SUPPLEMENTARY METHODS

Cell lines and culture conditions. The human ovarian adenocarcinoma cell lines ALST, OVCA432 and OVCA433 were cultured in Roswell Park Memorial Institute 1640 medium supplemented with 10% fetal bovine serum. All cell lines were tested for mycoplasma contamination and authenticated using a microsatellite panel. NOF151 ovarian fibroblasts and primary CAFs derived from the primary tumor tissues of HGSOC patients were cultured in MCDB 105/199 medium (1:1) supplemented with 10% fetal bovine serum and 1 ng/mL epidermal growth factor.

Microdissection and microarray analysis of tissue samples. RNA was extracted from microdissected frozen ovarian tissue samples, which included 6 normal ovarian surface epithelia samples and 8 normal stromal fibroblasts samples from normal ovaries, and tumor epithelial components and stromal CAFs from 70 HGSOC patients. Patient samples were collected from the Ovarian Cancer Repository under protocols approved by The University of Texas MD Anderson Cancer Center Institutional Review Board. All tumor tissue samples were resected from the primary tumor site of previously untreated HGSOC patients with grade 3, stage 3 and 4 diseases. Microdissection was performed on tissue sections fixed in 70% ethanol. The sections were stained with 1% methyl green to visualize histologic features. During laser microdissection, areas of interest in the sections were carefully outlined. Areas with immune cell and blood vessel infiltration were excluded to minimize contamination [6]. 100ng of purified RNA samples were amplified using the Ambion MessageAmp^{TM} Premier RNA amplification kit. Fragmented cRNA was labeled using the Affymetrix GeneChip IVT labeling kit, and hybridized onto GeneChip Human Genome U133 Plus 2.0 microarrays (Affymetrix) according to the manufacturer's protocol. After hybridization, arrays were washed and stained using a GeneChip Fluidics Station 450 and then

scanned using a GeneChip Scanner 3000 7G (Affymetrix). The quality of microarray data was assessed by spike-in controls, perfect match expression and relative log expression during data summarization and normalization. In addition, area under the curve (AUC) was calculated based on a list of tissue specific reference genes designated by the Affymetrix Expression Console software program. Only samples with an ACU greater than the threshold of 0.7 will be further analyzed. In brief, transcriptome data generated from each individual Affymetrix Human Genome U133 Plus 2.0 microarray array was analyzed with the MAS 5.0 algorithm using the Affymetrix Expression Console software program to obtain a report regarding the performance of the array and to identify any obvious problems prior to multichip analysis. The MAS 5.0 algorithm uses the Tukey's biweight estimator to provide a robust mean signal value and the Wilcoxon's rank test to calculate a significance and Detection call for each probe set. Background estimation is provided by a weighted average of the lowest 2% of the feature intensities. Mismatch probes are utilized to adjust the perfect match intensity. Subsequently, using the Genespring GX Bioinformatics Suite (Version 14.9; Agilent Technologies), the quality of the microarray data was further evaluated. To evaluate the efficiency of the cDNA synthesis reaction, with built-in control probesets on the microarray that recognized the 3', middle and 5' regions of the same gene, the ratio of signal intensity for 3' probesets to that from 5' probesets was calculated. In addition, using the software, the hybridization control plots for each of the samples were evaluated for the linearity of the assay, and the quality of the hybridization and washing process based on the signal intensities of spike-in controls prepared in staggered concentrations.

Hierarchical Clustering and silhouette analysis. Hierarchical Clustering based on Euclidean distance and Wards linkage was performed for the clustering analysis of hMSCs and microdissected CAF samples. Silhouette analysis was performed to determine the separation distance between the resulting clusters for the interpretation and validation of consistency within clusters of data. The silhouette displays a measure of how close each point in one cluster is to points in the neighboring clusters and thus provides a way to assess parameters like number of clusters. This measure has a range of [-1, 1]. Silhouette coefficients near 1 indicate that the sample is far away from the neighboring clusters. A value of 0 indicates that the sample is on or very close to the decision boundary between two neighboring clusters and negative values indicate that those samples might have been assigned to the wrong cluster. After calculating the average silhouette coefficients across all samples for clustering number k=3 through 10.

Two computational modules of the CCCExplorer platform used for data analysis. First, the Activated Transcriptional Factor discovery module was developed on the basis of target genes such as those from transcriptional factor (TF)–target interaction data from the Transcriptional Regulatory Element Database (TRED) [26] and KEGG signaling pathways [27]. In total, 2,618 TF-target interactions, between 192 TFs and 649 target genes, were collected. The computational module deploys the Fisher exact test [28] to identify the activated TFs as follows. Give a TF *x*, let T_x_relative expressed and T_x_relative silent denote expressed and non-expressed target genes of *x*, respectively, and T_all_relative expressed and T_all_relative silent denote expressed and non-expressed target genes of all TFs, respectively. Let $a = |T\_x\_relative\ expressed|$, $c = |T\_x\_relative\ silent|$, $b = |T\_all\_relative\ expressed| - a$, $d = |T\_all\_relative\ silent| - c$, and $n = a + b + c + d$. Then, the p value of the Fisher test was calculated

as: p = $\frac{(a+b)!\ (c+d)!\ (a+c)!\ (b+d)!}{a!\ b!\ c!\ d!}$. Finally, activated TFs were identified with a p value threshold of 0.05. Second, the Activated Ligand-Receptor interaction discovery module archived the ligand-receptor interaction data from KEGG and the Database of Ligand-Receptor Partners (DLRP) [29], and collected proteins that were annotated as “extracellular” or “secreted” in Human Protein Reference Database (HPRD) [30] as ligands, with the corresponding receptors of these ligands were identified by using the STRING [31] database. In total, 1,419 ligand-receptor interactions, between 431 ligands and 316 receptors, were collected in the Activated Ligand-Receptor interaction discovery module database. Consequently, the activated ligand-receptor interactions were identified by the following calculations: (1) determination of whether the ligand genes are upregulated and the corresponding receptor genes are expressed, (2) determination of whether the receptor genes are upregulated and the corresponding ligand genes are expressed, or (3) crosstalk signaling reconstruction by linking activated ligand–receptor–TF–target gene on the KEGG signaling pathways. In total, 256 KEGG signaling pathways were obtained from the KEGG database, and then the shortest path analysis in the “igraph” package in R was employed for each individual KEGG signaling pathway to reconstruct the crosstalk signaling pathways by linking the activated ligand-receptor pairs to the activated TFs and their expressed target genes. To predict potentially activated signaling pathways, we used Fisher Exact Test to evaluate the probability that one pathway was enriched in differentially expressed genes. Pathways that had p-values smaller than 0.05 indicated that there was a 95% probability that the proportion of differentially expressed genes in these pathways was higher than randomly selected gene sets. Thus, these pathways were not likely to be over-represented by chance.

Robustness assessment of CCCExplorer. Three approaches were used to assess the robustness of the CCCExplorer software program in predicting activation of crosstalk signaling pathways mediated by differentially expressed secretory ligands from cancer cells and in predicting pathways mediated by differentially expressed receptors in CAFs. For each approach, one thousand permutation tests were performed. First, to evaluate if CCCExplorer predicts activated crosstalk signaling pathways with statistical significance based on randomly generated data sets, input data sets of secretory ligands, receptors, transcription factors and differentially expressed genes were generated by randomly selecting candidates among all known protein coding genes represented by the Affymatrix Human Genome U133 Plus 2.0 microarray. The number of genes in each list is the same as our data set generated by comparing the transcriptome profiles between patients with CAF-C and CAF-N gene signatures. Second, to evaluate the effects of feeding unimportant genes to CCCExplorer on crosstalk signaling pathway prediction, randomly selected genes were added to each of our list of ligands, receptors, transcription factors, and differentially expressed genes. Ten percent of genes in the resulting lists were selected randomly. Finally, to evaluate the impact of deleting important genes from the data sets on signaling pathway prediction by CCCExplorer, ten percent of genes were randomly selected and removed from each of the list of ligands, receptors, transcription factors and differentially expressed genes.

qRT-PCR analysis. The relative expression level of each target gene was determined using the $2^{-\Delta\Delta CT}$ method [32]. Predesigned human MFAP5, VCAN, COMP, VDR and cyclophilin A TaqMan gene expression assays (Life Technologies) were used in qRT-PCR analyses.

Co-culture of ovarian cancer cells and fibroblasts. To evaluate the roles of Smad signaling pathway activation in CAFs on the motility of cancer cells, co-culture of the two cell types were performed using Boyden chambers in a 12-well plate: 1 x 10^5 ovarian cancer cells were seeded onto each 8-μm porous cell culture insert (BD Biosciences). In the lower chamber, 2 x 10^5 fibroblasts were plated. After a 4-hour incubation period, cancer cells were stained with calcein AM (Life Technologies). Non-migrated cells in the cell culture inserts were removed, and cancer cells that migrated through the pores were quantified by obtaining images of the stained cells in nine random fields of view per membrane using fluorescent microscopy and the Image-Pro Plus software program (version 7.0).

Western blot analysis. Protein lysates from CAFs were separated on NuPAGE gels (Life Technologies) under denaturing conditions and transferred onto nitrocellulose membranes using the iBlot Western blotting system (Life Technologies). Anti-human Smad3 and phospho-Smad3 antibodies were purchased from Cell Signaling Technology. Protein bands were detected using an Odyssey infrared imaging system (LI-COR Biosciences). Protein expression levels normalized to the corresponding GAPDH controls were calculated on the basis of the band intensity values measured using the ImageJ software program (National Institutes of Health).

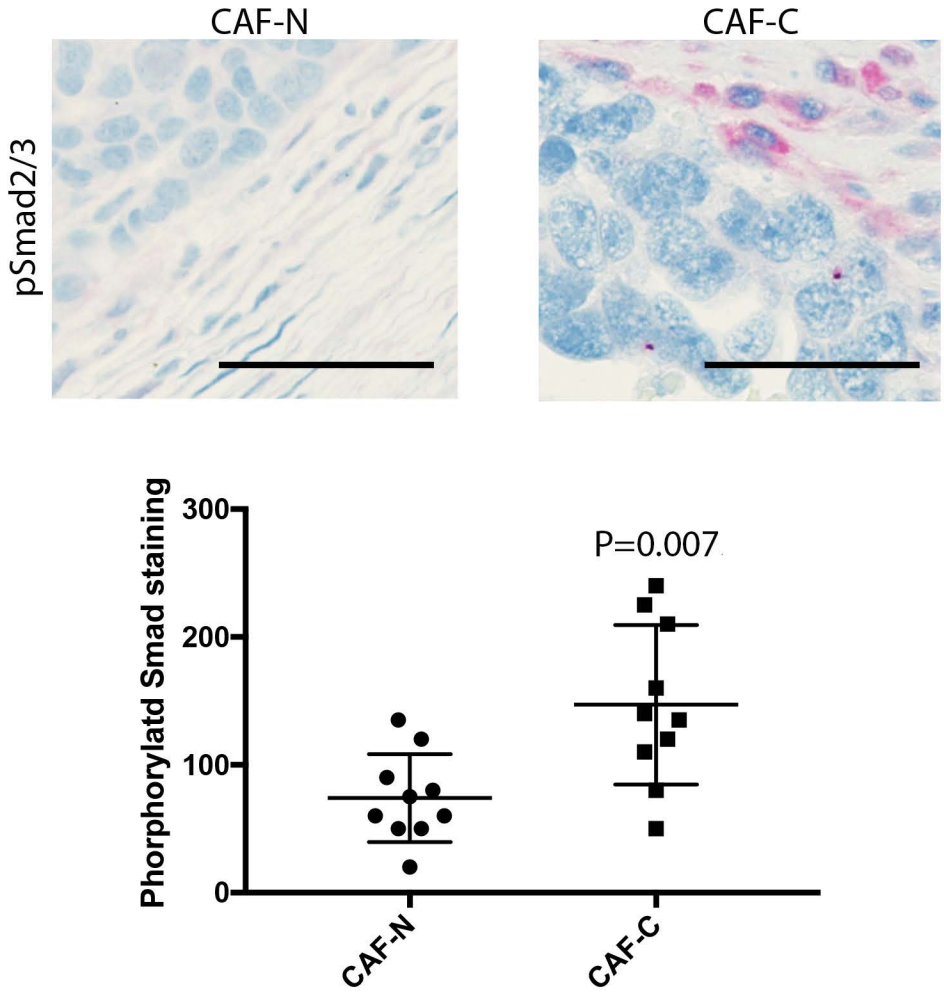
Repositioned drug identification. First, the names of FDA-approved drugs were obtained from the DrugMap Central database [33, 34] which included 2,202 FDA-approved drugs (1,991 FDA-approved small-molecule drugs and 211 FDA-approved protein/peptide drugs) from DrugBank. Then, drug prediction based on the Smad signaling gene signature was performed by extracting Smad signaling pathway information from the KEGG signaling pathway database and then using 23 upregulated genes

and nine downregulated genes modulated by Smad signaling in CAFs to rank drug candidates via the "query" function of the LINCScloud Web site (https://clue.io/). GSEA scores [35, 36] for the upregulated and downregulated gene sets were calculated for all LINCS compounds in the different cell lines. GSEA considered experiments with genome-wide expression profiles from samples belonging to two classes, labeled 1 or 2. Genes were ranked based on the correlation between their expression and the class distinction by using any suitable metric. Given an *a priori* defined set of genes *S*, the goal of GSEA was to determine whether the members of *S* were randomly distributed throughout *L* or primarily found at the top or bottom. In our drug repositioning module, S denoted up/down regulated genes modulated by Smad signaling in CAFs. *L* denoted the list of genes in the drug treatment experiments from LINCScloud ranked by their fold changes in gene expression before/after treatment. We calculated an enrichment score (*ES*) that reflected the degree to which a set *S* is overrepresented at the extremes (top or bottom) of the entire ranked list *L*. The score was calculated by walking down the list *L*, increasing a running-sum statistic when we encountered a gene in *S* and decreasing it when we encountered genes not in *S.* The magnitude of the increment depended on the correlation of the gene with the phenotype. The enrichment score was the maximum deviation from zero encountered in the random walk; it corresponded to a weighted Kolmogorov–Smirnov-like statistic. The *ES* scores were then normalized to [-100, 100] averaged across all cell lines with [0,100] meaning positive correlation and [-100,0] meaning reverse correlation between drug signature and Smad signaling signature. The mean GSEA scores of nine cell lines (PC3, VCAP, A375, A549, HA1E, HCC515, HT29, MCF7 and HEPG2) were used to select drugs potentially effective for Smad signaling suppression. Finally, noisy drug filtering was performed by drug clustering analysis. Since the prediction results from LINCScloud could be noisy, a drug clustering approach was developed to refine the drug prediction

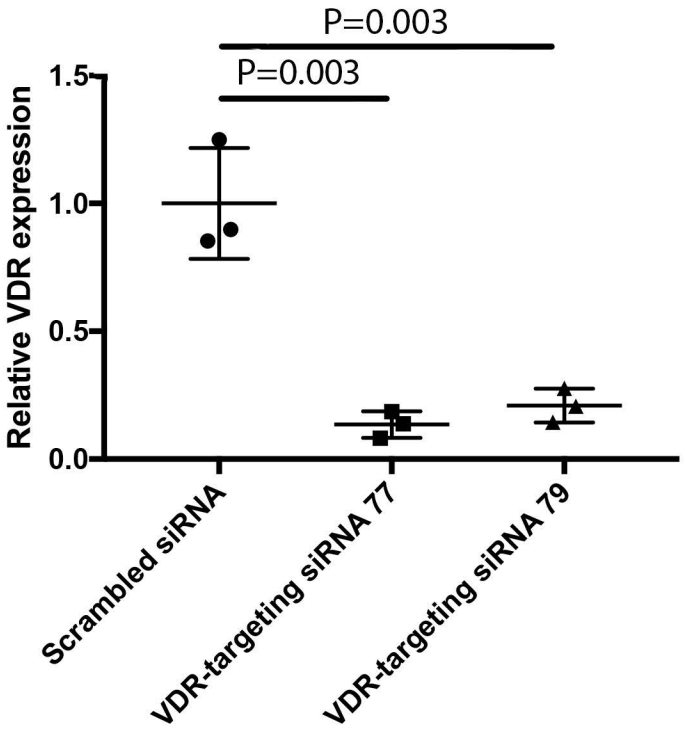
results. Specifically, the drug-drug similarity data were collected from an independent database, STITCH [37]. The top predicted drugs were then clustered using the affinity propagation clustering approach [38]. The drug clusters with fewer drugs were removed as noise, while bigger drug clusters were kept as potential drug candidates. Representative drugs were selected from individual drug clusters for further experimental evaluation.

Effects of calcitriol treatment on *in vivo* tumor growth and animal survival. To evaluate the effects of calcitriol treatment on ovarian tumor progression *in vivo*, $2x10^6$ OVCA432 human ovarian cancer cells and $2x10^6$ primary ovarian CAFs were mixed, resuspended in sterile PBS, and co-injected subcutaneously into female nude mice at the age of 6 weeks over both the left and right flank. Tumors were allowed to develop for 5 days prior to calcitriol treatment and a total of 20 subcutaneous tumor nodules were established in 10 mice. On day 5, animals were randomized, and the control animal group received intratumoral injection of sterile PBS, while the treatment group received calcitriol treatment at the dosage of 60 μg/kg. All animals were treated twice weekly for a total of 3 weeks. At the experimental endpoint, small animal imaging was performed to quantify the luciferase signal given by labeled ovarian cancer cells. Subsequently, all mice were euthanized and subcutaneous tumor nodules were harvested, weighed and fixed in formalin for further histological analysis. On the other hand, to investigate the effects of calcitriol treatment on the survival of ovarian tumor-bearing transgenic animals, the Amhr2-Cre–driven Dicer/PTEN double-knockout genetically engineered mouse model was used. At the age of 4 months, female transgenic animals were treated with either 60 μg/kg of calcitriol (N=9) or sterile PBS (N=11) twice per week via intraperitoneal injections until the animals became moribund. The survival duration for each animal was recorded and Kaplan-Meier survival analysis was

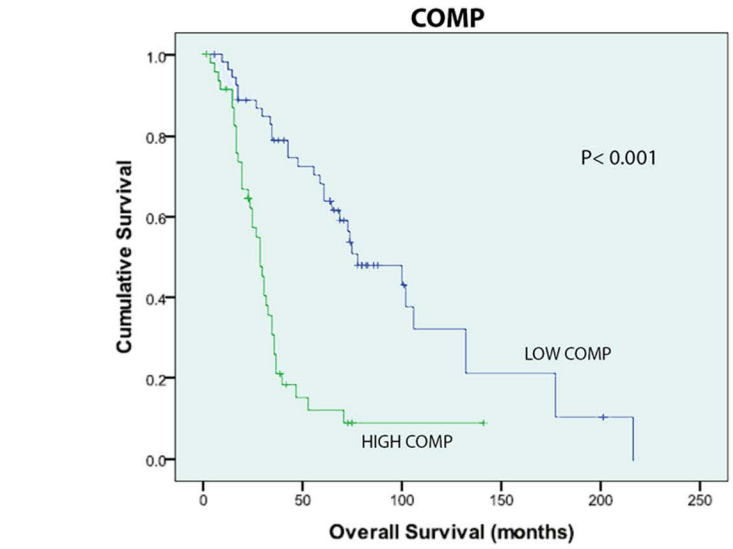
performed. Animal studies were performed under the protocol approved by the MD Anderson Institutional Animal Use and Care Committee (IACUC).



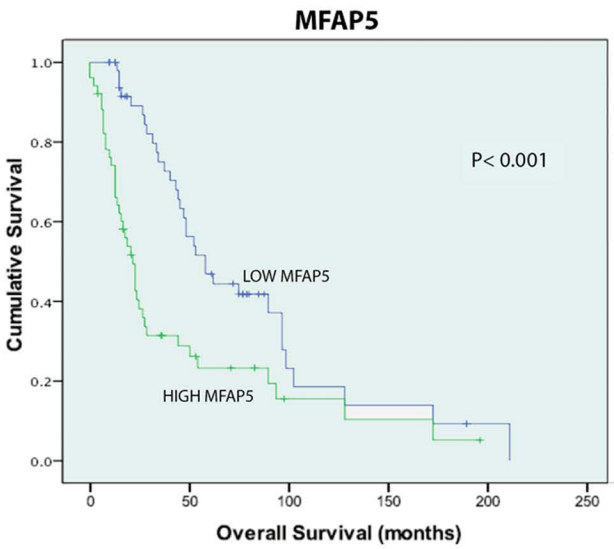
Supplementary Figure 1. Immunostaining of phosphorylated Smad2/3 were performed on FFPE tissue sections from HGSOC patients with CAF-C and CAF-N gene expression subtypes. (mean ± SD; N=10 per group; two-tailed Mann-Whitney U test; bar=50 μm).



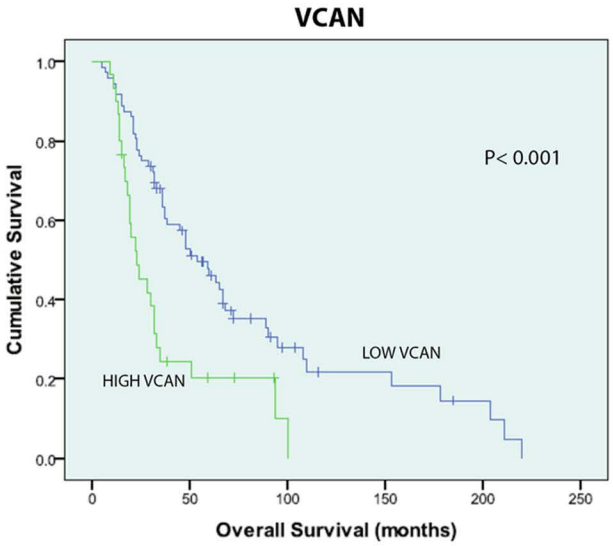
Supplementary Figure 2. Silencing of VDR expression in CAF863389 by VDR-targeting siRNAs was validated by qRT-PCR. (mean ± SD of three independent experiments; two-tailed Student t-test)



Number at risk						
Low	54	34	7	4	1	0
HIgh	47	5	1	0	0	0

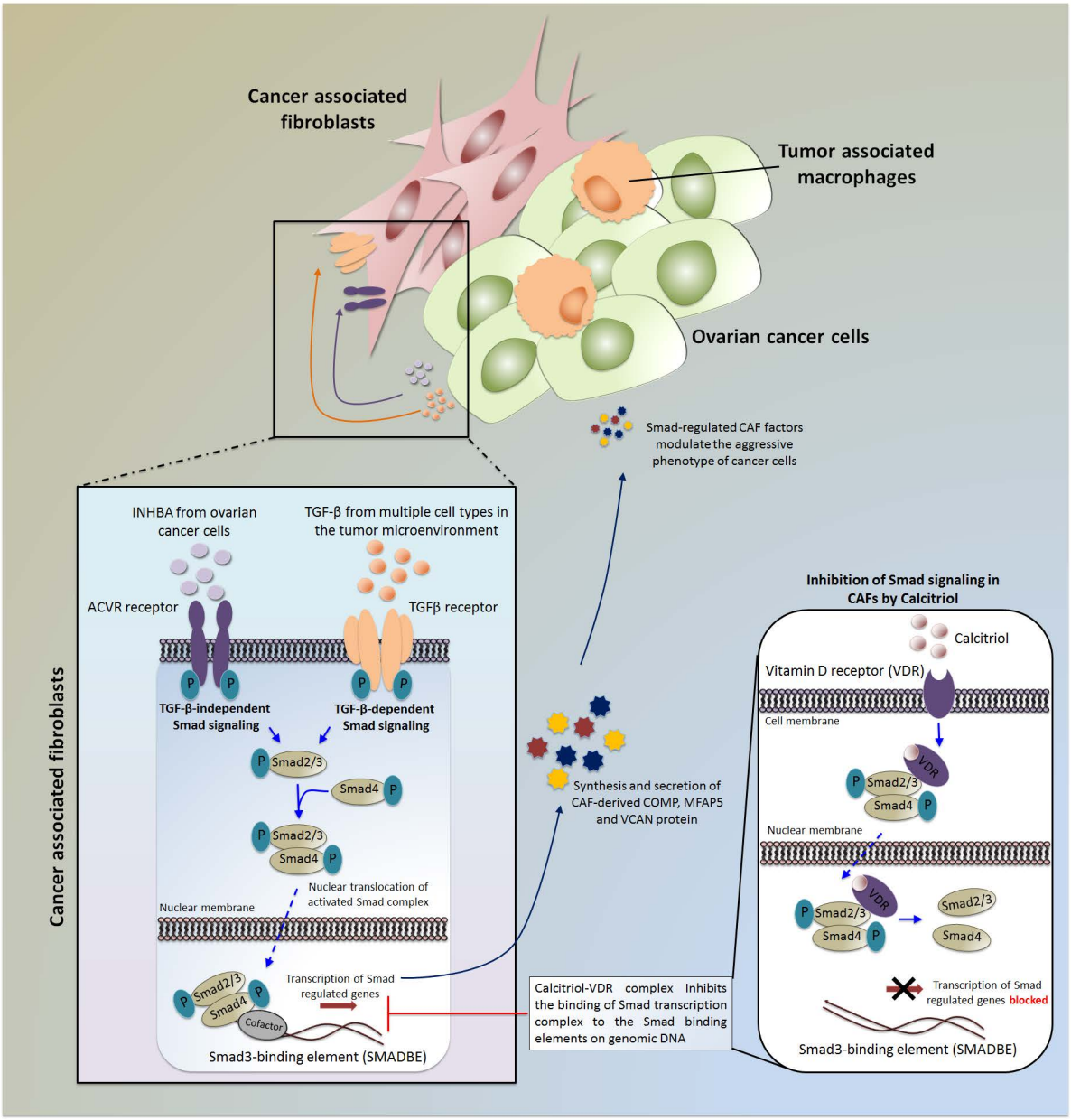


Number at risk						
Low	51	24	5	3	1	0
HIgh	51	11	3	2	0	0



Number at risk						
Low	72	39	10	6	3	0
HIgh	30	6	0	0	0	0

Supplementary Figure 3. The prognostic significance of the expression levels of TGF-β/Smad signaling downstream genes COMP, MFAP5, and VCAN in CAFs was evalulated by Kaplan-Meier analysis and log-rank tests



Supplementary Figure 4. A summary figure showing the activation of TGF-β-dependent and TGF-β-independent Smad signaling in ovarian CAFs. Cancer cell-derived INHBA and TGF-β from the ovarian tumor microenvironment promote the formation of the Smad transcription complex and the subsequent transcription of Smad-regulated genes in CAFs. Secretion of stromal factors including COMP, MFAP5 and VCAN by CAFs could promote the aggressive phenotypes of ovarian cancer cells. Smad signaling activation in CAFs can be attenuated by calcitriol. Calcitriol-VDR complex inhibits the binding of Smad transcription complex to genomic DNA and Smad protein will be dephosphorylated.

