------|------------------------------------------------------------------------------|------------------|---------|---------|
| ATP2C2     | ATPase, Ca++ transporting, type 2C, member 2                                 | 0.22             | -2.18   | 0.00    |
| ATP6V0A2   | ATPase, H+ transmembrane, member 2                                           | 0.28             | -1.86   | 0.00    |
| ATP6V0B    | ATPase, H+ transporting, member 2                                            | 3.32             | 1.73    | 0.00    |
| ATP6V0D1   | ATPase, H+ transporting, member 2                                            | 3.21             | 1.68    | 0.00    |
| ATP6V0E1   | ATPase, H+ transporting, member 2                                            | 3.93             | 1.98    | 0.00    |
| ATP6V0E2   | ATPase, H+ transporting, member 2                                            | 0.17             | -2.59   | 0.00    |
| ATP7A      | ATPase, Cu++ transporting, alpha polypeptide                                 | 0.22             | -2.21   | 0.00    |
| ATP7A      | ATPase, Cu++ transporting, alpha polypeptide                                 | 0.14             | -2.86   | 0.00    |
| ATP8A1     | ATPase, aminoacyl-tRNA synthetase, mitochondrial, member 2                   | 0.07             | -3.77   | 0.00    |
| ATRX       | alpha thalassem 7                                                           | 0.31             | -1.69   | 0.00    |
| ATRX       | alpha thalassem 7                                                           | 0.27             | -1.89   | 0.00    |
| ATXN7      | ataxin 7                                                                     | 0.16             | -2.64   | 0.00    |
| ATXN7      | ataxin 7                                                                     | 0.08             | -3.59   | 0.00    |
| AVIL       | advillin                                                                     | 0.21             | -2.27   | 0.00    |
| AVPR1B     | arginine vasopressin                                                         | 8.66             | 3.11    | 0.00    |
| AZGP1      | alpha-2-glycoprotein                                                         | 0.08             | -3.64   | 0.00    |
| B3GNT3     | UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 3                 | 3.84             | 1.94    | 0.00    |
| B3GNTL1    | UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase-like 1            | 0.25             | -1.98   | 0.00    |
| B4GALT4    | UDP-Gal:betaGal beta-1,3-N-acetylglucosaminyltransferase                      | 0.29             | -1.79   | 0.00    |
| B4GALT5    | UDP-Gal:betaGal beta-1,3-N-acetylglucosaminyltransferase                      | 4.14             | 2.05    | 0.00    |
| BAD        | BCL2-associated transducer                                                   | 3.16             | 1.66    | 0.00    |
| BAG5       | BCL2-associated transducer                                                   | 0.15             | -2.79   | 0.00    |
| BAK1       | BCL2-antagonist                                                              | 3.55             | 1.83    | 0.00    |
| BARD1      | BRCA1-associated protein                                                     | 0.13             | -2.91   | 0.00    |
| BARX2      | BARX homeobox                                                                | 3.30             | 1.72    | 0.00    |
| BASP1      | brain abundant tetratricopeptide repeat family member 1                      | 10.50            | 3.39    | 0.00    |
| BAT1       | HLA-B associate                                                              | 0.29             | -1.80   | 0.00    |
| BAT1       | HLA-B associate                                                              | 0.27             | -1.90   | 0.00    |
| BA2A       | bromodomain ac                                                               | 3.26             | 1.71    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |
| BCA2       | brevinacin                                                                   | 6.23             | 2.64    | 0.00    |

Page 153 of 207
| Gene ID     | Description                          | Fold Change | P-value | Log2Fold | LinFold |
|------------|--------------------------------------|-------------|---------|----------|---------|
| 214439_x_at| bridging integrator 1                | 7.63        | 0.00    | 2.93     | 0.00    |
| 202931_x_at| bridging integrator 1                | 5.74        | 0.00    | 2.52     | 0.00    |
| 210201_x_at| bridging integrator 1                | 3.72        | 0.00    | 1.89     | 0.00    |
| 219191_s_at| bridging integrator 1                | 4.71        | 0.00    | 2.24     | 0.00    |
| 202179_at  | bleomycin hydrolase                  | 0.21        | 0.00    | -2.25    | 0.00    |
| 206725_x_at| bone morphogen                      | 4.76        | 0.00    | 2.25     | 0.00    |
| 205574_x_at| bone morphogen                      | 3.11        | 0.00    | 1.64     | 0.00    |
| 207595_s_at| bone morphogen                      | 0.19        | 0.00    | -2.39    | 0.00    |
| 205951_s_at| bone morphogen                      | 0.25        | 0.00    | -2.01    | 0.00    |
| 20203_at   | bone morphogen                      | 8.22        | 0.00    | 3.04     | 0.00    |
| 206725_x_at| bone morphogen                      | 0.21        | 0.00    | -2.25    | 0.00    |
| 218090_s_at| bone morphogen                      | 0.27        | 0.00    | -1.89    | 0.00    |
| 215460_x_at| bone morphogen                      | 0.25        | 0.00    | -2.01    | 0.00    |
| 218090_s_at| bone morphogen                      | 0.28        | 0.00    | -1.83    | 0.00    |
| 208677_s_at| bone morphogen                      | 0.27        | 0.00    | -1.89    | 0.00    |
| 207326_at  | bone morphogen                      | 0.04        | 0.00    | -4.63    | 0.00    |
| 215425_at  | bone morphogen                      | 0.27        | 0.00    | -1.91    | 0.00    |
| 204821_at  | bone morphogen                      | 0.29        | 0.00    | -1.76    | 0.00    |
| 38241_at   | bone morphogen                      | 0.21        | 0.00    | -2.25    | 0.00    |
| 204901_at  | bone morphogen                      | 0.04        | 0.00    | -1.91    | 0.00    |
| 209183_s_at| chromosome 10                        | 3.31        | 0.00    | 1.73     | 0.00    |
| 219553_s_at| chromosome 11                        | 4.33        | 0.00    | 2.11     | 0.00    |
| 218299_at  | chromosome 11                        | 6.52        | 0.00    | 2.71     | 0.00    |
| 52164_at   | chromosome 11                        | 3.51        | 0.00    | 1.81     | 0.00    |
| 204218_at  | chromosome 11                        | 3.84        | 0.00    | 1.94     | 0.00    |
| 221208_at  | chromosome 11                        | 0.21        | 0.00    | -2.23    | 0.00    |
| 220141_at  | chromosome 11                        | 0.31        | 0.00    | -1.71    | 0.00    |
| 221599_at  | chromosome 11                        | 0.26        | 0.00    | -1.96    | 0.00    |
| 218789_s_at| chromosome 11                        | 0.22        | 0.00    | -2.16    | 0.00    |
| 64432_at   | chromosome 12                        | 0.14        | 0.00    | -2.83    | 0.00    |
| 218867_s_at| chromosome 12                        | 3.74        | 0.00    | 1.90     | 0.00    |
| 219099_at  | chromosome 12                        | 4.02        | 0.00    | 2.01     | 0.00    |
| 221777_at  | chromosome 12                        | 3.82        | 0.00    | 1.93     | 0.00    |
| 219166_at  | chromosome 14                        | 0.30        | 0.00    | -1.75    | 0.00    |
| 206500_s_at| chromosome 14                        | 0.15        | 0.00    | -2.71    | 0.00    |
| 218202_at  | chromosome 14                        | 0.07        | 0.00    | -3.76    | 0.00    |
| 208109_s_at| chromosome 15                        | 0.24        | 0.00    | -2.09    | 0.00    |
| 218060_s_at| chromosome 16                        | 3.18        | 0.00    | 1.67     | 0.00    |
| 219556_at  | chromosome 16                        | 4.60        | 0.00    | 2.20     | 0.00    |
| 203830_s_at| chromosome 17                        | 0.20        | 0.00    | -2.31    | 0.00    |
| 221621_at  | chromosome 17                        | 0.29        | 0.00    | -1.81    | 0.00    |
| 207996_s_at| chromosome 18                        | 5.81        | 0.00    | 2.54     | 0.00    |
| Gene ID | Description | Chromosome | Log2 Fold Change | FDR | P Value | Benjamini-Hochberg | Log10 Fold Change |
|---------|-------------|------------|-----------------|-----|---------|-------------------|------------------|
| 217539_at | C18orf25 | chromosome 18 | 0.33 | -1.59 | 0.00 | 0.00 | 0.00 |
| 222266_at | C19orf2 | chromosome 19 | 0.22 | -2.20 | 0.00 | 0.00 | 0.00 |
| 212925_at | C19orf21 | chromosome 19 | 11.10 | 3.47 | 0.00 | 0.00 | 0.00 |
| 55705_at | C19orf22 | chromosome 19 | 4.54 | 2.18 | 0.00 | 0.00 | 0.00 |
| 200078_s_at | C19orf50 | chromosome 19 | 3.95 | 1.98 | 0.00 | 0.00 | 0.00 |
| 206901_at | C19orf57 | chromosome 19 | 4.78 | 2.26 | 0.00 | 0.00 | 0.00 |
| 218429_s_at | C19orf66 | chromosome 19 | 3.20 | 1.68 | 0.00 | 0.00 | 0.00 |
| 212003_at | C1orf144 | chromosome 1 | 5.76 | 2.53 | 0.00 | 0.00 | 0.00 |
| 212004_at | C1orf144 | chromosome 1 | 3.79 | 1.92 | 0.00 | 0.00 | 0.00 |
| 210711_at | C1orf217 | chromosome 1 | 0.23 | -2.25 | 0.00 | 0.00 | 0.00 |
| 216935_at | C1orf46 | chromosome 1 | 0.20 | -2.30 | 0.00 | 0.00 | 0.00 |
| 218429_s_at | C1orf66 | chromosome 1 | 3.20 | 1.68 | 0.00 | 0.00 | 0.00 |
| 209006_s_at | C1orf63 | chromosome 1 | 0.23 | -2.10 | 0.00 | 0.00 | 0.00 |
| 217087_at | C1orf68 | chromosome 1 | 0.26 | -1.95 | 0.00 | 0.00 | 0.00 |
| 202553_at | C1QB | complement | 4.11 | 2.04 | 0.00 | 0.00 | 0.00 |
| 212067_s_at | C1R | complement | 5.69 | 2.51 | 0.00 | 0.00 | 0.00 |
| 219635_at | C1R | complement | 0.24 | -2.09 | 0.00 | 0.00 | 0.00 |
| 208747_s_at | C1S | complement | 11.24 | 3.49 | 0.00 | 0.00 | 0.00 |
| 203502_at | C2 | complement | 3.18 | 1.67 | 0.00 | 0.00 | 0.00 |
| 219463_at | C20orf103 | chromosome 20 | 3.60 | 1.85 | 0.00 | 0.00 | 0.00 |
| 215852_x_at | C20orf117 | chromosome 20 | 0.33 | -1.61 | 0.00 | 0.00 | 0.00 |
| 219961_s_at | C20orf19 | chromosome 20 | 5.10 | 2.35 | 0.00 | 0.00 | 0.00 |
| 217335_x_at | C20orf24 | chromosome 20 | 3.13 | 1.65 | 0.00 | 0.00 | 0.00 |
| 219070_at | C20orf29 | chromosome 20 | 3.37 | 1.75 | 0.00 | 0.00 | 0.00 |
| 219617_at | C2orf34 | chromosome 2 | 0.28 | -1.85 | 0.00 | 0.00 | 0.00 |
| 220149_at | C2orf54 | chromosome 2 | 0.16 | -2.66 | 0.00 | 0.00 | 0.00 |
| 220943_s_at | C2orf56 | chromosome 2 | 0.24 | -2.07 | 0.00 | 0.00 | 0.00 |
| 215046_at | C2orf67 | chromosome 2 | 0.17 | -2.59 | 0.00 | 0.00 | 0.00 |
| 221878_at | C2orf68 | chromosome 2 | 0.20 | -2.31 | 0.00 | 0.00 | 0.00 |
| 65472_at | C2orf68 | chromosome 2 | 0.15 | -2.76 | 0.00 | 0.00 | 0.00 |
| 209906_at | C3AR1 | complement | 5.11 | 2.35 | 0.00 | 0.00 | 0.00 |
| 209285_s_at | C3orf63 | chromosome 3 | 0.33 | -1.62 | 0.00 | 0.00 | 0.00 |
| 219023_at | C4orf16 | chromosome 4 | 0.17 | -2.59 | 0.00 | 0.00 | 0.00 |
| 218179_s_at | C4orf41 | chromosome 4 | 0.28 | -1.83 | 0.00 | 0.00 | 0.00 |
| 218513_at | C4orf43 | chromosome 4 | 0.14 | -2.83 | 0.00 | 0.00 | 0.00 |
| 205500_at | C5 | complement | 0.17 | -2.53 | 0.00 | 0.00 | 0.00 |
| 201310_s_at | C5orf13 | chromosome 5 | 4.10 | 2.04 | 0.00 | 0.00 | 0.00 |
| 221823_at | C5orf30 | chromosome 5 | 0.33 | -1.60 | 0.00 | 0.00 | 0.00 |
| 48030_i_at | C5orf4 | chromosome 5 | 13.20 | 3.72 | 0.00 | 0.00 | 0.00 |
| 218674_at | C5orf44 | chromosome 5 | 0.24 | -2.08 | 0.00 | 0.00 | 0.00 |
| 217924_at | C6orf106 | chromosome 6 | 3.32 | 1.73 | 0.00 | 0.00 | 0.00 |
| 210409_at | C6orf124 | chromosome 6 | 0.26 | -1.96 | 0.00 | 0.00 | 0.00 |
| 221100_at | C6orf15 | chromosome 6 | 3.57 | 1.84 | 0.00 | 0.00 | 0.00 |
| 220755_s_at | C6orf48 | chromosome 6 | 3.55 | 1.83 | 0.00 | 0.00 | 0.00 |
| 219655_at | C7orf10 | chromosome 7 | 4.29 | 2.10 | 0.00 | 0.00 | 0.00 |
| 215024_at | C7orf28B | chromosome 7 | 0.18 | -2.51 | 0.00 | 0.00 | 0.00 |
| 206497_at | C7orf44 | chromosome 7 | 0.31 | -1.71 | 0.00 | 0.00 | 0.00 |
| Gene ID    | Gene Symbol | Description                        | Fold Change | Log2 Fold Change | p-value | Adj. p-value |
|-----------|-------------|------------------------------------|-------------|-----------------|---------|-------------|
| 220949_at | C7orf49     | chromosome 7 open reading frame 49 | 3.79        | 1.92            | 0.00    | 0.00        |
| 210109_at | C7orf54     | chromosome 7 open reading frame 7  | 0.30        | -1.74           | 0.00    | 0.00        |
| 221596_s_at | C7orf64    | chromosome 7 open reading frame 64 | 0.15        | -2.72           | 0.00    | 0.00        |
| 221629_x_at | C8orf30A   | chromosome 8 open reading frame 30 | 3.94        | 1.98            | 0.00    | 0.00        |
| 61874_at  | C9orf7      | chromosome 9 open reading frame 7  | 3.02        | 1.60            | 0.00    | 0.00        |
| 204865_at | CA3         | carbonic anhydrd                   | 0.21        | -2.29           | 0.00    | 0.00        |
| 207504_at | CA7         | carbonic anhydrd                   | 3.45        | 1.79            | 0.00    | 0.00        |
| 211592_s_at | CACNA1C    | calcium channel, voltage-dependent | 0.25        | -2.01           | 0.00    | 0.00        |
| 211802_x_at | CACNA1G   | calcium channel, voltage-dependent | 4.04        | 2.02            | 0.00    | 0.00        |
| 62987_r_at | CACNG4      | calcium channel, voltage-dependent | 27.05       | 4.76            | 0.00    | 0.00        |
| 209030_s_at | CADM1      | cell adhesion molecule             | 0.30        | -1.72           | 0.00    | 0.00        |
| 209031_at | CADM1       | cell adhesion molecule             | 0.10        | -3.32           | 0.00    | 0.00        |
| 205428_s_at | CALB2      | calbindin 2                        | 4.94        | 2.30            | 0.00    | 0.00        |
| 221565_s_at | CALHM2     | calcium homeost                      | 3.42        | 1.78            | 0.00    | 0.00        |
| 20622_x_at | CALM3       | calmodulin 3 (ph)                  | 5.20        | 2.38            | 0.00    | 0.00        |
| 64408_s_at | CALML4      | calmodulin-like 4                  | 0.32        | -1.64           | 0.00    | 0.00        |
| 20757_s_at | CALU        | calumenin                          | 7.09        | 2.83            | 0.00    | 0.00        |
| 20755_s_at | CALU        | calumenin                          | 3.85        | 1.95            | 0.00    | 0.00        |
| 34846_at  | CAMK2B      | calcium/calmodu                     | 4.49        | 2.17            | 0.00    | 0.00        |
| 218309_at | CAMK2N1     | calcium/calmodu                     | 6.00        | 2.59            | 0.00    | 0.00        |
| 213547_at | CAND2       | cullin-associated                   | 0.23        | -2.16           | 0.00    | 0.00        |
| 221732_at | CANT1       | calcium activatef                  | 3.08        | 1.62            | 0.00    | 0.00        |
| 200625_s_at | CAP1       | CAP, adenylyt                      | 3.36        | 1.75            | 0.00    | 0.00        |
| 206833_at | CAPN2       | calpain 2, (ml/l)                  | 8.91        | 3.16            | 0.00    | 0.00        |
| 203356_at | CAPN7       | calpain 7                          | 0.30        | -1.76           | 0.00    | 0.00        |
| 203357_s_at | CAPN7      | calpain 7                          | 0.29        | -1.81           | 0.00    | 0.00        |
| 20001_at  | CAPNS1      | calpain, small su                  | 7.20        | 2.85            | 0.00    | 0.00        |
| 204950_at | CARD8       | caspase recruitf                   | 0.32        | -1.66           | 0.00    | 0.00        |
| 218384_at | CARHSP1     | calcium regulate                   | 4.39        | 2.14            | 0.00    | 0.00        |
| 61297_at  | CASKIN2     | CASK interacting                   | 0.28        | -1.83           | 0.00    | 0.00        |
| 211366_x_at | CASP1     | caspase 1, apop                     | 3.86        | 1.95            | 0.00    | 0.00        |
| 211368_s_at | CASP1      | caspase 1, apop                     | 3.22        | 1.69            | 0.00    | 0.00        |
| 222201_s_at | CASP8AP2   | caspase 8 associ                    | 0.28        | -1.82           | 0.00    | 0.00        |
| 215753_at | CAT         | catalase                           | 0.30        | -1.74           | 0.00    | 0.00        |
| 208204_s_at | CAV3       | caveolin 3                          | 3.57        | 1.84            | 0.00    | 0.00        |
| 213626_at | CBR4        | carbonyl reducta                   | 0.12        | -3.03           | 0.00    | 0.00        |
| 219611_s_at | CCDC21     | coiled-coil domain                | 3.59        | 1.85            | 0.00    | 0.00        |
| 219644_at | CCDC41      | coiled-coil domain                | 0.15        | -2.74           | 0.00    | 0.00        |
| 218175_at | CCDC92      | coiled-coil domain                | 6.13        | 2.62            | 0.00    | 0.00        |
| 209689_at | CCDC93      | coiled-coil domain                | 0.27        | -1.90           | 0.00    | 0.00        |
| 32128_at  | CCL18       | chemokine (C-C)                    | 3.09        | 1.63            | 0.02    | 0.03        |
| 204746_at | CCL20       | chemokine (C-C)                    | 4.96        | 2.31            | 0.00    | 0.00        |
| 207861_at | CCL22       | chemokine (C-C)                    | 3.62        | 1.86            | 0.00    | 0.00        |
| 207955_at | CCL27       | chemokine (C-C)                    | 0.01        | -6.30           | 0.00    | 0.00        |
| 204103_at | CCL4        | chemokine (C-C)                    | 4.13        | 2.05            | 0.00    | 0.00        |
| 1405_i_at | CCL5        | chemokine (C-C)                    | 5.61        | 2.49            | 0.00    | 0.00        |
| 204655_at | CCL5        | chemokine (C-C)                    | 3.45        | 1.78            | 0.01    | 0.02        |
| 208712_at | CCND1       | cyclin D1                          | 0.24        | -2.04           | 0.00    | 0.00        |
| Gene Symbol       | Gene Name                  | Symbol       | Value1 | Value2 | Value3 | Value4 |
|-------------------|----------------------------|--------------|--------|--------|--------|--------|
| 208711_s_at       | CCND1 cyclin D1            | 0.23         | -2.15  | 0.00   | 0.00   |
| 200951_s_at       | CCND2 cyclin D2            | 4.73         | 2.24   | 0.00   | 0.00   |
| 205034_at         | CCNE2 cyclin E2            | 0.29         | -1.80  | 0.00   | 0.00   |
| 204645_at         | CCNT2 cyclin T2            | 0.19         | -2.37  | 0.00   | 0.00   |
| 222156_x_at       | CCPG1 cell cycle progresor| 0.27         | -1.90  | 0.00   | 0.00   |
| 221156_x_at       | CCPG1 cell cycle progresor| 0.20         | -2.33  | 0.00   | 0.00   |
| 206933_at         | CCR6 chemokine (C-C)       | 0.32         | -1.66  | 0.00   | 0.00   |
| 220511_at         | CCRl1 chemokine (C-C)      | 0.30         | -1.72  | 0.02   | 0.03   |
| 201743_at         | CD14 CD14 molecule         | 5.64         | 2.50   | 0.00   | 0.00   |
| 204306_s_at       | CD151 CD151 molecule       | 4.22         | 2.08   | 0.00   | 0.00   |
| 206953_s_at       | CD164 CD164 molecule       | 5.43         | 2.44   | 0.00   | 0.00   |
| 221156_x_at       | CD177 CD177 molecule       | 3.53         | 1.82   | 0.00   | 0.00   |
| 206749_at         | CD18 CD18 molecule         | 3.49         | 1.81   | 0.01   | 0.01   |
| 205831_at         | CD2 CD2 molecule           | 3.11         | 1.64   | 0.00   | 0.00   |
| 220428_at         | CD207 CD207 molecule       | 0.29         | -1.81  | 0.00   | 0.00   |
| 209772_s_at       | CD24 CD24 molecule         | 17.78        | 4.15   | 0.00   | 0.00   |
| 209771_x_at       | CD24 CD24 molecule         | 4.46         | 2.16   | 0.01   | 0.02   |
| 208651_x_at       | CD24 CD24 molecule         | 4.02         | 2.01   | 0.01   | 0.01   |
| 216379_x_at       | CD24 CD24 molecule         | 3.98         | 1.99   | 0.02   | 0.03   |
| 219025_at         | CD248 CD248 molecule       | 3.06         | 1.61   | 0.00   | 0.00   |
| 203799_at         | CD302 CD302 molecule       | 0.16         | -2.65  | 0.00   | 0.00   |
| 35150_at          | CD40 CD40 molecule         | 8.42         | 3.07   | 0.00   | 0.00   |
| 222292_at         | CD40 CD40 molecule         | 0.24         | -2.09  | 0.00   | 0.00   |
| 217523_at         | CD44 CD44 molecule         | 0.26         | -1.96  | 0.00   | 0.00   |
| 211075_s_at       | CD47 CD47 molecule         | 8.48         | 3.08   | 0.00   | 0.00   |
| 213055_at         | CD47 CD47 molecule         | 4.38         | 2.13   | 0.00   | 0.00   |
| 203416_at         | CD53 CD53 molecule         | 3.25         | 1.70   | 0.00   | 0.00   |
| 222061_at         | CD58 CD58 molecule         | 0.13         | -2.98  | 0.00   | 0.00   |
| 209733_at         | CD59 CD59 molecule         | 7.55         | 2.92   | 0.00   | 0.00   |
| 209784_at         | CD59 CD59 molecule         | 3.09         | 1.63   | 0.00   | 0.00   |
| 204440_at         | CD83 CD83 molecule         | 3.35         | 1.74   | 0.00   | 0.00   |
| 205880_at         | CD84 CD84 molecule         | 3.40         | 1.77   | 0.00   | 0.00   |
| 205627_at         | CDA cytidine deaminase     | 11.29        | 3.50   | 0.00   | 0.00   |
| 205288_at         | CDC14A CDC14 cell divis    | 0.20         | -2.35  | 0.00   | 0.00   |
| 210742_at         | CDC14A CDC14 cell divis    | 0.17         | -2.58  | 0.00   | 0.00   |
| 211347_at         | CDC14B CDC14 cell divis    | 0.30         | -1.76  | 0.00   | 0.00   |
| 203213_at         | CDC2 cell division cycx    | 0.32         | -1.63  | 0.00   | 0.00   |
| 201853_s_at       | CDC25B cell division cycx  | 7.72         | 2.95   | 0.00   | 0.00   |
| 217879_at         | CDC27 cell division cycx   | 3.02         | 1.59   | 0.00   | 0.00   |
| 205288_s_at       | CDC42EP3 CDC42 effector    | 3.46         | 1.79   | 0.00   | 0.00   |
| 209507_x_at       | CDC5L CDC5 cell divis      | 4.21         | 2.08   | 0.00   | 0.00   |
| 221520_s_at       | CDC8A cell division cycx   | 3.65         | 1.87   | 0.00   | 0.00   |
| 206898_at         | CDH19 cadherin 19, type 1  | 0.33         | -1.60  | 0.00   | 0.00   |
| 203256_at         | CDH3 cadherin 3, type 1    | 19.30        | 4.27   | 0.00   | 0.00   |
| 204252_at         | CDK2 cyclin-dependen       | 0.28         | -1.86  | 0.00   | 0.00   |
| 203252_at         | CDK2AP2 cyclin-dependen    | 3.01         | 1.59   | 0.00   | 0.00   |
| 204247_s_at       | CDK5 cyclin-dependen       | 7.10         | 2.83   | 0.00   | 0.00   |
| 202284_s_at       | CDKN1A cyclin-dependen     | 3.19         | 1.67   | 0.00   | 0.00   |
| Probe Name | Description | Log2 Ratio | Fold Change | P-value 1 | P-value 2 |
|------------|-------------|------------|-------------|-----------|-----------|
| 209112_at  | CDKN1B      | 0.24       | -2.08       | 0.00      | 0.00      |
| 213348_at  | CDKN1C      | 3.45       | 1.79        | 0.00      | 0.00      |
| 207039_at  | CDKN2A      | 15.64      | 3.97        | 0.00      | 0.00      |
| 209644_x_at| CDKN2A      | 3.98       | 1.99        | 0.00      | 0.00      |
| 218929_at  | CDKN2AIP    | 0.30       | -1.75       | 0.00      | 0.00      |
| 204159_at  | CDKN2C      | 0.31       | -1.70       | 0.00      | 0.00      |
| 213230_at  | CDR2L       | 4.57       | 2.19        | 0.00      | 0.00      |
| 206430_at  | CDX1        | 5.67       | 2.50        | 0.00      | 0.00      |
| 201884_at  | CEACAM5     | 7.67       | 2.94        | 0.00      | 0.00      |
| 203757_s_at| CEACAM6     | 24.09      | 4.59        | 0.00      | 0.00      |
| 211657_at  | CEACAM6     | 23.43      | 4.55        | 0.00      | 0.00      |
| 219505_at  | CECR1       | 3.33       | 1.73        | 0.00      | 0.00      |
| 219591_at  | CEND1       | 4.69       | 2.23        | 0.00      | 0.00      |
| 204739_at  | CENPC1      | 0.17       | -2.54       | 0.00      | 0.00      |
| 219294_at  | CENPO       | 0.21       | -2.22       | 0.00      | 0.00      |
| 215170_s_at| CEP152      | 0.24       | -2.04       | 0.00      | 0.00      |
| 218827_s_at| CEP192      | 0.32       | -1.67       | 0.00      | 0.00      |
| 221683_s_at| CEP290      | 0.12       | -3.02       | 0.00      | 0.00      |
| 203493_s_at| CEP57       | 0.30       | -1.76       | 0.00      | 0.00      |
| 203494_s_at| CEP57       | 0.26       | -1.96       | 0.00      | 0.00      |
| 222151_s_at| CEP63       | 0.20       | -2.33       | 0.00      | 0.00      |
| 212677_s_at| CEP68       | 0.26       | -1.93       | 0.00      | 0.00      |
| 52285_f_at | CEP76       | 0.14       | -2.80       | 0.00      | 0.00      |
| 220335_x_at| CES3        | 6.47       | 2.69        | 0.00      | 0.00      |
| 209194_at  | CETN2       | 3.24       | 1.70        | 0.00      | 0.00      |
| 210701_at  | CFP2        | 0.14       | -2.82       | 0.00      | 0.00      |
| 218800_at  | CFH         | 7.12       | 2.83        | 0.00      | 0.00      |
| 206380_s_at| CFP         | 0.25       | -2.02       | 0.00      | 0.00      |
| 215318_at  | CG012       | 0.20       | -2.29       | 0.00      | 0.00      |
| 203975_s_at| CHAF1A      | 0.29       | -1.80       | 0.00      | 0.00      |
| 201183_s_at| CHD4        | 0.27       | -1.91       | 0.00      | 0.00      |
| 220586_at  | CHD9        | 0.31       | -1.70       | 0.00      | 0.00      |
| 210416_s_at| CHEK2       | 3.03       | 1.60        | 0.00      | 0.00      |
| 202229_s_at| CHERP       | 3.40       | 1.77        | 0.00      | 0.00      |
| 209395_s_at| CHI3L1      | 0.12       | -3.03       | 0.00      | 0.00      |
| 213060_s_at| CHI3L2      | 18.42      | 4.20        | 0.00      | 0.00      |
| 204591_at  | CHL1        | 0.31       | -1.68       | 0.01      | 0.01      |
| 218178_s_at| CHM1B       | 4.84       | 2.27        | 0.00      | 0.00      |
| 212624_s_at| CHN1        | 4.18       | 2.06        | 0.00      | 0.00      |
| 206149_at  | CHP2        | 0.05       | -4.29       | 0.00      | 0.00      |
| 202175_at  | CHPF        | 3.84       | 1.94        | 0.00      | 0.00      |
| 221675_s_at| CHPT1       | 0.20       | -2.30       | 0.00      | 0.00      |
| 211248_s_at| CHRD        | 0.16       | -2.69       | 0.00      | 0.00      |
| 219834_at  | CHST11      | 5.11       | 2.35        | 0.00      | 0.00      |
| 209834_at  | CHST3       | 10.38      | 3.38        | 0.00      | 0.00      |
| 32094_at   | CHST3       | 3.47       | 1.80        | 0.00      | 0.00      |
| 221065_s_at| CHST8       | 3.12       | 1.64        | 0.00      | 0.00      |
| 201953_at  | CIB1        | 4.52       | 2.18        | 0.00      | 0.00      |
| Gene ID   | Description                                    | Ratio | Log2 Ratio | P-value | Adjusted P-value |
|-----------|-----------------------------------------------|-------|------------|---------|-----------------|
| 205007_s_at | CIB2 calcium and integrin binding family member 2 | 5.79  | 2.53       | 0.00    | 0.00            |
| 205008_s_at | CIB2 calcium and integrin binding family member 2 | 3.93  | 1.98       | 0.00    | 0.00            |
| 209571_s_at | CIR1 corepressor interacting with RBPJ | 0.19  | -2.37      | 0.00    | 0.00            |
| 221223_x_at | CITED2 Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain | 0.30  | -1.73      | 0.00    | 0.00            |
| 207980_s_at | CITED2 Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain | 0.29  | -1.80      | 0.00    | 0.00            |
| 211359_s_at | CIZ1 CDKN1A interac | 0.32  | -1.63      | 0.00    | 0.00            |
| 209357_at | CITED2 Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain | 0.30  | -1.73      | 0.00    | 0.00            |
| 207980_s_at | CITED2 Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain | 0.29  | -1.80      | 0.00    | 0.00            |
| 212308_at | CLASP2 cytoplasmic linker | 0.13  | -2.90      | 0.00    | 0.00            |
| 206164_at | CLCA2 chloride channel | 6.41  | 2.68       | 0.00    | 0.00            |
| 206166_s_at | CLCA2 chloride channel | 4.28  | 2.10       | 0.00    | 0.00            |
| 206165_s_at | CLCA2 chloride channel | 4.23  | 2.08       | 0.01    | 0.01            |
| 214598_at | CLDN8 claudin 8 | 0.04  | -4.63      | 0.00    | 0.00            |
| 201640_x_at | CLPTM1 cleft lip and palate associated transmembrane protein 1 | 5.33  | 2.41       | 0.00    | 0.00            |
| 216293_at | CLTA clathrin, light chain (Lca) | 3.01  | 1.59       | 0.00    | 0.00            |
| 201975_s_at | CLIP1 CAP-GLY domain | 0.33  | -1.60      | 0.00    | 0.00            |
| 207176_s_at | CLIP1 CAP-GLY domain | 0.32  | -1.65      | 0.00    | 0.00            |
| 214683_s_at | CLK1 CDC-like kinase | 0.26  | -1.92      | 0.00    | 0.00            |
| 210346_s_at | CLK4 CDC-like kinase | 0.24  | -2.09      | 0.00    | 0.00            |
| 219341_s_at | CLN8 ceroid-lipofuscin | 0.32  | -1.64      | 0.00    | 0.00            |
| 221845_s_at | CLPB ClpB caseinolytic peptidase B (E. coli) | 3.75  | 1.91       | 0.00    | 0.00            |
| 201640_x_at | CLPTM1 cleft lip and palate | 5.33  | 2.41       | 0.00    | 0.00            |
| 216293_at | CLTA clathrin, light chain (Lca) | 3.01  | 1.59       | 0.00    | 0.00            |
| 205944_s_at | CLTCL1 clathrin, heavy chain | 3.18  | 1.67       | 0.00    | 0.00            |
| 220438_s_at | CLU clusterin | 0.10  | -3.26      | 0.00    | 0.00            |
| 210571_s_at | CMHA cytidine monophosphate | 0.31  | -1.68      | 0.00    | 0.00            |
| 205518_s_at | CMHA cytidine monophosphate | 0.03  | -5.28      | 0.00    | 0.00            |
| 218111_s_at | CMS cytidine monophosphate | 0.23  | -2.11      | 0.00    | 0.00            |
| 206417_s_at | CNGA1 cyclic nucleotide | 0.19  | -2.38      | 0.00    | 0.00            |
| 207342_s_at | CNGB1 cyclic nucleotide | 8.29  | 3.05       | 0.00    | 0.00            |
| 20874_s_at | CNM2 cyclic nucleotide | 3.68  | 1.88       | 0.00    | 0.00            |
| 203239_s_at | CNOT3 CCR4-NOT transporter | 0.33  | -1.62      | 0.00    | 0.00            |
| 210867_s_at | CNOT4 CCR4-NOT transporter | 0.14  | -2.86      | 0.00    | 0.00            |
| 202163_s_at | CNOT8 CCR4-NOT transporter | 0.29  | -1.80      | 0.00    | 0.00            |
| 208912_s_at | CNP cyclic nucleotide | 3.11  | 1.64       | 0.00    | 0.00            |
| 220323_s_at | CNTD2 cyclin N-terminal | 5.28  | 2.40       | 0.00    | 0.00            |
| 206970_s_at | CNTN2 contactin 2 (axon) | 3.02  | 1.59       | 0.00    | 0.00            |
| 213050_s_at | COBL cordon-bleu homolog | 0.18  | -2.47      | 0.00    | 0.00            |
| 205229_s_at | COCH coagulation factor | 0.15  | -2.74      | 0.00    | 0.00            |
| 211809_x_at | COL13A1 collagen, type XI | 0.30  | -1.75      | 0.00    | 0.00            |
| 204638_s_at | COL17A1 collagen, type X | 3.29  | 1.72       | 0.00    | 0.00            |
| Gene Accession | Gene Symbol | Description | log2 Fold Change | p-Value |
|----------------|-------------|-------------|-----------------|---------|
| 202310_s_at    | COL1A1      | collagen, type I, alpha 1 | 4.88           | 0.00    |
| 202404_s_at    | COL1A2      | collagen, type I, alpha 1 | 19.51          | 0.00    |
| 202403_s_at    | COL1A2      | collagen, type I, alpha 1 | 12.32          | 0.00    |
| 208096_s_at    | COL21A1     | collagen, type XXI, alpha 1 | 0.05           | 0.00    |
| 215076_s_at    | COL3A1      | collagen, type III, alpha 1 | 18.75          | 0.00    |
| 211616_s_at    | COL3A1      | collagen, type III, alpha 1 | 10.43          | 0.00    |
| 201852_s_at    | COL3A1      | collagen, type III, alpha 1 | 8.50           | 0.00    |
| 211908_at      | COL4A1      | collagen, type IV, alpha 1 | 14.34          | 0.00    |
| 211964_at      | COL4A2      | collagen, type IV, alpha 1 | 18.27          | 0.00    |
| 222073_at      | COL4A3      | collagen, type IV, alpha 1 | 0.29           | 0.00    |
| 212488_at      | COL5A1      | collagen, type V, alpha 1 | 8.23           | 0.00    |
| 52255_s_at     | COL5A3      | collagen, type V, alpha 3 | 0.21           | 0.00    |
| 213290_at      | COL6A2      | collagen, type VI, alpha 2 | 0.31           | 0.00    |
| 201438_at      | COL6A3      | collagen, type VI, alpha 3 | 27.71          | 0.00    |
| 204724_s_at    | COL9A3      | collagen, type IX, alpha 1 | 0.33           | 0.00    |
| 221019_s_at    | COLEC12     | collectin sub-fam | 0.31           | 0.00    |
| 218439_s_at    | COMMD10     | COMM domain c | 5.58           | 0.00    |
| 206441_s_at    | COMMD4      | COMM domain c | 3.23           | 0.00    |
| 219561_at      | COPZ2       | coatamer protein | 4.67           | 0.00    |
| 64486_at       | CORO1B      | coronin, actin bir | 3.99           | 0.00    |
| 203858_s_at    | COX10       | COX10 homolog | 3.48           | 0.00    |
| 221550_at      | COX15       | COX15 homolog | 0.15           | 0.00    |
| 213758_at      | COX41       | cytochrome c ox | 0.18           | 0.00    |
| 217249_x_at    | COX7A2      | cytochrome c ox | 4.29           | 0.00    |
| 205624_at      | CPA3        | carboxypeptidases | 4.13           | 0.02    |
| 205773_at      | CPEB3       | cytoplasmic poly | 0.30           | 0.00    |
| 211062_s_at    | CPZ         | carboxypeptidases | 3.51           | 0.00    |
| 202575_at      | CRABP2      | cellular retinoic | 3.08           | 0.01    |
| 209833_s_at    | CRAODD      | CASP2 and RIPA | 4.64           | 0.00    |
| 209432_s_at    | CREB3       | cAMP responsive | 3.15           | 0.00    |
| 212345_s_at    | CREB3L2     | cAMP responsive | 3.22           | 0.00    |
| 202979_s_at    | CREB2F      | CREB/ATF bZIP | 0.18           | 0.00    |
| 214508_x_at    | CREM        | cAMP responsive | 3.61           | 0.00    |
| 205081_at      | CRIP1       | cysteine-rich pro | 0.04           | 0.00    |
| 221541_at      | CRISP5D2    | cysteine-rich sec | 3.40           | 0.00    |
| 206274_s_at    | CROCC       | ciliary rootlet coil | 0.33           | 0.00    |
| 211038_s_at    | CROCC1      | ciliary rootlet coil | 0.31           | 0.00    |
| 209674_at      | CRY1        | cryptochrome 1 i | 0.15           | 0.00    |
| 212695_at      | CRY2        | cryptochrome 2 i | 0.23           | 0.00    |
| 206778_at      | CRYBB2      | crystallin, beta B | 3.35           | 0.00    |
| 205159_at      | CSF2RB      | colony stimulatin | 4.40           | 0.00    |
| 219049_at      | CSGALNACT1  | chondroitin sulf | 4.86           | 0.00    |
| 208886_at      | CSNK1A1     | casein kinase 1, | 0.21           | 0.00    |
| 203579_at      | CSNK2A2     | casein kinase 2, | 0.33           | 0.00    |
| 39966_at       | CSPG5       | chondroitin sulf | 0.25           | 0.00    |
| 207030_s_at    | CSRP2       | cysteine and gly | 5.04           | 0.00    |
| 210140_at      | CST7        | cystatin F (leuko) | 4.69           | 0.00    |
| 201201_at      | CSTB        | cystatin B (stefin) | 6.34           | 0.00    |
| Gene Symbol | Description                                      | Log2 Ratio | fold Change | p-Value   | q-Value  |
|-------------|--------------------------------------------------|-----------|-------------|-----------|----------|
| 204459_at  | CSTF2 cleavage stimulation factor, 3' pre-RNA, subunit 2, 64kDa | 3.00      | 1.59        | 0.00      | 0.00     |
| 215930_s_at | CTAGE5 CTAGE family, n | 0.23      | -2.15       | 0.00      | 0.00     |
| 218923_at  | CTBS chitinase, di-N-acetyl- | 0.25      | -1.99       | 0.00      | 0.00     |
| 208735_s_at | CTDSP2 CTD (carboxyl-terminal domain, RNA polymerase II, polypeptide A) small phosphatase 2 | 3.03      | 1.60        | 0.00      | 0.00     |
| 201533_at  | CTNNB1 catenin (cadherin) | 0.25      | -2.00       | 0.00      | 0.00     |
| 204925_at  | CTNS cystinosis, nephropathic | 3.42      | 1.78        | 0.00      | 0.00     |
| 213274_s_at | CTSB cathepsin B | 5.48      | 2.46        | 0.00      | 0.00     |
| 200839_s_at | CTSB cathepsin B | 4.48      | 2.17        | 0.00      | 0.00     |
| 200838_at  | CTSB cathepsin B | 3.51      | 1.81        | 0.00      | 0.00     |
| 201487_at  | CTSC cathepsin C | 5.90      | 2.56        | 0.00      | 0.00     |
| 202087_s_at | CTSL1 cathepsin L1 | 4.72      | 2.24        | 0.00      | 0.00     |
| 202501_x_at | CTSS cathepsin S | 0.19      | -2.39       | 0.00      | 0.00     |
| 212562_s_at | CTSZ cathepsin Z | 4.05      | 2.02        | 0.00      | 0.00     |
| 214073_at  | CTN cortactin | 3.52      | 1.82        | 0.00      | 0.00     |
| 214782_at  | CTTN cortactin | 0.17      | -2.58       | 0.00      | 0.00     |
| 202157_s_at | CUGBP2 CUG triplet repeat | 0.30      | -1.75       | 0.00      | 0.00     |
| 202158_s_at | CUGBP2 CUG triplet repeat | 0.25      | -2.03       | 0.00      | 0.00     |
| 203078_at  | CUL2 cullin 2 | 0.19      | -2.40       | 0.00      | 0.00     |
| 203533_s_at | CUL5 cullin 5 | 0.19      | -2.36       | 0.00      | 0.00     |
| 218787_x_at | CWF19L1 CWF19-like 1, cell cycle control (S. pombe) | 3.96      | 1.99        | 0.00      | 0.00     |
| 204470_at  | CXCL1 chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha) | 6.26      | 2.65        | 0.00      | 0.00     |
| 204533_at  | CXCL10 chemokine (C-X-C motif) ligand 10 | 9.44      | 3.24        | 0.02      | 0.02     |
| 203915_at  | CXCL9 chemokine (C-X-C motif) ligand 9 | 13.85     | 3.79        | 0.01      | 0.11     |
| 217028_at  | CXCR4 chemokine (C-X-C motif) ligand 4 | 6.16      | 2.62        | 0.00      | 0.00     |
| 220252_x_at | Cxorf21 chromosome X open reading frame 21 | 0.28      | -1.81       | 0.00      | 0.00     |
| 219355_at  | Cxorf57 chromosome X open reading frame 57 | 0.30      | -1.72       | 0.00      | 0.00     |
| 202263_at  | CYBSR1 cytochrome b5 n | 3.15      | 1.65        | 0.00      | 0.00     |
| 203028_s_at | CYBA cytochrome b-24 | 8.95      | 3.16        | 0.00      | 0.00     |
| 212133_at  | CYFIP1 cytoplasmic FMF | 3.17      | 1.67        | 0.00      | 0.00     |
| 213295_at  | CYLD cylindromatosis | 0.33      | -1.60       | 0.00      | 0.00     |
| 221905_at  | CYLD cylindromatosis | 0.31      | -1.72       | 0.00      | 0.00     |
| 39582_at   | CYLD cylindromatosis | 0.29      | -1.80       | 0.00      | 0.00     |
| 214131_at  | Cyorf15B chromosome Y open reading frame 15B | 0.11      | -3.18       | 0.01      | 0.02     |
| 202435_at  | CYP1B1 cytochrome P450 | 0.21      | -2.23       | 0.00      | 0.00     |
| 202436_s_at | CYP1B1 cytochrome P450 | 0.19      | -2.43       | 0.00      | 0.00     |
| 219825_at  | CYP2B6 cytochrome P450 | 0.28      | -1.86       | 0.00      | 0.00     |
| 205676_at  | CYP2B7 cytochrome P450 | 6.17      | 2.63        | 0.00      | 0.00     |
| 208327_at  | CYP2A13 cytochrome P450 | 3.62      | 1.86        | 0.00      | 0.00     |
| 205073_at  | CYP2J2 cytochrome P450 | 0.29      | -1.77       | 0.00      | 0.00     |
| 207786_at  | CYP2R1 cytochrome P450 | 0.27      | -1.89       | 0.00      | 0.00     |
| 220432_s_at | CYP3A1 cytochrome P450 | 0.10      | -3.32       | 0.00      | 0.00     |
| 205765_s_at | CYP3A5 cytochrome P450 | 0.06      | -4.14       | 0.00      | 0.00     |
| 210096_at  | CYP4B1 cytochrome P450 | 0.05      | -4.38       | 0.00      | 0.00     |
| 206539_s_at | CYP4F12 cytochrome P450 | 0.20      | -2.31       | 0.00      | 0.00     |
| 206515_at  | CYP4F3 cytochrome P450 | 0.23      | -2.15       | 0.00      | 0.00     |
| 202879_s_at | CYTH1 cytohesin 1 | 3.69      | 1.88        | 0.00      | 0.00     |
| 216060_s_at | DAAM1 dishevelled associated activator of morphogenesis | 0.22      | -2.17       | 0.00      | 0.00     |
| 218808_at  | DALRD3 DALR anticodon | 0.33      | -1.60       | 0.00      | 0.00     |
| Gene ID    | Description                                           | Log2 Fold Change | P-value | adjusted P-value | FDR |
|-----------|-------------------------------------------------------|------------------|---------|------------------|-----|
| 202806_at | DBN1 drebrin 1                                        | 7.54             | 2.92    | 0.00             | 0.00|
| 219001_s_at | DCAF10 DDB1 and CUL4                                | 0.30             | -1.76   | 0.00             | 0.00|
| 221840_s_at | DCAF15 DDB1 and CUL4                               | 0.32             | -1.64   | 0.00             | 0.00|
| 219717_at | DCAF16 DDB1 and CUL4                                 | 0.28             | -1.86   | 0.00             | 0.00|
| 205338_s_at | DCT dopachrome taur                                   | 0.08             | -3.58   | 0.00             | 0.00|
| 205337_at | DCT dopachrome taur                                   | 0.03             | -5.24   | 0.00             | 0.00|
| 209231_s_at | DCTN5 dynactin 5 (p25)                               | 4.91             | 2.29    | 0.00             | 0.00|
| 205684_s_at | DDAH1 dimethylarginine                               | 0.12             | -3.05   | 0.00             | 0.00|
| 202887_s_at | DDI7 DNA-damage-inducible transcript 4                | 0.08             | -3.58   | 0.00             | 0.00|
| 205603_s_at | DIAPH2 diaphanous hom                                 | 0.21             | -2.27   | 0.00             | 0.00|
| 219799_s_at | DHR9 dehydrogenase/i                                  | 3.65             | 1.87    | 0.00             | 0.00|
| 201386_s_at | DHH15 DEAH (Asp-Glu)                                  | 0.32             | -1.63   | 0.00             | 0.00|
| 205603_s_at | DIAH2 diaphanous hom                                  | 0.21             | -2.27   | 0.00             | 0.00|
| 212329_at | DICER1 dicer 1, ribonuclease                           | 0.32             | -1.63   | 0.00             | 0.00|
| 205572_at | DKFZp547G183 hypothetical LOC                         | 0.14             | -2.83   | 0.00             | 0.00|
| 206253_at | DLG2 discs, large hom                                 | 0.33             | -1.61   | 0.00             | 0.00|
| 202571_s_at | DLGAP4 discs, large (Dro)                             | 4.40             | 2.14    | 0.00             | 0.00|
| 207147_at | DLX2 distal-less home                                 | 4.93             | 2.30    | 0.00             | 0.00|
| 203881_s_at | DMD dystrophin                                        | 0.25             | -2.02   | 0.00             | 0.00|
| 203791_at | DMXL1 Dmx-like 1                                      | 0.19             | -2.40   | 0.00             | 0.00|
| 214229_at | DNAH17 dynein, axonem                                | 7.64             | 2.93    | 0.00             | 0.00|
| 215266_at | DNAH3 dynein, axonem                                  | 3.54             | 1.82    | 0.00             | 0.00|
| 220395_at | DNAJA4 DnaJ (Hsp40) hc                                | 4.54             | 2.18    | 0.00             | 0.00|
| 203810_at | DNAJB4 DnaJ (Hsp40) hc                                | 0.23             | -2.09   | 0.00             | 0.00|
| 212817_at | DNAJB5 DnaJ (Hsp40) hc                                | 3.21             | 1.68    | 0.00             | 0.00|
| 218435_at | DNAJC15 DnaJ (Hsp40) hc                               | 3.21             | 1.68    | 0.00             | 0.00|
| 212911_at | DNAJC16 DnaJ (Hsp40) hc                               | 0.21             | -2.29   | 0.00             | 0.00|
| 219861_at | DNAJC17 DnaJ (Hsp40) hc                               | 0.28             | -1.85   | 0.00             | 0.00|
| 204008_at | DNA1 dynein, axonem                                   | 4.00             | 2.00    | 0.00             | 0.00|
| 205554_s_at | DNASE1L3 deoxyribonuclea                              | 0.24             | -2.09   | 0.00             | 0.00|
| 203187_at | DOCK1 dedicator of cyto                               | 0.16             | -2.67   | 0.00             | 0.00|
| 213482_at | DOCK3 dedicator of cyto                               | 0.24             | -2.05   | 0.00             | 0.00|
| 221677_s_at | DONSON downstream neighbor                            | 0.25             | -1.99   | 0.00             | 0.00|
| 40612_at | DOPEY1 dopey family me                                | 0.20             | -2.35   | 0.00             | 0.00|
| 213267_at | DOPEY1 dopey family me                                | 0.11             | -3.15   | 0.00             | 0.00|
| 214301_s_at | DPYS1 dihydropyrimidin                               | 3.42             | 1.78    | 0.00             | 0.00|
| Gene ID  | Description                                           | Log2 Fold Change | p Value 1  | p Value 2  |
|---------|-------------------------------------------------------|------------------|------------|------------|
| 206590_x_at | dopamine receptor D2                                 | 3.33             | 1.74       | 0.00       | 0.00       |
| 207648_at | dystrophin related protein 2                         | 4.79             | 2.26       | 0.00       | 0.00       |
| 204751_x_at | desmocollin 2                                        | 69.34            | 6.12       | 0.00       | 0.00       |
| 204750_s_at | desmocollin 2                                        | 17.80            | 4.15       | 0.00       | 0.00       |
| 205595_at | desmoglein 3 (pemphigus vulgaris antigen)             | 26.79            | 4.74       | 0.00       | 0.00       |
| 221681_s_at | dentin sialophosphoprotein                           | 0.24             | -2.06      | 0.00       | 0.00       |
| 214663_at | dual serine/threonine kinase                         | 0.31             | -1.71      | 0.00       | 0.00       |
| 218585_s_at | denticleless homolog (Drosophila)                    | 0.27             | -1.90      | 0.00       | 0.00       |
| 214253_s_at | dystrobrevin, beta                                  | 6.06             | 2.60       | 0.00       | 0.00       |
| 204750_s_at | desmocollin 2                                        | 17.80            | 4.15       | 0.00       | 0.00       |
| 205595_at | desmoglein 3 (pemphigus vulgaris antigen)             | 26.79            | 4.74       | 0.00       | 0.00       |
| 205762_s_at | dihydouridine synthase 4-like (S. cerevisiae)        | 0.26             | -1.94      | 0.00       | 0.00       |
| 208892_s_at | dual specificity p                                  | 4.36             | 2.12       | 0.00       | 0.00       |
| 220774_at | DYM                                                   | 0.14             | -2.79      | 0.00       | 0.00       |
| 205348_s_at | dynein, cytoplasm                                    | 0.25             | -2.00      | 0.00       | 0.00       |
| 203762_s_at | dynein, cytoplasm                                    | 0.29             | -1.78      | 0.00       | 0.00       |
| 201999_at | dynein, light chain                                 | 3.11             | 1.64       | 0.00       | 0.00       |
| 202971_s_at | dystrobrevin, bet                                   | 0.26             | -1.94      | 0.00       | 0.00       |
| 218660_at | dysferlin, limb giri                                | 4.73             | 2.24       | 0.00       | 0.00       |
| 204556_s_at | DAZ interacting                                     | 3.93             | 1.97       | 0.00       | 0.00       |
| 38707_r_at | E2F4                                                  | 16.08            | 4.01       | 0.00       | 0.00       |
| 202248_at | E2F4                                                  | 3.07             | 1.62       | 0.00       | 0.00       |
| 219990_at | E2F5                                                  | 0.32             | -1.64      | 0.01       | 0.01       |
| 206101_at | ECM2                                                  | 0.31             | -1.68      | 0.00       | 0.00       |
| 206758_at | EDN2                                                  | 4.58             | 2.19       | 0.00       | 0.00       |
| 204464_s_at | endothelin receptor                                  | 3.18             | 1.67       | 0.01       | 0.02       |
| 204840_s_at | early endosome                                       | 0.14             | -2.81      | 0.00       | 0.00       |
| 210656_at | embryonic ectod                                     | 0.21             | -2.24      | 0.00       | 0.00       |
| 219833_s_at | EFHC1                                                | 0.26             | -1.95      | 0.00       | 0.00       |
| 220917_s_at | EFHC2                                                | 0.12             | -3.11      | 0.00       | 0.00       |
| 206254_at | epidermal growth factor                             | 0.22             | -2.16      | 0.00       | 0.00       |
| 206115_at | early growth resi                                   | 0.05             | -4.48      | 0.00       | 0.00       |
| 221755_at | EHBP1L1                                               | 3.87             | 1.95       | 0.00       | 0.00       |
| 91703_at  | EHBP1L1                                               | 3.29             | 1.72       | 0.00       | 0.00       |
| 221870_at | EH-domain conti                                      | 3.05             | 1.61       | 0.00       | 0.00       |
| 218939_at | EH-domain conti                                      | 6.54             | 2.71       | 0.00       | 0.00       |
| 205222_at | enoyl-Coenzyme                                       | 0.31             | -1.67      | 0.00       | 0.00       |
| 211698_at | EID1                                                  | 0.32             | -1.64      | 0.00       | 0.00       |
| 219190_s_at | EIF2C4                                              | 0.24             | -2.07      | 0.00       | 0.00       |
| 205321_at | EIF2S3                                               | 0.20             | -2.34      | 0.00       | 0.00       |
| 215190_at | EIF3M                                                | 0.24             | -2.05      | 0.00       | 0.00       |
| 208290_s_at | eukaryotic transl                                    | 3.31             | 1.73       | 0.01       | 0.01       |
| 208708_x_at | eukaryotic transl                                    | 3.08             | 1.63       | 0.00       | 0.00       |
| 201123_s_at | eukaryotic transl                                    | 3.22             | 1.69       | 0.00       | 0.00       |
| 210361_s_at | E74-like factor 2                                    | 0.18             | -2.52      | 0.00       | 0.00       |
| 210827_s_at | E74-like factor 3                                    | 8.67             | 3.12       | 0.00       | 0.00       |
| 203490_at | E74-like factor 4                                    | 6.66             | 2.74       | 0.00       | 0.00       |
| 204095_s_at | ELL                                                  | 4.36             | 2.13       | 0.00       | 0.00       |
| Gene Name          | Description                                      | Log2 Fold Change | p-value | FDR   |
|-------------------|--------------------------------------------------|------------------|---------|-------|
| 219518_s_at       | ELL3, elongation factor RNA polymerase II-like 3 | 0.31             | -1.69   | 0.01  |
| 219517_at         | ELL3, elongation factor                           | 0.25             | -2.03   | 0.00  |
| 219532_at         | ELOVL4, elongation of very long chain fatty acids | 0.11             | -3.24   | 0.00  |
| 204256_at         | ELOVL6, ELOVL family                               | 0.27             | -1.92   | 0.00  |
| 210868_s_at       | ELOVL6, ELOVL family                               | 0.15             | -2.70   | 0.00  |
| 204796_at         | ELOVL6, elongation of long chain fatty acids       | 0.27             | -1.89   | 0.00  |
| 219517_at         | ELL3, elongation factor                           | 0.25             | -2.03   | 0.00  |
| 213895_at         | EMP1, epithelial membrane                         | 0.26             | -1.97   | 0.00  |
| 204975_at         | EMP2, epithelial membrane                         | 0.31             | -1.71   | 0.00  |
| 221950_at         | EMX2, empty spiracles                             | 0.20             | -2.30   | 0.00  |
| 204797_s_at       | EN1, engrailed homec                               | 0.17             | -2.56   | 0.00  |
| 201341_at         | ENC1, ectodermal-neur                             | 5.13             | 2.36    | 0.00  |
| 201340_s_at       | ENC1, ectodermal-neur                             | 3.46             | 1.79    | 0.00  |
| 202221_s_at       | EP300, E1A binding prot                           | 0.28             | -1.85   | 0.00  |
| 201719_s_at       | EPB41L2, erythrocyte membrane                     | 0.28             | -1.64   | 0.00  |
| 201839_s_at       | EPCAM, epithelial cell adl                        | 0.24             | -2.07   | 0.00  |
| 205896_at         | EPHB2, EPH receptor B2                            | 6.50             | 2.70    | 0.00  |
| 205899_s_at       | EPHB2, EPH receptor B2                            | 4.22             | 2.08    | 0.00  |
| 207611_at         | ERG, v-ets erythroblasts                          | 3.31             | 1.73    | 0.00  |
| 215095_at         | ESD, esterase D/formylglutathione hydrolase       | 0.26             | -1.94   | 0.00  |
| 205225_at         | ESR1, estrogen receptor                           | 3.44             | 1.78    | 0.00  |
| 211234_x_at       | ESR1, estrogen receptor                           | 3.11             | 1.64    | 0.00  |
| 211627_x_at       | ESR1, estrogen receptor                           | 0.22             | -2.17   | 0.00  |
| 204034_at         | ETHE1, ethylmalonic enc                           | 15.37            | 3.94    | 0.00  |
| 210887_s_at       | EVC, Ellis van Creveld                           | 4.35             | 2.12    | 0.00  |
| 210012_s_at       | EWSR1, Ewing sarcoma I                           | 0.21             | -2.27   | 0.00  |
| 91684_g_at        | EXOSC4, exosome compo                             | 3.25             | 1.70    | 0.00  |
| 214734_at         | EXPH5, exophilin 5                                | 0.14             | -2.83   | 0.00  |
| 213929_at         | EXPH5, exophilin 5                                | 0.06             | -4.07   | 0.00  |
| 214985_at         | EXT1, exostoses (multi)                          | 0.28             | -1.85   | 0.00  |
| 203249_at         | EZH1, enhancer of zest                            | 0.31             | -1.69   | 0.00  |
| 211310_at         | EZH1, enhancer of zest                            | 0.17             | -2.58   | 0.00  |
| 203989_x_at       | F2R, coagulation factor                          | 0.09             | -3.45   | 0.00  |
| 210445_at         | FABP6, fatty acid binding                        | 6.52             | 2.70    | 0.00  |
| 205029_s_at       | FABP7, fatty acid binding                        | 0.11             | -3.22   | 0.00  |
| Gene | Description | Fold Change | P-value | q-value |
|------|-------------|-------------|---------|---------|
| FABP7 | fatty acid binding protein 7, brain | 0.02 | -6.08 | 0.00 |
| FADS2 | fatty acid desaturase 2 | 3.42 | 1.77 | 0.00 |
| FAIM3 | Fas apoptotic inhibitory molecule 3 | 4.86 | 2.28 | 0.00 |
| FAM115A | family with sequence similarity 115, member A | 0.31 | -1.67 | 0.00 |
| FAM117A | family with sequence similarity 117, member A | 0.15 | -2.77 | 0.00 |
| FAM134A | family with sequence similarity 134, member A | 0.15 | -2.77 | 0.00 |
| FAM134B | family with sequence similarity 134, member B | 0.09 | -3.48 | 0.00 |
| FAM13A | family with sequence similarity 13, member A | 0.31 | -1.67 | 0.00 |
| FAM160B2 | family with sequence similarity 160, member B2 | 3.11 | 1.64 | 0.00 |
| FAM164A | family with sequence similarity 164, member A | 0.14 | -2.81 | 0.00 |
| FAM168A | family with sequence similarity 168, member A | 0.13 | -2.94 | 0.00 |
| FAM174B | family with sequence similarity 174, member B | 0.18 | -2.51 | 0.00 |
| FAM178A | family with sequence similarity 178, member A | 0.10 | -3.37 | 0.00 |
| FAM160B2 | family with sequence similarity 160, member B2 | 3.11 | 1.64 | 0.00 |
| FAM168A | family with sequence similarity 168, member A | 0.13 | -2.94 | 0.00 |
| FAM174B | family with sequence similarity 174, member B | 0.18 | -2.51 | 0.00 |
| FAM178A | family with sequence similarity 178, member A | 0.10 | -3.37 | 0.00 |
| FAM160B2 | family with sequence similarity 160, member B2 | 3.11 | 1.64 | 0.00 |
| FAM168A | family with sequence similarity 168, member A | 0.13 | -2.94 | 0.00 |
| FAM174B | family with sequence similarity 174, member B | 0.18 | -2.51 | 0.00 |
| FAM178A | family with sequence similarity 178, member A | 0.10 | -3.37 | 0.00 |
| FAM160B2 | family with sequence similarity 160, member B2 | 3.11 | 1.64 | 0.00 |
| FAM168A | family with sequence similarity 168, member A | 0.13 | -2.94 | 0.00 |
| FAM174B | family with sequence similarity 174, member B | 0.18 | -2.51 | 0.00 |
| FAM178A | family with sequence similarity 178, member A | 0.10 | -3.37 | 0.00 |
| FAM160B2 | family with sequence similarity 160, member B2 | 3.11 | 1.64 | 0.00 |
| FAM168A | family with sequence similarity 168, member A | 0.13 | -2.94 | 0.00 |
| Gene ID     | Description                                      | Log2 Fold Change | P-value | q-value |
|------------|--------------------------------------------------|-----------------|---------|---------|
| 205283_at  | fukutin                                          | 0.24            | -2.08   | 0.00    |
| 215664_at  | folliculin                                       | 0.27            | -1.87   | 0.00    |
| 215074_at  | filaggrin                                       | 0.04            | -4.67   | 0.00    |
| 212025_s_at| flightless I homolog (Drosophila)                | 3.16            | 1.66    | 0.00    |
| 205511_at  | hypothetical prot FLJ10038                       | 0.11            | -3.18   | 0.00    |
| 220828_s_at| hypothetical prot FLJ11292                       | 0.21            | -2.22   | 0.00    |
| 219871_at  | hypothetical FLJ                               | 0.20            | -2.29   | 0.00    |
| 64900_at   | hypothetical prot FLJ22167                       | 0.20            | -2.33   | 0.00    |