Supplementary Table 1. Results of silhouette analysis on hierarchical clustering of transcriptome profiles.

Number of clusters	Silhouette coefficient (k means clustering)	Silhouette coefficient (Hierarchical clustering with Wards linkage)
3	0.520779	0.506461
4	0.440330	0.459211
5	0.212553	0.327744
6	0.288765	0.303304
7	0.253932	0.248601
8	0.271511	0.231292
9	0.276265	0.213131
10	0.257753	0.216640

Supplementary Table 2. Differentially expressed genes in CAF-C when compared with CAF-N

Upregulated genes (Fold change>5; Two-tailed Moderated *t*-test with Benjamini-Hochberg multiple testing adjusted P<0.05)

Gene symbol	Probe set ID	Fold change	P-value
COL6A2	209156_s_at	23.59	1.86E-22
VIM	201426_s_at	19.35	2.52E-24
DCN	211896_s_at	17.73	2.03E-17
PPIB	200967_at	17.55	4.09E-25
RAN	200750_s_at	16.20	1.97E-23
NACA	208635_x_at	15.75	2.32E-20
TAGLN	205547_s_at	15.68	1.41E-19
FTL	213187_x_at	15.43	1.03E-20
B2M	216231_s_at	15.12	1.11E-20
OAZ1	215952_s_at	15.02	4.07E-25
RPS16	201258_at	14.85	5.11E-19
HNRNPA2B1	205292_s_at	14.59	4.43E-19
COL3A1	201852_x_at	14.56	1.83E-13
GNAS	200780_x_at	14.54	2.95E-22
RPLP0	214167_s_at	14.14	2.98E-20
PSMB1	200876_s_at	13.86	5.54E-25
GNB2L1	200651_at	13.85	1.36E-22
FTH1	200748_s_at	13.69	4.36E-23
EEF2	204102_s_at	13.66	7.30E-21
COL1A1	202310_s_at	13.51	1.82E-17
RNU86	211666_x_at	13.39	3.00E-21
PRDX5	1560587_s_at	13.13	6.06E-22
LAMP1	201552_at	13.06	3.00E-18
SLC25A6	212085_at	12.88	2.77E-18
RPL8	200936_at	12.88	2.31E-21
TPT1	216520_s_at	12.77	3.54E-18
RPS9	217747_s_at	12.66	1.57E-20
ACTG1	211995_x_at	12.60	1.31E-23
ARPC2	208679_s_at	12.44	1.71E-25
HNRNPM	1555844_s_at	12.27	1.84E-19
HLA-B	209140_x_at	12.18	4.48E-18
ACTR2	200728_at	11.89	6.90E-23
ATP5C1	213366_x_at	11.75	3.85E-21
ANXA1	201012_at	11.69	1.76E-21
HSP90AB1	200064_at	11.68	1.34E-23
SSBP1	202591_s_at	11.67	2.91E-23

RPL10A	200036_s_at	11.63	6.88E-20
RPL15	221476_s_at	11.51	4.03E-20
P4HB	200654_at	11.46	7.90E-25
LTBP3	219922_s_at	11.39	4.06E-19
HSPA8	208687_x_at	11.39	1.99E-24
DDX5	200033_at	11.32	3.20E-18
SPCS1	217927_at	11.32	1.14E-22
RPS3	208692_at	11.27	1.02E-20
CCNI	208655_at	11.19	1.44E-19
EIF3C	210949_s_at	11.07	1.79E-24
KLF6	224606_at	11.07	5.26E-18
RPL4	211710_x_at	11.01	5.22E-21
CCT3	200910_at	10.98	2.80E-22
SLC25A3	200030_s_at	10.92	2.20E-25
RPL11	200010_at	10.80	4.85E-23
HNRNPDL	209067_s_at	10.80	1.52E-23
SPARC	200665_s_at	10.79	1.32E-12
CALM1	200655_s_at	10.74	9.83E-21
RPL29	200823_x_at	10.72	2.39E-20
NAP1L1	213864_s_at	10.71	6.34E-20
ATP5O	200818_at	10.68	8.10E-23
HLA-C	214459_x_at	10.67	4.27E-19
RPL6	200034_s_at	10.58	4.31E-21
BTF3	208517_x_at	10.56	9.09E-23
RPL28	200003_s_at	10.52	9.57E-18
GAPDH	213453_x_at	10.51	7.88E-25
GORASP2	207812_s_at	10.50	7.12E-24
PALLD	200907_s_at	10.48	2.12E-21
H2AFZ	200853_at	10.41	5.48E-21
ATP5F1	211755_s_at	10.40	1.67E-21
HNRNPD	209330_s_at	10.28	3.70E-19
MMADHC	217883_at	10.27	1.12E-18
PABPC1	215157_x_at	10.23	4.56E-24
EEF1D	203113_s_at	10.22	5.09E-18
HSP90B1	200598_s_at	10.14	2.42E-24
PPP2CB	201375_s_at	10.08	8.62E-17
SOX4	201417_at	10.08	3.55E-15
CNBP	206158_s_at	10.02	9.56E-22
RPLP2	200909_s_at	10.01	2.59E-21
HSP90AA1	210211_s_at	9.98	6.49E-22
YBX1	208628_s_at	9.87	9.65E-23

RHOA	200059_s_at	9.81	4.07E-27
C14orf166	217768_at	9.80	1.39E-20
RPL14	200074_s_at	9.79	5.65E-22
HSPB1	201841_s_at	9.73	4.45E-24
RPL35	200002_at	9.72	4.83E-19
TIMP1	201666_at	9.67	3.38E-19
CTSB	200838_at	9.65	2.74E-21
AP2M1	200613_at	9.59	1.95E-23
YWHAQ	200693_at	9.58	5.15E-27
SLIRP	221434_s_at	9.55	7.64E-23
LGALS1	201105_at	9.49	7.51E-24
PGK1	200738_s_at	9.47	6.34E-20
MRPL3	208787_at	9.45	1.70E-15
PNN	1567214_a_at	9.43	1.05E-16
RPL18	200022_at	9.41	2.60E-20
ATP5A1	213738_s_at	9.37	1.02E-20
GPX1	200736_s_at	9.37	1.71E-20
SH3BGRL	201312_s_at	9.36	4.01E-15
RPL5	200937_s_at	9.34	1.27E-19
PSMA2	201317_s_at	9.32	2.58E-19
EIF4A1	211787_s_at	9.30	2.64E-25
COL4A1	211980_at	9.24	1.18E-12
LAPTM4B	208029_s_at	9.23	2.36E-15
CTGF	209101_at	9.22	3.72E-16
BCLAF1	201084_s_at	9.17	5.00E-18
COL5A2	221730_at	9.16	9.18E-12
RPL13	212191_x_at	9.15	6.01E-18
YWHAZ	200640_at	9.15	1.32E-24
CSDE1	222975_s_at	9.12	1.14E-25
MDH2	209036_s_at	9.10	3.38E-24
ACTR3	200996_at	9.05	7.55E-19
GALNT1	1568618_a_at	9.02	2.91E-17
MTDH	212251_at	8.99	6.08E-25
OSTC	223001_at	8.99	8.30E-22
MATR3	200626_s_at	8.98	1.25E-19
RPL36AL	207585_s_at	8.89	3.48E-20
UXS1	225583_at	8.88	5.13E-23
PTPLAD1	222404_x_at	8.85	8.54E-21
SERBP1	209669_s_at	8.84	4.27E-19
ITM2B	217732_s_at	8.83	1.64E-19
PRDX4	201923_at	8.82	6.49E-18

UBC	211296_x_at	8.76	3.65E-23
RAC1	208640_at	8.76	2.68E-19
CYR61	201289_at	8.74	4.94E-14
CKAP4	200998_s_at	8.73	1.14E-25
TPM2	204083_s_at	8.73	4.50E-18
GTF3A	215091_s_at	8.69	3.49E-19
SERINC1	208671_at	8.67	4.79E-20
TTC3	208662_s_at	8.66	8.08E-23
CCT8	200873_s_at	8.60	1.66E-23
SPATS2L	222154_s_at	8.58	9.63E-19
TPI1	213011_s_at	8.57	8.03E-28
CLTA	216295_s_at	8.56	3.34E-22
RNASEK	224573_at	8.56	6.91E-27
NGRN	217722_s_at	8.55	2.69E-20
EIF3H	201592_at	8.54	4.25E-20
UBE2Q2	224747_at	8.53	1.67E-17
NBR1	201384_s_at	8.50	3.42E-20
SOD1	200642_at	8.45	3.44E-27
CCT2	201947_s_at	8.44	6.09E-23
RPL10	200725_x_at	8.43	1.80E-20
MYL9	201058_s_at	8.42	4.80E-22
UFC1	217797_at	8.42	2.40E-22
IMPDH2	201892_s_at	8.40	2.23E-18
CAPN2	208683_at	8.34	2.01E-20
EMC7	217898_at	8.33	2.32E-27
IFITM2	201315_x_at	8.31	1.03E-22
FOS	209189_at	8.30	3.10E-09
PDIA3	208612_at	8.17	2.44E-26
RTN4	210968_s_at	8.16	1.19E-20
GLT8D1	218147_s_at	8.14	6.92E-23
B4GALT5	221485_at	8.14	1.52E-20
UBE2H	222420_s_at	8.09	9.29E-22
LGALS3BP	200923_at	8.09	3.24E-20
MSRB2	218773_s_at	8.07	3.54E-25
LDHB	213564_x_at	8.02	1.04E-19
PERP	222392_x_at	8.02	3.72E-17
EIF3D	200005_at	8.00	1.98E-22
TUBB6	209191_at	8.00	1.85E-28
EEF1A1	204892_x_at	7.99	1.36E-20
HTRA1	201185_at	7.98	1.22E-18
CLU	208792_s_at	7.98	1.24E-10

STAU1	208948_s_at	7.97	3.03E-23
GABARAP	200645_at	7.97	6.73E-27
EIF1	202021_x_at	7.96	1.37E-24
COL12A1	225664_at	7.94	4.94E-10
TIMP2	224560_at	7.94	3.81E-18
MYL6	212082_s_at	7.93	9.26E-20
KDELR2	200699_at	7.93	6.69E-23
TUBA1B	212639_x_at	7.92	1.14E-25
IGFBP7	201162_at	7.90	8.92E-22
CNPY2	202857_at	7.90	3.43E-22
SET	40189_at	7.89	3.50E-20
PARK7	200006_at	7.88	6.28E-21
RPS19	213414_s_at	7.88	2.59E-21
HDAC1	201209_at	7.88	2.22E-21
COX2	1553569_at	7.86	6.25E-18
PAPOLA	222035_s_at	7.86	6.95E-21
RPL13A	210646_x_at	7.83	9.11E-20
LRRC47	212904_at	7.83	4.19E-23
PCBP2	204031_s_at	7.80	7.84E-27
YWHAB	208743_s_at	7.79	4.11E-26
PRDX2	39729_at	7.79	2.11E-18
SCARB2	224983_at	7.77	3.17E-24
RPS8	200858_s_at	7.77	8.62E-20
LDHA	200650_s_at	7.77	1.69E-21
EIF4G2	200004_at	7.76	2.91E-19
RPS14	208645_s_at	7.73	3.51E-20
EDF1	209059_s_at	7.73	1.61E-22
PSMA4	203396_at	7.72	2.00E-23
CUL3	201371_s_at	7.72	5.87E-23
PTGES3	200627_at	7.69	5.89E-24
ATP6V1G2	200041_s_at	7.68	5.07E-20
HSPA1A///HSPA1B	200800_s_at	7.68	1.04E-17
RPS7	200082_s_at	7.67	5.98E-28
DAD1	200046_at	7.66	2.82E-23
UQCRB	205849_s_at	7.65	5.16E-21
ATP5G3	207508_at	7.63	1.53E-24
ATRAID	219329_s_at	7.63	5.16E-23
MIF	217871_s_at	7.63	1.70E-18
TMEM14B	221452_s_at	7.62	4.70E-22
HLA-E	200905_x_at	7.61	1.12E-19
RPS12	213377_x_at	7.59	4.80E-22

P2RX5-TAX1BP3	209154_at	7.59	1.56E-15
TUG1	212725_s_at	7.59	7.34E-20
HLA-G	211529_x_at	7.59	2.00E-18
PHB2	201600_at	7.56	4.19E-23
EEF1G	200689_x_at	7.56	7.23E-21
FSTL1	208782_at	7.55	5.08E-23
TALDO1	201463_s_at	7.55	3.12E-25
SUMO3	200740_s_at	7.55	3.02E-15
RNF7	218286_s_at	7.55	1.66E-23
MDH1	200978_at	7.53	7.84E-27
NPC2	200701_at	7.52	2.35E-22
RPL7A	224930_x_at	7.51	1.49E-22
TUBA1C	211750_x_at	7.51	3.76E-27
NHP2	209104_s_at	7.50	1.01E-22
BTG1	200920_s_at	7.47	1.03E-22
CMTM6	223047_at	7.46	1.41E-17
H3F3A	209069_s_at	7.46	1.27E-25
CD47	211075_s_at	7.46	2.17E-21
SNX7	205573_s_at	7.44	1.27E-15
CST3	201360_at	7.40	2.03E-24
GOLM1	217771_at	7.37	6.68E-18
ANTXR2	225524_at	7.36	4.72E-19
TUBB	211714_x_at	7.35	2.32E-29
FKBP9	212169_at	7.32	3.17E-23
UQCRH	202233_s_at	7.32	8.20E-22
JTB	200048_s_at	7.31	2.18E-19
C12orf57	224719_s_at	7.31	3.00E-21
RPS15	200819_s_at	7.27	5.76E-19
RPS6	200081_s_at	7.26	9.54E-22
APMAP	206656_s_at	7.25	1.49E-24
SERPINF1	202283_at	7.24	5.09E-14
KRT19	201650_at	7.24	1.05E-10
OBSL1	212775_at	7.24	4.88E-16
HEBP1	218450_at	7.23	4.20E-19
HLA-A	215313_x_at	7.23	4.25E-18
VAMP3	201336_at	7.21	2.79E-26
MYL12A	201318_s_at	7.19	3.23E-20
LAP3	217933_s_at	7.19	1.93E-16
DPM1	202673_at	7.18	3.97E-15
POSTN	210809_s_at	7.18	2.43E-06
EIF2S2	208726_s_at	7.18	2.04E-25

DSTN	201021_s_at	7.17	4.34E-22
DBI	202428_x_at	7.15	1.62E-27
YTHDF2	222430_s_at	7.15	3.95E-23
MIR636	200754_x_at	7.14	1.52E-26
CSNK1A1	208865_at	7.13	3.42E-20
TXN	208864_s_at	7.13	1.62E-27
NOL7	202882_x_at	7.12	2.23E-21
ENO1	201231_s_at	7.11	6.76E-23
ACTA2	200974_at	7.10	3.04E-12
TGFBR2	208944_at	7.09	1.35E-16
UQCRFS1	208909_at	7.07	6.91E-27
GUK1	200075_s_at	7.07	5.81E-27
PCOLCE	202465_at	7.05	4.00E-23
COL4A2	211964_at	7.05	1.61E-16
PSMC2	201068_s_at	7.03	3.54E-24
RPN2	213399_x_at	7.00	5.41E-19
ARPC3	208736_at	7.00	3.01E-25
CCT6A	201327_s_at	7.00	2.06E-25
TM2D3	221702_s_at	6.99	5.82E-18
RPS2	212433_x_at	6.99	1.90E-22
EIF3M	202232_s_at	6.97	2.52E-24
LSM14A	212131_at	6.96	3.88E-18
EIF3K	212716_s_at	6.96	3.50E-21
CD9	201005_at	6.94	2.59E-14
RPL19	200029_at	6.94	7.10E-22
KPNB1	208974_x_at	6.93	2.45E-18
JAK1	201648_at	6.93	3.05E-21
CCT4	200877_at	6.92	7.20E-18
OLFML3	218162_at	6.91	1.59E-19
PGM1	201968_s_at	6.90	6.09E-16
CAP1	200625_s_at	6.88	1.22E-26
MINOS1	224867_at	6.88	3.92E-22
COL6A3	201438_at	6.88	2.12E-21
KARS	200079_s_at	6.87	1.35E-24
GNB1	200745_s_at	6.87	1.78E-21
DPYSL3	201431_s_at	6.87	6.01E-18
TIMP3	201150_s_at	6.85	1.43E-08
COX1	1553538_s_at	6.85	1.74E-13
CD63	200663_at	6.85	4.03E-25
NDUFA13	220864_s_at	6.83	8.82E-30
PPIA	211765_x_at	6.83	6.39E-25

CD59	200985_s_at	6.83	3.87E-28
SRI	208921_s_at	6.82	4.34E-22
BLOC1S5-TXNDC5	221253_s_at	6.82	6.09E-20
RPS5	200024_at	6.82	2.36E-18
TCEB2	200085_s_at	6.80	6.72E-25
LOC101060363	212661_x_at	6.80	4.44E-24
PSMB6	208827_at	6.79	5.47E-27
SHC1	214853_s_at	6.78	8.42E-26
COPS2	202467_s_at	6.78	3.51E-24
TMSB4X	216438_s_at	6.78	1.01E-20
SEC31A	200945_s_at	6.77	1.95E-19
SEC63	201916_s_at	6.76	5.58E-21
CAPRIN1	200723_s_at	6.75	2.64E-25
SLC25A5	200657_at	6.75	7.84E-23
NCOA4	210774_s_at	6.74	1.68E-16
MAGT1	224899_s_at	6.72	2.37E-13
SNORA29	208778_s_at	6.72	1.15E-26
RPS10	211542_x_at	6.71	6.45E-22
GNAI3	201180_s_at	6.71	2.50E-21
MARCKS	201669_s_at	6.71	3.00E-09
MSRB3	225782_at	6.71	1.44E-10
CCZ1	201973_s_at	6.68	1.43E-17
XPO1	208775_at	6.68	2.36E-16
ATP5L	210453_x_at	6.68	5.78E-24
SNRPB	208821_at	6.68	2.14E-23
XRCC5	208642_s_at	6.68	6.91E-27
UGP2	205480_s_at	6.67	2.84E-21
PSMB4	202243_s_at	6.66	1.56E-29
MEST	202016_at	6.66	4.47E-21
CSE1L	201112_s_at	6.65	8.13E-21
SNAI2	213139_at	6.65	5.47E-16
ATP6V1D	208898_at	6.64	2.13E-21
UBQLN1	222990_at	6.64	2.22E-19
MAGED1	209014_at	6.62	4.91E-25
TOMM20	200662_s_at	6.62	9.57E-19
TCEB1	202824_s_at	6.60	1.16E-17
CTNNA1	210844_x_at	6.60	1.31E-25
OCIAD1	223011_s_at	6.59	7.32E-26
ARL4C	202207_at	6.59	1.12E-14
TRMT112	217774_s_at	6.59	1.31E-25
CNIH4	218728_s_at	6.57	1.98E-22

TPM1	210987_x_at	6.56	6.14E-23
PPP1CC	200726_at	6.55	6.71E-15
PDIA6	207668_x_at	6.55	5.15E-27
SURF4	222978_at	6.54	2.55E-26
CD99	201029_s_at	6.54	6.34E-20
FIS1	218034_at	6.54	3.65E-27
C1QBP	214214_s_at	6.54	2.50E-17
TUFM	201113_at	6.53	6.12E-29
FBXL5	209004_s_at	6.53	2.59E-13
VPS28	218679_s_at	6.53	1.47E-21
RCN1	201063_at	6.52	2.28E-23
SAMM50	201569_s_at	6.52	1.27E-23
RPL27A	203034_s_at	6.50	3.90E-19
COL5A1	212488_at	6.50	4.92E-12
COPB1	201359_at	6.49	2.34E-23
GNS	212334_at	6.49	7.15E-17
SSB	201139_s_at	6.48	2.93E-20
LOC101060555	223269_at	6.48	1.49E-20
CLPTM1L	223020_at	6.47	4.56E-24
RPL35A	213687_s_at	6.47	5.69E-20
TCEA1	216241_s_at	6.47	6.95E-25
CORO1C	222409_at	6.46	2.05E-26
EID1	208669_s_at	6.46	4.30E-17
DESI2	212371_at	6.46	7.84E-27
CCT7	200812_at	6.46	2.84E-24
SRP9	201273_s_at	6.44	8.89E-16
CAB39	217873_at	6.43	9.96E-16
GTF2I	201065_s_at	6.43	2.36E-22
NARR	224710_at	6.42	1.26E-24
ARID4B	212591_at	6.41	1.98E-23
PMEPA1	222449_at	6.41	6.75E-16
TMEM258	218213_s_at	6.40	9.23E-20
HINT1	200093_s_at	6.38	7.65E-23
SCP2	201339_s_at	6.37	1.79E-23
COPS5	201652_at	6.36	6.69E-23
GLTSCR2	234339_s_at	6.35	1.13E-14
ERGIC2	218135_at	6.35	2.45E-28
TPM3	222976_s_at	6.34	3.69E-24
TIMMDC1	223004_s_at	6.34	1.77E-21
EIF3E	208697_s_at	6.33	2.71E-18
RPS4X	200933_x_at	6.33	5.88E-18

SCOC	224786_at	6.33	2.15E-13
CD81	200675_at	6.33	3.59E-22
TMED10	212352_s_at	6.31	3.42E-21
USMG5	225413_at	6.30	1.38E-21
PRRC1	224643_at	6.28	3.09E-14
SLC39A10	225295_at	6.28	1.77E-11
CAV1	212097_at	6.27	3.49E-19
ATP5J	202325_s_at	6.26	8.10E-23
GXYLT2	235371_at	6.26	5.12E-12
CHCHD1	226896_at	6.26	9.03E-22
GAS6	202177_at	6.25	1.72E-20
IFI16	208966_x_at	6.25	7.35E-13
SERPINH1	207714_s_at	6.25	2.53E-25
CALD1	201616_s_at	6.25	1.71E-25
ALDOA	214687_x_at	6.24	1.69E-22
S100A6	217728_at	6.24	8.98E-29
EIF4E2	213571_s_at	6.24	5.85E-15
FBN1	202766_s_at	6.23	3.72E-14
SYNCRIP	209024_s_at	6.23	2.00E-23
COX4I1	202698_x_at	6.23	3.74E-20
TRIP6	209129_at	6.23	6.72E-22
KLHDC2	217906_at	6.22	1.94E-22
PSEN1	203460_s_at	6.22	3.20E-21
DNAJA1	200881_s_at	6.22	1.27E-23
PAPSS1	209043_at	6.22	2.50E-27
ANXA5	200782_at	6.21	2.37E-21
ARPC5L	226914_at	6.20	1.16E-17
TMSB10	217733_s_at	6.19	4.89E-19
PDLIM5	203243_s_at	6.19	1.22E-12
ANXA4	201301_s_at	6.18	6.89E-20
TMEM30A	217743_s_at	6.18	5.67E-15
MMP2	201069_at	6.18	1.42E-19
HNRNPH2	201132_at	6.18	1.78E-16
CSTB	201201_at	6.17	1.50E-21
MIR21	220990_s_at	6.16	1.90E-13
BUD31	205690_s_at	6.16	3.49E-24
LAMTOR5	202300_at	6.16	7.65E-27
SRP72	208095_s_at	6.16	1.91E-21
HEG1	213069_at	6.15	1.17E-16
PIGY	224660_at	6.15	7.65E-20
ANXA2	201590_x_at	6.14	2.31E-20

MIR4691	203190_at	6.14	1.07E-21
SLC39A6	202088_at	6.12	2.98E-12
PABPC4	201064_s_at	6.12	6.91E-27
NCOR2	207760_s_at	6.11	6.53E-23
ITGB1	1553678_a_at	6.11	3.75E-24
APEX1	210027_s_at	6.11	2.47E-23
RPL30	200062_s_at	6.10	4.48E-20
PXDN	212013_at	6.09	1.38E-22
PSMD6	202753_at	6.09	1.14E-31
XRCC6	200792_at	6.09	5.32E-26
COX6B1	201441_at	6.09	1.49E-22
SF3B1	201071_x_at	6.08	2.03E-19
DDX1	201241_at	6.08	5.67E-25
RPS3A	200099_s_at	6.08	1.58E-17
RPL17	200038_s_at	6.08	2.58E-20
DYNLT1	201999_s_at	6.07	5.19E-21
ST13	207040_s_at	6.07	5.23E-19
RECQL	212918_at	6.06	1.19E-11
ECHS1	201135_at	6.06	1.61E-24
GPNMB	201141_at	6.05	4.11E-09
SEPW1	201194_at	6.04	4.80E-27
HSPA5	211936_at	6.03	5.76E-28
CLIC1	208659_at	6.02	6.83E-24
ATP6V0E1	201172_x_at	6.02	4.50E-28
RRM1	201477_s_at	6.01	2.72E-25
NDUFC2	218101_s_at	6.01	1.02E-20
GPI	208308_s_at	6.01	5.65E-28
HEXB	201944_at	6.01	6.89E-20
HNRNPR	208766_s_at	6.01	3.82E-16
NUP153	202097_at	6.00	5.07E-17
FUS	200959_at	6.00	6.66E-17
PQLC3	225579_at	6.00	2.21E-16
TMEM14C	223106_at	6.00	1.49E-18
NUCB2	203675_at	5.99	1.18E-22
SDF4	232032_x_at	5.99	3.94E-28
TUBB2A	204141_at	5.99	4.80E-14
RNF145	226077_at	5.99	3.46E-22
MIR4745	216306_x_at	5.98	2.40E-33
TMED3	208837_at	5.98	1.93E-25
COX6A1	200925_at	5.97	6.99E-24
UBA1	200964_at	5.96	4.09E-25