| 208613_s_at| filamin B, beta                                 | 5.23            | 2.39    | 0.00    |
| 210142_x_at| flotillin 1                                      | 5.06            | 2.34    | 0.00    |
| 208749_x_at| flotillin 1                                      | 4.53            | 2.18    | 0.00    |
| 210316_at  | fms-related tyros                             | 0.27            | -1.91   | 0.00    |
| 205666_at  | flavin containing                              | 0.28            | -1.84   | 0.00    |
| 215300_s_at| flavin containing                              | 0.09            | -3.45   | 0.00    |
| 203689_s_at| fragile X mental i                             | 0.24            | -2.04   | 0.00    |
| 216442_x_at| fibronectin 1                                   | 7.31            | 2.87    | 0.00    |
| 212464_s_at| fibronectin 1                                   | 7.06            | 2.82    | 0.00    |
| 210495_x_at| fibronectin 1                                   | 6.90            | 2.79    | 0.00    |
| 217179_x_at| fibronectin 1                                   | 5.54            | 2.47    | 0.01    |
| 204420_at  | FOS-like antigen                                 | 7.34            | 2.88    | 0.00    |
| 213260_at  | forkhead box C1                                 | 8.01            | 3.00    | 0.00    |
| 206912_at  | forkhead box E1                                 | 5.20            | 2.38    | 0.00    |
| 205021_s_at| forkhead box N3                                 | 4.92            | 2.30    | 0.00    |
| 205022_s_at| forkhead box N3                                 | 0.31            | -1.70   | 0.00    |
| 218031_s_at| forkhead box N3                                 | 0.24            | -2.06   | 0.00    |
| 205119_s_at| formyl peptide receptor                         | 6.11            | 2.61    | 0.00    |
| 208684_at  | frequently rearranged                           | 0.27            | -1.89   | 0.00    |
| 208476_s_at| FERM domain                                   | 0.17            | -2.54   | 0.00    |
| 214319_at  | furry homolog (D)                               | 0.22            | -2.18   | 0.00    |
| 204072_s_at| furry homolog (D)                               | 0.20            | -2.35   | 0.00    |
| 212546_at  | FRY-like                                       | 0.28            | -1.86   | 0.00    |
| 201564_s_at| fascin homolog 1                                | 6.46            | 2.69    | 0.00    |
| 204948_s_at| follistatin                                     | 6.18            | 2.63    | 0.00    |
| 208782_at  | follistatin-like 1                              | 8.39            | 3.07    | 0.00    |
| 203592_s_at| follistatin-like 3 (†)                          | 5.03            | 2.33    | 0.00    |
| 220604_s_at| formiminotransferase                            | 3.28            | 1.72    | 0.00    |
| 214211_at  | ferritin, heavy po                              | 3.28            | 1.71    | 0.00    |
| 213187_x_at| ferritin, light poly                            | 5.78            | 2.53    | 0.00    |
| 212788_s_at| ferritin, light poly                            | 4.24            | 2.08    | 0.00    |
| 214093_s_at| far upstream elec                              | 0.16            | -2.62   | 0.00    |
| 218247_at  | far upstream elec                              | 0.16            | -2.65   | 0.00    |
| 204299_at  | FUS interacting †                               | 0.29            | -1.80   | 0.00    |
| 210608_s_at| fucosyltransferas                              | 8.93            | 3.16    | 0.00    |
| 214088_s_at| fucosyltransferas                              | 5.55            | 2.47    | 0.00    |
| 210399_x_at| fucosyltransferas                              | 6.30            | 2.66    | 0.00    |
| 211465_x_at| fucosyltransferas                              | 5.48            | 2.45    | 0.00    |
| 203988_s_at| fucosyltransferas                              | 0.23            | -2.15   | 0.00    |
| Gene Symbol | Description                                      | Fold Change | p-value | q-value |
|------------|--------------------------------------------------|-------------|---------|---------|
| 201636_at | FXR1 fragile X mental i                           | 0.29        | -1.78   | 0.00    |
| 218084_x_at | FXYD domain cc                                    | 12.10       | 3.60    | 0.00    |
| 221245_s_at | FZD5 frizzled homolog                              | 4.42        | 2.15    | 0.00    |
| 222187_x_at | G3BP1 GTPase activatir                            | 0.32        | -1.87   | 0.00    |
| 208869_s_at | GABARAP1 GABA(A) receptor                         | 0.22        | -2.18   | 0.00    |
| 219815_at | GAL3ST4 galactose-3-O-si                           | 0.27        | -1.91   | 0.00    |
| 222187_x_at | FXYD domain containing ion transport regulator 5   | 12.10       | 3.60    | 0.00    |
| 221245_s_at | FZD5 frizzled homolog                              | 4.42        | 2.15    | 0.00    |
| 218084_x_at | FXYD domain cc                                    | 12.10       | 3.60    | 0.00    |
| 208869_s_at | GABARAP1 GABA(A) receptor                         | 0.22        | -2.18   | 0.00    |
| 219815_at | GAL3ST4 galactose-3-O-si                           | 0.27        | -1.91   | 0.00    |
| Gene ID     | Description                                      | Value 1 | Value 2 | Value 3 | Value 4 |
|------------|--------------------------------------------------|---------|---------|---------|---------|
| 2198692_at | GOLSYN Golgi-localized p                         | 0.11    | -3.23   | 0.00    | 0.00    |
| 219864_at  | GON4L gon-4-like (C. elr)                        | 0.30    | -1.75   | 0.00    | 0.00    |
| 213180_at  | GOSR2 golgi SNAP rece                            | 5.18    | 2.37    | 0.00    | 0.00    |
| 213144_at  | GOSR2 golgi SNAP rece                            | 3.64    | 1.94    | 0.00    | 0.00    |
| 200708_at  | GOT2 glutamic-oxaloac                            | 3.09    | 1.63    | 0.00    | 0.00    |
| 209769_at  | GP1BB glycoprotein lb ij                         | 4.22    | 2.08    | 0.00    | 0.00    |
| 206883_x_at| GP9 glycoprotein IX ij                           | 3.28    | 1.72    | 0.00    | 0.00    |
| 212510_at  | GPD1L glycerol-3-phosp                           | 0.33    | -1.60   | 0.00    | 0.00    |
| 210007_at  | GPD1 glycerol-3-phosp                            | 0.26    | -1.96   | 0.00    | 0.00    |
| 215554_at  | GPD1 glycoprotein phosha                         | 0.03    | -4.98   | 0.00    | 0.00    |
| 209169_at  | GPM6B glycoprotein M6t                            | 0.21    | -2.26   | 0.00    | 0.00    |
| 213094_at  | GPR126 G protein-couple                          | 0.23    | -2.15   | 0.00    | 0.00    |
| 220901_at  | GPR157 G protein-couple                          | 0.23    | -2.15   | 0.00    | 0.00    |
| 221958_at  | GPR177 G protein-couple                          | 0.23    | -2.09   | 0.00    | 0.00    |
| 209631_at  | GPR37 G protein-couple                           | 0.31    | -1.71   | 0.00    | 0.00    |
| 202789_at  | GPRAS1 G protein-couple                          | 0.19    | -2.39   | 0.00    | 0.00    |
| 203018_at  | GPRC5A G protein-couple                          | 14.91   | 3.90    | 0.00    | 0.00    |
| 200736_s_at| GPX1 glutathione perc                           | 3.84    | 1.94    | 0.00    | 0.00    |
| 202831_at  | GPX2 glutathione perc                            | 11.52   | 3.53    | 0.00    | 0.00    |
| 201348_at  | GPX3 glutathione perc                            | 13.28   | 3.73    | 0.00    | 0.00    |
| 214091_s_at| GPX3 glutathione perc                            | 7.98    | 3.00    | 0.00    | 0.00    |
| 213170_at  | GPX7 glutathione perc                            | 3.85    | 1.95    | 0.00    | 0.00    |
| 219313_s_at| GRAMD1C GRAM domain c                            | 0.10    | -3.30   | 0.00    | 0.00    |
| 216706_s_at| GRAMD3 GRAM domain c                            | 0.17    | -2.55   | 0.00    | 0.00    |
| 226481_at  | GRIPI glutamate recept                          | 5.10    | 2.35    | 0.00    | 0.00    |
| 216154_at  | GSDMD gsdamin D                                 | 3.38    | 1.76    | 0.00    | 0.00    |
| 222102_at  | GSTA3 glutathione S-tra                          | 0.11    | -3.20   | 0.00    | 0.00    |
| 200824_at  | GSTP1 glutathione S-tra                          | 3.32    | 1.73    | 0.00    | 0.00    |
| 205955_at  | GTF2F2 general transcrip                        | 0.28    | -1.82   | 0.00    | 0.00    |
| 205276_at  | GTBP1 GTP binding pro                           | 5.04    | 2.33    | 0.00    | 0.00    |
| 221942_s_at| GUCY1A3 guanylate cyclas                         | 4.04    | 2.02    | 0.00    | 0.00    |
| 204237_at  | GULP1 GULP, engulfme                             | 0.14    | -2.64   | 0.00    | 0.00    |
| 204235_s_at| GULP1 GULP, engulfme                             | 0.09    | -3.52   | 0.00    | 0.00    |
| 201554_x_at| GYG1 glycojenin 1                               | 3.94    | 1.98    | 0.00    | 0.00    |
| 205486_at  | GZMA granzyme A (gra)                            | 4.03    | 2.01    | 0.00    | 0.00    |
| 210164_at  | GZMB granzyme B (gra)                            | 4.60    | 2.20    | 0.00    | 0.00    |
| 208579_x_at| H2BFS H2B histone fam                           | 5.03    | 2.33    | 0.00    | 0.00    |
| 211998_at  | H3F3B H3 histone, fam                           | 0.29    | -1.77   | 0.00    | 0.00    |
| 221892_at  | H6PD hexose-6-phospl                             | 0.16    | -2.61   | 0.00    | 0.00    |
| 213054_at  | HAUS5 HAUS augmin-lli                           | 0.25    | -2.01   | 0.00    | 0.00    |
| 218602_s_at| HAUS6 HAUS augmin-lli                           | 0.19    | -2.44   | 0.00    | 0.00    |
| 217232_x_at| HBB hemoglobin, beti                            | 6.01    | 2.59    | 0.00    | 0.00    |
| 209116_x_at| HBB hemoglobin, beti                            | 4.20    | 2.07    | 0.03    | 0.04    |
| 38037_at   | HBEGF heparin-binding I                         | 10.71   | 3.42    | 0.00    | 0.00    |
| 203821_at  | HBEGF heparin-binding I                         | 5.46    | 2.45    | 0.00    | 0.00    |
| 209314_s_at| HBS1L HBS1-like (S. ce)                         | 0.18    | -2.51   | 0.00    | 0.00    |
| 209315_at  | HBS1L HBS1-like (S. ce)                         | 0.12    | -3.09   | 0.00    | 0.00    |
| 203746_s_at| HCCS holocytochrome                             | 4.12    | 2.04    | 0.00    | 0.00    |
| Gene ID     | Description                          | Log2 Fold Change | p-value | Adjusted p-value |
|------------|--------------------------------------|-----------------|---------|-----------------|
| 214893_x_at | HCN2  hyperpolarization              | 3.09            | 1.63    | 0.00            |
| 216224_s_at | HAC6  histone deacetylase            | 3.78            | 1.92    | 0.00            |
| 207067_s_at | HDC  histidine decarboxylic         | 3.14            | 1.65    | 0.00            |
| 213069_at  | HEG1  HEG homolog 1                  | 3.85            | 1.94    | 0.00            |
| 220085_at  | HELLS helicase, lymphoid-specific    | 0.23            | -2.11   | 0.00            |
| 218306_s_at | HERC1  helnot (homologous)           | 0.33            | -1.59   | 0.00            |
| 219352_at  | HERC6  hectar domain and             | 9.74            | 3.28    | 0.00            |
| 214308_s_at | HGD  homogentisate 1                | 3.46            | 1.79    | 0.00            |
| 218306_s_at | HERC1  helnot (homologous)           | 0.33            | -1.59   | 0.00            |
| 219352_at  | HERC6  hectar domain and             | 9.74            | 3.28    | 0.00            |
| 212293_at  | HIPK1  homeodomain in                | 0.15            | -2.77   | 0.00            |
| 212293_at  | HIPK1  homeodomain in                | 0.15            | -2.77   | 0.00            |
| 208583_x_at | HIST1  histone cluster 1            | 7.37            | 2.88    | 0.00            |
| 208583_x_at | HIST1  histone cluster 1            | 7.37            | 2.88    | 0.00            |
| 213537_at  | HLA-DOB major histocomp             | 3.10            | 1.63    | 0.00            |
| 213537_at  | HLA-DOB major histocomp             | 3.10            | 1.63    | 0.00            |
| 204755_at  | HLF  hepatic leukemia               | 1.07            | -2.54   | 0.00            |
| 204755_at  | HLF  hepatic leukemia               | 1.07            | -2.54   | 0.00            |
| 204753_s_at | HLF  hepatic leukemia               | 0.09            | -3.43   | 0.00            |
| 204753_s_at | HLF  hepatic leukemia               | 0.09            | -3.43   | 0.00            |
| 216548_x_at | HMGB3L1 high-mobility gro            | 3.25            | 1.70    | 0.00            |
| 207353_s_at | HMX1  H6 family homec               | 3.94            | 1.98    | 0.00            |
| 207353_s_at | HMX1  H6 family homec               | 3.94            | 1.98    | 0.00            |
| 217755_at  | HN1  hematological ar               | 5.31            | 2.41    | 0.00            |
| 222040_at  | HNRNP3  heterogeneous r             | 0.32            | -1.65   | 0.01            |
| 222040_at  | HNRNP3  heterogeneous r             | 0.32            | -1.65   | 0.01            |
| 211930_at  | HNRNP3  heterogeneous r             | 0.28            | -1.82   | 0.00            |
| 221480_at  | HNRNP3  heterogeneous r             | 0.33            | -1.61   | 0.00            |
| 213359_at  | HNRNP3  heterogeneous r             | 0.25            | -2.03   | 0.00            |
| 213472_at  | HNRNP3  heterogeneous r             | 0.21            | -2.27   | 0.00            |
| 202072_at  | HNRNPL  heterogeneous r             | 4.27            | 2.09    | 0.00            |
| 221860_at  | HNRNPL  heterogeneous r             | 0.30            | -1.72   | 0.00            |
| 66053_at   | HNRNPE2  heterogeneous r             | 0.26            | -1.94   | 0.00            |
| 212454_x_at | HNRNPE2  heterogeneous r             | 0.22            | -2.16   | 0.00            |
| 222222_s_at | HOMER3  homer homolog               | 5.57            | 2.48    | 0.00            |
| 204647_at  | HOMER3  homer homolog               | 3.25            | 1.70    | 0.00            |
| 213150_at  | HOXA10 homeobox A10                 | 0.31            | -1.69   | 0.00            |
| 209905_at  | HOXA9  homeobox A9                  | 0.13            | -2.91   | 0.00            |
| 214651_s_at | HOXA9  homeobox A9                  | 0.10            | -3.33   | 0.00            |
| 208224_at  | HOXB1  homeobox B1                  | 4.46            | 2.16    | 0.00            |
| 204779_s_at | HOXB7  homeobox B7                  | 7.90            | 2.98    | 0.00            |
| 216973_s_at | HOXB7  homeobox B7                  | 3.51            | 1.81    | 0.00            |
| 204778_s_at | HOXB7  homeobox B7                  | 3.28            | 1.72    | 0.00            |
| 219832_s_at | HOXC13 homeobox C13                 | 3.47            | 1.79    | 0.00            |
| Gene Symbol | Description | Log2 Fold Change | P-value | q-value |
|-------------|-------------|-----------------|---------|---------|
| HOXC6       | homeobox C6 | 0.17            | -2.57   | 0.00    |
| HOXC8       | homeobox C8 | 0.16            | -2.64   | 0.00    |
| HOXD11      | homeobox D11| 7.88            | 2.98    | 0.00    |
| HOXD4       | homeobox D4 | 6.49            | 2.70    | 0.00    |
| HP1BP3      | heterochromatin | 3.75          | 1.91    | 0.00    |
| HPGD        | hydroxyprostaglandin | 0.28        | -1.83   | 0.00    |
| HPGD        | hydroxyprostaglandin | 0.18        | -2.46   | 0.00    |
| HPGD        | hydroxyprostaglandin | 0.14        | -2.80   | 0.00    |
| HPGD        | hydroxyprostaglandin | 0.08        | -3.66   | 0.00    |
| HPGD        | hematopoietic protein | 0.15        | -2.72   | 0.00    |
| HPS4        | Hermansky-Pudl | 0.22        | -2.20   | 0.00    |
| HPGD        | hydroxyprostaglandin | 0.28        | -1.83   | 0.00    |
| HPGD        | hydroxyprostaglandin | 0.18        | -2.46   | 0.00    |
| HPGD        | hydroxyprostaglandin | 0.14        | -2.80   | 0.00    |
| HPGD        | hydroxyprostaglandin | 0.08        | -3.66   | 0.00    |
| HPGDS       | hematopoietic protein | 0.15        | -2.72   | 0.00    |
| HRASLS      | HRAS-like suppressor | 0.12        | -3.09   | 0.00    |
| HRASLS      | HRAS-like suppressor | 0.04        | -4.71   | 0.00    |
| HRH3        | histamine receptor | 4.60        | 2.20    | 0.00    |
| HS3ST1      | heparan sulfate | 3.92        | 1.97    | 0.00    |
| HSD11B1     | hydroxysteroid | 0.26        | -1.95   | 0.00    |
| HSD17B14    | hydroxysteroid | 5.20        | 2.38    | 0.00    |
| HSD17B2     | hydroxysteroid | 3.86        | 1.95    | 0.00    |
| HSD17B6     | hydroxysteroid | 3.56        | 1.83    | 0.00    |
| HSDL2       | hydroxysteroid d | 0.33        | -1.61   | 0.01    |
| HSF2        | heat shock trans | 0.15        | -2.74   | 0.00    |
| HSPA8       | heat shock 70kD | 4.13        | 2.05    | 0.01    |
| HSPH1       | heat shock 105k | 3.58        | 1.84    | 0.00    |
| HSPH1       | heat shock 105k | 3.49        | 1.80    | 0.00    |
| HTR4        | 5-hydroxytryptan | 3.64        | 1.86    | 0.00    |
| HUS1        | HUS1 checkpoint | 3.33        | 1.74    | 0.00    |
| HYMAI       | hydrolasiform mol | 0.06        | -4.03   | 0.00    |
| ICAM1       | intercellular adhesion | 4.63      | 2.21    | 0.00    |
| ICK         | intestinal cell (M) | 0.12       | -3.08   | 0.00    |
| ICM1        | isoprenylcysteine | 3.20        | 1.68    | 0.00    |
| ID1         | inhibitor of DNA | 8.60        | 3.10    | 0.00    |
| ID4         | inhibitor of DNA | 0.10        | -3.32   | 0.00    |
| ID4         | inhibitor of DNA | 0.04        | -4.82   | 0.00    |
| ID4         | inhibitor of DNA | 0.03        | -5.35   | 0.00    |
| IDO1        | indoleamine 2,3- | 7.24        | 2.86    | 0.00    |
| IDS         | iduronate 2-sulfa | 0.26        | -1.94   | 0.00    |
| IFFO1       | intermediate filament | 3.09      | 1.63    | 0.00    |
| IFI27       | interferon, alpha | 21.64     | 4.44    | 0.00    |
| IFI30       | interferon, gamma | 3.06        | 1.62    | 0.00    |
| IFI35       | interferon-inducible | 3.95       | 1.98    | 0.00    |
| IFI44       | interferon-inducible | 9.37       | 3.23    | 0.00    |
| IFI44L      | interferon-inducible | 6.62       | 2.73    | 0.00    |
| IFI6        | interferon, alpha | 10.31       | 3.37    | 0.00    |
| IFIT1       | interferon-inducible | 7.44       | 2.90    | 0.00    |
| Gene        | Description                                              | Fold Change | p-Value | q-Value |
|------------|----------------------------------------------------------|-------------|---------|---------|
| 204747_at  | IFIT3 interferon-induced protein with tetratricopeptide repeats 3 | 4.01        | 2.00    | 0.00    |
| 214022_s_at| IFITM1 interferon induce                                   | 12.07       | 3.59    | 0.00    |
| 201601_x_at| IFITM1 interferon induce                                   | 11.06       | 3.47    | 0.00    |
| 201315_x_at| IFITM2 interferon induce                                   | 8.01        | 3.00    | 0.00    |
| 212203_x_at| IFITM3 interferon induce                                   | 8.52        | 3.09    | 0.00    |
| 201642_at  | IFNGR2 interferon gamma                                    | 3.38        | 1.76    | 0.00    |
| 219174_at  | IFT74 intraflagellar tran                                 | 0.20        | -2.33   | 0.00    |
| 61732_r_at | IFT74 intraflagellar tran                                 | 0.19        | -2.41   | 0.00    |
| 202718_at  | IGFBP2 insulin-like growth                                | 5.64        | 2.50    | 0.00    |
| 203424_s_at| IGFBP5 insulin-like growth                                | 0.23        | -2.10   | 0.00    |
| 211959_at  | IGF74 intraflagellar tran                                 | 0.19        | -2.36   | 0.01    |
| 205067_at  | IL1B interleukin 1, bet                                   | 8.77        | 3.13    | 0.00    |
| 39402_at   | IL1B interleukin 1, bet                                   | 8.47        | 3.08    | 0.00    |
| 207526_s_at| IL1RN interleukin 1 recx                                  | 5.81        | 2.54    | 0.00    |
| 206569_at  | IL24 interleukin 24                                       | 6.74        | 2.75    | 0.00    |
| 203233_at  | IL4R interleukin 4 recx                                   | 5.92        | 2.57    | 0.00    |
| 206693_at  | IL7 interleukin 7                                         | 0.05        | -4.35   | 0.00    |
| 207094_at  | IL8 interleukin 8                                         | 4.14        | 2.05    | 0.00    |
| 208930_s_at| ILF3 interleukin enhar                                    | 0.22        | -2.22   | 0.00    |
| 204463_s_at| INA internexin neurox                                     | 3.38        | 1.76    | 0.00    |
| 214705_at  | INADL InA-like (Drosophil)                                | 0.06        | -4.03   | 0.00    |
| 210511_s_at| INHBA inhibin, beta A                                     | 10.89       | 3.44    | 0.00    |
| 205258_at  | INHBB inhibin, beta B                                     | 6.38        | 2.67    | 0.00    |
| 202781_s_at| INPP5K inositol polyphos                                  | 3.01        | 1.59    | 0.00    |
| Gene ID     | Description                                      | Fold Change | P-value | Log2 FC | P-value |
|------------|--------------------------------------------------|-------------|---------|---------|---------|
| 218783_at  | INTS7 integrator complex                        | 0.26        | 0.00    | -1.93   | 0.00    |
| 221185_s_at| IQCG iQ motif containai                         | 9.26        | 0.00    | 3.21    | 0.00    |
| 203907_s_at| IQSEC1 iQ motif and Sec                         | 4.22        | 0.00    | 2.08    | 0.00    |
| 202531_at  | IRF1 interferon regula                          | 4.25        | 0.00    | 2.09    | 0.00    |
| 209184_s_at| IRS2 insulin receptor s                         | 0.26        | 0.00    | -1.94   | 0.00    |
| 209185_s_at| IRS2 insulin receptor s                         | 0.25        | 0.00    | -2.00   | 0.00    |
| 210239_at  | IRX5 iroquois homeob                             | 0.22        | 0.00    | -2.22   | 0.00    |
| 205483_s_at| ISG15 ubiquitin-l                               | 7.16        | 0.00    | 2.84    | 0.00    |
| 209184_s_at| IRS2 insulin receptor s                         | 0.26        | 0.00    | -1.94   | 0.00    |
| 209185_s_at| IRS2 insulin receptor s                         | 0.25        | 0.00    | -2.00   | 0.00    |
| 210239_at  | IRX5 iroquois homeob                             | 0.22        | 0.00    | -2.22   | 0.00    |
| 205483_s_at| ISG15 ubiquitin-l                               | 7.16        | 0.00    | 2.84    | 0.00    |
| 33304_at   | ISG20 interferon stimuli                         | 4.59        | 0.00    | 2.20    | 0.00    |
| 204698_at  | ISG20 interferon stimuli                         | 4.16        | 0.00    | 2.06    | 0.00    |
| 207191_s_at| ISLR immunoglobulin                              | 3.01        | 0.00    | 1.59    | 0.00    |
| 204698_at  | ISG20 interferon stimuli                         | 4.16        | 0.00    | 2.06    | 0.00    |
| 215177_s_at| ITGA6 integrin, alpha 6                          | 0.21        | 0.00    | -2.22   | 0.00    |
| 216495_x_at| IVD isovaleryl Coenz                            | 5.30        | 0.00    | 2.41    | 0.00    |
| 201466_s_at| JUN jun oncogene                                | 3.56        | 0.00    | 1.83    | 0.00    |
| 205841_at  | JAK2 Janus kinase 2                              | 0.19        | 0.00    | -2.37   | 0.00    |
| 204017_at  | KDELR3 KDEL (Lys-Asp-I) endoplasmic reticulum    | 4.25        | 0.00    | 2.09    | 0.00    |
| 203907_s_at| IQSEC1 iQ motif and Sec                         | 4.22        | 0.00    | 2.08    | 0.00    |
| 202531_at  | IRF1 interferon regula                          | 4.25        | 0.00    | 2.09    | 0.00    |
| 33304_at   | ISG20 interferon stimuli                         | 4.59        | 0.00    | 2.20    | 0.00    |
| 204698_at  | ISG20 interferon stimuli                         | 4.16        | 0.00    | 2.06    | 0.00    |
| 207191_s_at| ISLR immunoglobulin                              | 3.01        | 0.00    | 1.59    | 0.00    |
| 211360_s_at| ITPR2 inositol 1,4,5-trip                        | 0.30        | 0.00    | -1.73   | 0.00    |
| 202531_at  | IRF1 interferon regula                          | 4.25        | 0.00    | 2.09    | 0.00    |
| 33304_at   | ISG20 interferon stimuli                         | 4.59        | 0.00    | 2.20    | 0.00    |
| 204698_at  | ISG20 interferon stimuli                         | 4.16        | 0.00    | 2.06    | 0.00    |
| 207191_s_at| ISLR immunoglobulin                              | 3.01        | 0.00    | 1.59    | 0.00    |
| 211360_s_at| ITPR2 inositol 1,4,5-trip                        | 0.30        | 0.00    | -1.73   | 0.00    |
| 202531_at  | IRF1 interferon regula                          | 4.25        | 0.00    | 2.09    | 0.00    |
| 33304_at   | ISG20 interferon stimuli                         | 4.59        | 0.00    | 2.20    | 0.00    |
| 204698_at  | ISG20 interferon stimuli                         | 4.16        | 0.00    | 2.06    | 0.00    |
| 207191_s_at| ISLR immunoglobulin                              | 3.01        | 0.00    | 1.59    | 0.00    |
| 211360_s_at| ITPR2 inositol 1,4,5-trip                        | 0.30        | 0.00    | -1.73   | 0.00    |
| 202531_at  | IRF1 interferon regula                          | 4.25        | 0.00    | 2.09    | 0.00    |
| 33304_at   | ISG20 interferon stimuli                         | 4.59        | 0.00    | 2.20    | 0.00    |
| 204698_at  | ISG20 interferon stimuli                         | 4.16        | 0.00    | 2.06    | 0.00    |
| 207191_s_at| ISLR immunoglobulin                              | 3.01        | 0.00    | 1.59    | 0.00    |
| 211360_s_at| ITPR2 inositol 1,4,5-trip                        | 0.30        | 0.00    | -1.73   | 0.00    |
| Gene ID       | Description                  | Gene ID       | Description                  |
|--------------|-------------------------------|--------------|-------------------------------|
| 202383_at    | lysine (K)-specific demethylase 5C | 3.40  | 1.76  | 0.00  | 0.00  |
| 203991_s_at  | lysine (K)-specific demethylase 6A | 0.20 | -2.33 | 0.00  | 0.00  |
| 41387_r_at   | lysine (K)-specific demethylase 6B | 3.08  | 1.62  | 0.00  | 0.00  |
| 212523_s_at  | KIAA0146                      | 0.20 | -2.35 | 0.00  | 0.00  |
| 212057_at    | KIAA0182                      | 0.19 | -2.40 | 0.00  | 0.00  |
| 38892_at     | KIAA0240                      | 0.22 | -2.18 | 0.00  | 0.00  |
| 213208_at    | KIAA0240                      | 0.19 | -2.39 | 0.00  | 0.00  |
| 212427_at    | KIAA0368                      | 0.19 | -2.43 | 0.00  | 0.00  |
| 202386_s_at  | KIAA0430                      | 0.28 | -1.85 | 0.00  | 0.00  |
| 203900_at    | KIAA0467                      | 0.24 | -2.04 | 0.00  | 0.00  |
| 214295_at    | hypothetical LOC              | 0.20 | -2.32 | 0.00  | 0.00  |
| 213340_s_at  | KIAA0495                      | 0.21 | -2.24 | 0.00  | 0.00  |
| 212943_at    | KIAA0528                      | 0.16 | -2.61 | 0.00  | 0.00  |
| 204075_s_at  | KIAA0562                      | 0.11 | -3.17 | 0.00  | 0.00  |
| 212314_at    | KIAA0746                      | 4.96 | 2.31  | 0.00  | 0.00  |
| 215268_at    | KIAA0754                      | 0.09 | -3.46 | 0.00  | 0.00  |
| 212633_at    | KIAA0776                      | 0.22 | -2.16 | 0.00  | 0.00  |
| 213358_at    | KIAA0802                      | 8.24 | 3.04  | 0.00  | 0.00  |
| 213424_at    | KIAA0895                      | 0.04 | -4.68 | 0.00  | 0.00  |
| 214398_at    | KIAA1107                      | 0.28 | -1.86 | 0.00  | 0.00  |
| 212942_s_at  | KIAA1199                      | 3.35 | 1.74  | 0.00  | 0.00  |
| 220911_s_at  | KIAA1305                      | 0.24 | -2.06 | 0.00  | 0.00  |
| 221901_at    | KIAA1644                      | 6.32 | 2.66  | 0.00  | 0.00  |
| 52837_at     | KIAA1644                      | 5.24 | 2.39  | 0.00  | 0.00  |
| 204444_at    | KIF11                         | 0.29 | -1.81 | 0.01  | 0.01  |
| 220777_at    | KIF13A                        | 0.31 | -1.72 | 0.01  | 0.02  |
| 202962_at    | KIF13B                        | 0.31 | -1.72 | 0.00  | 0.00  |
| 208128_x_at  | KIF25                         | 4.15 | 2.05  | 0.00  | 0.00  |
| 203390_s_at  | KIF3C                         | 3.60 | 1.85  | 0.00  | 0.00  |
| 203130_s_at  | KIF5C                         | 0.24 | -2.09 | 0.00  | 0.00  |
| 205051_s_at  | KIT                            | 0.16 | -2.65 | 0.00  | 0.00  |
| 221302_at    | KLF15                          | 4.22 | 2.08  | 0.00  | 0.00  |
| 220286_s_at  | KLF4                          | 0.16 | -2.69 | 0.00  | 0.00  |
| 209212_s_at  | KLF5                          | 0.25 | -2.00 | 0.00  | 0.00  |