MALSU1	226385_s_at	5.96	4.33E-15
MESDC2	224675_at	5.96	2.05E-16
ANAPC13	209001_s_at	5.95	2.33E-21
SULF2	224724_at	5.95	1.28E-14
RAB31	217763_s_at	5.94	5.11E-14
FERMT2	209210_s_at	5.93	6.94E-13
NREP	201310_s_at	5.93	5.11E-20
GATC	201698_s_at	5.93	2.73E-22
TGFBI	201506_at	5.93	2.25E-18
PAIP2	222984_at	5.92	7.14E-18
PHPT1	223207_x_at	5.92	1.13E-25
LEPROT	202378_s_at	5.91	1.32E-20
TRA2B	200893_at	5.91	3.23E-13
SLC38A2	220924_s_at	5.91	2.16E-26
HERPUD1	217168_s_at	5.90	1.45E-18
RABAC1	203136_at	5.90	2.93E-25
RHEB	213404_s_at	5.90	7.85E-14
FAM114A1	213455_at	5.90	2.07E-21
RPL7	212042_x_at	5.89	1.63E-16
RPLP1	200763_s_at	5.89	4.15E-20
C1orf43	223034_s_at	5.89	4.38E-24
KMT2E	223190_s_at	5.89	2.42E-14
LITAF	200704_at	5.89	7.82E-16
PDGFC	218718_at	5.88	1.85E-11
CDH11	207173_x_at	5.88	2.92E-09
HMGN4	209786_at	5.87	1.86E-10
DKK3	214247_s_at	5.87	1.07E-09
DUT	208956_x_at	5.87	1.56E-17
COL1A2	202403_s_at	5.86	1.51E-15
DYNLL1	200703_at	5.85	1.58E-25
IFITM1	201601_x_at	5.85	3.13E-21
RPL24	200013_at	5.85	8.74E-20
ILF3	211375_s_at	5.85	1.63E-22
TIMM23	225535_s_at	5.84	1.49E-18
HSPA4	208815_x_at	5.84	2.46E-23
HSD17B4	201413_at	5.84	6.24E-21
PABPC3	208113_x_at	5.83	8.53E-20
CBX1	201518_at	5.83	7.30E-20
DNAJC3	225284_at	5.82	6.51E-20
EIF3F	200023_s_at	5.82	7.60E-22
FNDC3B	218618_s_at	5.81	4.14E-17

C10orf99	224373_s_at	5.81	2.92E-15
PSMB7	200786_at	5.81	1.27E-24
ATP5B	201322_at	5.81	1.32E-26
FAM162A	223193_x_at	5.81	3.42E-21
ZFP36L2	201368_at	5.80	3.61E-14
DENR	231896_s_at	5.80	5.31E-24
BRI3	223376_s_at	5.80	2.06E-22
CNIH	201653_at	5.79	1.08E-09
PPA1	217848_s_at	5.79	1.72E-15
GJA1	201667_at	5.79	6.10E-11
EDEM3	223243_s_at	5.79	3.15E-16
C11orf58	201784_s_at	5.78	8.20E-20
MYADM	225673_at	5.78	1.69E-20
SGCE	204688_at	5.78	1.54E-15
PAFAH1B1	200816_s_at	5.78	1.08E-17
DCAF13	225676_s_at	5.78	1.55E-21
TOR1AIP1	212408_at	5.77	4.36E-18
MORF4L1	224561_s_at	5.77	4.00E-20
TMEM230	224584_at	5.77	1.47E-16
NDUFB2	218200_s_at	5.76	7.38E-17
TSPAN3	200972_at	5.76	8.42E-26
RHOBTB3	225202_at	5.75	4.73E-13
YME1L1	201351_s_at	5.75	2.11E-23
ODC1	200790_at	5.75	7.23E-23
IFI44	214453_s_at	5.75	2.21E-11
RAB7A	211961_s_at	5.74	2.22E-21
MRPS24	224948_at	5.74	8.65E-27
CSNK2B	201390_s_at	5.73	4.79E-23
ARID5B	212614_at	5.73	1.20E-20
CTR9	202060_at	5.73	1.62E-17
DAZAP2	200794_x_at	5.72	6.21E-22
RAB11A	200863_s_at	5.72	6.42E-22
ITGB1BP1	203336_s_at	5.71	1.86E-22
CLTC	200614_at	5.71	5.46E-19
TAPBP	208829_at	5.71	1.01E-18
PSMC6	201699_at	5.71	1.92E-13
SQSTM1	201471_s_at	5.71	3.48E-24
GARS	208693_s_at	5.71	5.14E-31
GGCT	215380_s_at	5.70	2.77E-18
GLB1	201576_s_at	5.70	1.58E-25
DPYSL2	200762_at	5.70	4.29E-16

EGLN1	223046_at	5.70	1.56E-17
WDR61	221532_s_at	5.70	9.05E-20
CUTA	221488_s_at	5.70	1.18E-21
COL6A1	213428_s_at	5.70	2.89E-18
PWP1	201606_s_at	5.69	8.56E-24
STAT3	208991_at	5.69	7.98E-20
HNRNPK	200097_s_at	5.69	1.25E-18
EAPP	202623_at	5.69	1.07E-19
KIF5B	201991_s_at	5.69	1.29E-15
GDI2	200009_at	5.69	8.49E-25
RCN2	201485_s_at	5.68	8.15E-24
SLC25A36	201917_s_at	5.67	4.87E-15
GNB4	225710_at	5.67	6.60E-10
RCN3	61734_at	5.67	5.67E-22
PSMA1	211746_x_at	5.66	7.55E-22
PRSS23	202458_at	5.65	8.65E-13
CAPZB	37012_at	5.65	1.08E-21
C1R	212067_s_at	5.64	4.44E-16
ERRFI1	224657_at	5.64	1.60E-11
CMPK1	217870_s_at	5.64	2.45E-16
QARS	217846_at	5.64	5.26E-22
MSN	200600_at	5.64	1.32E-26
S100A11	200660_at	5.62	7.96E-24
NDUFS5	201757_at	5.62	1.88E-26
FHL2	202949_s_at	5.62	2.41E-18
C16orf80	217957_at	5.62	2.66E-26
SFT2D1	225849_s_at	5.62	9.28E-16
SPCS2	201240_s_at	5.61	9.24E-14
TBL1XR1	222633_at	5.61	2.20E-20
FBL	211623_s_at	5.60	8.87E-19
GNG5	207157_s_at	5.59	4.84E-23
PNMA1	218224_at	5.59	5.31E-20
TM9SF2	201078_at	5.58	4.19E-23
RAB2A	208734_x_at	5.58	1.58E-22
NPEPPS	201454_s_at	5.58	1.04E-20
UBE2E1	212519_at	5.57	3.66E-16
ZFAND5	210275_s_at	5.57	2.15E-19
OST4	224637_at	5.57	3.86E-31
HNRNPA0	201054_at	5.57	2.45E-16
PRPF8	200000_s_at	5.56	2.34E-21
CREG1	201200_at	5.56	4.50E-15

CARKD	217940_s_at	5.56	1.12E-15
UBE2D3	200667_at	5.56	3.63E-14
BUB3	209974_s_at	5.56	6.42E-16
CDIPT	201253_s_at	5.55	4.35E-17
SLC38A1	224579_at	5.55	3.48E-17
LIPA	201847_at	5.54	3.38E-15
SSPN	226932_at	5.54	4.45E-14
REXO2	218194_at	5.54	1.78E-20
GPX4	201106_at	5.53	9.54E-22
HSPA1A	202581_at	5.53	1.44E-13
NNMT	202238_s_at	5.53	1.30E-11
RAD23B	201222_s_at	5.53	2.40E-33
NDUFA12	223244_s_at	5.53	5.91E-17
HARS	202042_at	5.52	1.76E-29
IGFBP2	202718_at	5.52	5.90E-17
VCAN	221731_x_at	5.51	4.29E-07
SKP1	200718_s_at	5.51	3.40E-15
HSPE1	205133_s_at	5.51	9.06E-23
TAF7	201023_at	5.51	5.26E-23
SUMF1	226850_at	5.49	1.48E-17
TMEM54	202090_s_at	5.48	9.25E-17
RPA1	201528_at	5.48	3.95E-17
PAM	212958_x_at	5.48	7.81E-15
ATP5G2	208764_s_at	5.48	2.41E-26
MAEA	207922_s_at	5.47	6.51E-21
TCEAL4	202371_at	5.47	8.64E-11
TARDBP	200020_at	5.47	5.47E-21
LOC100996253	200610_s_at	5.47	2.67E-25
RND3	212724_at	5.46	3.49E-24
RWDD1	219598_s_at	5.46	3.04E-18
AKAP2	202760_s_at	5.45	1.23E-16
TFRC	208691_at	5.45	2.74E-12
H1FX	204805_s_at	5.45	3.88E-19
PSMC5	209503_s_at	5.44	2.16E-26
PRDX1	208680_at	5.44	4.06E-26
TROVE2	210438_x_at	5.44	4.06E-25
TMBIM6	200804_at	5.43	2.00E-23
RBM39	207941_s_at	5.43	9.39E-16
C20orf24	223880_x_at	5.43	6.33E-23
ENSA	202596_at	5.43	6.17E-20
UBE2E3	210024_s_at	5.43	2.74E-23

UHRF2	225610_at	5.42	5.39E-19
DDX47	220890_s_at	5.42	3.17E-21
ARF1	200065_s_at	5.42	2.90E-28
HSPA9	200691_s_at	5.42	6.39E-25
PTP4A2	216988_s_at	5.42	2.27E-32
VBP1	201472_at	5.41	2.80E-22
CCNY	224651_at	5.41	3.88E-19
GOLGA5	218241_at	5.41	5.18E-22
MIR1292	200875_s_at	5.40	1.81E-19
GALNT2	217788_s_at	5.40	2.05E-22
DDAH1	209094_at	5.40	1.01E-20
ASH1L	222667_s_at	5.40	1.41E-16
CDC42BPA	214464_at	5.39	1.21E-13
TSPAN6	209108_at	5.39	5.63E-11
EMC2	203584_at	5.39	2.21E-19
NFU1	218946_at	5.38	5.84E-25
FAM101B	226905_at	5.38	4.01E-12
SEC61G	203484_at	5.38	2.12E-32
ATG3	221492_s_at	5.38	2.04E-19
CHMP3	222437_s_at	5.38	4.00E-25
C12orf23	224759_s_at	5.37	5.27E-14
PLOD2	202619_s_at	5.37	6.03E-23
TSPYL1	221493_at	5.36	2.02E-11
ATP1B3	208836_at	5.36	2.06E-16
LOC101060281	208091_s_at	5.36	1.38E-18
UQCRC2	212600_s_at	5.36	3.58E-19
YPEL5	217783_s_at	5.36	4.00E-17
CAPZA1	208374_s_at	5.36	1.56E-17
MGAT4B	224598_at	5.36	1.29E-14
VPS26A	201807_at	5.36	2.21E-12
TPM4	1567107_s_at	5.36	1.04E-12
CD2AP	203593_at	5.36	3.04E-17
NDUFB9	222992_s_at	5.36	9.23E-20
TEAD1	224955_at	5.35	1.84E-25
ASNSD1	217987_at	5.35	5.23E-19
MFSD1	218109_s_at	5.35	3.08E-15
UAP1	209340_at	5.34	3.27E-26
FXR1	201637_s_at	5.34	4.68E-25
SEC16A	215696_s_at	5.33	2.12E-20
ZNF330	209814_at	5.33	5.96E-15
PTTG1IP	200677_at	5.33	4.01E-17

PCNA	201202_at	5.33	9.77E-17
CBFB	202370_s_at	5.32	6.26E-17
GLG1	207966_s_at	5.32	1.19E-20
SARNP	224914_s_at	5.32	1.33E-26
RBM14-RBM4	200997_at	5.32	3.88E-22
FAM120A	200774_at	5.32	7.48E-19
AHCYL1	200850_s_at	5.32	1.34E-25
CDC5L	209056_s_at	5.31	2.02E-17
PRKAR1A	200605_s_at	5.31	1.10E-21
RAB1A	208724_s_at	5.30	2.49E-20
AZIN1	212461_at	5.30	9.25E-15
WDR1	200609_s_at	5.30	2.92E-21
VIMP	223209_s_at	5.30	6.31E-26
KPNA2	201088_at	5.29	4.26E-11
PRPF31	202408_s_at	5.29	5.03E-22
SNW1	201575_at	5.29	6.66E-20
BZW1	200777_s_at	5.28	2.39E-16
SRPRB	218140_x_at	5.28	2.13E-18
EMP1	201324_at	5.28	9.71E-11
SGCB	205120_s_at	5.27	4.60E-22
CXXC5	224516_s_at	5.27	1.31E-19
RPS24	200061_s_at	5.27	4.59E-21
SERP1	200971_s_at	5.27	7.93E-20
GHITM	209248_at	5.27	3.46E-18
NME1	201268_at	5.27	5.58E-21
NARS	200027_at	5.26	1.56E-14
SQLE	209218_at	5.26	3.05E-27
LRPPRC	211615_s_at	5.26	1.29E-18
SRRM2	208610_s_at	5.26	3.21E-10
MYLK	202555_s_at	5.25	4.95E-14
LBH	221011_s_at	5.25	6.90E-17
WDR45	209216_at	5.25	6.07E-24
TMEM200A	234994_at	5.25	6.39E-10
GOLGA7	217819_at	5.25	2.58E-19
FDPS	201275_at	5.24	4.92E-22
DDX3X	201210_at	5.24	3.74E-16
MRPL9	209609_s_at	5.24	2.44E-19
FGFR1OP2	233898_s_at	5.23	3.75E-13
NGFRAP1	217963_s_at	5.22	8.91E-15
MRFAP1L1	212199_at	5.22	9.86E-26
RBBP7	201092_at	5.22	2.41E-15

SRSF6	208804_s_at	5.22	8.72E-19
PPT1	200975_at	5.22	5.23E-14
CAPNS1	200001_at	5.22	7.55E-30
WBP5	217975_at	5.22	7.40E-12
EMC4	223043_at	5.22	4.41E-24
COX6C	201754_at	5.22	4.11E-20
ANKIB1	224687_at	5.22	2.56E-22
RPL36A	201406_at	5.22	1.15E-26
VDAC1	212038_s_at	5.22	1.11E-25
SEC61B	203133_at	5.21	1.92E-20
MCL1	200797_s_at	5.20	4.51E-17
PGAM1	200886_s_at	5.19	3.43E-19
TMED9	205812_s_at	5.19	6.27E-17
RPL36	219762_s_at	5.19	3.14E-22
TM2D2	224413_s_at	5.19	4.68E-22
PEBP1	205353_s_at	5.18	7.98E-29
ATP6AP2	201443_s_at	5.18	5.08E-12
IL13RA1	201887_at	5.17	5.02E-19
PSMA3	201532_at	5.17	8.29E-29
ACTN1	208637_x_at	5.17	9.89E-30
PSMG2	218467_at	5.17	7.05E-24
LOC100506710	225640_at	5.17	3.28E-18
C17orf49	224574_at	5.17	3.75E-24
ARL8B	217852_s_at	5.16	2.09E-15
EFEMP2	209356_x_at	5.15	6.56E-23
YWHAE	210996_s_at	5.15	1.61E-28
SDC2	212158_at	5.15	9.55E-15
SNHG16	224603_at	5.15	2.85E-25
ADI1	217761_at	5.15	1.87E-16
PAICS	201013_s_at	5.15	2.71E-18
STAG2	209022_at	5.14	5.00E-19
SNX3	210648_x_at	5.14	1.03E-16
LAMB2	216264_s_at	5.14	9.76E-21
NID2	204114_at	5.14	2.51E-08
TOMM5	225036_at	5.13	7.32E-12
FKBP11	219117_s_at	5.13	2.11E-09
BCAP31	200837_at	5.13	1.99E-24
TMEM50A	222401_s_at	5.13	1.15E-21
UXT	218495_at	5.13	3.34E-22
PLXNA1	221538_s_at	5.12	1.26E-16
NDUFV1	208714_at	5.12	1.02E-18

TMEM14A	218477_at	5.12	8.02E-14
PSMD4	210460_s_at	5.11	3.85E-24
MIR1304	222728_s_at	5.11	4.40E-15
EMILIN1	204163_at	5.11	3.74E-15
EIF5	208706_s_at	5.11	6.12E-19
FUNDC2	223042_s_at	5.11	1.88E-21
EIF3G	208887_at	5.11	4.12E-18
GPX3	201348_at	5.11	6.54E-08
MAP4	212566_at	5.10	7.39E-20
PSMB8	209040_s_at	5.10	1.36E-17
PSAP	200871_s_at	5.10	6.44E-19
NDUFS6	203606_at	5.10	3.74E-21
TUBA1A	209118_s_at	5.10	5.79E-15
G3BP1	201503_at	5.10	1.59E-21
EIF3B	203462_x_at	5.10	2.20E-25
PPP2R5C	201877_s_at	5.09	6.44E-17
STAT1	200887_s_at	5.09	1.15E-10
LMNA	203411_s_at	5.09	9.73E-35
NDUFB5	203621_at	5.09	1.20E-14
EBNA1BP2	201323_at	5.09	3.42E-20
HNRNPA3	211931_s_at	5.09	5.22E-16
ATP6V1G1	208737_at	5.09	4.92E-21
RBFOX2	212104_s_at	5.09	1.95E-18
BHLHE40	201170_s_at	5.08	4.72E-15
ARL6IP5	200760_s_at	5.08	2.49E-25
ERLIN1	202441_at	5.08	2.52E-23
TMEM59	200620_at	5.08	1.11E-23
PDHB	211023_at	5.08	3.95E-19
CDK2AP1	201938_at	5.08	2.15E-16
LAMP2	203042_at	5.08	5.71E-14
CCDC6	225010_at	5.08	4.52E-13
TMBIM4	223892_s_at	5.08	2.13E-21
ARCN1	201176_s_at	5.07	4.19E-21
KIAA1191	224502_s_at	5.07	4.43E-19
AIDA	226801_s_at	5.07	2.22E-19
SUCLG1	217874_at	5.07	2.65E-22
BTBD3	202946_s_at	5.07	6.88E-14
LAPTM4A	200673_at	5.07	4.15E-16
HMGN2	208668_x_at	5.07	2.57E-23
CEBPB	212501_at	5.07	2.20E-12
RPS18	201049_s_at	5.06	8.08E-20

CFDP1	203166_at	5.06	6.66E-22
METAP2	209861_s_at	5.05	4.03E-25
SLC44A1	224596_at	5.05	6.15E-10
STUB1	227625_s_at	5.05	7.95E-24
BECN1	208946_s_at	5.05	9.24E-18
LYPLA1	203007_x_at	5.05	6.91E-17
USP1	202413_s_at	5.05	5.19E-13
VPS51	217969_at	5.05	1.36E-17
TIMM17A	215171_s_at	5.05	1.71E-11
CCDC142	225523_at	5.05	1.68E-18
PKD2	203688_at	5.05	3.92E-21
METTL23	225808_at	5.05	5.70E-26
ARL3	202641_at	5.04	1.31E-19
SUB1	224587_at	5.04	1.78E-10
ARMCX3	217858_s_at	5.04	2.15E-19
MIR4784	213166_x_at	5.03	1.78E-17
CAMTA1	225693_s_at	5.03	4.46E-21
ISLR	207191_s_at	5.03	1.80E-12
RBM3	208319_s_at	5.02	1.53E-24
ANXA11	206200_s_at	5.02	1.25E-17
SNRPD3	202567_at	5.02	4.20E-19
SENP6	202318_s_at	5.01	5.20E-18
AHCY	200903_s_at	5.01	5.78E-24
POMP	217769_s_at	5.01	4.85E-27
PLK2	201939_at	5.01	1.08E-14
CCDC80	225242_s_at	5.01	7.62E-11
GPX8	227628_at	5.01	2.55E-18
MINOS1-NBL1	37005_at	5.00	1.81E-14

Downregulated genes (Fold change>5; Two-tailed Moderated *t*-test with Benjamini-Hochberg multiple testing adjusted P<0.05)

Gene symbol	Probe set ID	Fold change	P-value
ZNF548	1553718_at	-7.50	4.12E-20
TCTE3	1554400_at	-6.44	3.51E-25
LRRC25	1559502_s_at	-5.86	3.78E-20
ASB12	236033_at	-5.12	6.18E-18

P-values were calculated by Moderated *t*-tests with Benjamini-Hochberg multiple testing adjustment. All statistical tests were two-sided.

Supplementary Table 3. Differentially expressed genes in MSCs when compared with CAF-N

Upregulated genes (Fold change>5; Two-tailed Moderated *t*-test with Benjamini-Hochberg multiple testing adjusted P<0.05)

Gene symbol	Probe set ID	Fold change	P-value
EIF5A	201123_s_at	350.49	< 2.90E-44
PENK	213791_at	341.76	< 2.90E-44
TPM1	206116_s_at	327.92	7.74E-32
PFN1	200634_at	302.22	1.16E-40
SRGN	201858_s_at	243.16	3.50E-34
RHOA	1555814_a_at	236.03	< 2.90E-44
PTX3	206157_at	228.43	2.92E-37
PPAP2B	209355_s_at	212.07	1.21E-33
ENO1	217294_s_at	197.73	< 2.90E-44
ARPC2	208679_s_at	192.74	5.48E-26
OAZ1	215952_s_at	188.85	1.50E-25
TUBB3	213476_x_at	178.93	3.01E-39
ITGB1	1553678_a_at	177.31	1.70E-24
IGFBP3	212143_s_at	173.75	1.66E-39
CFL1	1555730_a_at	169.59	< 2.90E-44
HSPA8	210338_s_at	164.22	1.91E-28
TUBB	211714_x_at	160.33	2.27E-30
NQO1	210519_s_at	155.84	4.71E-40
LOX	204298_s_at	150.32	1.23E-26
COL6A2	209156_s_at	148.82	1.11E-22
YBX1	208627_s_at	147.10	3.65E-34
COTL1	224583_at	146.85	3.77E-37
TAGLN	1555724_s_at	145.55	1.01E-42
PLOD2	202619_s_at	144.42	3.36E-23
PTP4A2	216988_s_at	138.39	1.11E-33
CD59	200983_x_at	137.28	1.08E-35
YWHAB	217717_s_at	135.12	4.33E-36
ACTN1	208637_x_at	133.81	8.21E-31
DKK1	204602_at	131.48	< 2.90E-44
SH3BGRL3	221269_s_at	130.96	2.10E-39
CSDE1	219939_s_at	122.51	1.40E-37
PGK1	217356_s_at	118.89	1.63E-26
YWHAZ	200638_s_at	116.85	7.26E-27
CTSZ	210042_s_at	116.40	6.56E-34
LMNA	1554600_s_at	115.37	2.72E-43
VIM	201426_s_at	114.53	1.08E-24

CYR61	210764_s_at	110.03	1.71E-22
CORO1C	222409_at	109.64	4.87E-27
LIMA1	222457_s_at	109.58	4.09E-29
RPL18A	200869_at	108.07	1.99E-31
TIMP3	201149_s_at	107.11	1.26E-24
ATP5G3	207507_s_at	106.16	2.40E-34
FTH1	200748_s_at	105.44	2.38E-23
PPIB	200968_s_at	105.40	2.98E-26
SKP1	207974_s_at	104.29	8.31E-30
C1QBP	208910_s_at	102.99	3.51E-31
UCHL1	201387_s_at	100.94	9.19E-36
IGFBP4	201508_at	99.46	4.80E-35
HSPB1	201841_s_at	98.62	2.06E-24
UBE2S	202779_s_at	97.77	< 2.90E-44
ERGIC1	224576_at	96.62	9.86E-36
GNB2L1	200651_at	96.22	7.97E-23
FOXD1	206307_s_at	95.17	< 2.90E-44
KRTAP1-5	233533_at	94.58	< 2.90E-44
AXL	202686_s_at	94.02	8.25E-26
TXN	208864_s_at	93.69	2.43E-28
RNU86	211666_x_at	92.21	2.16E-21
RPS7	200082_s_at	91.88	8.51E-29
SEC61G	203484_at	90.39	8.97E-34
PSMD6	202753_at	90.03	5.97E-33
RAN	200750_s_at	89.07	9.93E-24
DDOST	208675_s_at	87.21	9.45E-32
NNMT	202238_s_at	85.50	1.30E-11
CAV1	203065_s_at	82.58	2.40E-29
RNASEK	224573_at	82.52	1.37E-27
PALLD	200906_s_at	82.47	1.42E-23
PSMA3	201532_at	82.15	9.08E-30
TMEM165	226825_s_at	81.94	2.90E-44
MRPS12	204331_s_at	81.38	2.90E-44
SUMO2	208739_x_at	80.97	1.81E-31
GAPDH	217398_x_at	80.78	1.68E-27
ALYREF	226319_s_at	79.77	5.70E-44
ID1	208937_s_at	78.67	7.11E-39
PSMB4	202243_s_at	78.34	1.41E-30
TRAM1	201399_s_at	77.51	1.88E-33
RAD23B	201222_s_at	76.20	6.11E-35
SELT	217811_at	74.77	< 2.90E-44