| 209211_at    | KLF5                          | 0.17 | -2.55 | 0.00  | 0.00  |
| 204334_at    | KLF7                          | 9.98 | 3.32  | 0.00  | 0.00  |
| 219930_at    | KLF8                          | 0.21 | -2.27 | 0.00  | 0.00  |
| 203543_s_at  | KLF9                          | 0.15 | -2.73 | 0.00  | 0.00  |
| 204176_at    | KHL20                          | 0.21 | -2.28 | 0.00  | 0.00  |
| 221986_s_at  | KHL24                          | 0.22 | -2.21 | 0.00  | 0.00  |
| 220238_s_at  | KHL7                          | 0.26 | -1.95 | 0.00  | 0.00  |
| 209792_s_at  | KKL10                          | 3.81 | 1.93  | 0.01  | 0.01  |
| 220782_x_at  | KKL12                          | 10.13 | 3.34 | 0.00  | 0.00  |
| 205783_at    | KKL13                          | 5.14 | 2.36  | 0.00  | 0.00  |
| 204733_at    | KKL6                          | 108.10 | 6.76 | 0.00  | 0.00  |
| 206316_s_at  | KNTC1                          | 0.29 | -1.77 | 0.00  | 0.00  |
| 204010_s_at  | KRAS                          | 0.11 | -3.18 | 0.00  | 0.00  |
| 216713_at    | KRIT1                          | 0.27 | -1.87 | 0.00  | 0.00  |
| Probe ID       | Description                              | Z Score | Log2 Fold Change | p Value   | q Value   |
|---------------|------------------------------------------|---------|-----------------|-----------|-----------|
| 34031_i_at    | KRT1, ankyrin repeat-containing protein   | 0.22    | -2.17           | 0.00      | 0.00      |
| 203203_s_at   | KRR1, small subunit processome component | 0.26    | -1.96           | 0.00      | 0.00      |
| 207203_s_at   | keratin 10                               | 0.31    | -1.70           | 0.01      | 0.02      |
| 207235_s_at   | keratin 13                               | 40.47   | 5.34            | 0.00      | 0.00      |
| 209200_at     | keratin 16                               | 79.28   | 6.31            | 0.00      | 0.00      |
| 205157_s_at   | keratin 17                               | 37.76   | 5.24            | 0.00      | 0.00      |
| 202230_x_at   | keratin 17                               | 29.54   | 4.89            | 0.00      | 0.00      |
| 201256_x_at   | keratin 18                               | 7.69    | 2.94            | 0.00      | 0.00      |
| 201265_at     | keratin 19                               | 11.33   | 3.50            | 0.00      | 0.00      |
| 207208_at     | keratin 2                                | 0.02    | -5.69           | 0.00      | 0.00      |
| 218263_s_at   | keratin 23                               | 0.29    | -1.78           | 0.02      | 0.03      |
| 206367_at     | keratin 31                               | 0.20    | -2.29           | 0.00      | 0.00      |
| 206369_at     | keratin 34                               | 5.42    | 2.44            | 0.00      | 0.00      |
| 209128_at     | keratin 6A                               | 644.60  | 9.33            | 0.00      | 0.00      |
| 213260_at     | keratin 6B                               | 725.86  | 9.50            | 0.00      | 0.00      |
| 209126_at     | keratin 6B                               | 138.17  | 7.11            | 0.00      | 0.00      |
| 207205_at     | keratin 75                               | 49.63   | 5.63            | 0.00      | 0.00      |
| 208323_s_at   | keratin 75                               | 7.75    | 2.95            | 0.00      | 0.00      |
| 217388_s_at   | kynureninase (L-kynurenine hydrolase)     | 15.95   | 4.00            | 0.00      | 0.00      |
| 204385_at     | kynureninase (L-kynurenine hydrolase)     | 7.36    | 2.88            | 0.00      | 0.00      |
| 210663_s_at   | kynureninase (L-kynurenine hydrolase)     | 5.02    | 2.33            | 0.00      | 0.00      |
| 220089_at     | L2HGDH                                   | 0.19    | -2.37           | 0.00      | 0.00      |
| 216276_at     | L3MBTL                                   | 3.54    | 1.82            | 0.00      | 0.00      |
| 210306_at     | L3MBTL                                   | 0.17    | -2.52           | 0.00      | 0.00      |
| 218701_at     | lactamase, beta 2                        | 0.25    | -2.00           | 0.00      | 0.00      |
| 216641_at     | ladinin 1                                 | 4.12    | 2.04            | 0.00      | 0.00      |
| 207509_s_at   | leukocyte-associated immunoglobulin-like 3| 3.13    | 1.64            | 0.00      | 0.00      |
| 203726_s_at   | laminin, alpha 3                         | 4.72    | 2.24            | 0.00      | 0.00      |
| 210089_s_at   | laminin, alpha 4                         | 0.29    | -1.80           | 0.00      | 0.00      |
| 209207_at     | laminin, beta 3                          | 16.20   | 4.02            | 0.00      | 0.00      |
| 216622_at     | laminin, beta 4                          | 0.32    | -1.66           | 0.00      | 0.00      |
| 215516_at     | laminin, beta 4                          | 0.02    | -5.39           | 0.00      | 0.00      |
| 200770_s_at   | laminin, gamma                           | 5.28    | 2.40            | 0.00      | 0.00      |
| 202267_at     | laminin, gamma                           | 6.77    | 2.76            | 0.00      | 0.00      |
| 20219_s_at    | LanC lantibiotic α                      | 4.04    | 2.01            | 0.00      | 0.00      |
| 201720_s_at   | lysosomal protein                        | 3.16    | 1.66            | 0.00      | 0.00      |
| 216651_s_at   | La ribonucleoprotein                     | 3.15    | 1.65            | 0.00      | 0.00      |
| 222212_s_at   | LAG1 homolog, α                          | 3.75    | 1.91            | 0.00      | 0.00      |
| 212442_s_at   | LAG1 homolog, α                          | 0.23    | -2.15           | 0.00      | 0.00      |
| 212446_s_at   | LAG1 homolog, α                          | 0.18    | -2.44           | 0.00      | 0.00      |
| 207734_at     | lymphocyte trans                         | 0.28    | -1.84           | 0.00      | 0.00      |
| 221011_s_at   | limb bud and heart development           | 3.22    | 1.69            | 0.01      | 0.01      |
| 207710_at     | late cornified envelope                  | 0.13    | -2.96           | 0.00      | 0.00      |
| 212531_at     | lipocalin 2                              | 61.65   | 5.95            | 0.00      | 0.00      |
| 201030_s_at   | lactate dehydrogen                      | 3.11    | 1.64            | 0.01      | 0.01      |
| 202068_s_at   | low density lipop                       | 3.95    | 1.98            | 0.00      | 0.00      |
| 202067_s_at   | low density lipop                       | 3.39    | 1.76            | 0.00      | 0.00      |
| 204454_at     | leucine zipper, d                        | 0.21    | -2.24           | 0.00      | 0.00      |
| Accession   | Symbol | Description                                      | Adj. Log2   | Log2 Fold | P     | FDR   |
|-------------|--------|--------------------------------------------------|-------------|-----------|-------|-------|
| 201105_at   | LGALS1 | lectin, galactosid                             | 7.83        | 2.97      | 0.00  | 0.00  |
| 208450_at   | LGALS2 | lectin, galactosid                              | 3.06        | 1.61      | 0.01  | 0.02  |
| 200923_at   | LGALS3BP| lectin, galactosid                             | 7.26        | 2.86      | 0.00  | 0.00  |
| 219699_at   | LGI2   | leucine-rich repeat                             | 3.25        | 1.70      | 0.00  | 0.00  |
| 218326_s_at | LGR4   | leucine-rich repeat                             | 0.16        | -2.69     | 0.00  | 0.00  |
| 214471_x_at | LHB    | luteinizing hormc                               | 3.48        | 1.80      | 0.00  | 0.00  |
| 212658_at   | LHPL2  | lipoma HMGIC family                             | 9.80        | 3.29      | 0.00  | 0.00  |
| 208333_at   | LHX5   | LIM homeobox 5                                  | 3.15        | 1.66      | 0.00  | 0.00  |
| 205266_at   | LIF    | leukemia inhibiting                            | 0.26        | -1.92     | 0.00  | 0.00  |
| 211336_x_at | LILRB1 | leukocyte immur                                  | 4.03        | 2.01      | 0.00  | 0.00  |
| 207104_x_at | LILRB1 | leukocyte immur                                  | 3.20        | 1.68      | 0.00  | 0.00  |
| 214850_at   | LIMP2  | LIM domain kina                                 | 3.79        | 1.92      | 0.00  | 0.00  |
| 204357_s_at | LIMP1  | LIM domain kina                                 | 3.21        | 1.68      | 0.00  | 0.00  |
| 201847_at   | LIPA   | lipase A, lysosor                                | 6.62        | 2.73      | 0.00  | 0.00  |
| 219181_at   | LIPG   | lipase, endotheli                               | 6.07        | 2.60      | 0.00  | 0.00  |
| 206123_at   | LLGL1  | lethal giant larva                               | 4.21        | 2.07      | 0.00  | 0.00  |
| 46142_at    | LMF1   | lipase maturation                               | 0.26        | -1.96     | 0.00  | 0.00  |
| 217892_s_at | LIMA1  | LIM domain and                                  | 4.03        | 2.01      | 0.00  | 0.00  |
| 204357_s_at | LIMK1  | LIM domain kina                                 | 3.21        | 1.68      | 0.00  | 0.00  |
| 204356_at   | LIMK1  | LIM domain kina                                 | 3.79        | 1.92      | 0.00  | 0.00  |
| 204356_at   | LIMK1  | LIM domain kina                                 | 3.79        | 1.92      | 0.00  | 0.00  |
| 204356_at   | LIMK1  | LIM domain kina                                 | 3.79        | 1.92      | 0.00  | 0.00  |
| 217548_at   | LOC100129502| hypothetical prot                            | 0.31        | -1.70     | 0.00  | 0.00  |
| 214850_at   | LOC100170939| glucuronidase, b                             | 0.21        | -2.25     | 0.00  | 0.00  |
| 213089_at   | LOC100272216| hypothetical LOC                    | 0.22        | -2.18     | 0.00  | 0.00  |
| 213085_s_at | LOC100272216| hypothetical LOC                    | 0.18        | -2.51     | 0.00  | 0.00  |
| 213703_at   | LOC150759| hypothetical prot                            | 0.13        | -2.99     | 0.00  | 0.00  |
| 215978_x_at | LOC152719| hypothetical prot                            | 3.14        | 1.65      | 0.00  | 0.00  |
| 220609_at   | LOC202181| hypothetical prot                            | 0.06        | -4.02     | 0.00  | 0.00  |
| 213510_x_at | LOC202694| TL132 protein                                  | 0.29        | -1.77     | 0.00  | 0.00  |
| 221949_at   | LOC222070| hypothetical prot                            | 0.27        | -1.87     | 0.00  | 0.00  |
| 217219_at   | LOC26102| hypothetical LOC                               | 3.62        | 1.86      | 0.00  | 0.00  |
| 217506_at   | LOC339290| hypothetical LOC                              | 0.27        | -1.89     | 0.00  | 0.00  |
| 216387_s_at | LOC399804| similar to nucleoq                            | 0.33        | -1.61     | 0.00  | 0.00  |
| 222437_at   | LOC644450| hypothetical prot                            | 0.27        | -1.92     | 0.01  | 0.02  |
| 22054_s_at  | LOC724848| peptidylprolyl iso                             | 0.30        | -1.76     | 0.00  | 0.00  |
| 217667_at   | LOC729799| SEC14-like 1 psi                               | 0.17        | -2.53     | 0.00  | 0.00  |
| 214712_at   | LOC730092| RNR3 RNA poly                                  | 0.27        | -1.88     | 0.00  | 0.00  |
| 215202_at   | LOC91316| glucuronidase, b                               | 4.29        | 2.10      | 0.00  | 0.00  |
| 21502_s_at  | LOC91316| glucuronidase, b                               | 0.23        | -2.13     | 0.00  | 0.00  |
| 207720_at   | LOR    | loricrin                                        | 0.07        | -3.85     | 0.01  | 0.01  |
| 215446_s_at | LOX    | lysyl oxidase                                  | 6.96        | 2.80      | 0.00  | 0.00  |
| 202998_s_at | LOXL2  | lysyl oxidase-like                             | 5.86        | 2.55      | 0.00  | 0.00  |
| 201818_at   | LPCAT1 | lysophosphatidyl                               | 5.54        | 2.47      | 0.00  | 0.00  |
| 215409_at   | LPCAT4 | lysophosphatidyl                               | 0.14        | -2.84     | 0.00  | 0.00  |
| 216250_s_at | LPXN   | leupaxin                                       | 3.71        | 1.89      | 0.00  | 0.00  |
| 21596_s_at  | LRG1   | leucine-rich repeat                            | 0.27        | -1.90     | 0.00  | 0.00  |
| 220254_at   | LRP12  | low density lipop                             | 0.31        | -1.68     | 0.00  | 0.00  |
| Gene ID       | Description                                      | Log2 Fold Change | Adjusted p-Value | Benjamini p-Value |
|--------------|--------------------------------------------------|------------------|------------------|------------------|
| 220253_s_at  | LRP12 low density lipoprotein-related protein 12 | 0.22             | -2.18            | 0.00             |
| 212850_s_at  | LRP4 low density lipoprotein                     | 0.09             | -3.52            | 0.00             |
| 34697_at     | LRP6 low density lipoprotein                     | 0.21             | -2.25            | 0.00             |
| 221740_x_at  | LRRC37A2 leucine rich repeat                     | 0.29             | -1.80            | 0.00             |
| 220220_at    | LRRC37A4 leucine rich repeat                     | 0.26             | -1.96            | 0.00             |
| 208140_s_at  | LRRC48 leucine rich repeat                       | 0.21             | -2.25            | 0.00             |
| 222231_s_at  | LRRC59 leucine rich repeat                       | 9.77             | 3.29             | 0.00             |
| 212976_at    | LRRC8B leucine rich repeat                       | 0.24             | -2.07            | 0.00             |
| 215375_x_at  | LRRFIP1 leucine rich repeat                      | 0.29             | -1.79            | 0.00             |
| 216164_at    | LRRN2 leucine rich repeat                        | 3.47             | 1.80             | 0.00             |
| 215375_x_at  | LSM4 homolog, U6 small nuclear RNA associated     | 3.95             | 1.98             | 0.00             |
| 212924_s_at  | LSS lanosterol synthi                            | 0.15             | -2.78            | 0.00             |
| 207339_s_at  | LTB lymphotxin bet                               | 3.79             | 1.92             | 0.00             |
| 202729_s_at  | LTBP1 latent transformi                          | 18.66            | 4.22             | 0.00             |
| 202728_s_at  | LTBP1 latent transformi                          | 3.49             | 1.80             | 0.00             |
| 204682_at    | LTBP2 latent transformi                          | 3.94             | 1.98             | 0.00             |
| 208835_s_at  | LUC7L3 LUC7-like 3 (S. c)                        | 0.23             | -2.16            | 0.00             |
| 201744_s_at  | LUM lumican                                      | 13.07            | 3.71             | 0.00             |
| 205688_at    | MAF v-maf musculoap  | 0.23             | -2.10            | 0.00             |
| 209348_s_at  | MAF v-maf musculoap  | 3.79             | 1.92             | 0.00             |
| 210754_s_at  | MAGEA3 melanoma antig               | 5.27             | 2.40             | 0.00             |
| 214254_s_at  | MAGEA4 melanoma antig               | 5.56             | 2.46             | 0.00             |
| 214612_x_at  | MACRO domain                                   | 0.20             | -2.36            | 0.00             |
| 204813_at    | MAP4K5 mitogen-activate                        | 0.27             | -1.88            | 0.00             |
| 214786_at    | MAPK10 mitogen-activate                        | 3.80             | 1.92             | 0.00             |
| 206362_x_at  | MAPK12 bindin                                  | 0.16             | -2.63            | 0.00             |
| Gene Symbol | Description                                      | Log2 Fold Change | P-value | FDR |
|-------------|--------------------------------------------------|-----------------|---------|-----|
| MBNL1       | muscleblind-like (Drosophila)                    | 0.27            | -1.90   | 0.00 |
| MBOAT7      | membrane bound O-acyltransferase domain containing 7 | 3.24            | 1.70    | 0.00 |
| MBTD1       | mbt domain cont                                  | 0.21            | -2.22   | 0.00 |
| MC2R        | melanocortin 2 n                                 | 3.44            | 1.78    | 0.00 |
| MCAM        | melanoma cell a                                  | 10.97           | 3.46    | 0.00 |
| MCAM        | melanoma cell a                                  | 4.93            | 2.30    | 0.00 |
| MCAM        | melanoma cell a                                  | 4.13            | 2.05    | 0.00 |
| MBOAT7      | membrane bound O-acyltransferase domain containing 7 | 3.24            | 1.70    | 0.00 |
| MC2R        | melanocortin 2 n                                 | 3.44            | 1.78    | 0.00 |
| MCAM        | melanoma cell a                                  | 10.97           | 3.46    | 0.00 |
| MCAM        | melanoma cell a                                  | 4.93            | 2.30    | 0.00 |
| MDN1        | midasin homolog (yeast)                          | 0.32            | -1.67   | 0.00 |
| MCF2L       | MCF.2 cell line d                                | 0.22            | -2.19   | 0.00 |
| MCF2L       | MCF.2 cell line d                                | 0.13            | -2.95   | 0.00 |
| MCF2L       | MCF.2 cell line d                                | 0.11            | -3.26   | 0.00 |
| MDM1        | Mdm1 nuclear pr                                  | 0.13            | -2.98   | 0.00 |
| MDM2        | Mdm2 p53 bindin                                  | 0.33            | -1.62   | 0.00 |
| MDN1        | MDN1, midasin l                                  | 0.32            | -1.67   | 0.00 |
| MECP2       | methyl CpG bind                                  | 3.11            | 1.64    | 0.00 |
| MECP2       | methyl CpG bind                                  | 0.30            | -1.74   | 0.00 |
| MECR        | mitochondrial tr                                  | 5.94            | 2.57    | 0.00 |
| MED1        | mediator complex                                 | 0.18            | -2.48   | 0.00 |
| MED13L      | mediator complex                                 | 0.33            | -1.59   | 0.00 |
| MED13L      | mediator complex                                 | 0.32            | -1.66   | 0.00 |
| MED13L      | mediator complex                                 | 0.16            | -2.69   | 0.00 |
| MED13L      | mediator complex                                 | 0.12            | -3.09   | 0.00 |
| MECP2       | methyl CpG bind                                  | 3.11            | 1.64    | 0.00 |
| MECP2       | methyl CpG bind                                  | 0.30            | -1.74   | 0.00 |
| MEGF9       | multiple EGF-like k                              | 0.21            | -2.28   | 0.00 |
| MED1        | mediator complex                                 | 0.18            | -2.48   | 0.00 |
| MED13L      | mediator complex                                 | 0.33            | -1.59   | 0.00 |
| MED13L      | mediator complex                                 | 0.32            | -1.66   | 0.00 |
| MED13L      | mediator complex                                 | 0.16            | -2.69   | 0.00 |
| MED13L      | mediator complex                                 | 0.12            | -3.09   | 0.00 |
| MECP2       | methyl CpG bind                                  | 3.11            | 1.64    | 0.00 |
| MEF2A       | myocyte enhanc                                   | 0.25            | -2.03   | 0.00 |
| MEGF9       | multiple EGF-like k                              | 0.21            | -2.28   | 0.00 |
| MEIS1       | Meis homeobox                                    | 0.21            | -2.26   | 0.00 |
| METAP2      | methionyl amino                                  | 0.29            | -1.78   | 0.00 |
| METT1D      | methyltransferas                                 | 0.24            | -2.08   | 0.00 |
| METTL3      | methyltransferas                                 | 0.22            | -2.20   | 0.00 |
| METTL7A     | methyltransferas                                 | 0.20            | -2.32   | 0.00 |
| METTL7A     | methyltransferas                                 | 0.20            | -2.35   | 0.00 |
| MFAP2       | microfibrillar-ass                               | 10.05           | 3.33    | 0.00 |
| MFAP3L      | microfibrillar-ass                               | 0.12            | -3.09   | 0.00 |
| MFSD6       | major facilitator t                              | 0.12            | -3.06   | 0.00 |
| MFSD9       | major facilitator t                              | 0.31            | -1.67   | 0.00 |
| MGC12488    | hypothetical prot                                | 0.13            | -2.97   | 0.00 |
| MGC87042    | STEAP family pr                                  | 7.67            | 2.94    | 0.00 |
| MGLL        | monoglyceride li                                  | 3.07            | 1.62    | 0.00 |
| MICAL2      | microtubule assc                                 | 4.19            | 2.07    | 0.00 |
| MICAL2      | microtubule assc                                 | 3.59            | 1.84    | 0.00 |
| MID1        | midline 1 (Opitz)                                | 7.07            | 2.82    | 0.00 |
| MIER2       | mesoderm induc                                   | 3.93            | 1.98    | 0.00 |
| MINK1       | missshapen-like k                                | 3.86            | 1.95    | 0.00 |
| MIOS        | missing oocyte, 1                                 | 0.31            | -1.69   | 0.00 |
| Gene ID | Symbol | Description | log2 Fold Change | p-value | q-value |
|---------|--------|-------------|-----------------|---------|---------|
| 206427_s_at | MLANA | melan-A | 0.24 | -2.07 | 0.01 |
| 206426_at | MLANA | melan-A | 0.20 | -2.31 | 0.02 |
| 212079_s_at | MLL | myeloid/lymphoid | 0.24 | -2.05 | 0.00 |
| 216845_x_at | MLL2 | myeloid/lymphoid | 5.50 | 2.46 | 0.00 |
| 216382_s_at | MLL2 | myeloid/lymphoid | 3.72 | 1.89 | 0.00 |
| 211071_s_at | MLLT11 | myeloid/lymphoid | 3.91 | 1.97 | 0.00 |
| 204918_s_at | MLLT3 | myeloid/lymphoid | 0.25 | -2.00 | 0.00 |
| 216845_x_at | MLL2 | myeloid/lymphoid | 5.50 | 2.46 | 0.00 |
| 216382_s_at | MLL2 | myeloid/lymphoid | 3.72 | 1.89 | 0.00 |
| 211071_s_at | MLLT11 | myeloid/lymphoid | 3.91 | 1.97 | 0.00 |
| 204918_s_at | MLLT3 | myeloid/lymphoid | 0.25 | -2.00 | 0.00 |
| 216845_x_at | MLL2 | myeloid/lymphoid | 5.50 | 2.46 | 0.00 |
| 216382_s_at | MLL2 | myeloid/lymphoid | 3.72 | 1.89 | 0.00 |
| 211071_s_at | MLLT11 | myeloid/lymphoid | 3.91 | 1.97 | 0.00 |
| 204918_s_at | MLLT3 | myeloid/lymphoid | 0.25 | -2.00 | 0.00 |
| 216845_x_at | MLL2 | myeloid/lymphoid | 5.50 | 2.46 | 0.00 |
| 216382_s_at | MLL2 | myeloid/lymphoid | 3.72 | 1.89 | 0.00 |
| 211071_s_at | MLLT11 | myeloid/lymphoid | 3.91 | 1.97 | 0.00 |
| 204918_s_at | MLLT3 | myeloid/lymphoid | 0.25 | -2.00 | 0.00 |
| Gene ID | Symbol | Description | Fold Change | p-value | FDR | 12.5 | 12.5 |
|---------|--------|-------------|-------------|---------|-----|------|------|
| 212277_at | MTMR4 | myotubularin related | 0.29 | -1.79 | 0.00 | 0.00 | 0.00 |
| 203774_at | MTR | 5-methyltetrahydryl | 0.28 | -1.85 | 0.00 | 0.00 | 0.00 |
| 215560_x_at | MTRF1L | mitochondrial tra | 0.30 | -1.72 | 0.00 | 0.00 | 0.00 |
| 213693_s_at | MUC1 | mucin 1, cell surf | 3.82 | 1.93 | 0.00 | 0.00 | 0.00 |
| 215560_x_at | MTRF1L | mitochondrial tra | 0.30 | -1.72 | 0.00 | 0.00 | 0.00 |
| 215560_x_at | MTRF1L | mitochondrial tra | 0.30 | -1.72 | 0.00 | 0.00 | 0.00 |
| 216671_x_at | MUC8 | mucin 8 | 3.11 | 1.64 | 0.00 | 0.00 | 0.00 |
| 219946_x_at | MUC8 | mucin 8 | 3.11 | 1.64 | 0.00 | 0.00 | 0.00 |
| 204994_at | MX2 | myxovirus (influe | 10.08 | 3.33 | 0.00 | 0.00 | 0.00 |
| 206877_at | MXD1 | MAX dimerization protein | 3.81 | 1.93 | 0.00 | 0.00 | 0.00 |
| 212509_s_at | MXRA7 | matrix-remodeling | 3.52 | 1.81 | 0.00 | 0.00 | 0.00 |
| 204796_at | MYB | v-myb myeloblasts | 0.12 | -3.11 | 0.00 | 0.00 | 0.00 |
| 201710_at | MYBL2 | v-myb myeloblasts | 4.35 | 2.12 | 0.00 | 0.00 | 0.00 |
| 204798_at | MYC binding protein 2 | 0.26 | -1.92 | 0.00 | 0.00 | 0.00 |
| 210960_s_at | MYCBP2 | MYC binding protein | 0.26 | -1.92 | 0.00 | 0.00 | 0.00 |
| 214058_at | MYCL1 | v-myc myelocyt | 0.30 | -1.73 | 0.00 | 0.00 | 0.00 |
| 212372_at | MYH10 | myosin, heavy cl | 3.60 | 1.85 | 0.00 | 0.00 | 0.00 |
| 219946_x_at | MYH14 | myosin, heavy cl | 8.08 | 3.02 | 0.00 | 0.00 | 0.00 |
| 205940_at | MYH3 | myosin, heavy cl | 0.28 | -1.82 | 0.00 | 0.00 | 0.00 |
| 212365_at | MYO1B | myosin IB | 7.69 | 2.94 | 0.00 | 0.00 | 0.00 |
| 212364_at | MYO1B | myosin IB | 4.31 | 2.11 | 0.00 | 0.00 | 0.00 |
| 204527_at | MYOSA | myosin VA (hean | 3.63 | 1.86 | 0.00 | 0.00 | 0.00 |
| 203216_s_at | MYO6 | myosin VI | 0.33 | -1.61 | 0.00 | 0.00 | 0.00 |
| 208452_x_at | MYO9B | myosin IXB | 3.15 | 1.66 | 0.00 | 0.00 | 0.00 |
| 206557_s_at | MYOD1 | myogenic differe | 3.30 | 1.72 | 0.00 | 0.00 | 0.00 |
| 204826_at | MYO2 | myomesin (M- | 0.24 | -2.04 | 0.00 | 0.00 | 0.00 |
| 219509_at | MYOZ1 | myozenin 1 | 4.52 | 2.18 | 0.00 | 0.00 | 0.00 |
| 213375_s_at | N4BP2L1 | NEDD4 binding | 0.09 | -3.50 | 0.00 | 0.00 | 0.00 |
| 202258_s_at | N4BP2L2 | NEDD4 binding | 0.23 | -2.10 | 0.00 | 0.00 | 0.00 |
| 221899_at | N4BP2L2 | NEDD4 binding | 0.23 | -2.10 | 0.00 | 0.00 | 0.00 |
| 202259_s_at | N4BP2L2 | NEDD4 binding | 0.15 | -2.72 | 0.00 | 0.00 | 0.00 |
| 214753_at | N4BP2L2 | NEDD4 binding | 0.14 | -2.80 | 0.00 | 0.00 | 0.00 |
| 208047_s_at | NAB1 | NGF-A binding | 0.33 | -1.61 | 0.00 | 0.00 | 0.00 |
| 204860_s_at | NAIP | NLR family, apo | 0.20 | -2.36 | 0.00 | 0.00 | 0.00 |
| 220184_at | NANO | Nanog homeobo | 0.18 | -2.52 | 0.00 | 0.00 | 0.00 |
| 219368_at | NAP1L2 | nucleosome ass | 0.09 | -3.50 | 0.00 | 0.00 | 0.00 |
| 204749_at | NAP1L3 | nucleosome ass | 0.16 | -2.66 | 0.00 | 0.00 | 0.00 |
| 219378_at | NARG1L | NMDA receptor | 0.25 | -1.99 | 0.00 | 0.00 | 0.00 |
| 221207_s_at | NBEA | neurobeachin | 0.28 | -1.82 | 0.00 | 0.00 | 0.00 |
| 212443_s_at | NBEAL2 | neurobeachin-lik | 0.24 | -2.03 | 0.00 | 0.00 | 0.00 |
| 201621_at | NBL1 | neuroblastoma, | 3.10 | 1.63 | 0.00 | 0.00 | 0.00 |
| 211885_s_at | NCA1L1D | neurocalcin delta | 3.97 | 1.99 | 0.00 | 0.00 | 0.00 |
| 209556_at | NCDN | neurochondrin | 6.07 | 2.60 | 0.00 | 0.00 | 0.00 |
| 209557_s_at | NCDN | neurochondrin | 5.48 | 2.46 | 0.00 | 0.00 | 0.00 |
| 216114_at | NCKIPSD | NCK interacting | 3.38 | 1.76 | 0.00 | 0.00 | 0.00 |
| 205731_s_at | NCOA2 | nuclear receptor | 0.17 | -2.57 | 0.00 | 0.00 | 0.00 |
| Entrez ID | Description                                      | Fold Change | t-statistic | p-value | Adjusted p-value |
|----------|--------------------------------------------------|-------------|-------------|---------|------------------|
| 217493    | nuclear receptor coactivator 3                   | 4.16        | 2.06        | 0.00    | 0.00             |
| 20962     | nuclear receptor coactivator 3                   | 3.16        | 1.66        | 0.00    | 0.00             |
| 203961    | nebulin                                          | 0.13        | -2.90       | 0.00    | 0.00             |
| 212129    | ninjurin                                          | 3.36        | 1.75        | 0.00    | 0.00             |
| 218160    | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 8, 19kDa | 3.81        | 1.93        | 0.00    | 0.00             |
| 218128    | nonhomologous                                    | 3.85        | 1.95        | 0.00    | 0.00             |
| 215228    | nescent helix for                               | 0.16        | -2.64       | 0.00    | 0.00             |
| 203413    | NELL2                                           | 16.67       | 4.06        | 0.00    | 0.00             |
| 218678    | nestin                                           | 12.01       | 3.59        | 0.00    | 0.00             |
| 218888    | neuropilin (NRP)                                 | 8.61        | 3.11        | 0.00    | 0.00             |
| 204889    | neutralized homo                                 | 5.47        | 2.45        | 0.00    | 0.00             |
| 208196    | nuclear factor of                               | 3.04        | 1.60        | 0.00    | 0.00             |
| 213029    | nuclear factor of                               | 0.17        | -2.58       | 0.00    | 0.00             |
| 212129    | ninjurin                                          | 3.36        | 1.75        | 0.00    | 0.00             |
| 20962     | nuclear receptor coactivator 3                   | 3.16        | 1.66        | 0.00    | 0.00             |
| 218160    | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 8, 19kDa | 3.81        | 1.93        | 0.00    | 0.00             |
| 218128    | nonhomologous                                    | 3.85        | 1.95        | 0.00    | 0.00             |
| 215228    | nescent helix for                               | 0.16        | -2.64       | 0.00    | 0.00             |
| 203413    | NELL2                                           | 16.67       | 4.06        | 0.00    | 0.00             |
| 218678    | nestin                                           | 12.01       | 3.59        | 0.00    | 0.00             |
| 218888    | neuropilin (NRP)                                 | 8.61        | 3.11        | 0.00    | 0.00             |
| 204889    | neutralized homo                                 | 5.47        | 2.45        | 0.00    | 0.00             |
| 208196    | nuclear factor of                               | 3.04        | 1.60        | 0.00    | 0.00             |
| 213029    | nuclear factor of                               | 0.17        | -2.58       | 0.00    | 0.00             |
| 212129    | ninjurin                                          | 3.36        | 1.75        | 0.00    | 0.00             |
| Gene Symbol | Description                                      | Fold Change | P-Value | q-Value |
|-------------|--------------------------------------------------|-------------|---------|---------|
| 207108_s_at | NIPBL Nipped-B homolog (Drosophila)              | 0.27        | -1.88   | 0.00    |
| 201591_s_at | NISCH nischarin                                  | 0.30        | -1.73   | 0.00    |
| 205004_s_at | NKRF NFKB repressing factor                      | 0.27        | -1.90   | 0.00    |
| 202379_s_at | NKTR natural killer-tum                          | 0.32        | -1.64   | 0.00    |
| 215338_s_at | NKTR natural killer-tum                          | 0.19        | -2.42   | 0.00    |
| 206578_at  | NKK2-5 NK2 transcriptor                          | 4.70        | 2.23    | 0.00    |
| 221933_at  | NLGN4X neurexin 4, X-lii                         | 4.26        | 2.09    | 0.01    |
| 210113_s_at| NLRP1 NLR family, pyrin                          | 0.33        | -1.61   | 0.00    |
| 205204_at  | NMB neuromedin B                                 | 5.20        | 2.38    | 0.00    |
| 205005_s_at| NMT2 N-myristoyltransferase                      | 0.26        | -1.92   | 0.00    |
| 215069_at  | NMT2 N-myristoyltransferase                      | 0.24        | -2.05   | 0.00    |
| 215743_at  | NMT2 N-myristoyltransferase                      | 0.24        | -2.09   | 0.00    |
| 206023_at  | NKU neuromedin U                                 | 0.23        | -2.11   | 0.00    |
| 202237_at  | NNMt nicotinamide N-r                           | 8.42        | 3.07    | 0.00    |
| 202238_s_at| NNMt nicotinamide N-r                            | 3.15        | 1.66    | 0.02    |
| 59625_at   | NOL3 nucleolar protein                           | 0.33        | -1.61   | 0.00    |
| 205895_s_at| NOLC1 nucleolar and co                           | 3.59        | 1.84    | 0.00    |
| 214011_at  | NOP16 NOP16 nucleolin                           | 3.18        | 1.67    | 0.00    |
| 207310_at  | NOS1 nitric oxide synth                          | 3.20        | 1.68    | 0.00    |
| 214722_at  | NOTCH2NL Notch homolog z                        | 0.19        | -2.39   | 0.00    |
| 203238_s_at| NOTCH3 Notch homolog z                           | 0.26        | -1.96   | 0.00    |
| 204501_at  | NOV nephroblastoma                               | 0.27        | -1.92   | 0.00    |
| 214321_at  | NOV nephroblastoma                               | 0.07        | -3.82   | 0.00    |
| 201695_s_at| NP nucleosine phosphate                         | 7.72        | 2.95    | 0.00    |
| 39549_at   | NPAS2 neuronal PAS domain c                      | 0.28        | -1.82   | 0.00    |
| 211584_s_at| NPAR nuclear protein, i                         | 0.32        | -1.64   | 0.00    |
| 214066_x_at| NPR2 natriuretic peptide                        | 0.20        | -2.32   | 0.00    |
| 204310_s_at| NPR2 natriuretic peptide                        | 0.17        | -2.53   | 0.00    |
| 205440_s_at| NPY1R neuropeptide Y r                          | 0.04        | -4.58   | 0.00    |
| 210519_s_at| NQO1 NAD(P)H dehydri                              | 7.00        | 2.81    | 0.00    |
| 201467_s_at| NQO1 NAD(P)H dehydri                             | 5.72        | 2.52    | 0.00    |
| 201468_s_at| NQO1 NAD(P)H dehydri                             | 4.31        | 2.11    | 0.01    |
| 206410_at  | NR082 nuclear receptor                          | 3.03        | 1.60    | 0.00    |
| 209119_x_at| NR2F2 nuclear receptor                          | 0.12        | -3.05   | 0.00    |
| 208529_at  | NR3C2 nuclear receptor                          | 0.22        | -2.20   | 0.00    |
| 211143_x_at| NR4A1 nuclear receptor                          | 3.75        | 1.91    | 0.00    |
| 202340_x_at| NR4A1 nuclear receptor                          | 3.25        | 1.70    | 0.00    |
| 212026_at  | NR4A1 nuclear receptor                          | 3.24        | 1.69    | 0.00    |
| 209959_at  | NR4A3 nuclear receptor                          | 7.07        | 2.81    | 0.00    |
| 219557_s_at| NRIP3 nuclear receptor                          | 5.24        | 2.39    | 0.00    |
| 210841_s_at| NRP2 neuropilin 2                               | 3.69        | 1.88    | 0.00    |
| 210683_at  | NRTN neurturin                                  | 0.11        | -3.20   | 0.00    |
| 221606_s_at| NSBP1 nucleosomal bin                           | 0.22        | -2.19   | 0.00    |
| 209279_s_at| NSDHL NAD(P) dependt                            | 4.79        | 2.26    | 0.00    |
| 217831_s_at| NSFL1C NSFL1 (p97) cof                          | 3.26        | 1.71    | 0.00    |
| 219067_s_at| NSMCE4A non-SMC elemeni                        | 0.31        | -1.70   | 0.00    |
| 222128_at  | NSUN6 NOL1/NOP2/Sur                             | 0.15        | -2.73   | 0.00    |
| 203939_at  | NT5E 5'-nucleotidase                            | 5.04        | 2.33    | 0.00    |
| Gene ID     | Description                                      | Fold Change | p-value | q-value |
|------------|--------------------------------------------------|-------------|---------|---------|
| 221796_at | neurotrophic tyrosine kinase, receptor, type 2    | 0.24        | -2.04   | 0.01    |
| 203979_at | NUBP1 nucleotide binding protein 1 (MinD homolog, E. coli) | 3.90        | 1.96   | 0.00    |
| 214390_at | NUDT13 nudix (nucleosid)                            | 0.13        | -2.93   | 0.00    |
| 213461_at | NUDT21 nudix (nucleosid)                            | 0.27        | -1.67   | 0.00    |
| 206303_s_at | NUDT4 nudix (nucleosid)                            | 4.19        | 2.07   | 0.00    |
| 220183_s_at | NUDT6 nudix (nucleosid)                            | 0.20        | -2.30   | 0.00    |
| 205134_s_at | NUFIP1 nuclear fragile X X                         | 0.24        | -2.09   | 0.00    |
| 207545_s_at | NUMB numb homolog (l)                             | 0.26        | -1.96   | 0.00    |
| 212709_at | NUP160 nucleoporin 160kDa                        | 0.23        | -2.13   | 0.00    |
| 216295_at | NUP50 nucleoporin 50kDa                           | 3.39        | 1.76   | 0.00    |
| 209230_s_at | NUPR1 nuclear protein, l                           | 0.19        | -2.40   | 0.00    |
| 202869_at | OAS1 2',5'-oligoadenyl synthetase 1, 40/46kDa     | 8.02        | 3.00   | 0.00    |
| 205552_s_at | OAS1 2',5'-oligoadenyl synthetase 1, 40/46kDa     | 5.26        | 2.39   | 0.00    |
| 204972_at | OAS2 2'-5'-oligoadenyl synthetase 2, 69/71kDa     | 4.04        | 2.01   | 0.00    |
| 205660_at | OASL 2'-5'-oligoadenyl synthetase 2, 69/71kDa     | 6.42        | 2.68   | 0.00    |
| 210797_s_at | OAT2 orphanin decarboxylase                      | 5.29        | 2.40   | 0.00    |
| 201364_s_at | OAT2 orphanin decarboxylase                      | 4.16        | 2.06   | 0.00    |
| 219100_at | OBF1 oligonucleotide/c                            | 5.31        | 2.41   | 0.00    |
| 220848_x_at | OBP2A odorant binding p                          | 3.93        | 1.98   | 0.00    |
| 206498_at | OCA2 oculocutaneous                              | 0.32        | -1.64  | 0.01    |
| 200790_at | ODC1 ornithine decarboxylase                     | 7.70        | 2.95   | 0.00    |
| 44617_at | OGFOD2 2-oxoglutarate a                          | 6.38        | 2.67   | 0.00    |
| 210443_x_at | OGFR opioid growth factor                        | 3.10        | 1.63   | 0.00    |
| 212307_s_at | OGT O-linked N-acetyl                              | 0.25        | -2.01  | 0.00    |
| 207564_x_at | OGT O-linked N-acetyl                            | 0.17        | -2.55  | 0.00    |
| 213131_at | OLFM1 olfactomedin 1                             | 3.94        | 1.98   | 0.01    |
| 218556_at | ORM1-like 2 (S. cerevisiae)                       | 3.46        | 1.79   | 0.00    |
| 212582_at | OSBPL8 oxysterol binding                         | 0.32        | -1.64  | 0.01    |
| 38710_at  | OTUB1 OTU domain, ub                              | 3.69        | 1.88   | 0.00    |
| 206604_at | OVL1 ovo-like 1(Dr)                               | 3.36        | 1.75   | 0.00    |
| 202780_at | OXCT1 3-oxoacid CoA tr                            | 0.16        | -2.68  | 0.00    |
| 218197_s_at | OXR1 oxidation resista                           | 0.12        | -3.10  | 0.00    |
| 207091_at | P2RX7 purinergic receptor                        | 0.24        | -2.07  | 0.00    |
| 206564_at | P4HB prolyl 4-hydroxyl                           | 3.38        | 1.76   | 0.00    |
| 222125_s_at | P4HTM prolyl 4-hydroxyl                          | 0.20        | -2.35  | 0.00    |
| 214794_at | PAG2G4 proliferation-assi                        | 0.24        | -2.05  | 0.00    |
| 221868_at | PAIP2B poly(A) binding p                         | 0.21        | -2.29  | 0.00    |
| 208878_s_at | PAK2 p21 protein (Cdc)                           | 0.17        | -2.60  | 0.00    |
| 200906_s_at | PALLD palladin, cytoske                           | 4.31        | 2.11   | 0.00    |
| 200907_s_at | PALLD palladin, cytoske                           | 3.09        | 1.63   | 0.00    |
| 203859_s_at | PALM paralemmin                                  | 0.32        | -1.62  | 0.00    |
| 212958_x_at | PAM peptidylglycine a                            | 5.37        | 2.42   | 0.00    |
| 202336_s_at | PAM peptidylglycine a                            | 4.55        | 2.19   | 0.00    |
| 213661_at | PMR1 peptidase domain                            | 0.06        | -4.16  | 0.00    |
| 203117_s_at | PAN2 PAN2 poly(A) sp                             | 0.22        | -2.19  | 0.00    |
| 221941_at | PAOX peptidylglycine a                           | 3.11        | 1.64   | 0.00    |
| 212720_at | PAPOLA poly(A) polymers                          | 0.32        | -1.64  | 0.00    |
| 215374_at | PAPOLA poly(A) polymers                          | 0.28        | -1.86  | 0.00    |
| Gene Symbol | Description | Log2 Fold Change | p-value | q-value |
|-------------|-------------|-----------------|---------|---------|
| 203060_s_at | PAPSS2 | 3'-phosphoadenosine 5'-phosphosulfate synthase 2 | 5.18 | 0.00 | 0.00 |
| 203058_s_at | PAPSS2 | 3'-phosphoadenosine 5'-phosphosulfate synthase 2 | 3.01 | 0.00 | 0.00 |
| 213372_at | PAQR3 | progestin and adipoQ receptor family member III | 0.25 | -2.02 | 0.00 |
| 221527_s_at | PARD3 | par-3 partitioning defective 3 homolog (C. elegans) | 0.23 | -2.09 | 0.00 |
| 205245_at | PARD6A | par-6 partitioning defective 6 homolog alpha (C. elegans) | 3.82 | 1.93 | 0.00 |
| 218543_s_at | PARD12 | poly (ADP-ribose) polymerase family, member 12 | 3.88 | 1.96 | 0.00 |
| 217980_s_at | PARVA | parvin, alpha | 6.67 | 2.74 | 0.00 |
| 121_at | PAX8 | paired box 8 | 8.54 | 3.09 | 0.00 |
| 212825_at | PAXIP1 | PAX interacting (with transcription-activation domain) protein 1 | 0.31 | -1.71 | 0.00 |
| 212599_s_at | PBX2 | pre-B-cell leukaemia homeobox 2 | 0.18 | -2.50 | 0.00 |
| 212259_s_at | PBXIP1 | pre-B-cell leukaemia homeobox interacting protein 1 | 3.24 | 1.70 | 0.00 |
| 203860_at | PC | pyruvate carboxylase | 5.70 | 2.51 | 0.00 |
| 203557_s_at | PCBD1 | perin-4-alpha-carboxylic acid | 3.48 | 1.80 | 0.00 |
| 21364_at | PCBP2 | poly(rC) binding | 0.30 | -1.72 | 0.00 |
| 213517_at | PCBP2 | poly(rC) binding | 0.22 | -2.17 | 0.00 |
| 203860_at | PCCA | propionyl CoA synthetase | 0.18 | -2.49 | 0.00 |
| 213369_at | PCDH21 | protocadherin 21 | 0.09 | -3.52 | 0.00 |
| 220186_s_at | PCDH24 | protocadherin 24 | 4.31 | 2.11 | 0.00 |
| 205534_at | PCDH7 | protocadherin 7 | 3.23 | 1.69 | 0.01 |
| 210368_at | PCDHGA8 | protocadherin ga | 0.29 | -1.81 | 0.00 |
| 203378_at | PCF11 | PCF11, cleavage and polyadenylation factor subunit, homolog (S. cerevisiae) | 0.13 | -2.98 | 0.00 |
| 210022_at | PCGF1 | polycomb group | 3.13 | 1.65 | 0.00 |
| 203792_x_at | PCGF2 | polycomb group | 3.73 | 1.90 | 0.00 |
| 213558_at | PCLO | piccolo (presynaptic cytomatrix protein) | 0.25 | -2.01 | 0.00 |
| 214937_x_at | PCM1 | pericentriolar material | 0.27 | -1.89 | 0.00 |
| 212406_at | PCMTD2 | protein-L-isoaspartate O-methyltransferase domain containing 2 | 0.16 | -2.65 | 0.00 |
| 215175_at | PCNX | pecanex homolog (Drosophila) | 0.33 | -1.60 | 0.00 |
| 205560_at | PCSK5 | proprotein convertase subtilisin/kexin type 5 | 0.25 | -2.00 | 0.00 |
| 205559_s_at | PCSK5 | proprotein convertase subtilisin/kexin type 5 | 0.17 | -2.60 | 0.00 |
| 210553_x_at | PCSK6 | proprotein convertase subtilisin/kexin type 5 | 3.24 | 1.70 | 0.00 |
| 207239_at | PCTK1 | protein-kinase casein kinase II | 3.35 | 1.75 | 0.00 |
| 212594_at | PDCD4 | programmed cell death | 0.30 | -1.73 | 0.00 |
| 222381_at | PDCD6 | programmed cell death | 3.23 | 1.69 | 0.00 |
| 204134_at | PDE2A | phosphodiesterase A | 3.05 | 1.61 | 0.00 |
| 206791_s_at | PDE4C | phosphodiesterase C | 3.16 | 1.66 | 0.00 |
| 213388_at | PDE4DIP | phosphodiesterase DIP | 0.23 | -2.15 | 0.00 |
| 209700_x_at | PDE4DIP | phosphodiesterase DIP | 0.21 | -2.28 | 0.00 |
| 203857_s_at | PDI5 | protein disulfide isomerase | 3.77 | 1.92 | 0.00 |
| 221957_at | PKD3 | pyruvate dehydrogenase | 3.49 | 1.80 | 0.00 |
| 219165_at | PDLIM2 | PDZ and LIM domain | 0.33 | -1.60 | 0.00 |
| 218690_at | PDLIM4 | PDZ and LIM domain | 4.59 | 2.20 | 0.00 |
| 211564_s_at | PDLIM4 | PDZ and LIM domain | 3.58 | 1.84 | 0.00 |
| 203242_s_at | PDLIM5 | PDZ and LIM domain | 0.29 | -1.80 | 0.00 |
| 213684_s_at | PDLIM5 | PDZ and LIM domain | 0.18 | -2.51 | 0.00 |
| 32029_at | PDPK1 | phosphoinositide-dependent protein kinase-1 | 3.83 | 1.94 | 0.00 |
| 221898_at | PDPN | podoplanin | 8.04 | 3.01 | 0.00 |
| Gene Symbol | Gene Name                                                                 | Expression | Fold Change | P-value | FDR   |
|-------------|---------------------------------------------------------------------------|------------|-------------|---------|-------|
| 215888_at   | PDSSB                                                                    | 0.27       | -1.88       | 0.00    | 0.00  |
| 204742_s_at | PDSSB                                                                    | 0.21       | -2.29       | 0.00    | 0.00  |
| 220865_s_at | PDSS1                                                                    | 3.73       | 1.90        | 0.00    | 0.00  |
| 221992_at   | PDXDC2                                                                   | 0.30       | -1.75       | 0.00    | 0.00  |
| 202671_s_at | PDXK                                                                     | 4.68       | 2.23        | 0.00    | 0.00  |
| 218018_at   | PDXK                                                                     | 3.84       | 1.94        | 0.00    | 0.00  |
| 209493_at   | PDZD2                                                                    | 0.06       | -4.14       | 0.00    | 0.00  |
| 216930_at   | PDZK1IP1                                                                 | 7.44       | 2.89        | 0.00    | 0.00  |
| 208982_at   | PECAM1                                                                   | 4.45       | 2.15        | 0.00    | 0.00  |
| 209242_at   | PDXK                                                                     | 0.30       | -1.75       | 0.00    | 0.00  |
| 202671_s_at | PDXK                                                                     | 4.68       | 2.23        | 0.00    | 0.00  |
| 218018_at   | PDXK                                                                     | 3.84       | 1.94        | 0.00    | 0.00  |
| 204873_at   | PDX1                                                                     | 0.06       | -4.04       | 0.00    | 0.00  |
| 201706_s_at | PEX1                                                                     | 5.22       | 2.38        | 0.00    | 0.00  |
| 203969_at   | PEX3                                                                     | 0.09       | -3.48       | 0.00    | 0.00  |
| 207931_at   | PFKFB2                                                                   | 3.45       | 1.79        | 0.00    | 0.00  |
| 204992_s_at | PFKFB2                                                                   | 0.11       | -3.25       | 0.00    | 0.00  |
| 201118_at   | PGD                                                                      | 4.26       | 2.09        | 0.00    | 0.00  |
| 205652_s_at | PEG3                                                                     | 0.10       | -3.32       | 0.00    | 0.00  |
| 204873_at   | PEX1                                                                     | 0.06       | -4.04       | 0.00    | 0.00  |
| 204873_at   | PEX1                                                                     | 0.06       | -4.04       | 0.00    | 0.00  |
| 219225_at   | PGBD5                                                                   | 11.03      | 3.46        | 0.00    | 0.00  |
| 204873_at   | PEX1                                                                     | 0.06       | -4.04       | 0.00    | 0.00  |
| 203969_at   | PEX3                                                                     | 0.09       | -3.48       | 0.00    | 0.00  |
| 201968_s_at | PGM1                                                                     | 3.26       | 1.70        | 0.00    | 0.00  |
| 218410_s_at | PGP                                                                      | 3.99       | 2.00        | 0.00    | 0.00  |
| 213227_at   | PGRMC2                                                                   | 0.23       | -2.15       | 0.00    | 0.00  |
| 218338_at   | PHC1                                                                     | 3.11       | 1.64        | 0.00    | 0.00  |
| 204866_at   | PHF16                                                                    | 0.24       | -2.05       | 0.00    | 0.00  |
| 217952_s_at | PHF3                                                                     | 0.28       | -1.83       | 0.00    | 0.00  |
| 217952_s_at | PHF3                                                                     | 0.28       | -1.83       | 0.00    | 0.00  |
| 215718_s_at | PHF3                                                                     | 0.11       | -3.21       | 0.00    | 0.00  |
| 201397_at   | PHGDH                                                                    | 0.21       | -2.28       | 0.00    | 0.00  |
| 205450_at   | PHKA1                                                                    | 3.74       | 1.90        | 0.00    | 0.00  |
| 217996_at   | PHLD1                                                                    | 6.96       | 2.80        | 0.00    | 0.00  |
| 217997_at   | PHLD1                                                                    | 6.16       | 2.62        | 0.00    | 0.00  |
| 216102_at   | PHLD1                                                                    | 5.85       | 2.55        | 0.00    | 0.00  |
| 212719_at   | PHLPF1                                                                   | 0.24       | -2.05       | 0.00    | 0.00  |
| 41469_at    | PI3                                                                       | 173.44     | 7.44        | 0.00    | 0.00  |
| 203691_at   | PI3                                                                       | 150.23     | 7.23        | 0.00    | 0.00  |
| 209346_s_at | PI4K2A                                                                   | 3.42       | 1.77        | 0.00    | 0.00  |
| 217862_at   | PIAS1                                                                   | 0.32       | -1.63       | 0.00    | 0.00  |
| 37433_at    | PIAS2                                                                   | 0.12       | -3.11       | 0.00    | 0.00  |
| 213239_at   | PIIBF1                                                                   | 0.24       | -2.05       | 0.00    | 0.00  |
| 205281_s_at | PIGA                                                                     | 0.33       | -1.62       | 0.00    | 0.00  |
| 215242_at   | PIGC                                                                     | 0.26       | -1.96       | 0.00    | 0.00  |
| 215129_at   | PIK3C2G                                                                   | 0.14       | -2.82       | 0.00    | 0.00  |
| Probe ID       | Description                                      | Log2 Fold | p-Value  | q-Value  |
|---------------|--------------------------------------------------|-----------|----------|----------|
| 204369_at     | PIK3CA phosphoinositol 0.17                     | -2.55     | 0.00     | 0.00     |
| 217620_s_at   | PIK3CB phosphoinositol 0.08                     | -3.57     | 0.00     | 0.00     |
| 221757_at     | PIK3P1 phosphoinositol 4.31                     | 2.11      | 0.00     | 0.00     |
| 202743_at     | PIK3R3 phosphoinositol 4.31                     | 2.11      | 0.00     | 0.00     |
| 213111_at     | PIKFYVE phosphoinositol 0.26                    | -1.93     | 0.00     | 0.00     |
| 222218_s_at   | PILRA paired immunogl 0.27                     | -1.88     | 0.00     | 0.00     |
| 220954_s_at   | PILRB paired immunogl 0.29                     | -1.78     | 0.00     | 0.00     |
| 222150_s_at   | PION pigeon homolog 0.17                        | -2.54     | 0.00     | 0.00     |
| 213142_x_at   | PION pigeon homolog 0.13                        | -2.92     | 0.00     | 0.00     |
| 205632_s_at   | PIP5K1B phosphatidylinos 0.23                   | -2.12     | 0.00     | 0.00     |
| 219155_at     | PITPNC1 phosphatidylinos 9.65                   | 3.27      | 0.00     | 0.00     |
| 205857_at     | PITX1 paired-like home 15.25                    | 3.93      | 0.00     | 0.00     |
| 208502_s_at   | PITX1 paired-like home 10.99                    | 3.46      | 0.00     | 0.00     |
| 218667_at     | PJA1 praja ring finger 4.11                     | 2.04      | 0.00     | 0.00     |
| 203688_at     | PKD2 polycystic kidney 0.22                     | -2.20     | 0.00     | 0.00     |
| 221061_at     | PKD2L1 polycystic kidney 5.68                   | 2.51      | 0.00     | 0.00     |
| 204267_x_at   | PKMYT1 protein kinase, r 3.85                   | 1.95      | 0.00     | 0.00     |
| 212629_s_at   | PKN2 protein kinase N 0.27                      | -1.88     | 0.00     | 0.00     |
| 205724_at     | PKP1 plakophilin 1 (ect 4.36                     | 2.12      | 0.00     | 0.00     |
| 201929_s_at   | PKP4 plakophilin 4 0.28                         | -1.85     | 0.00     | 0.00     |
| 207943_x_at   | PLAGL1 pleiomorphic ad 0.07                     | -3.80     | 0.00     | 0.00     |
| 209318_x_at   | PLAGL1 pleiomorphic ad 0.06                     | -3.96     | 0.00     | 0.00     |
| 207002_s_at   | PLAGL1 pleiomorphic ad 0.05                     | -4.38     | 0.00     | 0.00     |
| 201860_s_at   | PLAT plasminogen act 5.03                       | 2.33      | 0.00     | 0.00     |
| 205479_s_at   | PLAU plasminogen act 8.45                       | 3.08      | 0.00     | 0.00     |
| 210845_s_at   | PLAU plasminogen act 8.47                       | 3.08      | 0.00     | 0.00     |
| 211924_s_at   | PLAUR plasminogen act 7.69                      | 2.94      | 0.00     | 0.00     |
| 219011_s_at   | PLEKH4 pleckstrin homol 4.72                    | 2.24      | 0.00     | 0.00     |
| 220952_s_at   | PLEKH5 pleckstrin homol 0.33                    | -1.62     | 0.00     | 0.00     |
| 219566_s_at   | PLEKHF1 pleckstrin homol 8.15                   | 3.03      | 0.00     | 0.00     |
| 21283_s_at    | PLEKHG3 pleckstrin homol 3.01                   | 1.59      | 0.00     | 0.00     |
| 204436_at     | PLEKHO2 pleckstrin homol 5.39                   | 2.43      | 0.00     | 0.00     |
| 204519_s_at   | PLLP plasma membr 0.12                         | -3.12     | 0.00     | 0.00     |
| 202185_at     | PLOD3 procollagen-lysin 3.82                    | 1.93      | 0.00     | 0.00     |
| 205190_at     | PLS1 plastin 1 (f isoform 0.17                  | -2.53     | 0.00     | 0.00     |
| 202440_s_at   | PLSCR1 phospholipid scr 5.15                    | 2.37      | 0.00     | 0.00     |
| 202430_s_at   | PLSCR1 phospholipid scr 3.00                    | 1.59      | 0.00     | 0.00     |
| 56197_at      | PLSCR3 phospholipid scr 5.47                    | 2.45      | 0.00     | 0.00     |
| 213030_s_at   | PLXNA2 plecin A2 0.32                           | -1.63     | 0.00     | 0.00     |
| 217875_s_at   | PMEA1 prostate transm 3.15                      | 1.66      | 0.00     | 0.00     |
| 206503_x_at   | PML promyelocytic lea 3.09                     | 1.63      | 0.00     | 0.00     |
| 179_at        | PMS2L1 postmeiotic segr 12.81                   | 3.68      | 0.00     | 0.00     |
| 215412_x_at   | PMS2L2 postmeiotic segr 0.29                    | -1.77     | 0.00     | 0.00     |
| 212037_at     | PNN pinin, desmosor 0.31                        | -1.70     | 0.00     | 0.00     |
| 212036_s_at   | PNN pinin, desmosor 0.12                        | -3.02     | 0.00     | 0.00     |
| 39854_r_at    | PNPLA2 patatin-like phos 8.10                   | 3.02      | 0.00     | 0.00     |
| 220675_s_at   | PNPLA3 patatin-like phos 0.19                   | -2.38     | 0.00     | 0.00     |
| 219756_s_at   | POF1B premature ovarian 0.11                    | -3.14     | 0.00     | 0.00     |
| Gene ID   | Gene Symbol | Description                                      | Log2 Fold Change | p-value | q-value |
|----------|-------------|--------------------------------------------------|------------------|---------|---------|
| 215281_x_at | POGZ | pogo transposable element with ZNF domain | 0.27 | -1.92 | 0.00 0.00 |
| 214226_at | POL3S | polymerase (DNA) 3 | 4.40 | 2.14 | 0.00 0.00 |
| 219380_x_at | POLH | polymerase (DNA) | 0.23 | -2.12 | 0.00 0.00 |
| 219317_at | POLI | polymerase (DNA) | 0.24 | -2.05 | 0.00 0.00 |
| 202306_at | POLR2G | polymerase (RNA) II (DNA directed) polypeptide G | 3.37 | 1.75 | 0.00 0.00 |
| 60815_at | POLR2J4 | polymerase (RNA) II (DNA directed) polypeptide J4, pseudogene | 0.08 | -3.74 | 0.00 0.00 |
| 218866_s_at | POLR3K | polymerase (RNA) III (DNA directed) polypeptide K, 12.3 kDa | 3.03 | 1.60 | 0.00 0.00 |
| 217769_s_at | POMP | proteasome maturation protein | 3.07 | 1.62 | 0.00 0.00 |
| 220632_s_at | POMT2 | protein-O-mannosyltransferase 2 | 3.79 | 1.92 | 0.00 0.00 |
| 219926_at | POPDC3 | popeye domain containing 3 | 3.64 | 1.86 | 0.00 0.00 |
| 210809_s_at | POSTN | periostin, osteoblast specific factor | 0.28 | -1.82 | 0.01 0.02 |
| 214981_at | POSTN | periostin, osteoblast specific factor | 0.15 | -2.71 | 0.00 0.00 |
| 211660_at | POU2F2 | POU class 2 homeobox 2 | 3.19 | 1.67 | 0.00 0.00 |
| 215355_at | POU2F3 | POU class 2 homeobox 3 | 0.07 | -3.92 | 0.00 0.00 |
| 207109_at | POU2F3 | POU class 2 homeobox 3 | 0.04 | -4.53 | 0.00 0.00 |
| 207345_s_at | POUSF1 | POU class 3 homeobox 1 | 3.50 | 1.81 | 0.00 0.00 |
| 212226_at | PPA2B | phosphatidic acid phosphatase type 2B | 3.05 | 1.61 | 0.01 0.01 |
| 219195_at | PPARGC1A | peroxisome proliferator-activated receptor gamma, coactivator 1 alpha | 0.11 | -3.17 | 0.00 0.00 |
| 214374_s_at | PPFIBP1 | PTPRF interacting protein, binding protein 1 (liprin beta 1) | 0.18 | -2.46 | 0.00 0.00 |
| 217602_at | PPIA | peptidylprolyl iso | 0.06 | -4.01 | 0.00 0.00 |
| 204517_at | PPIC | peptidylprolyl iso | 3.63 | 1.86 | 0.00 0.00 |
| 204518_s_at | PPIC | peptidylprolyl iso | 3.06 | 1.61 | 0.00 0.00 |
| 205788_s_at | PPOX | proteoporphyrinogen | 0.31 | -4.56 | 0.00 0.00 |
| 216332_s_at | POUSF1 | POU class 3 homeobox 1 | 3.50 | 1.81 | 0.00 0.00 |
| 212226_at | PPA2B | phosphatidic acid phosphatase type 2B | 3.05 | 1.61 | 0.01 0.01 |
| 216347_s_at | PPP1R12A | protein phosphatase 1, regulatory (inhibitor) subunit 12A | 0.25 | -2.01 | 0.00 0.00 |
| 202165_at | PPP1R12B | protein phosphatase 1, regulatory (inhibitor) subunit 12B | 0.25 | -2.00 | 0.00 0.00 |
| 204284_at | PPP1R12C | protein phosphatase 1, regulatory (inhibitor) subunit 12C | 3.24 | 1.70 | 0.01 0.01 |
| 204554_at | PPP1R12D | protein phosphatase 1, regulatory (inhibitor) subunit 12D | 0.27 | -1.88 | 0.00 0.00 |
| 202880_s_at | PPP2R1B | protein phosphatase 2, regulatory (inhibitor) subunit 1B | 3.43 | 1.78 | 0.00 0.00 |
| 209632_at | PPP2R3A | protein phosphatase 2, regulatory (inhibitor) subunit 3A | 0.25 | -2.02 | 0.00 0.00 |