RPLP0	214167_s_at	74.52	2.37E-20
FRMD6	225464_at	74.24	1.53E-22
MARCKS	201670_s_at	73.47	3.73E-25
CTBP1	203392_s_at	73.32	3.65E-27
CALU	214845_s_at	73.13	< 2.90E-44
SELM	226051_at	72.81	5.20E-29
CLTA	204050_s_at	72.19	8.75E-29
OST4	224637_at	71.69	2.16E-32
SET	213047_x_at	71.66	6.68E-25
TMED2	204427_s_at	71.55	< 2.90E-44
ATP5H	210149_s_at	70.08	2.15E-39
HSP90B1	200598_s_at	69.17	1.03E-24
FTL	213187_x_at	67.95	7.83E-21
LGALS1	201105_at	67.65	3.65E-24
KDELR3	207265_s_at	67.28	1.09E-37
EMP3	203729_at	66.47	4.32E-34
PSMB3	201400_at	65.68	4.94E-31
TPM4	209344_at	65.67	6.43E-29
RER1	202296_s_at	65.49	5.26E-36
OSTC	223001_at	65.46	5.58E-22
POLR2L	211730_s_at	65.34	1.13E-35
GREM1	218468_s_at	65.14	6.23E-15
C12orf75	225105_at	65.01	3.72E-24
S100A6	217728_at	64.74	1.02E-29
EIF4A1	201530_x_at	64.58	8.00E-29
VDAC1	212038_s_at	64.17	3.22E-26
CNN3	201445_at	63.76	6.16E-22
SH3GLB1	209091_s_at	63.65	6.17E-25
PDIA6	216640_s_at	63.53	1.05E-24
CAPNS1	200001_at	62.86	5.20E-31
GARS	208693_s_at	62.83	3.14E-32
MEST	202016_at	62.51	3.29E-21
GLIPR1	226136_at	61.84	2.99E-31
GPI	208308_s_at	61.67	7.46E-29
NACA	208635_x_at	61.57	1.83E-20
TIMP1	201666_at	61.34	2.92E-19
ARF4	201096_s_at	61.25	2.33E-23
MGST1	231736_x_at	60.97	4.54E-41
ARMCX2	203404_at	60.90	5.67E-30
FUT5	225304_s_at	60.76	1.33E-29
B2M	216231_s_at	60.58	8.49E-21

LOXL2	202998_s_at	59.95	4.76E-23
GSPT1	201912_s_at	59.94	3.05E-32
SFT2D1	225850_at	59.39	6.19E-34
TPI1	213011_s_at	59.30	1.19E-28
P4HB	200656_s_at	59.10	3.43E-28
HSPD1	200806_s_at	58.96	1.41E-38
SERPINH1	207714_s_at	58.82	8.53E-26
HSP90AB1	214359_s_at	58.81	2.32E-26
POLR2E	213887_s_at	58.60	< 2.90E-44
ARF1	208750_s_at	58.25	5.31E-35
LOXL1	203570_at	58.25	8.72E-21
NDUFA13	220864_s_at	58.10	6.49E-31
CD47	211075_s_at	58.07	1.52E-21
PDIA3	208612_at	57.95	6.04E-27
CKAP4	200998_s_at	57.83	3.45E-26
RBMS1	209868_s_at	57.70	3.76E-39
TKT	208699_x_at	57.51	< 2.90E-44
GSTO1	1557915_s_at	57.30	2.27E-32
PLIN3	202122_s_at	57.20	8.84E-35
PSAP	200866_s_at	56.79	1.58E-28
ILF2	200052_s_at	56.73	1.18E-28
CALD1	201616_s_at	56.50	5.44E-26
AP2S1	208074_s_at	56.41	5.12E-29
EIF3C	210949_s_at	56.34	7.51E-25
RPL11	200010_at	56.15	2.67E-23
IGFBP6	203851_at	56.04	7.81E-29
CLPTM1L	223020_at	56.02	2.13E-24
SQLE	209218_at	56.01	4.86E-28
PRR16	220014_at	55.94	2.90E-44
NDUFB10	223112_s_at	55.75	2.23E-32
HSPA5	211936_at	55.48	7.86E-29
TSPO	202096_s_at	55.25	5.82E-32
MDH1	200978_at	55.23	1.65E-27
COPA	208684_at	55.20	1.60E-35
TUBA1C	211750_x_at	54.53	6.28E-28
GNAS	214548_x_at	54.52	4.54E-24
PDGFC	222719_s_at	54.32	5.70E-44
CD99	201028_s_at	54.22	2.09E-21
PSMB1	200876_s_at	53.88	2.11E-25
CFL2	224663_s_at	53.72	5.80E-28
PON2	210830_s_at	53.67	4.96E-32

PRMT1	206445_s_at	53.45	6.35E-36
RPL36A	201406_at	53.39	2.54E-27
THBS1	201109_s_at	53.23	1.86E-15
OLFML3	218162_at	53.14	1.35E-19
EIF2S2	208726_s_at	52.86	6.66E-26
PCBP2	204031_s_at	52.82	1.67E-27
YWHAH	201020_at	52.73	< 2.90E-44
C4orf3	224602_at	52.72	8.24E-29
SERPINE2	212190_at	52.65	9.03E-14
EIF5	208290_s_at	52.62	5.19E-32
RPN2	208689_s_at	52.61	3.68E-25
HAPLN1	230204_at	52.61	5.04E-28
APLP2	208703_s_at	52.44	4.16E-24
DENR	231896_s_at	52.43	2.48E-24
GLRX3	209080_x_at	52.21	9.20E-38
ENG	201809_s_at	52.13	2.08E-25
PTRF	208790_s_at	51.91	1.05E-31
HMOX1	203665_at	51.85	3.00E-36
SLC16A3	202856_s_at	51.82	1.73E-24
SLC38A2	220924_s_at	51.76	5.20E-27
SEC11A	216274_s_at	51.54	7.59E-29
CHIC2	219492_at	51.44	< 2.90E-44
DDR2	225442_at	51.14	1.41E-24
PABPC1	215157_x_at	51.07	2.12E-24
BNIP3L	221479_s_at	51.06	8.92E-29
TUSC3	213423_x_at	50.87	9.83E-35
SDF4	221972_s_at	50.86	1.42E-30
GRSF1	201520_s_at	50.70	7.22E-34
TUBB6	209191_at	50.65	2.16E-29
NPR3	219789_at	50.58	5.22E-25
TUBA1B	212639_x_at	50.46	3.42E-26
CTGF	209101_at	50.40	3.61E-16
ADD3	201752_s_at	49.39	1.68E-34
CNPY2	209796_s_at	49.11	5.45E-32
ENPP2	210839_s_at	48.82	3.42E-28
ITFG1	221449_s_at	48.81	2.77E-30
TNPO1	209226_s_at	48.73	4.19E-33
PFDN5	210908_s_at	48.59	1.91E-30
ROMO1	224972_at	48.58	7.35E-27
PSMD1	201198_s_at	48.55	4.02E-36
CALM1	200653_s_at	48.52	1.58E-26

CITED2	207980_s_at	48.15	2.58E-32
CTSB	227961_at	48.14	1.00E-23
RPS4Y1	201909_at	48.07	1.19E-30
TSPAN4	209264_s_at	47.83	< 2.90E-44
ACTR2	200728_at	46.50	3.95E-23
UAP1	209340_at	46.46	8.47E-27
DYNLRB1	217918_at	46.44	7.95E-40
LAMP1	201552_at	46.24	2.70E-18
MYL9	201058_s_at	45.88	3.13E-22
SERPINE1	202627_s_at	45.79	1.62E-20
SET///SETP4	215780_s_at	45.53	1.06E-25
SLC25A6	212085_at	45.51	2.49E-18
SCD	200832_s_at	45.40	3.77E-24
UBA1	200964_at	44.89	1.53E-25
RPS9	217747_s_at	44.82	1.22E-20
ANXA1	201012_at	44.64	1.21E-21
PEBP1	211941_s_at	44.56	1.71E-29
ATP5O	200818_at	44.30	4.73E-23
TTC3	208663_s_at	44.05	1.39E-20
TALDO1	201463_s_at	44.01	1.11E-25
RABAC1	203136_at	43.92	1.03E-25
GLRX	209276_s_at	43.73	< 2.90E-44
ALDOA	200966_x_at	43.70	3.21E-26
C17orf76-AS1	225065_x_at	43.53	1.24E-31
S100A11	200660_at	43.37	3.89E-24
TNFRSF11B	204933_s_at	43.30	2.90E-44
PTGR1	228824_s_at	43.27	< 2.90E-44
UGP2	205480_s_at	42.83	2.04E-21
SNX2	202113_s_at	42.79	1.80E-29
MMP2	201069_at	42.78	1.21E-19
YIPF5	221423_s_at	42.74	< 2.90E-44
DNAJC15	218435_at	42.58	3.83E-25
ESD	209009_at	42.55	1.77E-29
ECI2	218025_s_at	42.51	1.27E-29
NME1	201577_at	42.36	7.88E-26
UQCRFS1	208909_at	42.35	1.40E-27
ERGIC2	218135_at	41.55	2.91E-29
AP2M1	200613_at	41.37	9.82E-24
UFD1L	209103_s_at	41.36	5.81E-34
DSTN	201021_s_at	41.25	2.80E-22
WIPI1	203827_at	41.17	1.36E-28

VTI1B	209452_s_at	40.94	4.19E-31
COL1A1	202310_s_at	40.78	1.70E-17
CCNB1	214710_s_at	40.76	1.17E-23
CA12	204508_s_at	40.73	2.12E-36
ARL6IP5	200760_s_at	40.71	8.35E-26
CRTAP	1554464_a_at	40.57	1.48E-36
ASNS	205047_s_at	40.47	1.57E-24
SNORA29	208778_s_at	40.45	2.51E-27
C20orf24	224376_s_at	40.45	1.46E-31
RNH1	206050_s_at	40.30	1.08E-31
CCT2	201946_s_at	40.16	2.93E-40
PRKAR1A	200605_s_at	40.10	7.49E-22
APP	214953_s_at	39.92	5.78E-25
DAD1	200046_at	39.78	1.50E-23
ZFAS1	226835_s_at	39.75	3.51E-27
PKM	201251_at	39.68	7.68E-28
PRDX5	1560587_s_at	39.65	4.01E-22
ANXA7	209860_s_at	39.63	8.26E-26
ENAH	222433_at	39.49	1.49E-20
HDDC2	203259_s_at	39.47	2.75E-28
SYNC	221276_s_at	39.46	5.45E-25
SDC2	212154_at	39.31	1.13E-30
PSMD8	200820_at	39.22	9.92E-35
DBI	211070_x_at	39.20	6.83E-32
CHMP2A	202121_s_at	39.18	8.54E-31
EPDR1	223253_at	39.09	5.05E-25
FERMT2	209209_s_at	39.07	1.40E-43
PAPSS1	209043_at	39.05	3.84E-28
CST3	201360_at	39.01	8.66E-25
TMEM167A	226276_at	38.72	7.57E-19
LARP6	236565_s_at	38.70	6.13E-29
TM9SF2	201078_at	38.67	2.29E-23
AK1	202587_s_at	38.66	2.84E-32
PRDX3	201619_at	38.47	2.51E-27
GHITM	209249_s_at	38.26	4.43E-28
ATP6V1D	208899_x_at	38.24	4.96E-29
ACTG1	211995_x_at	38.18	6.47E-24
TRAM2	202369_s_at	38.05	3.96E-30
NARR	1555630_a_at	38.02	3.04E-29
UQCRC1	201903_at	37.85	1.38E-29
METAP2	209861_s_at	37.76	1.47E-25

PAWR	204004_at	37.53	1.88E-28
GABARAP	200645_at	37.38	1.28E-27
PPP1R3C	204284_at	37.30	5.33E-23
OCIAD1	223010_s_at	37.28	1.78E-38
RAB9A	221808_at	37.26	5.93E-32
FHL2	202949_s_at	37.19	2.16E-18
ARL1	201659_s_at	37.16	1.63E-26
LRRC59	222231_s_at	37.14	2.75E-25
TGFBI	201506_at	36.95	2.01E-18
SNRPD2	200826_at	36.90	5.03E-27
DHX15	201386_s_at	36.77	8.16E-25
RABEP1	225092_at	36.76	6.57E-26
PSMC3	201267_s_at	36.72	1.63E-30
SPCS2	201239_s_at	36.71	6.46E-23
RRAGA	201628_s_at	36.71	3.31E-33
PPP1R7	213465_s_at	36.69	5.73E-28
ATP5F1	211755_s_at	36.67	1.15E-21
CSTB	201201_at	36.67	1.02E-21
SLC25A3	200030_s_at	36.58	7.27E-26
GATC	201698_s_at	36.49	1.69E-22
CNOT7	218250_s_at	36.35	1.88E-32
MIR612	224566_at	36.35	3.68E-23
SULF1	212344_at	36.35	5.55E-18
CRIM1	202551_s_at	36.31	4.56E-30
TSPAN3	200973_s_at	36.30	5.80E-31
COX2	1553569_at	36.29	5.75E-18
CSNK2B	201390_s_at	36.29	2.62E-23
PPP2CA	208652_at	36.15	1.31E-29
TFPI2	209278_s_at	36.11	6.98E-18
RHOB	212099_at	35.90	1.09E-26
GANAB	211934_x_at	35.86	2.90E-44
TCEB2	200085_s_at	35.85	2.63E-25
CPNE3	202119_s_at	35.75	7.87E-25
YWHAQ	200693_at	35.64	9.35E-28
TMEM126B	221622_s_at	35.61	8.86E-30
PPP6C	206174_s_at	35.50	3.64E-41
EFEMP1	201842_s_at	35.49	2.36E-08
RPL29	200823_x_at	35.45	1.89E-20
HINT1	207721_x_at	35.44	6.76E-28
SLC25A46	212833_at	35.44	1.57E-27
COL5A2	221730_at	35.42	9.19E-12

IPO7	200993_at	35.39	4.53E-29
RHOC	200885_at	35.38	3.44E-30
ATP5G2	208764_s_at	35.37	5.89E-27
FIS1	218034_at	35.27	5.98E-28
EIF3M	202232_s_at	35.21	1.09E-24
CHP1	214665_s_at	35.18	3.87E-35
MSN	200600_at	35.14	3.01E-27
GALNT1	1568618_a_at	35.07	2.72E-17
LOC550643	225029_at	35.04	5.72E-38
CDH11	207172_s_at	34.90	1.41E-24
CCDC92	218175_at	34.85	1.11E-28
STC2	203438_at	34.76	3.76E-33
UCHL3	204616_at	34.76	1.04E-29
BTF3	208517_x_at	34.75	5.33E-23
CAPZB	201950_x_at	34.64	1.56E-32
ARPC3	208736_at	34.61	1.07E-25
ATP5B	201322_at	34.53	3.03E-27
VEGFC	209946_at	34.52	1.12E-23
RAB14	200927_s_at	34.48	2.59E-35
NRBF2	223650_s_at	34.37	6.55E-32
RCN3	61734_at	34.36	3.75E-22
TFDP1	212330_at	34.35	1.29E-31
SOD1	200642_at	34.34	5.55E-28
CAPRIN1	200723_s_at	34.25	9.09E-26
IGFBP2	202718_at	34.00	5.57E-17
PTGES3	200627_at	33.81	2.80E-24
SARS	200802_at	33.80	3.30E-33
REEP5	208872_s_at	33.68	3.55E-36
MRPL37	222993_at	33.68	5.90E-37
ERGIC3	216032_s_at	33.50	3.29E-25
S100A13	202598_at	33.47	3.72E-24
EIF1	212227_x_at	33.46	1.24E-25
POSTN	210809_s_at	33.46	2.44E-06
RAB22A	218360_at	33.42	9.69E-31
PXDN	212013_at	33.37	8.14E-23
EVA1A	227828_s_at	33.29	< 2.90E-44
MIR100HG	225381_at	33.28	1.86E-22
RRAS2	208456_s_at	33.23	< 2.90E-44
ANPEP	202888_s_at	33.14	8.21E-22
SRSF3	202899_s_at	33.13	3.75E-30
LDHA	200650_s_at	33.08	1.16E-21

ARPC1A	200950_at	32.96	3.83E-25
KDELR2	200700_s_at	32.95	1.55E-20
WDR26	218107_at	32.89	1.20E-28
FLNA	213746_s_at	32.81	3.40E-27
LSM7	204559_s_at	32.68	4.72E-27
VIMP	223209_s_at	32.68	1.73E-26
RANBP9	202583_s_at	32.64	< 2.90E-44
RGMB	226989_at	32.56	1.22E-29
GALNT10	212256_at	32.55	1.03E-20
PGD	201118_at	32.49	2.88E-41
PDCD6	203415_at	32.47	5.61E-29
PLP2	201136_at	32.45	1.50E-30
BNIP3	201848_s_at	32.39	6.39E-35
RPL28	200003_s_at	32.36	8.80E-18
CRNDE	238022_at	32.26	< 2.90E-44
SBDS	1554089_s_at	32.23	4.34E-30
FAM50A	203262_s_at	32.17	1.33E-31
CCDC80	225241_at	32.08	1.17E-15
PRDX4	201923_at	32.04	5.98E-18
SURF4	222978_at	32.03	6.36E-27
C14orf119	223060_at	31.96	8.20E-29
AMFR	202203_s_at	31.95	1.11E-42
ATP6AP2	201444_s_at	31.95	6.82E-39
BLOC1S6	222826_at	31.89	6.75E-22
HNRNPC	200751_s_at	31.87	2.00E-39
COX6A1	200925_at	31.86	3.36E-24
RHOBTB3	202975_s_at	31.83	4.88E-31
CLIC1	208659_at	31.81	3.26E-24
RCAN1	208370_s_at	31.80	3.13E-14
GAS6	202177_at	31.72	1.34E-20
IARS	204744_s_at	31.62	1.09E-28
KDELR1	200922_at	31.61	< 2.90E-44
PSMB7	200786_at	31.59	5.16E-25
SYNJ2	212828_at	31.49	2.90E-28
SPCS1	217927_at	31.37	6.73E-23
TUBB4B	208977_x_at	31.31	4.71E-27
FST	204948_s_at	31.28	7.20E-24
AKAP2	202759_s_at	31.22	1.17E-33
JAK1	201648_at	31.13	2.20E-21
HNRNPDL	209067_s_at	31.12	7.54E-24
ANXA6	200982_s_at	31.11	2.29E-30

HDGFRP3	216693_x_at	30.98	2.44E-35
ANXA2	210427_x_at	30.98	1.53E-20
NDUFV2	202941_at	30.85	1.20E-37
ETFA	201931_at	30.76	1.15E-20
FKBP7	224002_s_at	30.76	7.34E-26
TXNRD1	201266_at	30.75	5.55E-26
STT3A	202223_at	30.74	1.73E-31
PRMT2	228725_x_at	30.65	3.18E-35
SLIRP	221434_s_at	30.52	4.41E-23
RBM3	208319_s_at	30.47	6.40E-25
AKR1B1	201272_at	30.47	8.85E-35
DAB2	201279_s_at	30.44	5.49E-34
ZC3H15	201593_s_at	30.41	6.81E-28
PRDX1	208680_at	30.40	1.05E-26
EMC7	217898_at	30.40	3.51E-28
NT5DC2	218051_s_at	30.39	5.40E-33
FBN1	202765_s_at	30.36	3.14E-30
BAX	211833_s_at	30.35	< 2.90E-44
SRM	201516_at	30.33	5.63E-34
CDK4	202246_s_at	30.31	5.92E-27
KIAA0368	212428_at	30.26	8.24E-30
ANXA5	200782_at	30.20	1.68E-21
KLC1	212878_s_at	30.16	5.11E-35
RPL4	211710_x_at	30.14	3.87E-21
SRI	208921_s_at	30.11	2.81E-22
MSRB2	218773_s_at	30.11	1.28E-25
MORF4L1	221381_s_at	30.00	3.97E-24
NDUFS8	203190_at	29.98	7.28E-22
PDLIM4	211564_s_at	29.97	8.89E-29
RRM2	209773_s_at	29.97	1.02E-15
SCP2	201339_s_at	29.94	8.97E-24
PFKP	201037_at	29.84	2.98E-28
COPE	201264_at	29.84	5.44E-28
SAR1A	201543_s_at	29.83	2.87E-32
HEBP2	203430_at	29.81	7.47E-25
DYNLL1	200703_at	29.78	5.00E-26
ATP5C1	205711_x_at	29.76	1.91E-22
GUK1	200075_s_at	29.76	1.09E-27
BUB3	201457_x_at	29.73	8.57E-26
VAMP7	202829_s_at	29.71	2.21E-18
APEX1	210027_s_at	29.67	1.30E-23

GLB1	201576_s_at	29.65	4.99E-26
TNC	201645_at	29.57	8.91E-13
SSB	201138_s_at	29.53	6.11E-41
HAT1	203138_at	29.51	6.97E-25
ESYT2	224699_s_at	29.46	6.96E-30
EMC4	223043_at	29.45	2.03E-24
DDAH1	209094_at	29.45	7.61E-21
DPYSL3	201430_s_at	29.44	8.45E-26
TBCB	216194_s_at	29.44	4.17E-26
HAS2	230372_at	29.41	1.17E-15
LOC101060363	212661_x_at	29.40	2.05E-24
PTBP1	216306_x_at	29.37	7.66E-35
TOMM5	228053_s_at	29.37	1.47E-30
TMEM126A	223334_at	29.31	1.67E-22
HSPA9	200691_s_at	29.28	2.47E-25
EEF2	204102_s_at	29.26	5.48E-21
YIF1B	226437_at	29.23	3.54E-41
PFN2	204992_s_at	29.20	3.08E-24
DEGS1	207431_s_at	29.13	2.16E-28
PTPLAD1	222404_x_at	29.10	6.42E-21
COMT	208817_at	29.06	3.13E-32
RBBP4	210371_s_at	29.03	3.51E-28
TUBB2A	204141_at	29.01	4.76E-14
CCNDBP1	223084_s_at	28.95	2.22E-27
PRELID1	223032_x_at	28.91	1.20E-31
HOXA10	214651_s_at	28.86	1.27E-24
UQCRC2	200883_at	28.84	6.29E-23
ALPK2	228367_at	28.82	5.35E-15
PPP1R18	224927_at	28.82	3.24E-31
CHI3L1	209395_at	28.76	5.67E-11
GNB1	200745_s_at	28.74	1.23E-21
COPS2	202467_s_at	28.72	1.57E-24
FDFT1	210950_s_at	28.68	6.66E-34
CDC37	209953_s_at	28.67	4.42E-39
PPIA	211765_x_at	28.66	2.49E-25
CRYAB	209283_at	28.65	1.94E-40
PTPLA	219654_at	28.65	2.43E-27
PRC1	218009_s_at	28.63	4.25E-22
YAP1	224895_at	28.60	9.75E-30
MTDH	212251_at	28.53	2.34E-25
AKIRIN2	223145_s_at	28.48	3.55E-33

ADAMTS1	222162_s_at	28.42	8.89E-16
LAMTOR5	202300_at	28.41	1.56E-27
RPLP2	200909_s_at	28.38	1.84E-21
ADK	204119_s_at	28.35	2.57E-37
CRK	202224_at	28.33	2.81E-33
ATP2A2	209186_at	28.29	1.98E-31
EXT1	201995_at	28.28	5.60E-24
VKORC1	217949_s_at	28.27	1.41E-24
CAP1	200625_s_at	28.27	2.72E-27
CNBP	206158_s_at	28.26	6.49E-22
GNA11	204248_at	28.24	2.90E-44
ADIRF	203571_s_at	28.23	5.36E-29
ATP6V0B	200078_s_at	28.21	1.22E-35
BAG2	209406_at	28.18	1.81E-28
RBPJ	207785_s_at	28.17	1.79E-34
TMEM189	201002_s_at	28.16	6.87E-35
DARS	201623_s_at	28.13	3.24E-29
MAP4K4	206571_s_at	28.11	1.54E-23
GADD45GIP1	212891_s_at	27.96	2.38E-39
TMCO3	226050_at	27.76	2.35E-21
RPL14	200074_s_at	27.75	3.73E-22
LAMC1	200770_s_at	27.74	5.31E-34
RCN2	201485_s_at	27.65	4.00E-24
MICAL2	212472_at	27.62	1.77E-19
DNAJB11	223054_at	27.61	1.77E-26
C19orf70	225823_at	27.61	5.82E-33
MRPL17	222216_s_at	27.60	2.19E-28
LSM4	202736_s_at	27.50	< 2.90E-44
CYP1B1	202436_s_at	27.47	3.90E-08
PTGES	210367_s_at	27.46	5.02E-36
FKBP10	219249_s_at	27.44	< 2.90E-44
SGCB	205120_s_at	27.43	2.97E-22
KPNA2	211762_s_at	27.40	3.50E-21
PARVA	222454_s_at	27.38	3.30E-33
WDR1	200611_s_at	27.36	4.62E-23
PGLS	218388_at	27.34	5.60E-25
BCL2L2	201544_x_at	27.33	4.13E-22
AKR7A2	202139_at	27.26	3.32E-26
ACAA2	202003_s_at	27.23	2.61E-27
PDIA5	203857_s_at	27.20	4.59E-24
ACLY	210337_s_at	27.18	< 2.90E-44