| 219265_s_at | PPP2R3B | protein phosphatase 2, regulatory (inhibitor) subunit 3B | 0.27 | -1.90 | 0.00 0.00 |
| 215705_at | PPP5C | protein phosphatase 5, catalytic subunit | 3.54 | 1.82 | 0.00 0.00 |
| 209826_at | PPT2 | palmitoyl-protein | 0.17 | -2.58 | 0.00 0.00 |
| 213483_at | PWD1 | peptidylprolyl iso | 0.24 | -2.05 | 0.00 0.00 |
| 216458_at | PQLC3 | PQ loop repeat c | 4.88 | 2.29 | 0.00 0.00 |
| 211531_x_at | PRB1 | proline-rich protein | 7.08 | 2.82 | 0.00 0.00 |
| 210977_x_at | PRB1 | proline-rich protein | 3.50 | 1.81 | 0.00 0.00 |
| 207752_x_at | PRB1 | proline-rich protein | 3.18 | 1.67 | 0.00 0.00 |
| 37022_at | PRLP | proline/arginine | 0.26 | -1.92 | 0.00 0.00 |
| 205628_at | PRIM2 | primase, DNA, polypeptide | 0.21 | -2.19 | 0.00 0.00 |
| 214917_at | PRKAA1 | protein kinase, A | 0.17 | -2.56 | 0.00 0.00 |
| 200604_s_at | PRKAR1A | protein kinase, c | 7.74 | 2.95 | 0.00 0.00 |
| 204843_s_at | PRKAR2A | protein kinase, c | 3.69 | 1.89 | 0.00 0.00 |
| 203680_at | PRKAR2B | protein kinase, c | 0.30 | -1.75 | 0.00 0.00 |
| 209685_s_at | PRKCB | protein kinase C | 0.21 | -2.27 | 0.00 0.00 |
| 207957_s_at | PRKCB | protein kinase C | 0.13 | -2.91 | 0.00 0.00 |
| Gene ID  | Description                                  | Fold Change | p-Value | Log2 Fold Change |
|---------|----------------------------------------------|-------------|---------|------------------|
| 213010_at | PRKCDPB protein kinase C                     | 4.40        | 0.00    | 1.40             |
| 210038_at | PRKCQ protein kinase C                       | 5.19        | 0.00    | 2.19             |
| 211084_x_at | PRKD3 protein kinase D                       | 0.22        | 0.00    | -0.22            |
| 218236_s_at | PRKD3 protein kinase D                       | 0.17        | 0.00    | -0.25            |
| 210476_s_at | PRLR prolactin receptor                     | 3.80        | 0.00    | 1.93             |
| 206445_s_at | PRMT1 protein arginine                       | 4.49        | 0.00    | 2.17             |
| 214203_s_at | PRODH proline dehydrogenase                 | 0.20        | 0.00    | -0.36            |
| 220553_s_at | PRPF39 PRP39 pre-mRNA                    | 0.12        | 0.00    | -3.02            |
| 218613_at | PSD3 pleckstrin and Ss                     | 0.29        | 0.01    | -0.80            |
| 205961_s_at | PSIP1 PC4 and SFRS1                          | 0.22        | 0.00    | -2.18            |
| 209337_at | PSIP1 PC4 and SFRS1                          | 0.11        | 0.00    | -3.25            |
| 201274_at | PSMA5 proteasome (pro)                      | 4.12        | 0.00    | 2.04             |
| 202659_at | PSMB10 proteasome (pro)                     | 6.07        | 0.00    | 2.60             |
| 204279_at | PSMB9 proteasome (pro)                      | 4.94        | 0.00    | 2.30             |
| 209334_s_at | PSMD9 proteasome (pro)                      | 3.60        | 0.00    | 1.85             |
| 209535_s_at | PSME3 proteasome (pro)                      | 4.60        | 0.00    | 2.20             |
| 200987_x_at | PSME3 proteasome (pro)                      | 3.89        | 0.00    | 1.96             |
| 205128_x_at | PTGS1 prostaglandin (pro)                  | 0.29        | 0.00    | -1.78            |
| 203997_at | PTPN3 protein tyrosine                      | 0.31        | 0.00    | -1.71            |
| 210375_at | PTPN3 protein tyrosine                      | 0.31        | 0.00    | -1.70            |
| Gene ID   | Description                        | Fold Change | p-value | Log2 Fold Change | Benjamini & Hochberg FDR |
|-----------|------------------------------------|-------------|---------|-----------------|-------------------------|
| 204944_at | PTPRG protein tyrosine phosphatase | 3.21        | 0.00    | 1.68            | 0.00                    |
| 211320_s_at | PTPRU protein tyrosine phosphatase | 4.09        | 0.00    | 2.03            | 0.00                    |
| 212012_at | PXDN peroxidasin homolog           | 14.13       | 0.00    | 3.82            | 0.00                    |
| 212013_at | PXDN peroxidasin homolog           | 14.13       | 0.00    | 3.82            | 0.00                    |
| 201087_at | PXN paxillin                       | 3.78        | 0.00    | 1.92            | 0.00                    |
| 216944_at | PYCRL pyrroline-5-carboxylase      | 4.02        | 0.00    | 2.01            | 0.00                    |
| 202990_at | PYGL phosphorylase                 | 4.00        | 0.00    | 2.00            | 0.00                    |
| 209123_at | QDPR quinoid dihydropteridase      | 3.57        | 0.00    | 1.83            | 0.00                    |
| 212063_at | QKI quaking homolog                | 0.18        | 0.00    | -2.45           | 0.00                    |
| 201482_at | QSOX1 glutamyl-peptidase            | 3.27        | 0.00    | -1.72           | 0.00                    |
| 200864_s_at | RAB11A RAB11A, member            | 0.33        | 0.00    | -1.60           | 0.00                    |
| 214999_s_at | RAB2B RAB2B, member               | 0.32        | 0.00    | -1.64           | 0.00                    |
| 211764_s_at | RAB31 RAB31, member               | 0.25        | 0.00    | -2.02           | 0.00                    |
| 212346_at | RAB40C RAB40C, member             | 5.24        | 0.00    | 2.39            | 0.00                    |
| 219210_s_at | RAB8B RAB8B, member              | 3.52        | 0.00    | 1.82            | 0.00                    |
| 203136_at | RAC2 ras-related C3 br            | 3.27        | 0.00    | 1.71            | 0.00                    |
| 201464_at | RAD51AP1 RAD51 associated          | 0.20        | 0.00    | -2.33           | 0.00                    |
| 205647_at | RAD52 RAD52 homolog               | 0.19        | 0.00    | -2.38           | 0.00                    |
| 204199_at | RALGPS1 Ral GEF with Ptk           | 0.15        | 0.00    | -2.78           | 0.00                    |
| 220992_at | RAPGEF2 Ral guanine nuc            | 0.06        | 0.00    | -4.02           | 0.00                    |
| 201051_at | RAPGEF3 Ral guanine nuc            | 3.52        | 0.00    | 1.82            | 0.00                    |
| 205651_at | RAPGEF4 Ral guanine nuc            | 0.12        | 0.00    | -3.01           | 0.00                    |
| 219112_at | RAPGEF6 Ral guanine nuc            | 0.33        | 0.00    | -1.61           | 0.00                    |
| 218657_at | RAPGEFL1 Ral guanine nuc           | 0.19        | 0.00    | -2.36           | 0.00                    |
| 204189_at | RARG retinoic acid receptor        | 3.21        | 0.00    | 1.68            | 0.00                    |
| Gene ID   | Gene Name                  | Description                                      | Log2 Fold Change | p-value 1 | p-value 2 |
|----------|----------------------------|--------------------------------------------------|------------------|-----------|-----------|
| 221872_at | RARRES1                    | retinoic acid receptor (tazarotene induced) 1   | 3.39             | 1.76      | 0.01      | 0.02      |
| 212706_at | RASA4                      | RAS p21 protein                                  | 0.13             | -2.94     | 0.00      | 0.00      |
| 214369_s_at | RASGRP2                   | RAS guanyl reductase                             | 0.19             | -2.38     | 0.00      | 0.00      |
| 220027_s_at | RASIP1                    | Ras interacting p                               | 3.98             | 1.99      | 0.00      | 0.00      |
| 220033_s_at | RB1CC1                    | RB1-inducible cc                                 | 0.29             | -1.78     | 0.00      | 0.00      |
| 220034_s_at | RB1CC1                    | RB1-inducible cc                                 | 0.22             | -2.18     | 0.00      | 0.00      |
| 219222_at | RBKS                       | ribokinase                                       | 5.27             | 2.40      | 0.00      | 0.00      |
| 205296_at | RBL1                       | retinoblastoma-li                                | 0.24             | -2.06     | 0.00      | 0.00      |
| 212332_at | RBL2                       | retinoblastoma-li                                | 0.30             | -1.72     | 0.00      | 0.00      |
| 212331_at | RBL2                       | retinoblastoma-li                                | 0.24             | -2.04     | 0.00      | 0.00      |
| 51228_at  | RBM12B                     | RNA binding mo                                  | 0.20             | -2.33     | 0.00      | 0.00      |
| 210207_at | RBM25                      | RNA binding mo                                  | 0.32             | -1.64     | 0.00      | 0.00      |
| 219754_at | RBM41                      | RNA binding mo                                  | 0.24             | -2.04     | 0.00      | 0.00      |
| 209936_at | RBM5                       | RNA binding mo                                  | 0.32             | -1.64     | 0.00      | 0.00      |
| 217856_at | RBM8A                      | RNA binding mo                                  | 0.26             | -1.97     | 0.00      | 0.00      |
| 203423_at | RBP1                       | retinol binding pr                              | 5.19             | 2.38      | 0.00      | 0.00      |
| 220201_at | RC3H2                      | ring finger and C                               | 4.03             | 2.01      | 0.00      | 0.00      |
| 203498_at | RCAN2                      | regulator of calcii                             | 0.30             | -1.73     | 0.00      | 0.00      |
| 218352_at | RCBTB1                     | regulator of chro                               | 0.18             | -2.47     | 0.00      | 0.00      |
| 205332_at | RCE1                       | RCE1 homolog,                                   | 3.32             | 1.73      | 0.00      | 0.00      |
| 206753_at | RDH16                      | retinol dehydrogen                             | 7.03             | 2.81      | 0.00      | 0.00      |
| 212917_x_at | RECQL                     | RecQ protein-lk                                 | 0.30             | -1.72     | 0.00      | 0.00      |
| 205205_at | RELB                       | v-rel reticuloendr                             | 6.08             | 2.60      | 0.00      | 0.00      |
| 215201_at | REP51                      | RALBP1 associate                                 | 0.11             | -3.18     | 0.00      | 0.00      |
| 214409_at | RFPL3S                     | RFPL3 antisense                                 | 0.25             | -1.98     | 0.00      | 0.00      |
| 212646_at | RFTN1                      | raftlin, lipid raft li                           | 4.71             | 2.24      | 0.00      | 0.00      |
| 218564_at | RFWD3                      | ring finger and V                               | 0.27             | -1.88     | 0.00      | 0.00      |
| 218430_s_at | RXF7                      | regulatory factor                               | 0.27             | -1.91     | 0.00      | 0.00      |
| 216834_at | RGS1                       | regulator of G-pr                               | 4.05             | 2.02      | 0.02      | 0.04      |
| 204316_at | RGS10                      | regulator of G-pr                               | 5.73             | 2.52      | 0.00      | 0.00      |
| 202388_at | RGS2                       | regulator of G-pr                               | 0.24             | -2.04     | 0.00      | 0.00      |
| 210138_at | RGS20                      | regulator of G-pr                               | 4.30             | 2.10      | 0.00      | 0.00      |
| 203823_at | RGS3                       | regulator of G-pr                               | 3.58             | 1.84      | 0.00      | 0.00      |
| 219554_at | RHCG                       | Rh family, C glyc                               | 100.83           | 6.66      | 0.00      | 0.00      |
| 212651_at | RHOBTB1                    | Rho-related BTB                                 | 0.27             | -1.87     | 0.00      | 0.00      |
| 202975_s_at | RHOBTB3                   | Rho-related BTB                                 | 0.18             | -2.52     | 0.00      | 0.00      |
| 202976_s_at | RHOBTB3                   | Rho-related BTB                                 | 0.07             | -3.84     | 0.00      | 0.00      |
| 31846_at  | RHOO                       | ras homolog gen                                 | 7.26             | 2.86      | 0.00      | 0.00      |
| 218323_at | RHT1                       | ras homolog gen                                 | 0.18             | -2.50     | 0.00      | 0.00      |
| 222148_s_at | RHT1                      | ras homolog gen                                 | 0.17             | -2.53     | 0.00      | 0.00      |
| 205414_s_at | RIC2H2                     | Rho-type GTPas                                  | 0.28             | -1.84     | 0.00      | 0.00      |
| 214700_x_at | RIF1                      | RAP1 interacting                                | 0.19             | -2.39     | 0.00      | 0.00      |
| 206137_at | RIMS2                      | regulating synap                                | 3.31             | 1.73      | 0.00      | 0.00      |
| 218598_at | RINT1                      | RAD50 interacto                                 | 0.23             | -2.10     | 0.00      | 0.00      |
| 205158_at | RNASE4                     | ribonuclease, Rn                                | 0.33             | -1.62     | 0.00      | 0.00      |
| 213566_at | RNASE6                     | ribonuclease, Rn                                | 4.84             | 2.28      | 0.00      | 0.00      |
| 203022_at | RNASEH2A                    | ribonuclease H2                                 | 4.83             | 2.27      | 0.00      | 0.00      |
| 210056_at | RND1                       | Rho family GTPi                                 | 5.20             | 2.38      | 0.00      | 0.00      |
| Gene Symbol | Description                                      | Value 1  | Value 2  | Value 3  | Value 4  |
|-------------|--------------------------------------------------|----------|----------|----------|----------|
| RNF114      | ring finger protein 114                          | 4.25     | 2.09     | 0.00     | 0.00     |
| RNF123      | ring finger protein 123                          | 3.85     | 1.94     | 0.00     | 0.00     |
| RNF125      | ring finger protein 125                          | 0.08     | -3.65    | 0.00     | 0.00     |
| RNF128      | ring finger protein 128                          | 0.26     | -1.93    | 0.02     | 0.03     |
| RNF141      | ring finger protein 141                          | 3.11     | 1.64     | 0.00     | 0.00     |
| RNF170      | ring finger protein 170                          | 0.19     | -2.41    | 0.00     | 0.00     |
| RNF123      | ring finger protein 123                          | 3.85     | 1.94     | 0.00     | 0.00     |
| RNF125      | ring finger protein 125                          | 0.08     | -3.65    | 0.00     | 0.00     |
| RNF128      | ring finger protein 128                          | 0.26     | -1.93    | 0.02     | 0.03     |
| RNF141      | ring finger protein 141                          | 3.11     | 1.64     | 0.00     | 0.00     |
| RNF170      | ring finger protein 170                          | 0.19     | -2.41    | 0.00     | 0.00     |
| RNF123      | ring finger protein 123                          | 3.85     | 1.94     | 0.00     | 0.00     |
| RNF125      | ring finger protein 125                          | 0.08     | -3.65    | 0.00     | 0.00     |
| RNF128      | ring finger protein 128                          | 0.26     | -1.93    | 0.02     | 0.03     |
| RNF141      | ring finger protein 141                          | 3.11     | 1.64     | 0.00     | 0.00     |
| RNF170      | ring finger protein 170                          | 0.19     | -2.41    | 0.00     | 0.00     |
| RNF123      | ring finger protein 123                          | 3.85     | 1.94     | 0.00     | 0.00     |
| RNF125      | ring finger protein 125                          | 0.08     | -3.65    | 0.00     | 0.00     |
| RNF128      | ring finger protein 128                          | 0.26     | -1.93    | 0.02     | 0.03     |
| RNF141      | ring finger protein 141                          | 3.11     | 1.64     | 0.00     | 0.00     |
| RNF170      | ring finger protein 170                          | 0.19     | -2.41    | 0.00     | 0.00     |
| RNF123      | ring finger protein 123                          | 3.85     | 1.94     | 0.00     | 0.00     |
| RNF125      | ring finger protein 125                          | 0.08     | -3.65    | 0.00     | 0.00     |
| RNF128      | ring finger protein 128                          | 0.26     | -1.93    | 0.02     | 0.03     |
| RNF141      | ring finger protein 141                          | 3.11     | 1.64     | 0.00     | 0.00     |
| RNF170      | ring finger protein 170                          | 0.19     | -2.41    | 0.00     | 0.00     |
| RNF123      | ring finger protein 123                          | 3.85     | 1.94     | 0.00     | 0.00     |
| RNF125      | ring finger protein 125                          | 0.08     | -3.65    | 0.00     | 0.00     |
| RNF128      | ring finger protein 128                          | 0.26     | -1.93    | 0.02     | 0.03     |
| RNF141      | ring finger protein 141                          | 3.11     | 1.64     | 0.00     | 0.00     |
| RNF170      | ring finger protein 170                          | 0.19     | -2.41    | 0.00     | 0.00     |
| RNF123      | ring finger protein 123                          | 3.85     | 1.94     | 0.00     | 0.00     |
| RNF125      | ring finger protein 125                          | 0.08     | -3.65    | 0.00     | 0.00     |
| RNF128      | ring finger protein 128                          | 0.26     | -1.93    | 0.02     | 0.03     |
| RNF141      | ring finger protein 141                          | 3.11     | 1.64     | 0.00     | 0.00     |
| RNF170      | ring finger protein 170                          | 0.19     | -2.41    | 0.00     | 0.00     |
| RNF123      | ring finger protein 123                          | 3.85     | 1.94     | 0.00     | 0.00     |
| RNF125      | ring finger protein 125                          | 0.08     | -3.65    | 0.00     | 0.00     |
| RNF128      | ring finger protein 128                          | 0.26     | -1.93    | 0.02     | 0.03     |
| RNF141      | ring finger protein 141                          | 3.11     | 1.64     | 0.00     | 0.00     |
| RNF170      | ring finger protein 170                          | 0.19     | -2.41    | 0.00     | 0.00     |
| Gene ID   | Description                              | Log2 Fold Change | Normalized | P-value | q-value |
|-----------|------------------------------------------|------------------|------------|---------|---------|
| 202598_at | S100A13 S100 calcium binding protein A13 | 3.13             | 1.65       | 0.00    | 0.00    |
| 204268_at | S100A2 S100 calcium binding protein A2   | 6.70             | 2.75       | 0.00    | 0.00    |
| 206027_at | S100A3 S100 calcium binding protein A3   | 6.42             | 2.68       | 0.00    | 0.00    |
| 217728_at | S100A6 S100 calcium binding protein A6   | 6.35             | 2.67       | 0.00    | 0.00    |
| 205916_at | S100A7 S100 calcium binding protein A7   | 90.38            | 6.50       | 0.00    | 0.00    |
| 202917_s_at | S100A8 S100 calcium binding protein A8 | 197.39           | 7.63       | 0.00    | 0.00    |
| 214370_at | S100A8 S100 calcium binding protein A8   | 6.48             | 2.70       | 0.00    | 0.00    |
| 205916_at | S100A7 S100 calcium binding protein A7   | 90.38            | 6.50       | 0.00    | 0.00    |
| 202917_s_at | S100A8 S100 calcium binding protein A8 | 197.39           | 7.63       | 0.00    | 0.00    |
| 214370_at | S100A8 S100 calcium binding protein A8   | 6.48             | 2.70       | 0.00    | 0.00    |
| 214370_at | S100A8 S100 calcium binding protein A8   | 6.48             | 2.70       | 0.00    | 0.00    |
| Gene ID   | Description                               | Fold   | p-value | Log2Fold | p-value |
|-----------|-------------------------------------------|--------|---------|----------|---------|
| 202376_at | SERPINA3 serpin peptidase                 | 66.07  | 0.00    | 6.05     | 0.00    |
| 212268_at | SERPINB1 serpin peptidase                 | 10.29  | 0.00    | 3.36     | 0.00    |
| 213572_s_at | SERPINB1 serpin peptidase             | 8.08   | 0.00    | 3.02     | 0.00    |
| 209719_x_at | SERPINB3 serpin peptidase         | 51.63  | 0.00    | 5.69     | 0.00    |
| 209720_s_at | SERPINB3 serpin peptidase            | 32.54  | 0.00    | 5.02     | 0.00    |
| 211906_s_at | SERPINB4 serpin peptidase          | 107.54 | 0.00    | 6.75     | 0.00    |
| 209723_at | SERPINB9 serpin peptidase               | 5.39   | 0.00    | 2.43     | 0.00    |
| 202628_s_at | SERPINE1 serpin peptidase         | 10.42  | 0.00    | 3.38     | 0.00    |
| 202627_s_at | SERPINE1 serpin peptidase         | 6.45   | 0.00    | 2.69     | 0.00    |
| 211906_s_at | SERPINE2 serpin peptidase          | 25.61  | 0.00    | 4.68     | 0.00    |
| 213572_s_at | SERPINB1 serpin peptidase             | 8.08   | 0.00    | 3.02     | 0.00    |
| 209719_x_at | SERPINB3 serpin peptidase         | 51.63  | 0.00    | 5.69     | 0.00    |
| 209720_s_at | SERPINB3 serpin peptidase            | 32.54  | 0.00    | 5.02     | 0.00    |
| 211906_s_at | SERPINB4 serpin peptidase          | 107.54 | 0.00    | 6.75     | 0.00    |
| 209723_at | SERPINB9 serpin peptidase               | 5.39   | 0.00    | 2.43     | 0.00    |
| 202628_s_at | SERPINE1 serpin peptidase         | 10.42  | 0.00    | 3.38     | 0.00    |
| 202627_s_at | SERPINE1 serpin peptidase         | 6.45   | 0.00    | 2.69     | 0.00    |
| 211906_s_at | SERPINE2 serpin peptidase          | 25.61  | 0.00    | 4.68     | 0.00    |
| 213572_s_at | SERPINB1 serpin peptidase             | 8.08   | 0.00    | 3.02     | 0.00    |
| 209719_x_at | SERPINB3 serpin peptidase         | 51.63  | 0.00    | 5.69     | 0.00    |
| 209720_s_at | SERPINB3 serpin peptidase            | 32.54  | 0.00    | 5.02     | 0.00    |
| 211906_s_at | SERPINB4 serpin peptidase          | 107.54 | 0.00    | 6.75     | 0.00    |
| 209723_at | SERPINB9 serpin peptidase               | 5.39   | 0.00    | 2.43     | 0.00    |
| 202628_s_at | SERPINE1 serpin peptidase         | 10.42  | 0.00    | 3.38     | 0.00    |
| 202627_s_at | SERPINE1 serpin peptidase         | 6.45   | 0.00    | 2.69     | 0.00    |
| 211906_s_at | SERPINE2 serpin peptidase          | 25.61  | 0.00    | 4.68     | 0.00    |
| Probe ID       | Description                  | Log2 Fold Change | p-value | q-value |
|---------------|------------------------------|-----------------|---------|---------|
| 202254_at     | SI PA1L1                     | 0.32            | -1.64   | 0.00    |
| 37831_at      | SI PA1L3                     | 5.06            | 2.34    | 0.00    |
| 202897_at     | SI RPA                      | 4.20            | 2.07    | 0.00    |
| 202896_s_at   | SI RPA                      | 3.23            | 1.69    | 0.00    |
| 218878_s_at   | SI R T1                     | 0.23            | -2.15   | 0.00    |
| 49327_at      | SI R T3                     | 6.52            | 2.71    | 0.00    |
| 202234_s_at   | SI C16A1                    | 7.74            | 2.95    | 0.00    |
| 209000_s_at   | SI C16A1                    | 6.36            | 2.67    | 0.00    |
| 202235_at     | SI C16A1                    | 5.21            | 2.38    | 0.00    |
| 202236_s_at   | SI C16A1                    | 3.51            | 1.81    | 0.00    |
| 219613_s_at   | SI C16A10                   | 0.09            | -3.45   | 0.00    |
| 210807_s_at   | SI C16A7                    | 0.23            | -2.12   | 0.00    |
| 207057_at     | SI C19A2                    | 0.03            | -5.20   | 0.00    |
| 209860_at     | SI C22A3                    | 0.32            | -1.63   | 0.00    |
| 209237_s_at   | SI C23A2                    | 3.84            | 1.94    | 0.00    |
| 201916_at     | SI C25A36                   | 0.26            | -1.97   | 0.00    |
| 212683_at     | SI C25A44                   | 0.29            | -1.81   | 0.00    |
| 219344_at     | SI C29A3                    | 5.83            | 2.54    | 0.00    |
| 201249_at     | SI C2A1                     | 10.12           | 3.34    | 0.00    |
| 221751_at     | SI C2A3P1                   | 0.22            | -2.16   | 0.00    |
| 218985_at     | SI C2A8                     | 3.35            | 1.74    | 0.00    |
| 219991_at     | SI C2A9                     | 12.67           | 3.66    | 0.00    |
| 207039_at     | SI C30A3                    | 6.61            | 2.72    | 0.00    |
| 206770_s_at   | SI C35A3                    | 0.31            | -1.69   | 0.00    |
| 209865_at     | SI C35A3                    | 0.24            | -2.07   | 0.00    |
| 218485_s_at   | SI C35C1                    | 3.87            | 1.95    | 0.00    |
| 213033_at     | SI C35D2                    | 3.24            | 1.69    | 0.00    |
| 218928_s_at   | SI C37A1                    | 0.26            | -1.96   | 0.00    |
| 212110_at     | SI C39A14                   | 3.23            | 1.69    | 0.00    |
| 219175_s_at   | SI C41A3                    | 4.46            | 2.16    | 0.00    |
| 204394_at     | SI C43A1                    | 0.33            | -1.61   | 0.00    |
| 222364_at     | SI C44A1                    | 0.15            | -2.79   | 0.00    |
| 219525_at     | SI C47A1                    | 0.04            | -4.53   | 0.00    |
| 207771_at     | SI C5A2                     | 3.37            | 1.75    | 0.00    |
| 213164_at     | SI C5A3                     | 0.29            | -1.76   | 0.00    |
| 211123_at     | SI C5A5                     | 4.50            | 2.17    | 0.00    |
| 204087_s_at   | SI C5A6                     | 3.59            | 1.84    | 0.00    |
| 201195_s_at   | SI C7A5                     | 3.09            | 1.63    | 0.00    |
| 216604_s_at   | SI C7A8                     | 4.31            | 2.11    | 0.00    |
| 202752_x_at   | SI C7A8                     | 3.69            | 1.88    | 0.00    |
| 208015_at     | SMAD1                      | 0.13            | -2.98   | 0.00    |
| 205398_s_at   | SMAD3                      | 4.48            | 2.16    | 0.00    |
| Gene ID    | Description                                      | Value 1 | Value 2 | Value 3 | Value 4 |
|-----------|--------------------------------------------------|---------|---------|---------|---------|
| 202527_s_at | SMAD4 SMAD family member 4                       | 0.24    | -2.04   | 0.00    | 0.00    |
| 205187_at  | SMAD5 SMAD family member 5                       | 0.05    | -4.21   | 0.00    | 0.00    |
| 206544_x_at | SMARCA2 SWI/SNF related                          | 0.33    | -1.60   | 0.00    | 0.00    |
| 206542_s_at | SMARCA2 SWI/SNF related                          | 0.12    | -3.05   | 0.00    | 0.00    |
| 208793_x_at | SMARCA4 SWI/SNF related                          | 3.76    | 1.91    | 0.00    | 0.00    |
| 201321_s_at | SMARCC2 SWI/SNF related                          | 0.32    | -1.63   | 0.00    | 0.00    |
| 209257_s_at | SMC3 structural mainte                           | 0.30    | -1.76   | 0.00    | 0.00    |
| 212569_at  | SMCHD1 structural mainte                         | 0.32    | -1.65   | 0.00    | 0.00    |
| 212579_at  | SMCHD1 structural mainte                         | 0.16    | -2.66   | 0.00    | 0.00    |
| 220368_s_at | SMEK1 SMEK homolog                               | 0.14    | -2.85   | 0.00    | 0.00    |
| 222270_at  | SMEK2 SMEK homolog                               | 0.13    | -3.00   | 0.00    | 0.00    |
| 220140_s_at | SNX10 sorting nexin 10                          | 3.13    | 1.65    | 0.01    | 0.02    |
| 53912_at   | SNX11 sorting nexin 11                           | 4.33    | 2.11    | 0.00    | 0.00    |
| 215223_s_at | SOD2 superoxide dism                             | 3.21    | 1.68    | 0.00    | 0.00    |
| 204275_at  | SOLH small optic lobes                           | 0.30    | -1.72   | 0.00    | 0.00    |
| 212807_s_at | SORT1 sortlin 1                                  | 3.41    | 1.77    | 0.00    | 0.00    |
| 209843_s_at | SOX10 SRY (sex determ)                           | 3.31    | 1.73    | 0.00    | 0.00    |
| 201416_at  | SOX4 SRY (sex determ)                            | 3.33    | 1.74    | 0.00    | 0.00    |
| 202390_s_at | SOX9 SRY (sex determ)                            | 10.33   | 3.37    | 0.00    | 0.00    |
| 202395_s_at | SOX9 SRY (sex determ)                            | 4.30    | 2.11    | 0.00    | 0.00    |
| 208012_x_at | SP110 SP110 nuclear b                            | 4.72    | 2.24    | 0.00    | 0.00    |
| 214791_at  | SP140L SP140 nuclear b                           | 4.80    | 2.26    | 0.00    | 0.00    |
| 213168_at  | SP3 Sp3 transcriptionor                          | 0.27    | -1.90   | 0.00    | 0.00    |
| 210117_at  | SPAG1 sperm associate                            | 0.31    | -1.68   | 0.01    | 0.01    |
| 219109_at  | SPAG16 sperm associate                            | 0.29    | -1.80   | 0.00    | 0.00    |
| 200685_s_at | SPARC secreted protein,                          | 5.74    | 2.52    | 0.00    | 0.00    |
| 204433_s_at | SPATA2 spermatogenesis                           | 3.67    | 1.88    | 0.00    | 0.00    |
| 215694_at  | SPATA5L1 spermatogenesis                         | 0.28    | -1.85   | 0.00    | 0.00    |
| 220298_s_at | SPATA6 spermatogenesis                           | 0.19    | -2.40   | 0.00    | 0.00    |
| 215983_s_at | SPATA7 spermatogenesis                           | 0.15    | -2.70   | 0.00    | 0.00    |
| 213442_x_at | SPDEF SAM pointed dor                            | 7.40    | 2.89    | 0.00    | 0.00    |
| 213441_x_at | SPDEF SAM pointed dor                            | 6.49    | 2.70    | 0.00    | 0.00    |
| 220192_x_at | SPDEF SAM pointed dor                            | 5.50    | 2.46    | 0.00    | 0.00    |
| 214404_x_at | SPDEF SAM pointed dor                            | 4.44    | 2.15    | 0.00    | 0.00    |
| Gene ID   | Description                                    | log2 Fold Change | p-value | Adjusted p-value |
|-----------|-----------------------------------------------|------------------|---------|-----------------|
| 212526_at | spastic parapleg (Troyer syndrome)             | 0.18             | -2.48   | 0.00            |
| 209857_s_at | sphingosine kinase                             | 3.35             | 1.74    | 0.00            |
| 217813_s_at | spindlin 1                                     | 0.21             | -2.25   | 0.00            |
| 206239_s_at | serine peptidase                               | 0.18             | -2.51   | 0.00            |
| 206057_x_at | sialophorin                                    | 3.75             | 1.91    | 0.00            |
| 202523_s_at | sparc/osteonectin                              | 4.89             | 2.29    | 0.00            |
| 208927_at | speckle-type PO                                | 0.32             | -1.65   | 0.00            |
| 209857_s_at | secreted phosphoprotein                        | 8.76             | 3.13    | 0.00            |
| 203458_at | sepiapterin reductase                          | 7.82             | 2.97    | 0.00            |
| 214549_x_at | small proline-rcf                              | 31.23            | 4.97    | 0.00            |
| 213796_at | small proline-rcf                              | 18.08            | 4.18    | 0.00            |
| 220664_s_at | small proline-rcf                              | 9.43             | 3.24    | 0.00            |
| 218990_s_at | small proline-rcf                              | 9.21             | 3.20    | 0.00            |
| 212558_at | sprouty homolog                                | 0.21             | -2.27   | 0.00            |
| 221489_s_at | sprouty homolog                                | 5.99             | 2.58    | 0.00            |
| 214925_s_at | spectrin, alpha, non-erythrocytic              | 0.13             | -3.00   | 0.00            |
| 214145_s_at | spectrin, beta, erythrocytic                   | 3.18             | 1.67    | 0.00            |
| 220185_s_at | spectrin, beta, non-erythrocytic              | 4.89             | 2.29    | 0.00            |
| 220456_at | serine palmitoylt                              | 0.11             | -3.17   | 0.00            |
| 217995_at | sulfide quinone r                              | 3.60             | 1.85    | 0.00            |
| 212061_at | U2-associated S                                | 0.25             | -2.00   | 0.00            |
| 38766_at  | Sf12-related CRI                              | 4.09             | 2.03    | 0.00            |
| 210959_s_at | steroid-5-alpha-r                              | 3.26             | 1.71    | 0.00            |
| 218800_s_at | steroid 5 alpha-r                              | 0.26             | -1.96   | 0.00            |
| 201248_s_at | sterol regulatory                             | 3.02             | 1.59    | 0.00            |
| 213239_at | SLIT-ROBO Rc                                 | 0.12             | -3.03   | 0.00            |
| 201859_at | serglycin                                     | 12.12            | 3.60    | 0.00            |
| 208921_s_at | sorcin                                        | 3.46             | 1.79    | 0.00            |
| 219205_at | serine racemase                                | 3.11             | 1.64    | 0.00            |
| 202817_s_at | synovial sarcom                                 | 0.21             | -2.27   | 0.00            |
| 201138_s_at | Sjogren syndorr                               | 0.33             | -1.60   | 0.00            |
| 202506_at | sperm specific a                               | 0.32             | -1.63   | 0.00            |
| 219241_x_at | slingshot homolc                               | 3.55             | 1.83    | 0.00            |
| 203114_at | Sjogren syndorr                               | 5.03             | 2.33    | 0.00            |
| 217650_x_at | ST3 beta-galactcr                              | 0.30             | -1.75   | 0.00            |
| 202440_s_at | suppression of t.                             | 5.13             | 2.36    | 0.00            |
| 38487_at  | stabilin 1                                    | 3.05             | 1.61    | 0.00            |
| 209023_s_at | stromal antigen                               | 0.17             | -2.60   | 0.00            |
| 221191_at | stromal antigen                               | 0.25             | -2.02   | 0.00            |
| 204548_at | steroidogenic ac                               | 0.23             | -2.11   | 0.00            |
| 200887_s_at | signal transduce                              | 3.84             | 1.94    | 0.00            |
| 208992_s_at | signal transduce                              | 5.98             | 2.58    | 0.00            |
| 208991_at | signal transduce                              | 3.45             | 1.79    | 0.00            |
| 218424_s_at | STEAP family m                                | 4.10             | 2.04    | 0.00            |
| 41657_at  | serine/threonine                               | 6.33             | 2.66    | 0.00            |
| 202693_s_at | serine/threonine                              | 3.20             | 1.68    | 0.00            |
| 211085_s_at | serine/threonine                              | 0.27             | -1.87   | 0.00            |
| 204701_s_at | stomatin (EPB72)                               | 3.59             | 1.84    | 0.00            |
| Gene ID   | Description                                      | Fold Change | p-value | Log2 Fold Change | p-value |
|----------|--------------------------------------------------|-------------|---------|------------------|---------|
| 33736_at | STOML1 stomatin (EPB72)                            | 3.24        | 0.00    | 1.70             | 0.00    |
| 221701_s_at | STRA6 stimulated by ret                          | 4.20        | 0.00    | 2.07             | 0.00    |
| 221500_s_at | STX16 syntaxin 16                               | 0.28        | 0.00    | -1.82            | 0.00    |
| 203457_at | STX7 syntaxin 7                                  | 0.29        | 0.00    | -1.77            | 0.00    |
| 203310_at | STXB3 syntaxin binding                            | 0.30        | 0.00    | -1.74            | 0.00    |
| 220994_s_at | STXB6 syntaxin binding                           | 0.15        | 0.00    | -2.74            | 0.00    |
| 219425_at | SULT4A1 sulfonyltransferase                       | 4.05        | 0.00    | 2.02             | 0.00    |
| 206506_s_at | SUPT3H suppressor of Ty                         | 3.33        | 0.00    | 1.74             | 0.00    |
| 201483_s_at | SUPT4H1 suppressor of Ty                       | 3.34        | 0.00    | 1.74             | 0.00    |
| 219389_at | SUSD4 sushi domain co                            | 7.31        | 0.00    | 2.87             | 0.00    |
| 217704_x_at | SUZ12P suppressor of ze                         | 0.33        | 0.00    | -1.60            | 0.00    |
| 209306_s_at | SYDE1 synapse defective                        | 4.15        | 0.00    | 2.05             | 0.00    |
| 216272_x_at | SYDE1 synapse defective                       | 3.33        | 0.00    | 1.74             | 0.00    |
| 216272_x_at | SYDE1 synapse defective                        | 3.33        | 0.00    | 1.74             | 0.00    |
| 209025_s_at | SYNCRIP synaptotagmin b                        | 3.23        | 0.00    | 1.69             | 0.00    |
| 209447_at | SYNE1 spectrin repeat c                         | 0.06        | 0.00    | -4.05            | 0.00    |
| 202761_s_at | SYNE2 spectrin repeat c                        | 0.15        | 0.00    | -2.77            | 0.00    |
| 204287_at | SYNGR1 synaptogyrin 1                           | 0.31        | 0.00    | -1.68            | 0.00    |
| 205652_s_at | TAC1 tachykinin, prec.                        | 0.17        | 0.00    | -2.54            | 0.00    |
| 211382_s_at | TACC2 transforming, aci                        | 0.33        | 0.00    | -1.59            | 0.00    |
| 202829_s_at | TACC2 transforming, aci                        | 0.26        | 0.00    | -1.93            | 0.00    |
| 214690_at | TAF1B TATA box bindin                           | 0.24        | 0.00    | -2.07            | 0.00    |
| 221617_at | TAF9B TAF9B RNA pol                           | 0.18        | 0.00    | -2.51            | 0.00    |
| 210978_s_at | TAGLN2 transgelin 2                            | 3.70        | 0.00    | 1.89             | 0.00    |
| 204769_s_at | TAP2 transporter 2, AT                          | 6.68        | 0.00    | 2.74             | 0.00    |
| 221264_s_at | TARDBP TAR DNA bindin                          | 0.14        | 0.00    | -2.89            | 0.00    |
| 213786_at | TAX1BP1 Tax1 (human T-1)                        | 0.31        | 0.00    | -1.70            | 0.00    |
| 212350_at | TBC1D1 TBC1 (tre-2USF)                          | 4.54        | 0.00    | 2.18             | 0.00    |
| 203386_at | TBC1D4 TBC1 domain fa                         | 0.20        | 0.00    | -2.32            | 0.00    |
| 204526_s_at | TBC1D8 TBC1 domain fa                        | 0.20        | 0.00    | -2.32            | 0.00    |
| 206552_s_at | TBRG4 transforming gro                        | 3.29        | 0.00    | 1.72             | 0.00    |
| 219682_s_at | TBOX3 T-box 3                                  | 0.27        | 0.00    | -1.88            | 0.00    |
| 212382_at | TCF4 transcription fact                        | 0.31        | 0.00    | -1.71            | 0.00    |
| 203753_at | TCF4 transcription fact                        | 0.29        | 0.00    | -1.77            | 0.00    |
| 222146_s_at | TCF4 transcription fact                        | 0.27        | 0.00    | -1.88            | 0.00    |
| 212762_s_at | TCF7L2 transcription fact                      | 0.17        | 0.00    | -2.53            | 0.00    |
| 204849_at | TCFL5 transcription fact                       | 0.30        | 0.00    | -1.73            | 0.00    |
| 213780_at | TCHH trichohyalin                             | 6.73        | 0.00    | 2.75             | 0.00    |
| 204158_s_at | TCIRG1 T-cell, immune n                        | 5.56        | 0.00    | 2.48             | 0.00    |
| 205513_at | TCN1 transcobalamin I                        | 30.82       | 0.00    | 4.95             | 0.00    |
| 204043_at | TCN2 transcobalamin I                        | 3.20        | 0.00    | 1.68             | 0.00    |
| 204158_s_at | TCIRG1 T-cell, immune n                        | 5.56        | 0.00    | 2.48             | 0.00    |
| 205796_s_at | TCP11L1 t-complex 11 (m)                      | 3.24        | 0.00    | 1.70             | 0.00    |
| 218584_at | TCP11L1 t-complex 11 (m)                      | 3.17        | 0.00    | 1.66             | 0.00    |
| 205943_at | TDOR tryptophan 2.3-d                         | 4.04        | 0.01    | 2.02             | 0.01    |
| Gene ID   | Description                                              | Log2 Fold Change | Annotation      | p-value | q-value |
|----------|----------------------------------------------------------|------------------|-----------------|---------|---------|
| 219715_s_at | TDP1 tyrosyl-DNA phosphodiesterase 1                     | 3.74             | 1.90            | 0.00    | 0.00    |
| 208089_s_at | TDRD3 tudor domain cox                                  | 0.19             | -2.40           | 0.00    | 0.00    |
| 212084_at | TEX261 testis expressed                                  | 4.15             | 2.05            | 0.00    | 0.00    |
| 212083_at | TEX261 testis expressed                                  | 3.23             | 1.69            | 0.00    | 0.00    |
| 204654_s_at | TFAP2A transcription factor                             | 0.13             | -2.95           | 0.00    | 0.00    |
| 214451_at | TFAP2B transcription factor                             | 0.07             | -3.80           | 0.00    | 0.00    |
| 205688_at | TFAP4 transcription factor                              | 3.06             | 1.61            | 0.00    | 0.00    |
| 219735_s_at | TFCP2L1 transcription factor                            | 3.67             | 1.88            | 0.00    | 0.00    |
| 204731_at | TGFBR3 transforming growth factor                        | 0.15             | -2.74           | 0.00    | 0.00    |
| 206008_at | TGM1 transglutaminase                                   | 6.25             | 2.64            | 0.00    | 0.00    |
| 206004_at | TGM3 transglutaminase                                   | 0.21             | -2.24           | 0.00    | 0.00    |
| 222122_s_at | THOC2 THO complex 2                                     | 0.32             | -1.63           | 0.00    | 0.00    |
| 1316_at | THRA thyroid hormone                                    | 0.28             | -1.85           | 0.00    | 0.00    |
| 206555_s_at | THUMP domain                                            | 0.31             | -1.68           | 0.00    | 0.00    |
| 218408_at | TIMM10 translocase of in                                | 3.40             | 1.76            | 0.00    | 0.00    |
| 201666_at | TIMP1 TIMP metalloprotein                               | 4.02             | 2.01            | 0.00    | 0.00    |
| 201148_s_at | TIMP3 TIMP metalloprotein                               | 12.32            | 3.62            | 0.00    | 0.00    |
| 203222_s_at | TLE1 transducin-like e                                  | 0.19             | -2.43           | 0.00    | 0.00    |
| 40837_at | TLE2 transducin-like e                                  | 0.33             | -1.59           | 0.01    | 0.01    |
| 216997_x_at | TLE4 transducin-like e                                  | 0.30             | -1.72           | 0.00    | 0.00    |
| 204924_at | TLR2 toll-like receptor                                 | 4.37             | 2.13            | 0.00    | 0.00    |
| 206271_at | TLR3 toll-like receptor                                 | 0.33             | -1.60           | 0.00    | 0.00    |
| 213882_at | TM2D1 TM2 domain con                                     | 0.17             | -2.57           | 0.00    | 0.00    |
| 205387_s_at | TM4SF1 transmembrane                                     | 23.17            | 4.53            | 0.00    | 0.00    |
| 215034_s_at | TM4SF1 transmembrane                                     | 18.49            | 4.21            | 0.00    | 0.00    |
| 209386_at | TM4SF1 transmembrane                                     | 10.58            | 3.40            | 0.00    | 0.00    |
| 219892_at | TM6SF1 transmembrane                                     | 0.32             | -1.65           | 0.00    | 0.00    |
| 217974_at | TM7SF3 transmembrane                                     | 0.21             | -2.23           | 0.00    | 0.00    |
| 200803_s_at | TMBIM6 transmembrane                                     | 3.94             | 1.98            | 0.00    | 0.00    |
| 219580_s_at | TM9D1 transmembrane                                     | 0.25             | -2.01           | 0.00    | 0.00    |
| 203679_at | TMED1 transmembrane                                      | 3.11             | 1.64            | 0.00    | 0.00    |
| 200929_at | TMED10 transmembrane                                     | 5.02             | 2.33            | 0.00    | 0.00    |
| 220097_s_at | TMEM104 transmembrane                                    | 3.01             | 1.59            | 0.00    | 0.00    |
| 216930_at | TMEM106B transmembrane                                   | 0.32             | -1.63           | 0.00    | 0.00    |
| 215250_at | TMEM111 transmembrane                                    | 0.31             | -1.69           | 0.00    | 0.00    |
| 218534_s_at | TMEM132A transmembrane                                   | 13.59            | 3.77            | 0.00    | 0.00    |
| 218477_at | TMEM14A transmembrane                                    | 3.32             | 1.73            | 0.00    | 0.00    |
| 213272_s_at | TMEM159 transmembrane                                    | 0.23             | -2.10           | 0.00    | 0.00    |
| 218745_x_at | TMEM161A transmembrane                                   | 8.61             | 3.11            | 0.00    | 0.00    |
| 219253_at | TMEM185B transmembrane                                   | 3.10             | 1.63            | 0.00    | 0.00    |
| 217016_x_at | TMEM212 transmembrane                                    | 0.31             | -1.69           | 0.00    | 0.00    |
| 221512_at | TMEM222 transmembrane                                    | 4.11             | 2.04            | 0.00    | 0.00    |
| 52078_at | TMEM222 transmembrane                                    | 3.22             | 1.69            | 0.00    | 0.00    |
| 209565_s_at | TMEM47 transmembrane                                     | 0.30             | -1.73           | 0.00    | 0.00    |
| 219462_at | TMEM53 transmembrane                                     | 3.48             | 1.80            | 0.00    | 0.00    |
| 221255_s_at | TMEM93 transmembrane                                     | 3.32             | 1.73            | 0.00    | 0.00    |
| 213024_at | TMF1 TATA element r                                     | 0.20             | -2.30           | 0.00    | 0.00    |
| 207602_at | TPRSS11D transmembrane                                   | 19.38            | 4.28            | 0.00    | 0.00    |
| Gene ID   | Description                                          | Log2 Fold Change | Adj P Value | Log10 Fold Change | Adj P Value |
|----------|------------------------------------------------------|------------------|-------------|-------------------|-------------|
| 218960_at| TMPRSS4 transmembrane                                | 7.40             | 0.00        | 2.89              | 0.00        |
| 221032_s_at| TMPRSS5 transmembrane                              | 5.37             | 0.00        | 2.43              | 0.00        |
| 214955_at| TMPRSS6 transmembrane                                | 3.41             | 0.00        | 1.77              | 0.00        |
| 217733_s_at| TMSB10 thymosin beta 1f                            | 4.77             | 0.00        | 2.26              | 0.00        |
| 201645_at| TNC tenascin C                                       | 15.70            | 0.00        | 3.97              | 0.00        |
| 201207_at| TNFAIP1 tumor necrosis fi                           | 3.14             | 0.00        | 1.65              | 0.00        |
| 201208_s_at| TNFAIP1 tumor necrosis fi                           | 3.12             | 0.00        | 1.64              | 0.00        |
| 209295_at| TNFRSF10B tumor necrosis fi                          | 3.17             | 0.00        | 1.76              | 0.00        |
| 201208_s_at| TNFRSF10B tumor necrosis fi                          | 3.17             | 0.00        | 1.76              | 0.00        |
| 209295_at| TNFRSF21 tumor necrosis fi                           | 3.97             | 0.00        | 2.26              | 0.00        |
| 201208_s_at| TNFRSF21 tumor necrosis fi                           | 3.97             | 0.00        | 2.26              | 0.00        |
| 213201_s_at| TNNT1 tumor necrosis fi                             | 0.11             | 0.00        | -3.19             | 0.00        |
| 210609_s_at| TNX3 tensin 3                                       | 4.08             | 0.00        | 2.03              | 0.00        |
| 217960_at| TOM1 target of myb1 (c)                              | 3.74             | 0.00        | 1.90              | 0.00        |
| 210987_x_at| TPSAB1 trypar outer mitochondrial membrane 22        | 4.46             | 0.00        | 2.16              | 0.00        |
| 201052_s_at| TPR transfactor 2 aq                                 | 0.12             | 0.00        | -3.11             | 0.00        |
| 215382_s_at| TPX2 microtubulin                                  | 3.31             | 0.00        | 1.73              | 0.00        |
| 201807_s_at| TRABD TraB domain cor                               | 4.04             | 0.00        | 2.02              | 0.00        |
| Gene Expression Probe ID | Gene Name                                      | Description                                      | Fold Change | t-statistic | P-value (FDR) | P-value (FDR) |
|-------------------------|-----------------------------------------------|--------------------------------------------------|-------------|-------------|---------------|---------------|
| 213888_s_at TRAF3P3      | TRAF3 interacting protein 3                   |                                                  | 3.39        | -1.76       | 0.01          | 0.02          |
| 209412_at TRAPPCC10      | trafficking protein                           |                                                  | 0.33        | -1.59       | 0.00          | 0.00          |
| 215269_at TRAPPCC10      | trafficking protein                           |                                                  | 0.13        | -2.98       | 0.00          | 0.00          |
| 203511_s_at TRAPPCC3     | trafficking protein                           |                                                  | 3.64        | 2.67        | 0.00          | 0.00          |
| 56829_at TRAPPCC9        | trafficking protein                           |                                                  | 3.30        | 1.72        | 0.00          | 0.00          |
| 219725_at TREM2          | triggering receptor                           |                                                  | 4.64        | 2.21        | 0.00          | 0.00          |
| 213293_s_at TRIM22       | tripartite motif-cc                           |                                                  | 5.25        | 2.39        | 0.00          | 0.00          |
| 207432_s_at TRIM23       | tripartite motif-cc                           |                                                  | 0.20        | -2.32       | 0.00          | 0.00          |
| 206911_at TRIM25         | tripartite motif-cc                           |                                                  | 3.80        | 1.93        | 0.00          | 0.00          |
| 212116_at TRIM27         | tripartite motif-cc                           |                                                  | 4.60        | 2.20        | 0.00          | 0.00          |
| 213885_at TRIM3          | tripartite motif-cc                           |                                                  | 0.30        | -1.75       | 0.00          | 0.00          |
| 214815_at TRIM33         | tripartite motif-cc                           |                                                  | 0.29        | -1.81       | 0.00          | 0.00          |
| 212435_at TRIM33         | tripartite motif-cc                           |                                                  | 0.13        | -2.93       | 0.00          | 0.00          |
| 203610_s_at TRIM38       | tripartite motif-cc                           |                                                  | 7.07        | 2.82        | 0.00          | 0.00          |
| 221897_at TRPC1          | transient receptor                            |                                                  | 0.25        | -1.99       | 0.00          | 0.00          |
| 205803_s_at TRPC1        | transient receptor                            |                                                  | 0.20        | -2.32       | 0.00          | 0.00          |
| 206528_at TRPC6          | transient receptor                            |                                                  | 0.23        | -2.12       | 0.00          | 0.00          |
| 206479_at TRPM1          | transient receptor                            |                                                  | 0.31        | -1.69       | 0.01          | 0.01          |
| 205708_s_at TRPM2        | transient receptor                            |                                                  | 3.21        | 1.68        | 0.00          | 0.00          |
| 203930_at TSC1           | tuberous sclerosis                            |                                                  | 0.30        | -1.75       | 0.00          | 0.00          |
| 203824_at TSPAN8         | tetraspanin 8                                 |                                                  | 0.32        | -1.64       | 0.00          | 0.00          |
| 217162_at TSPY1          | testsis specific pr                           |                                                  | 3.95        | 1.98        | 0.00          | 0.00          |
| 212928_at TSPYL4         | TSPY-like 4                                   |                                                  | 0.29        | -1.79       | 0.00          | 0.00          |
| 213922_at TTBK2          | tau tubulin kinase                            |                                                  | 0.11        | -3.15       | 0.00          | 0.00          |
| 219758_at TTC26          | tetratricopeptide                              |                                                  | 3.04        | 1.61        | 0.00          | 0.00          |
| 208663_s_at TTC3         | tetratricopeptide                              |                                                  | 0.31        | -1.70       | 0.00          | 0.00          |
| 219421_at TTC33          | tetratricopeptide                              |                                                  | 0.21        | -2.28       | 0.00          | 0.00          |
| 203048_s_at TTC37        | tetratricopeptide                              |                                                  | 0.33        | -1.61       | 0.00          | 0.00          |
| 203049_s_at TTC37        | tetratricopeptide                              |                                                  | 0.32        | -1.64       | 0.00          | 0.00          |
| 215898_at TTLL5          | tubulin tyrosine li                            |                                                  | 0.33        | -1.62       | 0.00          | 0.00          |
| 201090_x_at TUBA1B       | tubulin, alpha 1b                              |                                                  | 3.62        | 1.98        | 0.00          | 0.00          |
| 216364_x_at TUBA1B       | tubulin, alpha 1b                              |                                                  | 3.36        | 1.75        | 0.00          | 0.00          |
| 216323_x_at TUBA3D       | tubulin, alpha 3d                              |                                                  | 3.32        | 1.73        | 0.00          | 0.00          |
| 211714_x_at TUBB         | tubulin, beta                                 |                                                  | 3.95        | 1.98        | 0.00          | 0.00          |
| 209191_at TUBB6          | tubulin, beta 6                                |                                                  | 3.56        | 1.84        | 0.00          | 0.00          |
| 214876_s_at TUBGCP5      | tubulin, gamma i                               |                                                  | 0.14        | -2.81       | 0.00          | 0.00          |
| 218134_at TULP4          | tubby like protein                             |                                                  | 0.23        | -2.10       | 0.00          | 0.00          |
| 203272_s_at TUSC2        | tumor suppressc                               |                                                  | 4.28        | 2.10        | 0.00          | 0.00          |
| 213943_at TWIST1         | twist homolog 1i                               |                                                  | 0.31        | -1.67       | 0.00          | 0.00          |
| 216609_at TXN            | thioredoxin                                   |                                                  | 0.23        | -2.10       | 0.00          | 0.00          |