BTG1	200920_s_at	27.16	6.05E-23
NEDD8	201840_at	27.16	9.06E-36
ITGAE	205055_at	27.16	1.88E-26
LINC00152	225799_at	27.16	5.89E-17
FLII	222065_s_at	27.15	3.09E-31
HYPK	224625_x_at	27.12	2.61E-24
CCND1	208711_s_at	27.05	3.01E-20
NUPR1	209230_s_at	27.05	6.13E-37
ZNF207	200828_s_at	27.04	3.50E-32
PTP4A1	200730_s_at	27.01	< 2.90E-44
TPT1	216520_s_at	26.95	3.20E-18
TCEA1	216241_s_at	26.95	2.75E-25
MALSU1	226386_at	26.93	1.35E-29
TM9SF3	222399_s_at	26.92	5.98E-21
RRAGC	222514_at	26.85	1.59E-30
DESI2	212371_at	26.83	1.69E-27
LEPR	211354_s_at	26.82	< 2.90E-44
ORMDL2	218556_at	26.82	1.19E-26
TTC37	203048_s_at	26.82	4.67E-36
SDHB	202675_at	26.82	6.10E-33
PCOLCE	202465_at	26.81	2.16E-23
SAE1	217946_s_at	26.81	2.22E-35
COPG1	217749_at	26.76	6.11E-38
H2AFZ	200853_at	26.72	4.08E-21
TP53I3	210609_s_at	26.72	2.81E-28
DLD	209095_at	26.67	1.64E-21
TGOLN2	212040_at	26.67	2.61E-26
ACTR3	200996_at	26.64	6.72E-19
TFRC	207332_s_at	26.56	5.66E-18
SUB1	214512_s_at	26.54	3.90E-32
MAPK1	212271_at	26.44	3.37E-33
DDX1	201241_at	26.38	2.17E-25
ATP6V0E1	200096_s_at	26.38	5.41E-29
RPL10A	200036_s_at	26.34	5.65E-20
DPH3	225200_at	26.29	6.66E-23
PSMA1	210759_s_at	26.26	2.45E-25
ELOVL1	218028_at	26.25	< 2.90E-44
RANBP1	202483_s_at	26.15	2.42E-28
RRAS	212647_at	26.10	9.17E-29
MYOF	211864_s_at	26.04	1.96E-23
MIR3656	217959_s_at	26.03	5.73E-25

COPZ2	219561_at	26.01	7.16E-21
CCDC53	218628_at	26.00	1.55E-37
PABPC4	201064_s_at	25.97	1.35E-27
NT5E	203939_at	25.95	3.93E-18
UBE2M	203109_at	25.92	2.02E-37
MTX2	203517_at	25.89	1.05E-29
TGFB1	203085_s_at	25.87	< 2.90E-44
CD44	212063_at	25.87	6.36E-16
SLC25A1	210010_s_at	25.84	8.70E-44
EXT2	202012_s_at	25.80	7.40E-34
XRCC5	208643_s_at	25.78	1.49E-23
CHMP3	222437_s_at	25.78	1.45E-25
FXYD5	218084_x_at	25.76	1.29E-28
NRG1	206343_s_at	25.75	< 2.90E-44
SESTD1	226763_at	25.72	1.73E-32
SUMO1	208761_s_at	25.59	5.83E-22
GDI2	200008_s_at	25.59	2.90E-44
FGF7	205782_at	25.57	5.81E-40
ZNF281	218401_s_at	25.55	3.53E-30
PHB2	201600_at	25.54	2.27E-23
YME1L1	201351_s_at	25.53	1.09E-23
RAB1A	207791_s_at	25.50	5.96E-22
RPL36	219762_s_at	25.47	1.99E-22
SNX9	223028_s_at	25.45	2.47E-31
TIMM23	218119_at	25.43	< 2.90E-44
PCBP1	208620_at	25.39	6.35E-25
TOMM20	212773_s_at	25.37	1.49E-24
NDUFB4	218226_s_at	25.34	4.79E-30
SRSF1	208863_s_at	25.33	5.57E-29
DLC1	224822_at	25.31	2.89E-25
TPM2	204083_s_at	25.31	4.09E-18
TAGLN2	210978_s_at	25.28	< 2.90E-44
POLR2K	202635_s_at	25.27	3.77E-23
SEC63	201914_s_at	25.21	1.78E-25
SNX3	208781_x_at	25.19	8.22E-27
PCYOX1	203803_at	25.18	8.08E-28
SIX1	228347_at	25.17	1.89E-41
EIF3D	200005_at	25.16	1.19E-22
FOXC1	1553613_s_at	25.16	2.18E-19
SSH1	221752_at	25.10	1.28E-27
TPD52L2	201379_s_at	25.09	1.13E-32

PSMB6	208827_at	25.05	1.01E-27
COPS7A	209029_at	25.04	3.97E-35
PSMD12	202352_s_at	25.01	1.46E-29
APMAP	206656_s_at	24.99	6.15E-25
VBP1	201472_at	24.96	1.75E-22
C7orf73	224752_at	24.95	5.57E-29
UBE2L3	200682_s_at	24.94	8.77E-27
PDIA4	211048_s_at	24.93	6.89E-25
CXCL12	209687_at	24.90	9.90E-10
NQO2	203814_s_at	24.90	1.25E-35
ATIC	208758_at	24.89	5.56E-30
INSIG1	201627_s_at	24.89	< 2.90E-44
TRMT112	217774_s_at	24.89	4.09E-26
ENDOD1	212573_at	24.87	8.01E-23
TMBIM6	200803_s_at	24.86	1.92E-27
RTCA	203594_at	24.85	1.11E-25
VCAN	211571_s_at	24.79	3.12E-23
RND3	212724_at	24.73	1.55E-24
MCTS1	218163_at	24.69	5.92E-19
SHMT2	214437_s_at	24.65	2.04E-31
H3F3A	209069_s_at	24.65	3.91E-26
GALNT2	217788_s_at	24.65	1.24E-22
KRTAP1-1	220976_s_at	24.61	< 2.90E-44
FTSJ1	205324_s_at	24.57	1.92E-37
CSE1L	201112_s_at	24.50	6.11E-21
GNAI3	201180_s_at	24.42	1.77E-21
CDK7	211297_s_at	24.39	1.17E-23
SYNCRIP	217832_at	24.39	4.45E-27
TEAD1	224955_at	24.35	5.94E-26
ACOT13	204565_at	24.35	< 2.90E-44
MIR21	224917_at	24.31	4.62E-18
TRIM16	204341_at	24.27	2.68E-39
MTCH2	217772_s_at	24.26	2.26E-27
GYG1	201554_x_at	24.24	6.67E-27
MED21	209362_at	24.24	4.83E-21
INO80C	229582_at	24.20	3.63E-32
POLR1D	218258_at	24.19	1.80E-25
FIBP	202041_s_at	24.18	1.69E-32
ZNHIT3	212544_at	24.18	2.47E-27
RPL18	200022_at	24.15	2.06E-20
LOC101060541	222443_s_at	24.12	1.77E-30

SSBP1	202591_s_at	24.11	1.55E-23
USP14	201671_x_at	24.08	1.17E-35
TPM3	222976_s_at	24.06	1.66E-24
CRIP1	205081_at	23.96	2.18E-15
KRT7	209016_s_at	23.95	6.59E-13
COL12A1	231879_at	23.94	1.35E-38
BDNF	206382_s_at	23.88	1.49E-34
PAPPA	224942_at	23.88	< 2.90E-44
GPX8	227628_at	23.87	2.29E-18
COPS8	202143_s_at	23.78	8.04E-41
TGFBR2	208944_at	23.78	1.29E-16
ITGBL1	1557080_s_at	23.78	2.62E-09
PSMD11	208777_s_at	23.77	2.83E-34
PITRM1	205273_s_at	23.77	4.28E-29
ZYX	200808_s_at	23.75	2.58E-27
EIF3F	200023_s_at	23.75	5.09E-22
C1orf43	223034_s_at	23.71	2.01E-24
CDC42EP3	209286_at	23.67	2.33E-29
H2AFX	205436_s_at	23.61	1.49E-22
PSMB2	200039_s_at	23.59	1.88E-25
MAP1B	226084_at	23.58	3.89E-18
ATP6V1G2	200041_s_at	23.57	4.12E-20
ZDHHC4	220261_s_at	23.54	2.04E-35
CXXC5	224516_s_at	23.47	1.12E-19
HN1	217755_at	23.46	7.64E-31
TMEM59	200620_at	23.46	5.47E-24
MYL6B	204173_at	23.45	4.01E-31
LAPTM4B	1554679_a_at	23.44	< 2.90E-44
RBX1	218117_at	23.42	2.47E-32
ALKBH7	223318_s_at	23.38	1.53E-28
ADAMTS2	226311_at	23.37	8.15E-13
GTF2H5	213357_at	23.33	2.58E-28
RASA1	210621_s_at	23.32	5.33E-27
VDAC3	208846_s_at	23.30	4.83E-25
METTL2A	225253_s_at	23.30	1.46E-31
HSPA4	211015_s_at	23.30	1.22E-37
H2AFV	202487_s_at	23.27	5.09E-26
LEPROT	202377_at	23.25	4.05E-20
TMEM70	219449_s_at	23.22	1.42E-23
SPOP	204640_s_at	23.16	1.13E-32
ATP6V1B2	201089_at	23.15	1.12E-30

MRPS24	224948_at	23.12	1.89E-27
SMAD7	204790_at	23.12	2.28E-26
TMEM14B	221452_s_at	23.12	3.05E-22
ATP5L	210453_x_at	23.11	2.72E-24
MRPL15	218027_at	23.11	7.10E-23
TMEM230	220477_s_at	23.11	3.56E-38
RTFDC1	234926_s_at	23.08	2.30E-29
RNPEP	208270_s_at	23.07	4.21E-28
VTA1	223021_x_at	23.05	< 2.90E-44
AHRR	229354_at	23.00	3.08E-28
FBXO7	1554423_a_at	22.94	1.30E-34
TUFM	201113_at	22.89	5.98E-30
VCL	200931_s_at	22.85	2.03E-24
YWHAE	210996_s_at	22.83	1.82E-29
HARS	202042_at	22.81	1.66E-30
WNT5A	205990_s_at	22.76	3.09E-12
PHPT1	223207_x_at	22.76	3.32E-26
ACAT1	205412_at	22.75	1.45E-25
COX16	223191_at	22.75	3.70E-31
VAMP3	201336_at	22.67	7.12E-27
HSP90AA1	211968_s_at	22.63	9.55E-22
CCT5	208696_at	22.60	1.54E-30
SHC1	214853_s_at	22.60	2.36E-26
SNX7	205573_s_at	22.50	1.24E-15
PSMD10	219485_s_at	22.48	3.80E-19
PSMB5	208799_at	22.47	5.23E-29
DCTN6	203261_at	22.46	1.44E-27
MRPS10	224247_s_at	22.41	1.14E-43
CCT3	200910_at	22.41	1.75E-22
HNRNPM	200072_s_at	22.41	2.55E-24
CD63	200663_at	22.40	1.47E-25
PHLDA1	217996_at	22.36	8.71E-17
MRPL13	218049_s_at	22.29	8.53E-23
PPP1R14B	212680_x_at	22.29	1.55E-28
ERH	200043_at	22.24	6.37E-31
EDF1	209059_s_at	22.24	9.52E-23
SERINC3	211769_x_at	22.23	7.95E-28
KPNA3	221503_s_at	22.23	1.47E-39
GORASP2	207812_s_at	22.19	3.45E-24
GPC4	204983_s_at	22.14	7.11E-39
LOC100996724	214130_s_at	22.13	< 2.90E-44

RPL13A	200716_x_at	22.13	1.86E-20
PBK	219148_at	22.13	1.03E-24
LAMB1	211651_s_at	22.08	7.10E-19
CTSD	200766_at	22.04	1.40E-24
SPOCK1	202363_at	22.03	7.33E-13
NELFCD	220607_x_at	22.02	1.38E-30
LSS	202245_at	22.01	1.39E-29
ID2	201565_s_at	22.01	2.63E-21
RPS6KA2	212912_at	22.00	3.10E-33
VPS35	222387_s_at	21.98	< 2.90E-44
GINM1	225576_at	21.97	6.20E-32
FZD2	210220_at	21.97	5.37E-26
HIST2H2AA3	214290_s_at	21.96	6.32E-23
ALCAM	201951_at	21.94	1.22E-25
CEBPG	204203_at	21.93	5.97E-28
SLC39A7	202667_s_at	21.89	6.05E-32
PAIP2	222983_s_at	21.85	1.02E-25
SDAD1	228408_s_at	21.84	4.92E-33
OTUB1	201245_s_at	21.83	2.16E-35
SNRPB	208821_at	21.81	1.11E-23
RNF181	223064_at	21.81	2.55E-36
SUPT4H1	201483_s_at	21.77	4.81E-34
PSMD14	212296_at	21.74	4.28E-23
KHDRBS1	201488_x_at	21.71	3.92E-31
SEC13	207707_s_at	21.71	1.30E-28
SLC7A5	201195_s_at	21.70	2.08E-35
CANX	208852_s_at	21.68	7.08E-22
PPP3R1	204506_at	21.65	2.90E-44
PRICKLE4	223516_s_at	21.62	4.30E-21
FKBP14	219390_at	21.61	1.82E-18
KIAA1199	212942_s_at	21.59	7.31E-09
TMED3	208837_at	21.58	6.26E-26
RCHY1	212749_s_at	21.53	3.32E-22
NEGR1	243357_at	21.53	1.50E-34
SNHG16	224603_at	21.52	1.00E-25
LSM3	202209_at	21.51	2.37E-31
JKAMP	223215_s_at	21.45	9.48E-25
RAB18	224787_s_at	21.44	2.06E-23
LDLR	202068_s_at	21.44	1.64E-20
POMP	217769_s_at	21.44	8.49E-28
PSMD4	210460_s_at	21.44	1.75E-24

CCT6A	201327_s_at	21.43	6.76E-26
DPY30	224129_s_at	21.39	1.75E-23
CAMK2D	224994_at	21.36	3.94E-41
SCFD1	215548_s_at	21.31	2.47E-30
KCNK2	210261_at	21.30	< 2.90E-44
ATP5A1	213738_s_at	21.27	7.68E-21
SH3BP4	222258_s_at	21.26	1.20E-23
ARPC4	211672_s_at	21.25	< 2.90E-44
ETF1	201574_at	21.25	1.25E-29
SLC1A1	213664_at	21.21	4.14E-21
UBE2G2	209042_s_at	21.20	4.43E-27
KARS	200079_s_at	21.17	5.54E-25
CIB1	201953_at	21.16	2.80E-27
RRM1	201477_s_at	21.15	9.47E-26
FAM96B	218074_at	21.14	5.81E-29
TRIOBP	210276_s_at	21.09	6.08E-28
C12orf57	224719_s_at	21.07	2.16E-21
SF3B5	221263_s_at	21.06	8.07E-26
ATOX1	203454_s_at	21.04	7.49E-33
ATP1A1	220948_s_at	20.99	7.07E-26
ODC1	200790_at	20.96	4.17E-23
ARPC1B	201954_at	20.94	2.25E-23
NUCB2	203675_at	20.93	6.93E-23
GLUD1	200946_x_at	20.91	3.03E-30
BASP1	202391_at	20.90	2.80E-21
SSR3	222412_s_at	20.89	4.83E-26
SMAD2	203076_s_at	20.87	1.51E-25
CTSA	200661_at	20.86	2.59E-27
DCN	211896_s_at	20.86	1.90E-17
COPB1	201359_at	20.83	1.22E-23
RTN3	219549_s_at	20.82	3.22E-31
RPS16	201258_at	20.82	4.51E-19
PGRMC1	201120_s_at	20.82	1.46E-40
UBE2R2	223014_at	20.81	6.24E-28
RAB2A	208734_x_at	20.81	9.31E-23
MRPL40	203152_at	20.81	1.02E-31
SLC39A6	202089_s_at	20.80	1.89E-28
COL3A1	201852_x_at	20.78	1.82E-13
ENO2	201313_at	20.75	8.86E-22
ADH5	208848_at	20.75	7.09E-17
TMSB4X	216438_s_at	20.73	7.64E-21

AMZ2	218167_at	20.73	9.62E-22
YTHDF2	222430_s_at	20.70	2.13E-23
GDE1	202593_s_at	20.69	< 2.90E-44
P4HA1	207543_s_at	20.68	5.56E-17
AP2B1	200615_s_at	20.67	9.97E-29
IMPDH2	201892_s_at	20.64	1.99E-18
NPEPPS	201455_s_at	20.64	1.69E-29
MAP1LC3B	208786_s_at	20.64	4.31E-23
EMC1	212396_s_at	20.63	4.76E-38
SLC20A1	201920_at	20.60	3.13E-19
TARS	201263_at	20.57	3.32E-27
DCBLD2	224911_s_at	20.52	2.33E-16
COPS5	201652_at	20.50	3.80E-23
UBE2E3	210024_s_at	20.48	1.45E-23
TIMM17A	201821_s_at	20.47	2.50E-31
COPZ1	222386_s_at	20.46	9.27E-25
HNRNPL	202072_at	20.45	< 2.90E-44
RAB27B	228708_at	20.44	9.87E-17
CUL3	201371_s_at	20.43	3.27E-23
SATB2	213435_at	20.42	2.52E-40
PRPS1	208447_s_at	20.42	< 2.90E-44
HRAS	212983_at	20.40	6.90E-30
PPIC	204518_s_at	20.37	4.18E-20
NPC2	200701_at	20.35	1.44E-22
MLF2	200948_at	20.33	5.50E-28
COPB2	201098_at	20.33	2.81E-23
MFAP5	209758_s_at	20.30	5.14E-07
MGAT4B	220189_s_at	20.30	6.60E-41
WDR61	221532_s_at	20.29	7.58E-20
SNF8	218391_at	20.27	6.27E-29
NDUFS1	203039_s_at	20.25	3.35E-34
BUD31	205690_s_at	20.25	1.55E-24
EXTL2	209537_at	20.23	2.32E-30
LDHB	213564_x_at	20.23	8.80E-20
RIT1	209882_at	20.14	9.15E-34
MPRIP	214771_x_at	20.14	3.41E-28
PSMC5	209503_s_at	20.12	5.26E-27
ZSWIM7	229119_s_at	20.12	1.49E-27
RPS6	200081_s_at	20.11	6.46E-22
ACOT9	221641_s_at	20.10	1.68E-29
RPL19	200029_at	20.10	4.75E-22

LOC100288911	236656_s_at	20.08	6.02E-26
EIF6	210213_s_at	20.07	5.77E-28
IRX3	229638_at	20.06	1.08E-11
ZNF423	214761_at	20.06	6.91E-20
MRPS23	223156_at	20.06	1.43E-23
CSRP1	200621_at	20.05	1.45E-21
FOSL2	218880_at	20.02	1.75E-19
MRPL18	217907_at	20.00	4.87E-29
TRAPPC2L	218354_at	19.99	1.96E-39
COPS6	201405_s_at	19.98	6.01E-25
HIRA	217427_s_at	19.95	2.06E-31
GNG5	207157_s_at	19.91	2.66E-23
PBDC1	223294_at	19.90	1.92E-25
WAC	217742_s_at	19.90	5.81E-24
YY1	201901_s_at	19.88	1.75E-29
AHCYL1	200850_s_at	19.88	4.22E-26
XRCC6	200792_at	19.88	1.41E-26
P2RX5	215464_s_at	19.82	4.43E-29
ARID4B	212591_at	19.81	1.01E-23
LTBP3	219922_s_at	19.80	3.54E-19
TAF10	200055_at	19.80	3.47E-28
PPP1CA	200846_s_at	19.80	3.58E-31
EIF4G1	208625_s_at	19.78	2.93E-29
GPX4	201106_at	19.78	6.45E-22
RNF130	217865_at	19.76	1.02E-25
VPS29	223026_s_at	19.72	1.92E-27
ATP5J2	202961_s_at	19.69	4.15E-24
PWP1	201606_s_at	19.68	4.20E-24
MMADHC	217883_at	19.67	1.00E-18
RPA1	201529_s_at	19.66	1.89E-24
ACOT7	208002_s_at	19.64	1.54E-33
NSF	202395_at	19.63	9.64E-29
HMGCR	202539_s_at	19.61	4.22E-21
FAM127A	201828_x_at	19.61	5.45E-26
SYPL1	201259_s_at	19.60	8.11E-43
TRIP12	201546_at	19.60	2.59E-26
MAP7D1	217943_s_at	19.59	4.67E-31
MYL12A	201318_s_at	19.59	2.57E-20
LAMP2	203041_s_at	19.58	2.99E-21
RPL36AL	207585_s_at	19.53	2.78E-20
SLBP	206052_s_at	19.53	2.16E-22

EMC3	217882_at	19.51	2.77E-29
SAMM50	201569_s_at	19.50	6.29E-24
STUB1	233049_x_at	19.50	7.54E-28
PCMT1	210156_s_at	19.49	5.74E-31
SRSF7	214141_x_at	19.48	1.84E-23
FAM98A	212333_at	19.47	2.95E-21
RARS	201330_at	19.46	6.78E-25
MAP1A	203151_at	19.43	5.38E-37
MRPL47	223480_s_at	19.41	9.94E-22
RPL8	200936_at	19.40	1.63E-21
MAGED1	209014_at	19.38	1.85E-25
RTN4	210968_s_at	19.36	9.09E-21
YBX3	201161_s_at	19.35	1.05E-26
LOC100505828	201403_s_at	19.34	7.76E-31
TSR1	218156_s_at	19.33	< 2.90E-44
DHCR24	200862_at	19.33	2.87E-15
ATP6V0D1	212041_at	19.30	3.85E-27
VPS28	218679_s_at	19.30	1.01E-21
AKR1C1	204151_x_at	19.26	1.58E-21
DDX3X	212515_s_at	19.26	1.39E-24
AHCY	200903_s_at	19.26	2.72E-24
TUBG1	201714_at	19.24	2.57E-28
EBPL	223306_at	19.22	4.54E-21
NDUFS5	201757_at	19.19	4.41E-27
CD9	201005_at	19.15	2.56E-14
BAG6	213318_s_at	19.13	2.76E-28
FBLN1	202995_s_at	19.12	1.42E-14
FKBP1A	200709_at	19.08	3.35E-23
TOP2A	201291_s_at	19.08	9.45E-15
PSENEN	218302_at	19.07	4.02E-30
LRRFIP1	201862_s_at	19.06	8.81E-19
RNASE4	205158_at	19.04	3.28E-35
EMP1	201325_s_at	19.02	7.12E-21
POLE4	225844_at	19.01	1.96E-30
DDAH2	215537_x_at	18.99	7.08E-29
PRPF40A	213729_at	18.96	1.66E-27
LMO4	209205_s_at	18.95	5.17E-39
FSCN1	201564_s_at	18.95	8.54E-31
ORAI2	217529_at	18.94	6.74E-35
CHCHD2	217720_at	18.94	2.21E-25
RBPMS	209488_s_at	18.93	6.20E-23

CDC26	225422_at	18.93	1.96E-29
YIF1A	202418_at	18.91	4.83E-26
UBE2I	213535_s_at	18.91	1.42E-30
IRX5	210239_at	18.90	< 2.90E-44
KLF6	208961_s_at	18.90	3.38E-20
UBE2K	202347_s_at	18.89	3.13E-24
HSBP1	200942_s_at	18.88	8.77E-32
EIF4E2	209393_s_at	18.88	6.75E-21
SF3B14	223416_at	18.88	4.99E-25
WARS	200628_s_at	18.84	4.65E-37
EIF5B	201027_s_at	18.82	6.66E-32
ACTN4	200601_at	18.81	2.00E-26
PLRG1	225194_at	18.80	1.19E-28
UBC	211296_x_at	18.80	1.96E-23
ZNF706	218059_at	18.79	1.47E-27
MRFAP1L1	212199_at	18.76	2.80E-26
C11orf58	201784_s_at	18.76	6.85E-20
IFITM2	201315_x_at	18.74	6.07E-23
GNG12	212294_at	18.73	4.10E-22
DDT	202929_s_at	18.72	7.74E-30
ADAM12	213790_at	18.71	2.33E-10
TMED10	200929_at	18.70	5.90E-27
TAF7	201023_at	18.69	2.93E-23
FAP	209955_s_at	18.69	8.80E-11
SARNP	224914_s_at	18.68	3.08E-27
SSR4	201004_at	18.65	1.53E-19
C17orf49	224574_at	18.63	1.70E-24
YKT6	217785_s_at	18.62	< 2.90E-44
IPO5	211954_s_at	18.62	6.10E-34
NUS1	225070_at	18.60	2.49E-41
SDC4	202071_at	18.58	2.33E-20
SMIM19	225534_at	18.55	9.10E-19
KIAA1279	212453_at	18.55	3.04E-34
GPX1	200736_s_at	18.53	1.32E-20
NACC2	212993_at	18.53	1.78E-22
DPAGT1	209509_s_at	18.52	4.41E-39
MRPS2	218001_at	18.52	1.72E-29
UQCRH	202233_s_at	18.50	5.50E-22
COL4A1	211981_at	18.48	1.47E-16
LOC100653217	227566_at	18.42	9.70E-07
TYMS	1554696_s_at	18.41	< 2.90E-44

MYADM	225673_at	18.41	1.31E-20
TRAPPC5	225870_s_at	18.40	2.89E-31
NUP37	218622_at	18.37	6.79E-24
KIAA0391	208805_at	18.37	1.81E-23
NRP1	212298_at	18.36	1.15E-17
CTNNA1	210844_x_at	18.36	4.07E-26
VMA21	225556_at	18.35	6.84E-30
DCTN1	201082_s_at	18.31	2.16E-41
GABARAPL2	209046_s_at	18.31	2.07E-20
TXNDC17	224511_s_at	18.28	3.52E-28
CMC2	218447_at	18.26	6.08E-26
PPA2	1556285_s_at	18.26	7.60E-31
CLU	208791_at	18.24	3.14E-13
CNOT8	202164_s_at	18.23	2.00E-36
AP1S1	205195_at	18.23	< 2.90E-44
PTPRK	203038_at	18.22	2.05E-18
ME1	204059_s_at	18.19	2.90E-20
COA3	218026_at	18.18	9.15E-29
NAP1L1	208752_x_at	18.18	1.36E-22
PPID	204186_s_at	18.17	3.72E-29
CCZ1	208310_s_at	18.16	9.26E-32
COMMD1	226024_at	18.14	1.20E-31
DCTD	210137_s_at	18.11	5.53E-23
FADS3	216080_s_at	18.09	1.49E-42
SQSTM1	201471_s_at	18.08	1.53E-24
G6PD	202275_at	18.07	5.69E-41
TIMM50	224913_s_at	18.05	1.14E-32
IARS2	217900_at	18.05	4.60E-22
HRSP12	203790_s_at	18.05	3.85E-27
ZMAT3	228315_at	18.05	2.04E-18
MBNL1	201152_s_at	18.03	3.29E-26
EPS8	202609_at	17.99	4.42E-13
TRIP6	209129_at	17.98	4.49E-22
PFDN2	218336_at	17.96	3.55E-29
DNAJA1	200881_s_at	17.96	6.29E-24
TMEM50A	217766_s_at	17.96	6.39E-29
MIF	217871_s_at	17.93	1.52E-18
SNW1	215424_s_at	17.92	1.44E-40
GSE1	212057_at	17.92	2.60E-41
FSTL1	208782_at	17.92	2.80E-23
NPC1	202679_at	17.91	1.22E-37