| 209078_s_at TXN2         | thioredoxin 2                                 |                                                  | 3.98        | 1.99        | 0.00          | 0.00          |
| 221253_s_at TXNDC5       | thioredoxin dom                              |                                                  | 4.50        | 2.17        | 0.00          | 0.00          |
| 59631_at TXNRD3          | thioredoxin reduc                           |                                                  | 5.28        | 2.40        | 0.00          | 0.00          |
| 204858_s_at TYMP         | thymidine phosp                               |                                                  | 36.21       | 5.18        | 0.00          | 0.00          |
| Gene ID | Gene Name                  | Description | Log2 Ratio | Fold Change | p-value (adj) | q-value (adj) |
|---------|---------------------------|-------------|------------|-------------|---------------|---------------|
| 217497_at | TYMP                      | thymidine phosphorylase | 3.66       | 1.87        | 0.00          | 0.00          |
| 205694_at | TYRP1                     | tyrosinase-relate | 0.03       | -5.04       | 0.00          | 0.00          |
| 218382_s_at | U2AF2                   | U2 small nuclear | 4.59       | 2.20        | 0.00          | 0.00          |
| 218837_s_at | UBE2D4                 | ubiquitin-conjugating enzyme E2D4 | 6.07       | 2.60        | 0.00          | 0.00          |
| 209041_s_at | UBE2G2                | ubiquitin-conjugating enzyme E2G2 | 3.20       | 1.68        | 0.00          | 0.00          |
| 217999_x_at | UBE2H                   | ubiquitin-conjugating enzyme E2H | 3.80       | 1.93        | 0.00          | 0.00          |
| 211009_s_at | UBE2I                   | ubiquitin-conjugating enzyme E2I | 3.42       | 1.77        | 0.00          | 0.00          |
| 203109_at | UBE2M                     | ubiquitin-conjugating enzyme E2M | 3.87       | 1.95        | 0.00          | 0.00          |
| 210685_s_at | UBE4B                  | ubiquitin conjugation factor | 0.26       | -1.95       | 0.00          | 0.00          |
| 201534_s_at | UBL3                   | ubiquitin-like 3 | 0.21       | -2.24       | 0.00          | 0.00          |
| 207253_s_at | UBN1                   | ubiquinol-1 | 4.67       | 2.22        | 0.00          | 0.00          |
| 204596_at | UBOX5                     | U-box domain containing 5 | 3.67       | 1.88        | 0.00          | 0.00          |
| 208883_at | UBR5                      | ubiquitin protein | 0.30       | -1.74       | 0.00          | 0.00          |
| 212074_at | UNC84A                   | unc-84 homolog | 0.30       | -1.74       | 0.00          | 0.00          |
| 206487_at | UNC84A                   | unc-84 homolog | 0.22       | -2.17       | 0.00          | 0.00          |
| 214382_at | UNC89A                   | unc-93 homolog | 0.26       | -1.96       | 0.00          | 0.00          |
| 202330_s_at | UNG                   | uracil-DNA glycosylase | 0.19       | -2.43       | 0.00          | 0.00          |
| 216624_at | UPK1A                    | uroplakin 1A | 0.21       | -2.29       | 0.00          | 0.00          |
| 203234_at | UPP1                      | uridine phosphorylase | 15.58      | 3.96        | 0.00          | 0.00          |
| 215886_x_at | USP12                  | ubiquitin specific | 0.23       | -2.11       | 0.00          | 0.00          |
| 212513_s_at | USP33                  | ubiquitin specific | 0.31       | -1.70       | 0.00          | 0.00          |
| 219280_at | USP34                    | ubiquitin specific | 0.31       | -1.68       | 0.00          | 0.00          |
| 215013_s_at | USP34                 | ubiquitin specific | 0.26       | -1.96       | 0.00          | 0.00          |
| 212065_s_at | USP34                 | ubiquitin specific | 0.14       | -2.84       | 0.00          | 0.00          |
| 222032_s_at | USP7                     | ubiquitin specific | 0.33       | -1.60       | 0.00          | 0.00          |
| 202745_at | USP8                      | ubiquitin specific | 0.29       | -1.81       | 0.00          | 0.00          |
| 205139_s_at | UST                  | uronate-2-sulfotransferase | 0.16       | -2.69       | 0.00          | 0.00          |
| 213236_at | VAMP1                    | vesicle-associated | 0.23       | -2.10       | 0.00          | 0.00          |
| 218807_at | VAV3                      | vav3 guanine nucleotide exchange factor | 0.24       | -2.08       | 0.00          | 0.00          |
| 221731_x_at | VCAN                | versican | 4.47       | 2.16        | 0.01          | 0.01          |
| 209946_at | VEGFC                    | vascular endothelial growth factor | 6.01       | 2.59        | 0.00          | 0.00          |
| 205586_x_at | VGF                    | VGF nerve growth factor | 3.02       | 1.60        | 0.00          | 0.00          |
| 205946_at | VIPR2                    | vasoactive intestinal peptide 2 | 7.87       | 2.98        | 0.00          | 0.00          |
| 217949_s_at | VKORC1               | vitamin K epoxide | 4.14       | 2.05        | 0.00          | 0.00          |
| 205844_at | VNN1                     | vanin 1 | 3.91       | 1.97        | 0.01          | 0.01          |
| 220528_at | VNN3                     | vanin 3 | 5.32       | 2.41        | 0.00          | 0.00          |
| 204376_at | VPRBP                    | Vpr (HIV-1) binding | 0.27       | -1.92       | 0.00          | 0.00          |
| 204377_s_at | VPR8BP              | Vpr (HIV-1) binding | 0.13       | -2.92       | 0.00          | 0.00          |
| 214785_s_at | VPS13A               | vacuolar protein sorting | 0.17       | -2.58       | 0.00          | 0.00          |
| 218369_at | VPS13C                  | vacuolar protein sorting | 0.20       | -2.32       | 0.00          | 0.00          |
| 220221_at | VPS13D                 | vacuolar protein sorting | 0.16       | -2.69       | 0.00          | 0.00          |
| 203797_at | VSNL1                    | visinin-like 1 | 4.91       | 2.30        | 0.00          | 0.00          |
| 202112_at | VWF                      | von Willebrand factor | 3.12       | 1.64        | 0.00          | 0.00          |
| 212267_at | WAPAL                    | wings apart-like 1 | 0.33       | -1.59       | 0.00          | 0.00          |
| 200628_s_at | WARS                  | tryptophanyl tRNA synthetase | 9.30       | 3.22        | 0.00          | 0.00          |
| 200629_at | WARS                    | tryptophanyl-tRNA synthetase | 6.34       | 2.67        | 0.00          | 0.00          |
| 205810_s_at | WASL                   | Wiskott-Aldrich syndrome | 3.00       | 1.59        | 0.00          | 0.00          |
| 218509_at | WDR59                    | WD repeat domain | 0.33       | -1.62       | 0.00          | 0.00          |
| Gene ID     | Gene Name            | Description                        | Log2 Fold Change | Fold Change | p-value 1 | p-value 2 |
|------------|----------------------|------------------------------------|------------------|-------------|-----------|-----------|
| 201420_s_at | WDR77                | WD repeat domain                   | 3.38             | 1.76        | 0.00      | 0.00      |
| 212533_at  | WEE1                 | WEE1 homolog                       | 0.23             | -2.11       | 0.00      | 0.00      |
| 210881_s_at | WISP3                | WNT1 inducible                     | 4.80             | 2.26        | 0.00      | 0.00      |
| 221783_at  | WIZ                  | widely interspaced                 | 3.36             | 1.75        | 0.00      | 0.00      |
| 39313_at   | WNK1                 | WNK lysine deficient               | 0.09             | -3.48       | 0.00      | 0.00      |
| 205646_at  | WNT2                 | wingless-type MII                  | 0.27             | -1.87       | 0.00      | 0.00      |
| 205990_s_at| WNT5A                | wingless-type MII                  | 3.87             | 1.95        | 0.01      | 0.01      |
| 213155_at  | WSCD1                | WSC domain                        | 0.33             | -1.61       | 0.00      | 0.00      |
| 212637_s_at| WWP1                 | WW domain                          | 0.18             | -2.47       | 0.00      | 0.00      |
| 206698_at  | XK                   | X-linked Kx bloop                  | 0.29             | -1.78       | 0.00      | 0.00      |
| 209375_at  | XPC                  | xeroderma pigment                   | 0.32             | -1.63       | 0.00      | 0.00      |
| 207598_x_at| XRC2                 | X-ray repair com                   | 0.27             | -1.89       | 0.00      | 0.00      |
| 205071_x_at| XRC4                 | X-ray repair com                   | 3.59             | 1.84        | 0.00      | 0.00      |
| 216911_at  | YEATS4               | YEATS domain                       | 0.14             | -2.82       | 0.00      | 0.00      |
| 202418_at  | YIF1A                | Yip1 interacting I                 | 3.69             | 1.88        | 0.00      | 0.00      |
| 220207_at  | YIF1B                | Yip1 interacting I                 | 3.17             | 1.67        | 0.00      | 0.00      |
| 65086_at   | YIPF2                | Yip1 domain farr                   | 3.06             | 1.61        | 0.00      | 0.00      |
| 212343_at  | YIPF6                | Yip1 domain farr                   | 0.27             | -1.87       | 0.00      | 0.00      |
| 214659_x_at| YLP1M                | YLP motif contai                   | 0.32             | -1.64       | 0.00      | 0.00      |
| 214814_at  | YTHDC1               | YTH domain                         | 0.11             | -3.23       | 0.00      | 0.00      |
| 213077_at  | YTHDC2               | YTH domain                         | 0.29             | -1.80       | 0.00      | 0.00      |
| 219836_at  | ZBED2                | zinc finger, BED                   | 4.71             | 2.24        | 0.01      | 0.01      |
| 213376_at  | ZBTB1                | zinc finger and B                  | 0.26             | -1.93       | 0.00      | 0.00      |
| 205092_x_at| ZBTB1                | zinc finger and B                  | 0.21             | -2.23       | 0.00      | 0.00      |
| 205883_at  | ZBTB16               | zinc finger and B                  | 0.07             | -3.78       | 0.00      | 0.00      |
| 222357_at  | ZBTB20               | zinc finger and B                  | 0.23             | -2.14       | 0.00      | 0.00      |
| 220391_at  | ZBTB3                | zinc finger and B                  | 0.14             | -2.80       | 0.00      | 0.00      |
| 218610_at  | ZC3H12A              | zinc finger CCC                   | 9.68             | 3.27        | 0.00      | 0.00      |
| 219062_s_at| ZCCHC2               | zinc finger, CCH                   | 0.28             | -1.84       | 0.00      | 0.00      |
| 214219_at  | ZCCHC24              | zinc finger, CCH                   | 4.53             | 2.18        | 0.00      | 0.00      |
| 221646_s_at| ZDHHC11              | zinc finger, DHH                   | 0.03             | -5.21       | 0.00      | 0.00      |
| 219296_at  | ZDHHC13              | zinc finger, DHH                   | 0.23             | -2.12       | 0.00      | 0.00      |
| 217741_s_at| ZFAND5               | zinc finger, AN1-                  | 3.35             | 1.74        | 0.00      | 0.00      |
| 222186_at  | ZFANDE6              | zinc finger, AN1-                  | 0.20             | -2.30       | 0.00      | 0.00      |
| 203699_at  | ZFP36L2              | zinc finger protei                 | 0.31             | -1.69       | 0.01      | 0.01      |
| 214878_x_at| ZFX                  | zinc finger protei                 | 0.20             | -2.29       | 0.00      | 0.00      |
| 219929_s_at| ZFYVE21              | zinc finger, FYVI                  | 0.31             | -1.68       | 0.00      | 0.00      |
| 214900_at  | ZKSCAN1              | zinc finger with k                 | 0.22             | -2.21       | 0.00      | 0.00      |
| 218752_at  | ZMAT5                | zinc finger, matrix                | 7.33             | 2.87        | 0.00      | 0.00      |
| 210281_s_at| ZMYM2                | zinc finger, MYM                   | 0.29             | -1.79       | 0.00      | 0.00      |
| 210282_at  | ZMYM2                | zinc finger, MYM                   | 0.29             | -1.80       | 0.00      | 0.00      |
| 206652_at  | ZMYM5                | zinc finger, MYM                   | 0.16             | -2.66       | 0.00      | 0.00      |
| 219925_at  | ZMYM6                | zinc finger, MYM                   | 0.17             | -2.58       | 0.00      | 0.00      |
| 202137_s_at| ZMYND11              | zinc finger, MYN                   | 0.23             | -2.14       | 0.00      | 0.00      |
| 209049_s_at| ZMYND8               | zinc finger, MYN                   | 0.18             | -2.45       | 0.00      | 0.00      |
| 205739_x_at| ZNF107               | zinc finger protei                 | 0.27             | -1.89       | 0.00      | 0.00      |
| 219571_s_at| ZNF12                | zinc finger protei                 | 0.11             | -3.25       | 0.00      | 0.00      |
| 204234_s_at| ZNF195               | zinc finger protei                 | 0.26             | -1.92       | 0.00      | 0.00      |
| Probe ID   | Gene Symbol | Description | Log2 Fold Change | P-value | q-value |
|-----------|-------------|-------------|------------------|---------|---------|
| 214823_at | ZNF204      | zinc finger protein | 0.08             | -3.70   | 0.00    |
| 207128_s_at | ZNF223    | zinc finger protein | 0.25             | -2.02   | 0.00    |
| 216983_s_at | ZNF224    | zinc finger protein | 0.12             | -3.01   | 0.00    |
| 205791_x_at | ZNF230   | zinc finger protein | 0.27             | -1.89   | 0.00    |
| 219171_s_at | ZNF236    | zinc finger protein | 0.17             | -2.60   | 0.00    |
| 212774_at | ZNF238     | zinc finger protein | 0.18             | -2.52   | 0.00    |
| 213269_at | ZNF248     | zinc finger protein | 0.23             | -2.10   | 0.00    |
| 205917_at | ZNF264     | zinc finger protein | 0.28             | -1.83   | 0.00    |
| 209989_at | ZNF268     | zinc finger protein | 0.30             | -1.72   | 0.00    |
| 215239_x_at | ZNF273    | zinc finger protein | 0.10             | -3.35   | 0.00    |
| 221213_s_at | ZNF280D   | zinc finger protein | 0.14             | -2.84   | 0.00    |
| 212366_at | ZNF292     | zinc finger protein | 0.25             | -2.02   | 0.00    |
| 212368_at | ZNF292     | zinc finger protein | 0.14             | -2.85   | 0.00    |
| 222016_s_at | ZNF323    | zinc finger protein | 4.64             | 2.21    | 0.00    |
| 213760_s_at | ZNF330    | zinc finger protein | 3.20             | 1.68    | 0.00    |
| 206448_at | ZNF365     | zinc finger protein | 10.36            | 3.38    | 0.00    |
| 215358_x_at | ZNF37B    | zinc finger protein | 0.14             | -2.87   | 0.00    |
| 215429_s_at | ZNF428    | zinc finger protein | 5.43             | 2.44    | 0.00    |
| 222136_x_at | ZNF43     | zinc finger protein | 0.24             | -2.07   | 0.00    |
| 215892_at | ZNF440     | zinc finger protein | 0.18             | -2.45   | 0.00    |
| 212557_at | ZNF451     | zinc finger protein | 0.31             | -1.69   | 0.00    |
| 213124_at | ZNF473     | zinc finger protein | 4.37             | 2.13    | 0.00    |
| 55872_at  | ZNF512B    | zinc finger protein | 0.26             | -1.95   | 0.00    |
| 204291_at | ZNF518A    | zinc finger protein | 0.22             | -2.17   | 0.00    |
| 215019_x_at | ZNF528    | zinc finger protein | 3.17             | 1.66    | 0.00    |
| 217212_s_at | ZNF551    | zinc finger protein | 0.10             | -3.31   | 0.00    |
| 206648_at | ZNF571     | zinc finger protein | 0.28             | -1.85   | 0.00    |
| 217627_at | ZNF573     | zinc finger protein | 0.16             | -2.65   | 0.00    |
| 204175_at | ZNF593     | zinc finger protein | 4.11             | 2.04    | 0.00    |
| 205954_at | ZNF652     | zinc finger protein | 0.05             | -4.38   | 0.00    |
| 219239_s_at | ZNF654    | zinc finger protein | 0.24             | -2.08   | 0.00    |
| 220760_x_at | ZNF665   | zinc finger protein | 0.31             | -1.69   | 0.00    |
| 206180_x_at | ZNF747    | zinc finger protein | 5.84             | 2.55    | 0.00    |
| 219995_s_at | ZNF750    | zinc finger protein | 0.28             | -1.83   | 0.02    |
| 219627_at | ZNF767     | zinc finger family | 0.27             | -1.87   | 0.00    |
| 219781_s_at | ZNF771    | zinc finger protein | 7.59             | 2.92    | 0.00    |
| 214138_at | ZNF79      | zinc finger protein | 4.30             | 2.10    | 0.00    |
| 60794_f_at | ZNF814     | zinc finger protein | 0.22             | -2.16   | 0.00    |
| 219676_at | ZSCAN16    | zinc finger and S  | 0.28             | -1.86   | 0.00    |
| 218312_s_at | ZSCAN18   | zinc finger and S  | 0.12             | -3.07   | 0.00    |
| 217593_at | ZSCAN18    | zinc finger and S  | 0.12             | -3.09   | 0.00    |
| 214580_x_at |          |              | 530.47           | 9.05    | 0.00    |
| 210413_x_at |          |              | 59.98            | 5.91    | 0.00    |
| 208539_x_at |          |              | 53.48            | 5.74    | 0.00    |
| 215504_x_at |          |              | 10.00            | 3.32    | 0.00    |
| 218822_s_at |          |              | 9.35             | 3.23    | 0.00    |
| 216745_x_at |          |              | 7.95             | 2.99    | 0.00    |
| 221059_s_at |          |              | 7.63             | 2.93    | 0.00    |
| Gene ID   | Log2 Fold Change | p-value | q-value | Gene ID   | Log2 Fold Change | p-value | q-value |
|----------|-----------------|---------|---------|----------|-----------------|---------|---------|
| 217619_x_at | 7.30             | 2.87    | 0.00    | 204438_at | 7.28             | 2.87    | 0.00    |
| 219489_s_at | 6.72             | 2.75    | 0.00    | 214463_x_at | 6.33             | 2.66    | 0.00    |
| 222114_x_at | 6.05             | 2.60    | 0.00    | 216499_at | 5.35             | 2.42    | 0.00    |
| 205114_s_at | 5.01             | 2.33    | 0.00    | 216554_s_at | 4.91             | 2.30    | 0.00    |
| 214290_s_at | 4.90             | 2.29    | 0.00    | 211691_x_at | 4.88             | 2.29    | 0.00    |
| 216474_x_at | 4.86             | 2.28    | 0.00    | 216432_at  | 4.72             | 2.24    | 0.00    |
| 217516_x_at | 4.67             | 2.22    | 0.00    | 216539_at  | 4.66             | 2.22    | 0.00    |
| 210387_at  | 4.56             | 2.19    | 0.00    | 216656_x_at | 4.54             | 2.18    | 0.00    |
| 216694_at  | 4.20             | 2.07    | 0.00    | 217055_x_at | 4.16             | 2.06    | 0.00    |
| 215489_x_at | 4.08             | 2.03    | 0.00    | 205980_s_at | 4.03             | 2.01    | 0.00    |
| 210915_x_at | 4.03             | 2.01    | 0.00    | 208580_x_at | 4.00             | 2.00    | 0.00    |
| 57540_at   | 3.96             | 1.99    | 0.00    | 206302_s_at | 3.95             | 1.98    | 0.00    |
| 209372_x_at | 3.85             | 1.94    | 0.00    | 200885_at  | 3.82             | 1.93    | 0.00    |
| 213690_s_at | 3.75             | 1.91    | 0.00    | 206063_x_at | 3.57             | 1.84    | 0.00    |
| 216371_at  | 3.51             | 1.81    | 0.00    | 220445_s_at | 3.49             | 1.80    | 0.00    |
| 216138_at  | 3.47             | 1.80    | 0.00    | 216280_x_at | 3.46             | 1.79    | 0.00    |
| 212444_at  | 3.42             | 1.78    | 0.00    | 216542_x_at | 3.38             | 1.76    | 0.00    |
| 208540_x_at | 3.37             | 1.75    | 0.00    | 215353_at  | 3.36             | 1.75    | 0.00    |
| 221699_at  | 3.34             | 1.74    | 0.01    | 205717_x_at | 3.31             | 1.73    | 0.00    |
| 215949_x_at | 3.26             | 1.70    | 0.00    | 205890_s_at | 3.25             | 1.70    | 0.02    |
| 216806_at  | 3.23             | 1.69    | 0.00    | 217998_at  | 3.18             | 1.67    | 0.00    |
| 210474_s_at | 3.17             | 1.66    | 0.00    | 215261_at  | 3.17             | 1.66    | 0.00    |
| 216668_at  | 3.13             | 1.65    | 0.00    | 216562_at  | 3.08             | 1.63    | 0.00    |
| 205272_s_at | 3.08             | 1.62    | 0.00    | 216043_x_at | 3.03             | 1.60    | 0.00    |
| Gene      | Value 1 | Value 2 | Value 3 | Value 4 |
|-----------|---------|---------|---------|---------|
| 205955_at | 0.33    | -1.59   | 0.00    | 0.00    |
| 213212_x_at | 0.33  | -1.59   | 0.00    | 0.00    |
| 216628_at | 0.33    | -1.59   | 0.00    | 0.00    |
| 210491_at | 0.33    | -1.60   | 0.00    | 0.00    |
| 31799_at  | 0.32    | -1.63   | 0.00    | 0.00    |
| 200856_x_at | 0.32  | -1.64   | 0.00    | 0.00    |
| 213739_at | 0.32    | -1.63   | 0.00    | 0.00    |
| 215928_at | 0.32    | -1.64   | 0.00    | 0.00    |
| 222375_at | 0.32    | -1.65   | 0.00    | 0.00    |
| 215802_at | 0.32    | -1.65   | 0.00    | 0.00    |
| 215612_at | 0.32    | -1.66   | 0.00    | 0.00    |
| 222371_at | 0.32    | -1.66   | 0.00    | 0.00    |
| 206848_at | 0.32    | -1.66   | 0.00    | 0.00    |
| 217604_at | 0.32    | -1.66   | 0.00    | 0.00    |
| 214808_at | 0.31    | -1.70   | 0.00    | 0.00    |
| 217659_at | 0.31    | -1.70   | 0.00    | 0.00    |
| 222319_at | 0.31    | -1.70   | 0.00    | 0.00    |
| 215304_at | 0.31    | -1.71   | 0.00    | 0.00    |
| 217554_at | 0.31    | -1.71   | 0.00    | 0.00    |
| 216211_at | 0.31    | -1.71   | 0.00    | 0.00    |
| 222335_at | 0.31    | -1.71   | 0.00    | 0.00    |
| 215578_at | 0.30    | -1.72   | 0.00    | 0.00    |
| 216783_at | 0.30    | -1.72   | 0.00    | 0.00    |
| 219151_s_at | 0.30  | -1.72   | 0.00    | 0.00    |
| 220809_at | 0.30    | -1.72   | 0.00    | 0.00    |
| 210598_at | 0.30    | -1.72   | 0.00    | 0.00    |
| 215140_at | 0.30    | -1.73   | 0.00    | 0.00    |
| 216769_x_at | 0.30  | -1.73   | 0.00    | 0.00    |
| 212920_at | 0.30    | -1.74   | 0.00    | 0.00    |
| 215164_at | 0.30    | -1.74   | 0.00    | 0.00    |
| 222159_at | 0.30    | -1.75   | 0.00    | 0.00    |
| 204060_s_at | 0.30  | -1.75   | 0.00    | 0.00    |
| 213971_s_at | 0.30  | -1.75   | 0.00    | 0.00    |
| 213648_at | 0.30    | -1.76   | 0.00    | 0.00    |
| 215147_at | 0.29    | -1.77   | 0.00    | 0.00    |
| 217610_at | 0.29    | -1.77   | 0.00    | 0.00    |
| 220175_s_at | 0.29  | -1.77   | 0.00    | 0.00    |
| 217713_x_at | 0.29  | -1.78   | 0.00    | 0.00    |
| 215059_at | 0.29    | -1.79   | 0.00    | 0.00    |
| 216000_at | 0.29    | -1.79   | 0.00    | 0.00    |
| 208078_s_at | 0.29  | -1.80   | 0.00    | 0.00    |
| 217653_x_at | 0.29  | -1.79   | 0.00    | 0.00    |
| 217519_at | 0.28    | -1.82   | 0.00    | 0.00    |
| 215597_x_at | 0.28  | -1.84   | 0.00    | 0.00    |
| 217679_x_at | 0.28  | -1.83   | 0.00    | 0.00    |
| 216142_at | 0.28    | -1.84   | 0.00    | 0.00    |
| 215370_at | 0.28    | -1.85   | 0.00    | 0.00    |
| 222344_at | 0.28    | -1.85   | 0.00    | 0.00    |
| Gene ID     | Value1 | Value2 | Value3 | Value4 |
|------------|--------|--------|--------|--------|
| 212182_at  | 0.28   | -1.85  | 0.00   | 0.00   |
| 222372_at  | 0.27   | -1.87  | 0.00   | 0.00   |
| 217586_x_at| 0.27   | -1.88  | 0.00   | 0.00   |
| 220033_at  | 0.27   | -1.88  | 0.00   | 0.00   |
| 214945_at  | 0.27   | -1.90  | 0.01   | 0.02   |
| 212842_x_at| 0.27   | -1.90  | 0.00   | 0.00   |
| 215956_at  | 0.27   | -1.92  | 0.00   | 0.00   |
| 222326_at  | 0.26   | -1.93  | 0.00   | 0.00   |
| 215029_at  | 0.26   | -1.94  | 0.00   | 0.00   |
| 220912_at  | 0.26   | -1.93  | 0.00   | 0.00   |
| 216411_s_at| 0.26   | -1.94  | 0.00   | 0.00   |
| 216214_at  | 0.26   | -1.95  | 0.00   | 0.00   |
| 216094_at  | 0.26   | -1.95  | 0.00   | 0.00   |
| 216069_at  | 0.26   | -1.97  | 0.00   | 0.00   |
| 214857_at  | 0.25   | -1.98  | 0.00   | 0.00   |
| 212867_at  | 0.25   | -2.00  | 0.00   | 0.00   |
| 216497_at  | 0.25   | -2.01  | 0.00   | 0.00   |
| 220905_at  | 0.25   | -2.01  | 0.00   | 0.00   |
| 222149_x_at| 0.25   | -2.02  | 0.00   | 0.00   |
| 210410_s_at| 0.25   | -2.02  | 0.00   | 0.00   |
| 217588_at  | 0.25   | -2.03  | 0.00   | 0.00   |
| 220690_at  | 0.24   | -2.04  | 0.00   | 0.00   |
| 215545_at  | 0.24   | -2.04  | 0.00   | 0.00   |
| 203852_s_at| 0.24   | -2.08  | 0.00   | 0.00   |
| 203240_at  | 0.24   | -2.08  | 0.00   | 0.00   |
| 215390_at  | 0.23   | -2.10  | 0.00   | 0.00   |
| 217152_at  | 0.23   | -2.10  | 0.00   | 0.00   |
| 215172_at  | 0.23   | -2.14  | 0.00   | 0.00   |
| 215629_s_at| 0.23   | -2.14  | 0.00   | 0.00   |
| 222341_x_at| 0.23   | -2.14  | 0.00   | 0.00   |
| 215576_at  | 0.22   | -2.16  | 0.00   | 0.00   |
| 213931_at  | 0.22   | -2.18  | 0.00   | 0.00   |
| 217690_at  | 0.22   | -2.18  | 0.00   | 0.00   |
| 222111_at  | 0.22   | -2.18  | 0.00   | 0.00   |
| 206088_at  | 0.22   | -2.18  | 0.00   | 0.00   |
| 220612_at  | 0.22   | -2.19  | 0.00   | 0.00   |
| 214375_at  | 0.22   | -2.20  | 0.00   | 0.00   |
| 217137_x_at| 0.22   | -2.21  | 0.00   | 0.00   |
| 222277_at  | 0.21   | -2.23  | 0.00   | 0.00   |
| 216022_at  | 0.21   | -2.25  | 0.00   | 0.00   |
| 222358_x_at| 0.21   | -2.25  | 0.00   | 0.00   |
| 217019_at  | 0.20   | -2.36  | 0.00   | 0.00   |
| 215786_at  | 0.19   | -2.37  | 0.00   | 0.00   |
| 221079_s_at| 0.19   | -2.39  | 0.00   | 0.00   |
| 214871_x_at| 0.19   | -2.39  | 0.00   | 0.00   |
| 215133_s_at| 0.19   | -2.42  | 0.00   | 0.00   |
| 213686_at  | 0.18   | -2.44  | 0.00   | 0.00   |
| 216173_at  | 0.18   | -2.48  | 0.00   | 0.00   |
| Gene              | Value1 | Value2 | Value3 | Value4 |
|------------------|--------|--------|--------|--------|
| 215212_at        | 0.18   | -2.49  | 0.00   | 0.00   |
| 215378_at        | 0.18   | -2.50  | 0.00   | 0.00   |
| 214807_at        | 0.18   | -2.51  | 0.00   | 0.00   |
| 221833_at        | 0.18   | -2.51  | 0.00   | 0.00   |
| 217164_at        | 0.17   | -2.52  | 0.00   | 0.00   |
| 215626_at        | 0.17   | -2.53  | 0.00   | 0.00   |
| 208154_at        | 0.17   | -2.56  | 0.00   | 0.00   |
| 215344_at        | 0.17   | -2.58  | 0.00   | 0.00   |
| 213156_at        | 0.16   | -2.63  | 0.00   | 0.00   |
| 217671_at        | 0.16   | -2.63  | 0.00   | 0.00   |
| 215287_at        | 0.16   | -2.65  | 0.00   | 0.00   |
| 220969_s_at      | 0.16   | -2.66  | 0.00   | 0.00   |
| 213930_at        | 0.16   | -2.67  | 0.00   | 0.00   |
| 215191_at        | 0.16   | -2.68  | 0.00   | 0.00   |
| 217014_s_at      | 0.16   | -2.69  | 0.00   | 0.00   |
| 222290_at        | 0.15   | -2.70  | 0.00   | 0.00   |
| 221834_at        | 0.15   | -2.71  | 0.00   | 0.00   |
| 222214_at        | 0.15   | -2.74  | 0.00   | 0.00   |
| 216756_at        | 0.15   | -2.77  | 0.00   | 0.00   |
| 220728_at        | 0.14   | -2.80  | 0.00   | 0.00   |
| 216278_at        | 0.14   | -2.83  | 0.00   | 0.00   |
| 217330_at        | 0.14   | -2.83  | 0.00   | 0.00   |
| 214235_at        | 0.14   | -2.86  | 0.00   | 0.00   |
| 217353_at        | 0.14   | -2.85  | 0.00   | 0.00   |
| 217643_x_at      | 0.14   | -2.86  | 0.00   | 0.00   |
| 214234_s_at      | 0.14   | -2.88  | 0.00   | 0.00   |
| 222313_at        | 0.14   | -2.88  | 0.00   | 0.00   |
| 222282_at        | 0.13   | -2.93  | 0.00   | 0.00   |
| 205728_at        | 0.13   | -2.95  | 0.00   | 0.00   |
| 215385_at        | 0.13   | -2.95  | 0.00   | 0.00   |
| 215555_at        | 0.13   | -3.00  | 0.00   | 0.00   |
| 222366_at        | 0.12   | -3.01  | 0.00   | 0.00   |
| 215033_at        | 0.12   | -3.03  | 0.00   | 0.00   |
| 215123_at        | 0.12   | -3.06  | 0.00   | 0.00   |
| 215204_at        | 0.12   | -3.07  | 0.00   | 0.00   |
| 217536_x_at      | 0.12   | -3.07  | 0.00   | 0.00   |
| 205871_at        | 0.12   | -3.09  | 0.00   | 0.00   |
| 220855_at        | 0.12   | -3.09  | 0.00   | 0.00   |
| 222316_at        | 0.11   | -3.18  | 0.00   | 0.00   |
| 213158_at        | 0.11   | -3.22  | 0.00   | 0.00   |
| 220711_at        | 0.11   | -3.23  | 0.00   | 0.00   |
| 216006_at        | 0.10   | -3.26  | 0.00   | 0.00   |
| 215599_at        | 0.10   | -3.28  | 0.00   | 0.00   |
| 213397_x_at      | 0.10   | -3.29  | 0.00   | 0.00   |
| 222308_x_at      | 0.10   | -3.38  | 0.00   | 0.00   |
| 216527_at        | 0.09   | -3.40  | 0.00   | 0.00   |
| 215635_at        | 0.09   | -3.44  | 0.00   | 0.00   |
| 215392_at        | 0.09   | -3.45  | 0.00   | 0.00   |
| Gene Symbol | Fold Change | p-value | q-value |
|-------------|-------------|---------|---------|
| 216614_at   | 0.08        | -3.64   | 0.00    |
| 206655_s_at | 0.08        | -3.66   | 0.00    |
| 214415_at   | 0.07        | -3.85   | 0.00    |
| 212913_at   | 0.07        | -3.91   | 0.00    |
| 208498_s_at | 0.06        | -4.01   | 0.00    |
| 215322_at   | 0.06        | -4.02   | 0.00    |
| 222368_at   | 0.06        | -4.03   | 0.00    |
| 220038_at   | 0.05        | -4.41   | 0.00    |
| 215768_at   | 0.04        | -4.53   | 0.00    |