WSB2	201760_s_at	17.89	7.62E-18
AP2A2	212159_x_at	17.88	9.45E-30
NDUFA1	202298_at	17.86	2.03E-30
CMTM6	223047_at	17.83	1.30E-17
POLR2C	208996_s_at	17.83	2.47E-31
MLLT11	211071_s_at	17.82	2.52E-19
CDC37L1	219343_at	17.80	8.65E-33
FN1	214702_at	17.79	1.06E-19
SCCPDH	201825_s_at	17.78	2.58E-32
DDIT4	202887_s_at	17.78	3.27E-14
PDZD11	223037_at	17.77	2.86E-33
CCNI	208656_s_at	17.76	2.28E-23
TIMP2	224560_at	17.75	3.45E-18
IGF2R	201393_s_at	17.74	7.18E-29
GRPEL1	212432_at	17.74	2.11E-30
CYB5R1	202263_at	17.73	2.86E-37
CCDC85B	204610_s_at	17.73	7.70E-24
SLC30A5	232432_s_at	17.69	8.36E-23
PUM1	201164_s_at	17.64	1.03E-29
NAA35	220925_at	17.64	7.55E-28
LOC100996657	210178_x_at	17.64	3.70E-37
DAP	201095_at	17.63	5.38E-27
SSR2	200652_at	17.63	1.72E-28
MRPL16	217980_s_at	17.61	8.65E-30
IFITM10	227863_at	17.60	4.08E-38
ELAVL1	201726_at	17.60	1.05E-26
RAPH1	225189_s_at	17.60	1.75E-19
SERINC1	208671_at	17.59	3.87E-20
HNRNPAB	201277_s_at	17.58	2.36E-23
ANKMY2	212798_s_at	17.58	4.65E-21
EIF3I	208756_at	17.58	1.69E-25
TROVE2	210438_x_at	17.57	1.49E-25
PSMA2	201317_s_at	17.57	2.22E-19
UBE2G1	209142_s_at	17.55	3.90E-25
SPG21	217827_s_at	17.53	4.16E-29
GLS	203159_at	17.52	3.44E-21
RNF141	219104_at	17.51	9.78E-42
BAMBI	203304_at	17.51	2.60E-13
LYRM4	218561_s_at	17.50	2.94E-27
RPS27L	218007_s_at	17.49	7.82E-20
UTP3	209486_at	17.49	1.70E-27

SLC14A1	229151_at	17.47	0
SNAPC1	205443_at	17.47	4.50E-24
ATP6AP1	207809_s_at	17.46	1.41E-27
KIAA0100	201729_s_at	17.45	1.14E-32
TBC1D19	220260_at	17.43	1.17E-30
RHOQ	212117_at	17.42	1.80E-24
ARPC5	211963_s_at	17.38	1.03E-19
RPL35	200002_at	17.38	4.25E-19
TECR	208336_s_at	17.38	9.22E-26
PPP2R3C	218852_at	17.37	1.90E-26
NTMT1	223369_at	17.36	3.94E-39
GOLGA5	218241_at	17.34	3.41E-22
AKR1C2	211653_x_at	17.33	3.04E-34
PIEZO1	202771_at	17.33	6.19E-23
EIF4G3	201935_s_at	17.30	1.42E-25
NAGK	218231_at	17.30	1.33E-22
CLCN3	201735_s_at	17.27	4.19E-28
CLTB	206284_x_at	17.26	2.80E-28
CAPN2	208683_at	17.23	1.58E-20
RPL15	221476_s_at	17.20	3.24E-20
LMBRD1	218191_s_at	17.19	4.02E-22
SLC35B1	202433_at	17.18	2.67E-28
RPS6KC1	218909_at	17.16	5.51E-30
EPRS	200842_s_at	17.15	3.46E-26
SLC16A1	202236_s_at	17.15	3.01E-38
MRPL27	224330_s_at	17.13	4.45E-34
NAA15	222837_s_at	17.13	< 2.90E-44
CLTC	200614_at	17.12	4.85E-19
ITGA5	201389_at	17.10	1.04E-21
B4GALT1	201883_s_at	17.07	1.72E-28
RPS5	200024_at	17.06	2.11E-18
EFEMP2	209356_x_at	17.06	3.71E-23
COX7B	202110_at	17.05	1.38E-25
PRPF4	209162_s_at	17.05	< 2.90E-44
ZBTB1	213376_at	17.00	2.86E-23
NDUFS4	209303_at	17.00	8.62E-30
POLE3	208828_at	16.99	3.60E-27
PSMA7	216088_s_at	16.98	7.12E-23
RAF1	201244_s_at	16.97	4.10E-29
MAP2K2	202424_at	16.94	1.38E-27
ACSL3	201662_s_at	16.94	1.35E-21

NFU1	218946_at	16.94	2.24E-25
SLC25A11	207088_s_at	16.92	5.84E-36
TRAPPC1	225294_s_at	16.91	6.00E-32
SLC25A5	200657_at	16.91	4.55E-23
DNAJC7	202416_at	16.91	1.05E-32
EXOC5	225084_at	16.90	1.08E-28
VARS	201797_s_at	16.89	9.54E-31
XPNPEP1	208453_s_at	16.88	< 2.90E-44
RPS2	212433_x_at	16.88	1.14E-22
RPF1	218462_at	16.87	8.06E-22
RPL23	200888_s_at	16.87	1.03E-14
DHRS7	210788_s_at	16.86	6.12E-33
COL6A1	212091_s_at	16.85	1.42E-26
AP3D1	208710_s_at	16.83	1.07E-13
ARID5B	212614_at	16.82	9.17E-21
FAM114A1	213455_at	16.80	1.44E-21
EBF3	227242_s_at	16.77	< 2.90E-44
ADAM9	1555326_a_at	16.77	< 2.90E-44
ACP1	201629_s_at	16.77	7.06E-25
COX6B1	201441_at	16.75	8.78E-23
TRA2B	200892_s_at	16.75	2.88E-26
HSPE1	205133_s_at	16.75	5.30E-23
MRPS28	219819_s_at	16.74	1.30E-29
ANKH	223092_at	16.74	9.69E-15
SLC4A4	203908_at	16.71	1.67E-16
MT1X	208581_x_at	16.71	1.09E-15
GAP43	204471_at	16.69	3.31E-28
CDC20	202870_s_at	16.66	1.44E-18
PPP2R5E	229322_at	16.66	4.29E-23
SMDT1	225795_at	16.64	4.82E-19
TES	202719_s_at	16.63	1.09E-21
PDCD6IP	217746_s_at	16.63	8.37E-25
CALCOCO2	210817_s_at	16.58	2.88E-30
BOK	223349_s_at	16.58	4.22E-28
MATR3	200626_s_at	16.58	1.06E-19
CHMP4B	225498_at	16.56	1.10E-24
SSR1	201894_s_at	16.56	3.20E-18
PCDHGA1	211066_x_at	16.54	4.39E-30
RBFOX2	213901_x_at	16.53	4.34E-37
PSPH	205048_s_at	16.52	1.83E-16
DKC1	201478_s_at	16.50	5.25E-29

UBXN4	212007_at	16.50	2.20E-19
ASPH	210896_s_at	16.50	1.20E-24
GYS1	201673_s_at	16.49	6.58E-37
CORO1B	64486_at	16.48	2.34E-31
CDC16	202717_s_at	16.46	3.66E-26
P4HA2	202733_at	16.44	1.53E-14
TBPL1	208398_s_at	16.44	2.56E-27
SPG7	202104_s_at	16.43	2.17E-26
LURAP1L	227443_at	16.41	1.50E-29
RHEB	1555780_a_at	16.40	5.40E-30
ATG5	202511_s_at	16.40	6.64E-31
AK4	204348_s_at	16.37	3.72E-21
RPL35A	213687_s_at	16.37	4.64E-20
UFC1	217797_at	16.37	1.48E-22
GSTP1	200824_at	16.36	8.94E-25
ARF5	201526_at	16.36	2.73E-42
RAP2C	218669_at	16.33	5.22E-21
QDPR	209123_at	16.33	3.50E-31
MT1F	217165_x_at	16.32	1.65E-16
TUG1	212725_s_at	16.31	6.08E-20
UBE2D3	200669_s_at	16.31	5.43E-34
EIF3B	211501_s_at	16.30	2.58E-27
FHL1	210299_s_at	16.30	1.20E-32
ATP6V1H	221504_s_at	16.30	9.76E-28
GNB2	200852_x_at	16.29	1.50E-25
RPN1	201011_at	16.29	1.82E-25
PDLIM2	219165_at	16.28	2.96E-22
TMEM47	209656_s_at	16.26	2.94E-12
NOP10	217962_at	16.26	4.30E-26
FADS1	208962_s_at	16.24	1.61E-25
H2AFY	214500_at	16.24	3.86E-38
PPP2R2A	202313_at	16.20	2.21E-32
COL4A2	211966_at	16.18	2.42E-16
PCDH18	225975_at	16.18	2.94E-13
ANKRD1	206029_at	16.17	< 2.90E-44
DDA1	218260_at	16.15	< 2.90E-44
DACT1	219179_at	16.14	3.02E-15
ILF3	208931_s_at	16.14	< 2.90E-44
THYN1	218491_s_at	16.13	1.57E-21
ZKSCAN1	1557953_at	16.12	1.20E-21
EIF3K	212716_s_at	16.12	2.55E-21

SCARB2	224983_at	16.12	1.39E-24
SERPINB6	211474_s_at	16.11	5.43E-25
BANF1	210125_s_at	16.10	1.01E-24
ALKBH5	1553101_a_at	16.10	< 2.90E-44
HADHA	208631_s_at	16.09	2.26E-25
FEZ1	203562_at	16.09	1.60E-26
IDH3A	202069_s_at	16.09	1.25E-25
ASNA1	202024_at	16.06	2.89E-24
LTBP2	223690_at	16.06	1.33E-16
MFGE8	210605_s_at	16.06	9.34E-40
ERP29	201216_at	16.04	3.14E-24
SRSF2	200754_x_at	16.03	3.54E-27
MTFR1	203207_s_at	16.03	1.09E-36
SEC31A	210616_s_at	16.02	1.31E-22
COX6C	201754_at	16.02	3.32E-20
CNIH4	223993_s_at	16.01	3.32E-20
RAD1	204460_s_at	16.01	2.56E-42
ARMC10	223328_at	16.01	5.82E-27
C5orf51	226159_at	15.99	1.16E-21
MRPL42	217919_s_at	15.98	3.40E-28
M6PR	200900_s_at	15.96	2.25E-25
CDKN3	1555758_a_at	15.96	< 2.90E-44
LRRC42	215084_s_at	15.94	1.57E-38
PHB	200658_s_at	15.93	1.75E-22
MCM7	210983_s_at	15.93	1.15E-28
VCP	208649_s_at	15.91	3.92E-29
MPV17	203466_at	15.89	5.39E-26
HNRNPD	209330_s_at	15.88	3.22E-19
TM9SF1	209150_s_at	15.88	5.83E-23
POLR2I	212955_s_at	15.88	1.86E-24
RABGAP1	213313_at	15.88	3.18E-24
IL13RA1	210904_s_at	15.87	< 2.90E-44
TMEM43	217795_s_at	15.83	2.23E-26
MINOS1	224867_at	15.83	2.52E-22
CERS2	222212_s_at	15.82	6.23E-30
LRP10	201412_at	15.82	9.31E-25
UXT	218495_at	15.81	2.13E-22
RNF14	201823_s_at	15.81	8.24E-37
SEPW1	201194_at	15.81	8.26E-28
HNRNPA2B1	205292_s_at	15.80	3.89E-19
EID1	208669_s_at	15.77	4.05E-17

FUCA2	223120_at	15.76	2.21E-31
BRD4	202102_s_at	15.74	2.64E-19
MFF	223354_x_at	15.74	3.84E-35
SCRG1	205475_at	15.72	1.44E-33
NEMF	1557950_at	15.71	< 2.90E-44
ATXN10	208833_s_at	15.71	4.27E-24
HOXC10	218959_at	15.66	5.70E-44
MAGOH	210092_at	15.66	3.23E-30
TMEM30A	232591_s_at	15.66	1.51E-35
CD81	200675_at	15.64	2.30E-22
EZR	217234_s_at	15.62	2.52E-27
DUT	209932_s_at	15.61	1.25E-21
PLEKHO1	218223_s_at	15.60	2.81E-26
TAF9	202168_at	15.60	4.87E-28
CCNA2	203418_at	15.60	< 2.90E-44
MAPRE1	200713_s_at	15.57	9.68E-25
NGRN	224281_s_at	15.57	2.66E-38
ARL2BP	202092_s_at	15.56	4.82E-31
GNPNAT1	225853_at	15.55	9.98E-30
EEF1A1	204892_x_at	15.54	1.05E-20
SS18	202817_s_at	15.53	< 2.90E-44
TGM2	201042_at	15.52	4.63E-21
SLC35B4	225881_at	15.51	1.67E-28
PIGY	224660_at	15.48	6.35E-20
NDUFA4	217773_s_at	15.48	1.65E-17
RNF7	218286_s_at	15.48	8.26E-24
APCDD1L	235548_at	15.46	5.78E-42
HNRNPK	200097_s_at	15.46	1.11E-18
ATP5J	202325_s_at	15.45	4.74E-23
PPP4C	208932_at	15.44	5.66E-26
EIF3A	200596_s_at	15.43	8.30E-20
ANXA4	201301_s_at	15.41	5.68E-20
PDLIM5	216804_s_at	15.41	3.31E-18
RBM39	208720_s_at	15.40	3.79E-26
MRPS33	218654_s_at	15.40	9.12E-26
SNHG8	225220_at	15.39	3.19E-17
GRHPR	201347_x_at	15.39	7.91E-24
LAMTOR3	217971_at	15.38	1.87E-23
POLR2J	212782_x_at	15.38	1.11E-26
PPAP2A	209147_s_at	15.38	8.66E-28
NHP2	209104_s_at	15.38	5.93E-23

SYT11	209198_s_at	15.38	4.21E-28
AREL1	202128_at	15.37	4.14E-38
MANBAL	224689_at	15.37	6.74E-24
MRPS18B	208907_s_at	15.36	4.76E-40
HNRNPU	200594_x_at	15.35	1.48E-25
PAFAH1B1	200815_s_at	15.35	1.89E-29
PSMD3	201388_at	15.34	7.41E-39
HSPA1A	202581_at	15.34	1.43E-13
GTPBP4	218238_at	15.34	8.70E-26
C6orf120	221786_at	15.34	8.61E-17
DCUN1D5	223151_at	15.33	1.26E-19
C1orf85	1558693_s_at	15.33	1.17E-27
USP16	218386_x_at	15.32	5.78E-24
INHBA	210511_s_at	15.32	4.93E-06
STAU1	208948_s_at	15.32	1.62E-23
SCUBE3	228407_at	15.32	8.23E-35
C12orf5	219099_at	15.31	1.05E-24
TBL1XR1	221428_s_at	15.31	8.40E-42
KCTD15	222668_at	15.28	6.39E-19
GRAMD3	218706_s_at	15.25	7.31E-25
SH3PXD2B	231823_s_at	15.25	1.19E-23
HMGB1	200679_x_at	15.22	1.78E-19
ID3	207826_s_at	15.22	3.96E-19
DRAP1	203258_at	15.21	4.82E-35
TADA3	215273_s_at	15.21	5.93E-27
GOLGA7	1554167_a_at	15.21	3.36E-40
BLOC1S5	221253_s_at	15.19	4.97E-20
PDLIM7	214121_x_at	15.18	1.02E-36
MBD4	209580_s_at	15.18	6.24E-24
PSMC2	201068_s_at	15.18	1.59E-24
EIF4H	206621_s_at	15.16	9.11E-22
ANAPC13	209001_s_at	15.16	1.65E-21
RARS2	232902_s_at	15.16	2.13E-23
PSMG2	218467_at	15.15	3.41E-24
SEC23B	201583_s_at	15.15	4.43E-30
BRI3	223376_s_at	15.14	1.25E-22
ZFYVE21	219929_s_at	15.14	< 2.90E-44
RAB11A	200863_s_at	15.13	4.25E-22
THUMPD3	225730_s_at	15.13	1.26E-35
FAM115A	212979_s_at	15.12	5.09E-24
PAPOLA	222035_s_at	15.12	5.19E-21

PRMT5	217786_at	15.11	2.18E-25
MPC2	202427_s_at	15.09	2.54E-29
RAB8A	208819_at	15.09	4.46E-22
GLIPR2	225604_s_at	15.08	5.30E-26
AP1M1	223024_at	15.07	8.51E-25
QSOX1	201482_at	15.06	9.21E-27
OAZ2	201364_s_at	15.05	6.37E-33
PRUNE2	212805_at	15.03	1.93E-19
TOMM22	222474_s_at	15.03	< 2.90E-44
H2AFJ	225245_x_at	15.02	8.76E-23
ZFP91	224636_at	15.02	1.45E-22
SPRED2	212458_at	14.99	4.46E-27
ABL1	202123_s_at	14.99	2.01E-26
PDXK	202671_s_at	14.99	6.02E-22
LOC128322	202397_at	14.98	3.60E-31
GPNMB	201141_at	14.97	4.14E-09
SMAGP	209679_s_at	14.96	2.84E-39
TSG101	201758_at	14.96	4.83E-26
TOR1AIP1	212408_at	14.95	3.96E-18
MT2A	212185_x_at	14.94	6.08E-16
SPPL2A	226353_at	14.92	9.91E-22
DNAJB6	209015_s_at	14.90	6.42E-27
RPL7A	224930_x_at	14.90	8.79E-23
SNRPD1	202690_s_at	14.90	6.05E-25
ERLIN2	221542_s_at	14.90	< 2.90E-44
UBE2A	201898_s_at	14.88	1.18E-33
PTPN11	209896_s_at	14.87	5.75E-28
PPP1R12A	201602_s_at	14.86	5.91E-33
PXK	1552275_s_at	14.85	< 2.90E-44
ATP2B1	209281_s_at	14.85	4.34E-26
LYRM2	221311_x_at	14.85	< 2.90E-44
MDH2	209036_s_at	14.85	1.48E-24
MAP3K13	226556_at	14.84	5.80E-23
VASN	225867_at	14.84	1.84E-28
SERPINF1	202283_at	14.83	5.06E-14
PGM3	210041_s_at	14.83	8.80E-21
GTF2A2	202678_at	14.82	6.20E-34
RAC1	208641_s_at	14.81	2.57E-26
PLAC9	227419_x_at	14.81	1.67E-43
TPGS2	213617_s_at	14.78	4.79E-34
AMOTL2	203002_at	14.78	8.08E-23

PSAT1	223062_s_at	14.77	1.30E-11
MARS	201475_x_at	14.76	5.35E-31
RDX	212397_at	14.75	1.77E-17
SPTLC2	216202_s_at	14.75	1.14E-43
BRD2	208686_s_at	14.74	< 2.90E-44
MAD1L1	204857_at	14.74	7.71E-39
BBX	226331_at	14.73	1.32E-24
ADI1	222400_s_at	14.73	1.27E-29
IKBIP	227295_at	14.72	4.24E-14
RPL13	212191_x_at	14.72	5.53E-18
EIF4EBP1	221539_at	14.71	1.27E-29
WDR45	209216_at	14.68	2.89E-24
SLC1A4	209610_s_at	14.68	1.47E-27
C11orf73	219979_s_at	14.66	2.04E-29
APOA1BP	225427_s_at	14.65	2.93E-26
TMEM248	218008_at	14.65	7.42E-23
PAICS	201013_s_at	14.64	2.44E-18
RAB10	222981_s_at	14.64	6.36E-17
DPCD	1553976_a_at	14.62	1.88E-20
ANLN	222608_s_at	14.61	1.07E-15
UQCRB	209066_x_at	14.60	3.12E-24
GLRX2	219933_at	14.59	3.54E-32
SRPX	204955_at	14.59	2.71E-15
LIPA	201847_at	14.59	3.31E-15
LAMTOR2	218291_at	14.58	3.34E-35
GFPT1	202721_s_at	14.58	2.19E-31
STAT3	208991_at	14.57	6.64E-20
CHPT1	221675_s_at	14.53	1.36E-21
TMEM41B	212623_at	14.52	3.17E-23
TIMMDC1	223004_s_at	14.52	1.22E-21
CDC42BPB	217849_s_at	14.52	< 2.90E-44
PCNA	201202_at	14.49	9.29E-17
MRPS36	224302_s_at	14.49	3.66E-31
ESYT1	208858_s_at	14.49	5.38E-32
COL8A1	214587_at	14.48	4.45E-30
TMEM9B	222507_s_at	14.48	< 2.90E-44
SRP14	200007_at	14.47	7.37E-26
SCOC	223341_s_at	14.46	< 2.90E-44
LRRC41	1555831_s_at	14.44	2.26E-42
GNAI2	201040_at	14.43	3.40E-23
EHD2	45297_at	14.43	1.05E-28

GLUD2	215794_x_at	14.42	2.47E-39
AKIRIN1	222458_s_at	14.42	< 2.90E-44
MFAP2	203417_at	14.42	1.37E-14
ERLEC1	224630_at	14.42	7.42E-23
TMX1	208097_s_at	14.41	5.70E-44
TERF2IP	201174_s_at	14.38	1.84E-24
TMEM87A	212202_s_at	14.37	2.11E-25
FAM162A	223193_x_at	14.36	2.49E-21
MXRA7	212509_s_at	14.35	7.63E-21
DYNLT1	201999_s_at	14.35	3.84E-21
ARL8B	222442_s_at	14.34	9.10E-26
MMGT1	225125_at	14.33	6.76E-21
CCT8	200873_s_at	14.32	8.27E-24
NAA20	223040_at	14.32	4.53E-23
IGFBP7	201162_at	14.31	6.00E-22
UPF3A	206958_s_at	14.31	9.18E-19
PEF1	217923_at	14.29	2.48E-31
ARL4C	202206_at	14.27	1.12E-18
HSD17B12	217869_at	14.27	8.22E-26
AP3M1	222516_at	14.26	8.76E-17
ANKIB1	224687_at	14.25	1.58E-22
MRPL36	224331_s_at	14.24	1.04E-23
SMIM15	224740_at	14.24	9.47E-16
SETD5	221806_s_at	14.23	2.50E-25
IPO9	217885_at	14.23	8.74E-30
USMG5	225413_at	14.23	9.41E-22
GPS1	217782_s_at	14.23	3.58E-39
WASF2	224563_at	14.22	1.14E-43
KPNA6	212103_at	14.22	2.60E-31
GALNT5	236129_at	14.22	3.75E-17
IDH3G	202471_s_at	14.19	3.83E-25
CHCHD5	223479_s_at	14.18	3.17E-36
TMEM181	225127_at	14.17	5.87E-20
SRP54	203605_at	14.17	9.20E-23
DNAJC21	238337_s_at	14.17	1.62E-35
RNF139	209510_at	14.13	1.12E-22
OXSR1	202696_at	14.12	6.77E-21
FAM21C	211068_x_at	14.11	1.56E-28
FAM171A1	212771_at	14.09	1.56E-24
NDUFS3	201740_at	14.08	7.29E-26
PPP2CB	201375_s_at	14.08	8.20E-17

NDUFA10	217860_at	14.06	9.85E-22
WNT5B	221029_s_at	14.06	1.60E-28
C14orf166	217768_at	14.06	1.07E-20
ITGB1BP1	203336_s_at	14.06	1.11E-22
SURF1	204295_at	14.05	6.33E-29
LOC101060373	221853_s_at	14.04	5.93E-27
ASAH1	1555419_a_at	14.04	2.01E-25
ACTR10	222230_s_at	14.03	1.62E-17
HLA-B	211911_x_at	14.02	2.91E-17
PLAA	209533_s_at	14.01	1.73E-33
SMURF2	205596_s_at	14.00	1.69E-18
SPDL1	221685_s_at	13.99	7.53E-31
HMGN4	202579_x_at	13.99	3.06E-26
RRBP1	201204_s_at	13.99	2.93E-22
CBFB	202370_s_at	13.98	5.92E-17
SWI5	226027_at	13.97	1.52E-31
CKS2	204170_s_at	13.96	5.71E-13
RPL26L1	218830_at	13.95	3.85E-27
MSANTD3	1552277_a_at	13.94	9.13E-37
AURKAIP1	225552_x_at	13.94	2.10E-20
MRPS15	221437_s_at	13.94	3.43E-28
CLIC4	201559_s_at	13.93	8.04E-32
RPL17	200038_s_at	13.93	2.04E-20
EIF3E	208697_s_at	13.93	2.43E-18
MYC	202431_s_at	13.93	4.50E-21
GLG1	214730_s_at	13.91	2.80E-20
BICC1	213429_at	13.90	3.51E-14
RAB5C	201156_s_at	13.90	< 2.90E-44
PDHA1	200980_s_at	13.90	3.15E-24
KIF13A	235072_s_at	13.90	3.43E-16
TFB2M	218605_at	13.89	1.92E-24
IQGAP1	200791_s_at	13.88	4.61E-19
KRT34	206969_at	13.86	6.98E-35
FNTA	209471_s_at	13.85	2.79E-22
SMIM7	224717_s_at	13.85	3.77E-24
PSMA5	201274_at	13.84	9.95E-25
GPR176	227846_at	13.82	6.76E-24
IRF2BP2	224571_at	13.82	3.17E-18
PPP2R5C	1554365_a_at	13.81	< 2.90E-44
FKBP3	218003_s_at	13.80	2.45E-25
MGAT2	203102_s_at	13.78	1.57E-16

TM2D2	224413_s_at	13.77	3.03E-22
CMPK1	217870_s_at	13.75	2.37E-16
HEBP1	218450_at	13.75	3.67E-19
DERL1	218172_s_at	13.74	2.72E-24
TTL	224896_s_at	13.73	2.41E-27
KLF13	225390_s_at	13.73	6.73E-22
REXO2	223989_s_at	13.72	1.20E-27
AIDA	220199_s_at	13.71	5.23E-21
HMGN2	208668_x_at	13.71	1.36E-23
RBM14	200997_at	13.70	2.49E-22
C6orf89	224977_at	13.69	4.49E-25
CETN2	209194_at	13.68	1.03E-21
PEX3	203972_s_at	13.67	1.41E-38
FAM171B	227370_at	13.67	1.15E-17
EMC8	218057_x_at	13.67	5.83E-36
SOX9	202936_s_at	13.67	3.24E-26
ALAS1	205633_s_at	13.65	2.90E-25
CIRH1A	230656_s_at	13.65	3.73E-31
ABCF2	207622_s_at	13.64	1.48E-40
DCAF10	222804_x_at	13.63	1.08E-30
MEX3D	91816_f_at	13.62	< 2.90E-44
TCTN3	212121_at	13.61	2.56E-25
ASL	204608_at	13.61	7.21E-28
LOC101060478	212742_at	13.59	3.93E-33
ETHE1	204034_at	13.59	7.61E-31
UTP11L	218235_s_at	13.59	1.27E-40
PRRX1	226695_at	13.58	1.29E-07
MBD2	202484_s_at	13.57	4.14E-20
NONO	208698_s_at	13.57	1.74E-24
ST13	207040_s_at	13.56	4.62E-19
S100A11P1	208540_x_at	13.52	2.66E-36
ITM2B	217732_s_at	13.52	1.39E-19
NSA2	201922_at	13.52	2.15E-19
UBE2T	223229_at	13.51	1.33E-37
TRIB2	202478_at	13.51	1.44E-17
ADSL	210250_x_at	13.51	4.90E-21
ADAM10	214895_s_at	13.50	1.72E-41
RPS20	200949_x_at	13.50	4.69E-24
DSP	200606_at	13.49	2.42E-13
RPRD1A	222559_s_at	13.49	5.33E-27
PTS	209694_at	13.48	3.61E-21

AK3	224655_at	13.48	9.57E-19
MFSD5	212861_at	13.46	1.44E-33
LARP1	212137_at	13.46	2.75E-25
VPS25	224608_s_at	13.46	3.15E-33
EXOSC3	223490_s_at	13.44	3.43E-40
RPL24	200013_at	13.43	7.32E-20
RSPRY1	225774_at	13.42	2.45E-30
CD151	204306_s_at	13.41	1.57E-26
TM4SF1	215034_s_at	13.41	9.56E-13
MED28	218438_s_at	13.38	4.22E-24
FKBP9	212169_at	13.38	1.70E-23
HK1	200697_at	13.38	1.20E-28
SEC23A	204344_s_at	13.37	< 2.90E-44
PAPSS2	203058_s_at	13.37	7.90E-18
ANTXR1	220092_s_at	13.36	2.71E-28
KCTD20	223176_at	13.36	1.52E-22
BABAM1	221711_s_at	13.36	3.59E-29
PCNP	1554868_s_at	13.35	1.19E-32
NFE2L2	201146_at	13.35	3.70E-18
NME7	219553_at	13.33	5.45E-17
SRPRB	218140_x_at	13.33	1.90E-18
TDP2	202266_at	13.33	4.04E-16
ALDH18A1	217791_s_at	13.31	1.67E-26
NMT2	205005_s_at	13.31	7.25E-24
PPP3CA	202429_s_at	13.31	3.05E-15
CDK5	204247_s_at	13.30	8.46E-33
MAGED4	223313_s_at	13.30	9.72E-19
RAB23	220955_x_at	13.29	< 2.90E-44
NDUFB11	218320_s_at	13.28	8.16E-25
GLOD4	209092_s_at	13.26	3.20E-22
KRCC1	222585_x_at	13.26	7.08E-33
COX8A	201119_s_at	13.26	5.61E-26
NUDT3	221579_s_at	13.25	< 2.90E-44
GOLM1	217771_at	13.24	6.15E-18
C7orf50	224478_s_at	13.24	9.76E-28
PPP1R2	202166_s_at	13.23	1.20E-18
LSM2	209449_at	13.23	1.21E-27
FLG	215704_at	13.22	1.27E-20
SMAD3	218284_at	13.22	1.65E-26
C7orf10	219655_at	13.22	1.23E-11
UGCG	224967_at	13.20	2.57E-12

PKP4	201929_s_at	13.19	< 2.90E-44
CRKL	212180_at	13.17	5.01E-21
PURA	204021_s_at	13.17	3.10E-18
MRPL41	227186_s_at	13.15	7.02E-20
SMTN	209427_at	13.14	5.48E-30
HIP1	205425_at	13.13	< 2.90E-44
NUFIP2	224956_at	13.13	6.50E-27
NUDCD2	226642_s_at	13.12	3.65E-19
LOC100506538	235509_at	13.10	1.50E-19
DNM1L	203105_s_at	13.10	1.48E-30
DOCK7	225384_at	13.09	6.84E-19
MRPL4	223743_s_at	13.08	< 2.90E-44
ARIH2	201229_s_at	13.07	1.72E-40
CSNK1A1	213860_x_at	13.07	1.10E-21
RPS10	211542_x_at	13.06	4.29E-22
TMEM219	224981_at	13.05	1.20E-26
PIGG	218652_s_at	13.04	5.28E-24
ARCN1	201176_s_at	13.02	3.06E-21
SELO	233167_at	13.02	9.39E-34
LGALS3	208949_s_at	13.02	3.59E-19
PERP	222392_x_at	13.02	3.49E-17
ERLIN1	202441_at	13.01	1.33E-23
MED31	222867_s_at	13.00	4.48E-33
TCF25	221495_s_at	13.00	1.58E-25
BZW1	200776_s_at	12.99	8.38E-25
DLST	215210_s_at	12.97	1.71E-36
C19orf10	216483_s_at	12.97	3.03E-22
BHLHE40	201170_s_at	12.96	4.64E-15
FAS	215719_x_at	12.95	< 2.90E-44
NDFIP1	217800_s_at	12.94	1.02E-19
GATAD1	208503_s_at	12.92	2.85E-35
DVL3	201908_at	12.92	1.55E-25
CLPTM1	211136_s_at	12.90	< 2.90E-44
LSMD1	224512_s_at	12.90	2.59E-24
PELO	218472_s_at	12.90	2.59E-27
MID1	203636_at	12.89	4.14E-19
PRCP	201494_at	12.89	5.31E-27
TMEM258	218213_s_at	12.89	7.75E-20
TMED5	202194_at	12.89	2.01E-14
DCTN3	204246_s_at	12.88	4.53E-20
CAT	201432_at	12.87	4.60E-26

LARS	222427_s_at	12.87	7.42E-25
SOX4	201417_at	12.86	3.48E-15
KPNB1	213803_at	12.85	4.28E-23
INSIG2	209566_at	12.85	2.77E-20
AKR1C3	209160_at	12.85	1.58E-13
PAR-SN	206042_x_at	12.84	2.70E-34
ENC1	201341_at	12.82	1.54E-12
MRPL52	226241_s_at	12.81	8.22E-25
PPP1R11	1566303_s_at	12.79	4.86E-29
VDAC2	211662_s_at	12.78	1.86E-24
ERP44	208959_s_at	12.78	2.24E-21
PRKRA	209139_s_at	12.78	8.58E-26
WSB1	210561_s_at	12.78	3.80E-24
NUCKS1	224582_s_at	12.77	2.90E-44
UBFD1	224878_at	12.76	4.75E-27
COMMD6	225312_at	12.76	1.45E-22
SMIM14	224990_at	12.76	1.26E-25
ARF3	200734_s_at	12.76	3.14E-17
OAT	201599_at	12.76	8.45E-17
SRA1	224130_s_at	12.75	1.94E-29
CYB5R3	1554574_a_at	12.75	< 2.90E-44
RGS4	204337_at	12.75	7.12E-11
MIOS	206860_s_at	12.74	4.09E-25
SNRNP25	218493_at	12.73	7.12E-25
PRDX2	39729_at	12.72	1.88E-18
S100A16	227998_at	12.72	9.64E-27
LTA4H	208771_s_at	12.71	3.13E-19
PYGL	202990_at	12.71	1.82E-17
GNS	212335_at	12.71	7.39E-19
OGFOD1	225106_s_at	12.71	2.28E-41
UBE2H	222420_s_at	12.70	6.27E-22
DNPH1	204238_s_at	12.69	3.90E-25
PPIL3	224364_s_at	12.68	1.79E-18
PLD3	201050_at	12.68	2.94E-22
KLHDC2	217906_at	12.65	1.17E-22
CTDSPL2	223271_s_at	12.65	1.33E-33
HAUS1	225297_at	12.64	3.42E-29
ATP6V1C1	202874_s_at	12.64	7.01E-35
SLC7A1	212295_s_at	12.64	5.08E-20
CUL4B	202213_s_at	12.62	2.18E-30
BCAP31	200837_at	12.62	8.44E-25

PIGK	227639_at	12.62	5.33E-16
NAP1L5	228062_at	12.61	2.66E-20
C15orf61	229742_at	12.60	1.13E-19
ADD1	214736_s_at	12.59	1.44E-24
HSPH1	208744_x_at	12.59	3.08E-34
FBXO21	212229_s_at	12.58	7.45E-15
NBR1	201384_s_at	12.58	2.73E-20
TXNDC9	203008_x_at	12.57	6.66E-14
DRAM2	225230_at	12.57	8.03E-23
MRPS18C	228019_s_at	12.57	4.11E-36
MTFMT	235689_at	12.57	< 2.90E-44
INTS12	218616_at	12.56	3.10E-26
MCFD2	212246_at	12.56	2.11E-40
HBS1L	209316_s_at	12.56	1.75E-26
EEF1G	200689_x_at	12.56	5.42E-21
IFT43	226195_at	12.55	1.74E-26
RPL5	200937_s_at	12.55	1.08E-19
MGLL	211026_s_at	12.55	2.17E-30
OSBPL1A	209485_s_at	12.55	7.60E-17
RMND1	220329_s_at	12.54	3.23E-37
EEF1D	203113_s_at	12.53	4.65E-18
MVP	202180_s_at	12.52	4.52E-26
GPX7	213170_at	12.52	6.23E-23
GOLGA2	204384_at	12.52	7.23E-24
RPS19	213414_s_at	12.51	1.84E-21
FYTTD1	224641_at	12.51	2.12E-16
DDX3Y	205000_at	12.50	8.43E-32
STK38	202951_at	12.50	3.22E-23
RALY	201271_s_at	12.49	1.10E-21
ATP8B2	226771_at	12.49	1.62E-27
LANCL1	202020_s_at	12.48	1.26E-20
ACTR1A	200721_s_at	12.47	3.53E-33
B9D1	210534_s_at	12.46	< 2.90E-44
PGM1	201968_s_at	12.45	5.94E-16
MRPL23	213897_s_at	12.44	1.83E-24
HEXA	201765_s_at	12.43	4.01E-27
MED6	210104_at	12.42	< 2.90E-44
ELN	212670_at	12.41	3.15E-30
MRPS14	203800_s_at	12.41	7.33E-22
COG5	203630_s_at	12.41	2.62E-21
AJUBA	225806_at	12.41	2.32E-16

SPATS2L	222154_s_at	12.41	8.57E-19
CACYBP	210691_s_at	12.39	1.03E-31
SAP30	204900_x_at	12.39	3.39E-28
LGALS8	208933_s_at	12.38	6.42E-22
SLC44A1	224595_at	12.38	3.97E-16
TRIM8	223132_s_at	12.37	4.40E-24
SNX5	222417_s_at	12.37	5.49E-20
EIF2S3	205321_at	12.37	4.34E-38
FBXW2	218941_at	12.36	9.14E-34
XYLT1	213725_x_at	12.36	4.41E-13
CDC123	201725_at	12.35	3.62E-24
DENND5A	212561_at	12.34	1.76E-25
OSTF1	204479_at	12.34	1.05E-23
TACC1	1554690_a_at	12.34	4.03E-34
LOC100996496	201586_s_at	12.33	1.93E-18
SEC61A1	217716_s_at	12.33	6.09E-25
FASTKD2	216996_s_at	12.32	3.95E-33
RSU1	201980_s_at	12.32	4.11E-17
ARMC1	218185_s_at	12.32	7.96E-24
UQCR10	218190_s_at	12.31	2.69E-23
DR1	207654_x_at	12.31	1.32E-32
DNAJA2	209157_at	12.31	6.65E-23
NDUFB9	222992_s_at	12.30	7.77E-20
PI4K2A	209345_s_at	12.30	1.66E-34
HYOU1	200825_s_at	12.30	5.00E-31
TPX2	210052_s_at	12.30	1.72E-27
MEGF6	226869_at	12.29	2.22E-27
YIPF3	216338_s_at	12.27	8.45E-29
NSFL1C	220248_x_at	12.27	1.17E-29
PEX2	210296_s_at	12.27	8.88E-16
CCDC132	226031_at	12.27	6.37E-32
NPM1	221691_x_at	12.26	1.11E-17
TXLNA	212300_at	12.24	6.88E-31
URI1	211563_s_at	12.24	5.55E-28
MBTPS1	201620_at	12.23	3.72E-24
BCCIP	227322_s_at	12.23	1.63E-25
ASPM	219918_s_at	12.23	1.18E-23
LTBP1	202728_s_at	12.22	1.12E-26
RSL1D1	212018_s_at	12.22	5.46E-23
TRAPPC4	217958_at	12.21	1.06E-22
SIX2	206510_at	12.21	< 2.90E-44

SDHC	210131_x_at	12.21	1.66E-26
DONSON	221677_s_at	12.20	6.41E-37
MED17	221517_s_at	12.19	2.44E-23
CAMTA1	225693_s_at	12.19	3.28E-21
TMEM9	222987_s_at	12.18	2.84E-34
ATRAID	219329_s_at	12.18	2.87E-23
RNF145	226077_at	12.16	2.22E-22
UXS1	225583_at	12.15	2.84E-23
TUB	228882_at	12.15	1.64E-29
C3orf38	226524_at	12.14	3.21E-31
ATP2B4	212136_at	12.14	1.66E-18
YPEL5	222408_s_at	12.13	1.05E-26
RIOK2	218535_s_at	12.13	5.34E-27
HLTF	202983_at	12.11	5.19E-21
TCEA2	203919_at	12.10	3.97E-24
SNTB1	226438_at	12.10	3.62E-27
CUL1	207614_s_at	12.10	8.14E-29
SAP18	208742_s_at	12.10	1.55E-29
GEMIN7	222821_s_at	12.09	7.94E-42
ANAPC5	208722_s_at	12.09	1.52E-26
HTRA1	201185_at	12.09	1.09E-18
CHCHD1	226896_at	12.09	6.08E-22
ASF1A	203428_s_at	12.08	3.09E-22
MNF1	224448_s_at	12.08	2.05E-24
PRRC1	224643_at	12.07	3.06E-14
LOC100996747	217753_s_at	12.07	4.01E-15
RPS24	200061_s_at	12.07	3.38E-21
UBE2B	211763_s_at	12.06	1.39E-19
NDUFA3	218563_at	12.04	1.68E-21
POGK	218229_s_at	12.03	1.39E-29
FOXC2	239058_at	12.02	6.22E-36
ITGA11	222899_at	12.02	4.66E-11
NF2	218915_at	12.02	6.14E-34
MED30	227787_s_at	12.01	1.28E-23
EIF3H	201592_at	12.01	3.43E-20
LEPROTL1	202595_s_at	12.00	5.35E-27
TAF12	209463_s_at	11.99	2.19E-43
OSMR	226621_at	11.97	6.49E-19
FUNDC2	223042_s_at	11.97	1.31E-21
MLEC	200616_s_at	11.96	5.93E-20
EPAS1	200878_at	11.96	2.10E-13

RAB3B	205924_at	11.96	< 2.90E-44
RPA3	209507_at	11.96	1.44E-30
KIFAP3	203333_at	11.95	7.19E-21
PSIP1	205961_s_at	11.93	7.27E-19
JMJD6	212722_s_at	11.93	7.51E-26
DERL2	218333_at	11.93	4.71E-26
E2F7	228033_at	11.93	1.92E-24
UBAC1	202151_s_at	11.93	4.67E-28
CLNS1A	209143_s_at	11.93	1.07E-20
FAM69A	216044_x_at	11.92	5.01E-11
APPL2	218218_at	11.92	2.23E-41
PLA2G4A	210145_at	11.91	1.81E-27
FZD7	203705_s_at	11.90	6.12E-14
RRP36	225788_at	11.90	1.25E-23
SMAD4	202527_s_at	11.88	3.63E-21
STEAP1	205542_at	11.88	1.25E-11
POP4	202868_s_at	11.87	1.47E-25
CCDC50	225331_at	11.87	1.65E-19
NASP	201970_s_at	11.86	1.61E-19
DTD1	234107_s_at	11.86	1.28E-26
SNX1	214531_s_at	11.86	3.64E-28
KIAA0101	202503_s_at	11.86	6.20E-09
MSH6	211450_s_at	11.85	< 2.90E-44
SSSCA1	203114_at	11.84	3.06E-29
CGGBP1	224600_at	11.84	4.80E-38
BCAP29	225677_at	11.84	2.63E-29
DLX1	242138_at	11.83	< 2.90E-44
CCDC142	225523_at	11.83	1.50E-18
GMPR2	217990_at	11.83	2.81E-17
NDUFA2	209224_s_at	11.83	5.05E-21
ZNHIT1	201541_s_at	11.82	4.86E-27
C16orf80	217957_at	11.82	6.70E-27
BCAT1	214452_at	11.82	1.59E-13
DPF2	202116_at	11.81	2.59E-20
RBM7	218379_at	11.81	2.63E-23
KPNA1	202059_s_at	11.79	7.57E-25
HIBADH	224812_at	11.79	4.17E-24
MAD2L1	1554768_a_at	11.77	< 2.90E-44
C11orf70	224463_s_at	11.77	2.06E-27
TMEM138	223113_at	11.77	2.06E-29
FBL	211623_s_at	11.76	7.89E-19

C19orf53	217926_at	11.76	1.43E-22
MMP14	160020_at	11.75	6.05E-36
UBE2D2	201345_s_at	11.75	1.53E-25
METTL23	225808_at	11.73	1.53E-26
ACBD6	225317_at	11.73	7.68E-26
NCOR2	207760_s_at	11.73	3.68E-23
ASNSD1	217987_at	11.73	4.62E-19
CCDC6	225010_at	11.71	4.51E-13
PNMA1	218224_at	11.71	4.32E-20
CCT4	200877_at	11.70	6.63E-18
C14orf1	217188_s_at	11.70	< 2.90E-44
PSMA4	203396_at	11.69	1.03E-23
PRKDC	208694_at	11.69	2.78E-18
SERAC1	232183_at	11.68	8.61E-35
HNRNPLL	225386_s_at	11.68	1.26E-24
CD164	208654_s_at	11.68	4.41E-15
SRR	219204_s_at	11.68	7.89E-42
IDH1	1555037_a_at	11.67	1.45E-17
MBNL1-AS1	232298_at	11.67	4.38E-31
LMAN1	224629_at	11.66	1.12E-19
BTG3	205548_s_at	11.66	3.84E-23
MRPS30	218398_at	11.66	1.83E-26
GUCD1	223039_at	11.66	1.39E-24
MOB3A	225530_at	11.66	1.12E-27
CLIP3	212358_at	11.66	8.65E-31
TM2D1	211703_s_at	11.66	5.18E-24
ZFAND2A	226650_at	11.65	3.88E-25
TBC1D7	223461_at	11.62	3.77E-24
PKD2	203688_at	11.62	2.87E-21
HDAC1	201209_at	11.62	1.55E-21
TWIST1	213943_at	11.62	7.47E-11
DYNC1H1	211928_at	11.62	6.41E-26
PDE1C	239218_at	11.62	2.15E-26
DHCR7	201790_s_at	11.62	1.65E-35
PSMC4	201252_at	11.61	6.47E-27
CD109	226545_at	11.61	1.70E-10
COX7C	213846_at	11.60	1.44E-24
CREB3L2	212345_s_at	11.58	1.97E-26
PTK7	207011_s_at	11.55	5.00E-36
C14orf2	210532_s_at	11.54	1.51E-24
CCDC22	206016_at	11.54	2.60E-39

CBLB	209682_at	11.53	1.17E-19
IFITM3	212203_x_at	11.52	2.79E-25
DGUOK	203816_at	11.50	4.39E-36
SRP72	208800_at	11.50	2.64E-24
NAV1	224773_at	11.48	4.96E-30
FOXO3	204132_s_at	11.48	7.54E-42
JAZF1	225798_at	11.47	2.11E-20
SRRM1	201225_s_at	11.47	2.21E-18
MRPL54	225797_at	11.46	1.85E-29
DNLZ	228272_at	11.46	1.60E-31
PHF20L1	227523_s_at	11.46	6.79E-23
KRIT1	34031_i_at	11.46	< 2.90E-44
STAG2	207983_s_at	11.46	3.65E-26
CLEC3B	205200_at	11.45	5.30E-25
IFITM1	201601_x_at	11.44	2.26E-21
RPL6	200034_s_at	11.43	3.17E-21
SLC2A10	221024_s_at	11.42	2.99E-17
TMEM119	227300_at	11.42	1.70E-24
CDK2AP1	201938_at	11.41	2.07E-16
CHTOP	202560_s_at	11.41	8.37E-22
RPS14	208645_s_at	11.41	2.82E-20
HMOX2	218120_s_at	11.41	8.97E-35
NDUFAF1	204125_at	11.41	1.58E-26
DUSP14	203367_at	11.39	1.82E-30
STIP1	213330_s_at	11.39	1.01E-40
CERCAM	224794_s_at	11.38	1.25E-19
DLGAP5	203764_at	11.36	7.93E-18
SMARCA4	215714_s_at	11.35	5.16E-25
CISD1	218597_s_at	11.35	1.84E-27
MRPS16	218046_s_at	11.35	5.49E-29
HEXB	201944_at	11.34	5.67E-20
PSEN1	203460_s_at	11.34	2.32E-21
SLC38A1	224579_at	11.34	3.26E-17
RAB32	204214_s_at	11.33	1.36E-22
IRF9	203882_at	11.33	7.83E-27
MT1H	206461_x_at	11.31	8.65E-13
AVEN	219366_at	11.29	1.82E-20
SKIV2L2	212896_at	11.28	1.71E-31
RUVBL2	201459_at	11.26	8.46E-27
ALG9	219374_s_at	11.26	2.77E-42
ATL3	224893_at	11.25	1.62E-18

MORC4	219038_at	11.25	7.96E-26
GLO1	200681_at	11.25	5.91E-22
HSPB7	218934_s_at	11.24	7.10E-40
NFATC3	210555_s_at	11.23	1.67E-43
RYK	216976_s_at	11.23	1.44E-35
NMD3	218036_x_at	11.22	2.01E-39
MOB1A	201298_s_at	11.22	5.73E-21
UBQLN1	222990_at	11.20	1.91E-19
SLC25A39	223649_s_at	11.19	9.92E-35
CNOT11	224695_at	11.18	2.24E-38
SLC25A32	221020_s_at	11.18	3.62E-22
FAM21A	212370_x_at	11.17	7.82E-26
NSMCE4A	211376_s_at	11.17	3.38E-31
LOC100996253	200610_s_at	11.17	9.26E-26
BCLAF1	201084_s_at	11.16	4.56E-18
C10orf99	224373_s_at	11.16	2.86E-15
USP11	208723_at	11.16	2.50E-21
DYNC1I2	211684_s_at	11.15	2.23E-20
EPHX1	202017_at	11.15	1.42E-24
LUZP6	224656_s_at	11.15	2.44E-24
RPL10	200725_x_at	11.14	1.41E-20
CDKN1A	202284_s_at	11.13	1.67E-16
RDH11	217775_s_at	11.12	7.00E-34
NME4	212739_s_at	11.11	1.45E-29
EMG1	209233_at	11.11	2.47E-23
WDR83OS	217780_at	11.10	5.76E-27
TMEM183A	212165_at	11.10	2.04E-32
PTDSS1	201433_s_at	11.09	3.26E-21
LASP1	200618_at	11.09	7.48E-22
FKBP11	219118_at	11.08	1.89E-16
CBS	212816_s_at	11.08	2.15E-32
LOC100996732	228158_at	11.08	1.56E-24
NEK6	223158_s_at	11.08	6.60E-25
HMG20B	210719_s_at	11.08	4.91E-23
SMARCC1	201075_s_at	11.07	4.47E-40
PSMD13	201232_s_at	11.07	1.35E-23
DCAF13	225676_s_at	11.06	1.07E-21
CNPY3	1552977_a_at	11.05	1.19E-36
DGCR6	208024_s_at	11.04	1.89E-26
SRPR	200918_s_at	11.03	1.84E-23
ATP6V0C	200954_at	11.03	2.15E-32

PHACTR2	204048_s_at	11.03	7.60E-16
CS	208660_at	11.03	2.03E-31
PPIE	210502_s_at	11.03	1.70E-24
NDUFA12	223244_s_at	11.02	5.58E-17
CCT7	200812_at	11.02	1.24E-24
EIF2B1	201632_at	11.00	3.55E-24
HNRNPH3	210588_x_at	11.00	4.34E-22
NDUFC1	203478_at	11.00	1.02E-18
VAMP5	204929_s_at	11.00	5.00E-22
CYBRD1	217889_s_at	10.99	5.49E-23
SRSF4	201696_at	10.99	5.86E-24
MORN2	226790_at	10.99	3.00E-38
FZD8	224325_at	10.98	7.51E-23
S100A10	200872_at	10.98	6.17E-17
STOML2	215416_s_at	10.97	2.94E-20
SNAI2	213139_at	10.97	5.33E-16
SCRN1	201462_at	10.97	3.57E-20
PET100	226006_at	10.97	1.09E-26
MED1	225456_at	10.96	5.13E-37
PCOLCE2	219295_s_at	10.96	7.13E-19
KDSR	202419_at	10.95	1.15E-26
NDUFS7	211752_s_at	10.95	5.50E-27
BCL2L13	217955_at	10.95	3.32E-18
FXR1	201637_s_at	10.94	1.76E-25
DNAJC9	213088_s_at	10.94	2.56E-25
ALDH7A1	208950_s_at	10.94	4.77E-21
KIRREL	225303_at	10.94	3.66E-22
KCTD5	218474_s_at	10.94	1.14E-34
MYL6	212082_s_at	10.92	7.81E-20
C11orf87	236532_at	10.92	< 2.90E-44
ZHX1	223214_s_at	10.90	3.64E-24
SPARC	200665_s_at	10.90	1.32E-12
HECTD1	224481_s_at	10.89	5.61E-23
RPS15	200819_s_at	10.89	5.13E-19
LOC100131262	1558152_at	10.88	6.38E-39
PTOV1	212032_s_at	10.88	5.71E-22
NOL7	202882_x_at	10.88	1.57E-21
CAPG	201850_at	10.87	1.09E-14
LPAR1	204037_at	10.87	3.27E-17
EGFR	201983_s_at	10.87	5.18E-26
CD99L2	223041_at	10.86	4.97E-37

COX14	225772_s_at	10.86	3.60E-30
SQRDL	217995_at	10.85	2.84E-14
NFIX	227400_at	10.85	< 2.90E-44
SLC39A14	212110_at	10.85	2.12E-14
TRMT5	221952_x_at	10.84	1.71E-24
UBE3C	201817_at	10.84	1.55E-19
MID1IP1	218251_at	10.84	2.90E-44
MRPL34	221692_s_at	10.83	1.84E-30
SSRP1	200957_s_at	10.83	4.71E-30
LACTB	1552485_at	10.82	1.58E-33
RSRC2	202302_s_at	10.81	5.96E-21
ERCC1	203719_at	10.80	2.75E-26
DKK3	202196_s_at	10.80	1.02E-18
BTN3A2	209846_s_at	10.79	4.10E-22
HAX1	201145_at	10.79	7.92E-29
LACTB2	222714_s_at	10.79	3.80E-23
MAGED2	208682_s_at	10.78	2.57E-20
PSME3	200987_x_at	10.78	5.46E-30
LOC100996792	215498_s_at	10.78	7.06E-22
CRELD2	218358_at	10.78	2.71E-25
NREP	201310_s_at	10.77	4.15E-20
GNL3	217850_at	10.77	4.30E-26
SGCE	204688_at	10.77	1.50E-15
MCMBP	222464_s_at	10.77	5.60E-24
PLOD3	202185_at	10.76	2.44E-26
EGLN1	223046_at	10.76	1.44E-17
RBMS2	225776_at	10.76	2.91E-28
ALG5	218203_at	10.76	4.51E-19
TMEM251	213246_at	10.75	2.16E-22
COX5B	202343_x_at	10.73	1.39E-23
LOC101060567	202658_at	10.73	3.02E-24
DECR1	202447_at	10.73	6.15E-23
GCNT1	239761_at	10.72	4.72E-34
TNFRSF19	227812_at	10.72	2.56E-13
FAF1	224217_s_at	10.71	1.13E-21
RPS12	213377_x_at	10.69	3.13E-22
C18orf32	224957_at	10.68	5.66E-18
HSD17B4	201413_at	10.67	4.66E-21
ST6GALNAC4	220937_s_at	10.67	1.90E-40
EPG5	227638_at	10.66	4.25E-30
HPRT1	202854_at	10.66	2.60E-20

MYBL1	213906_at	10.66	9.58E-26
GTF2H1	202453_s_at	10.66	9.68E-41
ANTXR2	225524_at	10.65	4.14E-19
TXNL4A	202836_s_at	10.65	8.30E-21
RBM25	212030_at	10.65	1.47E-22
SMOC1	222783_s_at	10.65	< 2.90E-44
PIK3C2A	226094_at	10.64	< 2.90E-44
PTPN14	244533_at	10.63	9.43E-26
IFRD2	209100_at	10.63	2.07E-31
SKI	229265_at	10.63	3.28E-25
TMEM208	221597_s_at	10.62	1.36E-25
EEF1E1	204905_s_at	10.61	1.32E-15
SLC25A37	222528_s_at	10.61	7.58E-41
FARP1	201911_s_at	10.61	6.84E-19
SASH1	213236_at	10.60	1.82E-33
FAM120A	200774_at	10.59	6.65E-19
POLR3K	218866_s_at	10.59	3.87E-40
SOCS5	209647_s_at	10.58	2.47E-22
BRD7	221776_s_at	10.58	5.04E-28
CAST	208908_s_at	10.57	6.72E-27
BFAR	218056_at	10.57	4.38E-32
NIPA2	212129_at	10.56	1.20E-22
PPIF	201490_s_at	10.56	< 2.90E-44
HAS1	207316_at	10.56	3.60E-17
CAV2	203323_at	10.55	7.40E-13
MFSD1	218109_s_at	10.55	3.02E-15
PIGF	205078_at	10.55	6.90E-26
MRPS9	226749_at	10.54	8.62E-23
RAB31	217763_s_at	10.53	5.08E-14
MPZL1	210087_s_at	10.53	1.49E-29
PNPLA8	223309_x_at	10.52	6.40E-26
PLEKHB2	201410_at	10.52	1.72E-24
PREPL	212216_at	10.52	1.00E-30
SLC35E1	222263_at	10.51	< 2.90E-44
SPIN1	222431_at	10.50	1.42E-19
ROCK2	202762_at	10.50	5.63E-16
HERPUD1	217168_s_at	10.49	1.29E-18
DNAJC10	221781_s_at	10.49	1.13E-30
UAP1L1	214755_at	10.48	0
IDH3B	210418_s_at	10.46	5.59E-22
FAM57A	218898_at	10.46	4.06E-32

COPS3	202078_at	10.46	1.71E-26
TM7SF3	222477_s_at	10.45	1.81E-20
LOC100509484	209122_at	10.45	3.79E-12
LINC00116	228614_at	10.45	1.39E-40
LRR1	235113_at	10.44	4.81E-34
NCOA4	210774_s_at	10.44	1.61E-16
MICU1	216903_s_at	10.43	7.99E-28
SH3BGRL	201311_s_at	10.43	1.08E-28
ATP6V1A	201971_s_at	10.43	< 2.90E-44
COPS4	218042_at	10.43	1.99E-18
DDX41	217840_at	10.43	3.51E-19
RPS8	200858_s_at	10.42	7.21E-20
WTAP	210285_x_at	10.42	1.23E-36
MED29	225708_at	10.41	1.30E-31
AGPS	225113_at	10.41	5.46E-23
GLT8D1	218147_s_at	10.40	3.98E-23
NETO2	218888_s_at	10.40	5.78E-21
RPL7L1	224738_x_at	10.40	3.09E-25
KDM5B	201549_x_at	10.39	1.05E-24
C11orf24	52164_at	10.39	3.39E-19
PPP1R8	207830_s_at	10.39	1.12E-30
ZNF654	219239_s_at	10.38	8.11E-43
IMP3	221688_s_at	10.37	5.57E-40
RABGGTB	209180_at	10.37	1.02E-18
STK17A	202695_s_at	10.37	1.37E-38
PRSS23	202458_at	10.36	8.63E-13
SLC39A9	222445_at	10.36	4.43E-26
YES1	202932_at	10.36	3.06E-18
CHCHD7	222701_s_at	10.36	7.37E-19
HMGN1	200943_at	10.36	4.71E-18
C7orf55	226781_at	10.35	3.12E-27
EIF2AK1	217736_s_at	10.34	9.87E-20
SNX17	200991_s_at	10.34	3.04E-24
TCEAL8	224819_at	10.34	1.93E-18
RIOK3	202129_s_at	10.32	4.64E-41
IMMT	200955_at	10.32	5.46E-26
LOXL3	228253_at	10.32	7.22E-32
LAMB2	216264_s_at	10.31	7.32E-21
EIF2B2	202461_at	10.31	8.19E-26
MRPS17	218982_s_at	10.31	3.56E-22
ENY2	218482_at	10.31	2.61E-28

SCFD2	226923_at	10.30	2.24E-32
TST	209605_at	10.30	5.19E-21
CSNK1G3	220768_s_at	10.29	2.46E-17
ZWILCH	222606_at	10.29	1.39E-18
TRIAP1	218403_at	10.29	7.52E-21
NEU1	208926_at	10.29	4.64E-28
KIAA1644	52837_at	10.28	1.54E-33
NRAS	202647_s_at	10.28	7.41E-19
ABCC1	202805_s_at	10.28	< 2.90E-44
BLOC1S1	202592_at	10.26	1.51E-31
DNAJB1	200666_s_at	10.26	7.94E-31
UBE2J1	222435_s_at	10.26	4.32E-19
EBP	213787_s_at	10.26	4.50E-29
ZNF664	224593_at	10.25	2.59E-18
FYN	216033_s_at	10.25	1.15E-27
BICD2	212702_s_at	10.24	3.40E-26
SPATA20	218164_at	10.24	2.18E-18
PHLDA2	209803_s_at	10.24	6.71E-10
PPP2R1A	200695_at	10.23	1.10E-27
DLX2	207147_at	10.23	< 2.90E-44
RNASEH1	218497_s_at	10.23	2.74E-18
CD248	219025_at	10.22	4.05E-20
PEA15	200787_s_at	10.21	1.06E-25
AURKA	204092_s_at	10.21	1.43E-21
MAPK14	202530_at	10.21	5.10E-21
ARHGAP35	229394_s_at	10.20	5.28E-21
SPOCD1	235417_at	10.20	2.47E-29
WIPI2	204710_s_at	10.19	1.02E-21
EMILIN1	204163_at	10.19	3.66E-15
GNB5	207124_s_at	10.19	5.27E-36
MAEA	207922_s_at	10.19	4.87E-21
MAPK1IP1L	212644_s_at	10.19	2.02E-28
PPP3CB	209817_at	10.18	1.38E-19
THY1	208850_s_at	10.17	1.25E-13
ARPP19	221483_s_at	10.17	3.82E-19
FOXM1	202580_x_at	10.16	5.55E-28
MRPL44	222555_s_at	10.16	1.39E-41
HGS	210428_s_at	10.15	2.63E-27
AAED1	227534_at	10.15	1.55E-35
NAPA	206491_s_at	10.13	1.03E-28
TNRC6A	234734_s_at	10.13	2.13E-31

MTFR1L	224280_s_at	10.12	9.35E-28
PDHB	208911_s_at	10.11	5.22E-28
MBTPS2	226760_at	10.11	4.41E-14
MSH2	209421_at	10.10	5.00E-20
CUL4A	201423_s_at	10.09	1.69E-29
CUL2	203079_s_at	10.09	1.91E-24
NDUFA8	218160_at	10.09	1.01E-22
CCNG2	211559_s_at	10.07	< 2.90E-44
MSMO1	209146_at	10.06	3.89E-14
GMDS	204875_s_at	10.06	1.68E-23
MIR4647	224716_at	10.06	7.37E-28
LEO1	235096_at	10.06	5.92E-26
PRKCA	213093_at	10.04	5.09E-20
ACSL1	207275_s_at	10.03	5.36E-24
EMP2	204975_at	10.03	1.79E-19
TNFRSF12A	218368_s_at	10.02	4.53E-14
DHX30	204355_at	10.01	3.86E-23
UBE2F	225787_at	10.01	1.09E-18
PANX1	204715_at	10.01	1.20E-25
OBSL1	212776_s_at	10.01	7.15E-17
DNASE1L1	203912_s_at	10.01	1.49E-26
PLCB4	203895_at	9.99	1.56E-23
MVB12A	227864_s_at	9.99	3.04E-26
DHX29	212648_at	9.98	4.27E-20
CYP51A1	216607_s_at	9.98	2.82E-34
ERCC6	232287_at	9.98	1.07E-41
SSBP3	222482_at	9.98	1.09E-20
RPL22L1	225541_at	9.97	2.20E-16
FEZ2	202305_s_at	9.97	2.61E-18
CPSF6	202469_s_at	9.97	8.32E-18
TPD52L1	210372_s_at	9.96	< 2.90E-44
CCNK	225824_at	9.96	5.07E-28
ADPRM	220606_s_at	9.96	< 2.90E-44
EHD4	209536_s_at	9.95	3.86E-20
TMEM242	222638_s_at	9.95	4.48E-32
LOC101060439	200833_s_at	9.94	1.01E-18
NFIC	226895_at	9.94	3.08E-15
NAE1	202268_s_at	9.94	1.39E-13
OTTHUMG00000031646	216505_x_at	9.94	6.91E-21
NPDC1	218086_at	9.94	4.28E-24
CYLD	221903_s_at	9.92	6.96E-24

DHX36	223139_s_at	9.91	1.21E-21
FBXO9	1566509_s_at	9.91	1.31E-19
SLC10A3	204928_s_at	9.91	2.25E-23
UBE2Q1	217978_s_at	9.90	1.06E-21
PROSC	209385_s_at	9.90	9.21E-20
NUP62	207740_s_at	9.90	< 2.90E-44
NMT1	201158_at	9.90	7.99E-33
KDM3A	212689_s_at	9.90	1.14E-22
MZT2A	212995_x_at	9.90	9.89E-21
TOR1A	202348_s_at	9.89	5.72E-32
ZSCAN18	218312_s_at	9.89	1.62E-20
MRPS11	211595_s_at	9.89	3.98E-34
PRKD1	205880_at	9.87	2.58E-15
BECN1	208946_s_at	9.87	8.49E-18
MAP4K5	203553_s_at	9.86	2.22E-25
SHOC2	202777_at	9.86	5.77E-19
TTC19	217964_at	9.86	1.13E-18
PTPRG	204944_at	9.85	8.13E-15
RPS3	208692_at	9.85	7.74E-21
LOC100505573	225567_at	9.84	1.31E-21
MRPL10	224671_at	9.84	9.51E-25
MCM3AP	212269_s_at	9.83	5.21E-20
TNFAIP1	201207_at	9.82	6.75E-25
POLR2J2	216242_x_at	9.82	2.98E-39
CUTA	221488_s_at	9.82	8.02E-22
KIF4A	218355_at	9.82	1.51E-23
PMM1	203467_at	9.81	1.58E-29
ACO1	207071_s_at	9.80	1.04E-27
TMEM97	212281_s_at	9.80	2.34E-10
ACOX1	209600_s_at	9.79	5.43E-28
COL5A1	212488_at	9.79	4.91E-12
SHFM1	202276_at	9.79	2.92E-26
ABI1	209027_s_at	9.78	1.58E-19
CALR	214315_x_at	9.78	1.40E-13
RAB7A	211961_s_at	9.78	1.56E-21
SNRPA1	216977_x_at	9.78	1.28E-28
LOC100505633	239370_at	9.78	1.00E-29
SLIT3	203813_s_at	9.78	2.52E-17
POPDC3	219926_at	9.78	< 2.90E-44
ZBTB8OS	228970_at	9.77	3.41E-27
IL11RA	204773_at	9.77	1.28E-28

ORMDL1	223187_s_at	9.77	4.64E-23
HMGXB4	212596_s_at	9.77	6.29E-21
RAP1GDS1	209444_at	9.77	1.83E-24
AKTIP	223894_s_at	9.77	3.14E-32
TRAPPC11	233558_s_at	9.76	1.22E-35
SWAP70	209307_at	9.76	4.22E-20
TRIM28	200990_at	9.76	2.59E-19
FABP5	202345_s_at	9.76	9.23E-16
SMIM4	229826_at	9.75	5.48E-39
MYO1B	212365_at	9.75	5.34E-20
MRPL39	218558_s_at	9.75	4.63E-21
PRR11	228273_at	9.75	1.81E-12
CRIP2	208978_at	9.74	1.99E-27
TRAPPC3	203511_s_at	9.74	3.52E-20
SMC3	209257_s_at	9.74	8.27E-34
KTN1	214709_s_at	9.74	1.01E-17
TMSB10	217733_s_at	9.74	4.30E-19
ACOT1	202982_s_at	9.73	9.05E-25
USO1	201831_s_at	9.73	1.72E-22
PPDPF	233571_x_at	9.73	5.79E-21
HPCAL1	205462_s_at	9.73	< 2.90E-44
SMARCA2	206544_x_at	9.72	3.01E-33
PI4KB	210417_s_at	9.72	3.61E-34
GLTP	226177_at	9.72	1.72E-28
JDP2	226267_at	9.72	3.38E-41
NCBP1	209520_s_at	9.72	1.53E-35
MAN1B1	65884_at	9.71	1.04E-29
ATP8B1	226302_at	9.71	2.46E-14
CAPN7	203357_s_at	9.71	3.99E-39
HIST1H2BK	209806_at	9.71	1.67E-15
ZC3HAV1	225634_at	9.71	1.01E-22
PDCL3	219043_s_at	9.71	3.05E-23
SHCBP1	219493_at	9.70	1.57E-25
MAK16	211686_s_at	9.70	2.15E-31
RC3H2	220202_s_at	9.68	< 2.90E-44
CKS1B	201897_s_at	9.68	3.86E-18
ACADVL	200710_at	9.67	1.09E-22
C1GALT1	226107_at	9.67	2.34E-28
GTF2I	201065_s_at	9.66	1.45E-22
DNAJC3	225284_at	9.66	5.34E-20
SPIRE1	1554807_a_at	9.66	< 2.90E-44

HNRNPA3	206809_s_at	9.66	6.10E-27
UTP6	218715_at	9.66	5.15E-27
SCO1	223221_at	9.65	4.13E-31
MMP24-AS1	49679_s_at	9.65	< 2.90E-44
CCNY	224651_at	9.64	3.37E-19
SIPA1L1	202254_at	9.64	9.63E-39
FDPS	201275_at	9.64	3.22E-22
UQCRQ	201568_at	9.64	5.85E-22
ECHS1	201135_at	9.63	6.79E-25
DPP3	232510_s_at	9.63	1.44E-27
C1orf86	229113_s_at	9.62	1.65E-30
ACO2	200793_s_at	9.62	1.15E-19
QARS	217846_at	9.62	3.47E-22
LAMTOR1	223009_at	9.62	1.80E-32
MTHFD1	202309_at	9.62	1.18E-28
ZWINT	204026_s_at	9.61	3.30E-10
UBE2N	201523_x_at	9.61	6.22E-36
C1orf174	238010_at	9.60	< 2.90E-44
PSMD9	207805_s_at	9.60	1.00E-23
BPTF	207186_s_at	9.60	3.43E-20
TLDC1	221843_s_at	9.59	5.18E-32
TSN	201515_s_at	9.59	3.66E-21
AK2	208967_s_at	9.59	4.60E-21
ULBP2	238542_at	9.58	1.49E-35
TLN1	203254_s_at	9.57	1.75E-39
PRKAG1	201805_at	9.57	1.70E-33
FBLN5	203088_at	9.57	1.19E-20
CORO2B	209789_at	9.56	< 2.90E-44
TMX2	201175_at	9.56	5.36E-29
CKAP5	1555278_a_at	9.54	5.70E-44
RALA	214435_x_at	9.54	3.43E-18
C12orf44	218214_at	9.54	3.68E-21
GSKIP	223239_at	9.53	1.13E-13
LAMTOR4	224890_s_at	9.53	1.45E-21
ANP32A	201051_at	9.53	2.66E-20
UBE2C	202954_at	9.53	4.67E-18
BPGM	203502_at	9.53	2.92E-22
SUCLG2	215772_x_at	9.52	7.68E-13
GREM2	220794_at	9.52	2.46E-39
SF3B2	200619_at	9.52	1.89E-28
SRP68	224607_s_at	9.52	9.30E-26

IMPACT	222698_s_at	9.52	5.03E-28
DEF8	219646_at	9.52	7.18E-26
CNN2	201605_x_at	9.52	2.13E-24
IAH1	225908_at	9.50	5.07E-25
ACTB	200801_x_at	9.50	1.57E-18
TPRG1L	224871_at	9.50	1.28E-23
AKT1	207163_s_at	9.49	1.08E-32
CDK6	224851_at	9.49	2.19E-17
SEC14L1	202082_s_at	9.49	3.90E-19
DOCK5	230263_s_at	9.48	1.01E-13
LOC100289097	215160_x_at	9.48	4.17E-27
SLC35A2	209326_at	9.47	3.68E-18
COL1A2	202403_s_at	9.46	1.48E-15
SNRPF	203832_at	9.46	2.47E-29
DYNC1LI2	224614_at	9.46	8.73E-29
CARHSP1	218384_at	9.45	2.07E-34
NUP85	218014_at	9.45	2.52E-24
LBH	221011_s_at	9.44	6.55E-17
LIX1L	225793_at	9.44	6.24E-18
CHST3	209834_at	9.44	6.83E-30
TTF1	204772_s_at	9.43	< 2.90E-44
QKI	212263_at	9.43	4.84E-20
GSN	200696_s_at	9.43	1.42E-15
RIC8A	221647_s_at	9.42	6.43E-30
MRPL22	218339_at	9.42	1.56E-28
EML4	228674_s_at	9.41	2.37E-24
CDC6	203968_s_at	9.41	< 2.90E-44
IFRD1	202147_s_at	9.41	1.10E-22
TMEM120A	223482_at	9.41	7.59E-27
PQBP1	214527_s_at	9.40	3.48E-25
HPS5	204544_at	9.40	2.17E-26
MRPL9	209609_s_at	9.40	2.10E-19
IL6ST	211000_s_at	9.39	6.40E-17
NDUFB6	203613_s_at	9.39	2.14E-19
RBM12	212168_at	9.39	1.28E-25
COPRS	225096_at	9.39	5.85E-29
ALKBH3	226127_at	9.39	3.44E-37
USP38	223289_s_at	9.38	5.55E-37
C16orf13	1554466_a_at	9.38	1.16E-40
NTAN1	213061_s_at	9.37	2.40E-24
BGN	201262_s_at	9.37	< 2.90E-44

PNN	210183_x_at	9.37	8.22E-22
MZT1	225578_at	9.36	4.61E-22
GDF15	221577_x_at	9.36	1.52E-30
LOC100996643	225520_at	9.36	8.10E-15
PHF23	1555789_s_at	9.36	< 2.90E-44
CYB561	209164_s_at	9.36	4.93E-18
BMPR2	209920_at	9.35	1.23E-39
EPB41L4A-AS1	225698_at	9.35	7.43E-13
BSDC1	218004_at	9.34	1.48E-23
CAND1	207483_s_at	9.34	4.14E-22
CBX1	201518_at	9.33	6.02E-20
CCBE1	229641_at	9.33	1.28E-24
RPL30	200062_s_at	9.32	3.62E-20
BAG5	202985_s_at	9.32	1.01E-22
KRT19	201650_at	9.32	1.05E-10
BOP1	212563_at	9.32	2.86E-21
MEA1	218061_at	9.31	1.50E-25
SERTAD2	202657_s_at	9.30	2.39E-18
MTA1	211783_s_at	9.30	2.67E-26
MKI67IP	224714_at	9.29	4.95E-24
NDUFV1	208714_at	9.28	9.08E-19
HM13	224615_x_at	9.28	2.86E-26
MCM6	201930_at	9.27	2.73E-18
GGPS1	202322_s_at	9.27	1.35E-27
PSMD5	203447_at	9.27	7.30E-24
IMP4	212411_at	9.27	1.25E-23
SLC52A2	222155_s_at	9.27	2.06E-21
WLS	228950_s_at	9.26	1.75E-21
LAP3	217933_s_at	9.23	1.86E-16
DFNA5	203695_s_at	9.23	8.50E-22
PPA1	217848_s_at	9.23	1.69E-15
NUCB1	200646_s_at	9.22	< 2.90E-44
GSTK1	217751_at	9.22	1.71E-22
RABL2A	219151_s_at	9.22	5.65E-30
PEX13	205246_at	9.22	1.74E-39
RMDN1	218549_s_at	9.21	1.88E-16
TRAPPC12	203122_at	9.21	4.15E-21
NDUFB7	202839_s_at	9.20	9.81E-23
TSEN15	225399_at	9.20	9.54E-21
COQ5	223114_at	9.20	6.90E-23
GPD1L	212510_at	9.20	6.58E-22

MT1P3	216336_x_at	9.20	1.13E-15
UBE2Z	222395_s_at	9.19	3.99E-21
PRDX6	200844_s_at	9.19	1.31E-21
MSL2	218733_at	9.19	2.84E-42
PRKCSH	200707_at	9.19	7.79E-21
MTPAP	218947_s_at	9.18	4.45E-37
CIAPIN1	208968_s_at	9.18	2.41E-27
NUDT21	202697_at	9.17	1.44E-24
NAV3	1552658_a_at	9.17	< 2.90E-44
CRYBB2	206777_s_at	9.17	4.07E-30
CDK1	203214_x_at	9.17	1.80E-25
LYPLAL1	226851_at	9.16	6.47E-11
PCM1	202174_s_at	9.16	1.72E-17
TMEM203	225052_at	9.15	2.38E-21
GCSH/	213133_s_at	9.15	5.06E-20
EXOSC9	205061_s_at	9.14	2.54E-28
RPS11	200031_s_at	9.14	8.11E-18
EIF4E	201435_s_at	9.14	2.93E-25
MMS19	202167_s_at	9.14	7.10E-29
PFDN6	222029_x_at	9.14	2.51E-29
CLPP	202799_at	9.14	8.44E-28
RCN1	201063_at	9.14	1.19E-23
PQLC3	225579_at	9.13	2.14E-16
ANK2	202920_at	9.13	1.41E-10
CLMP	228082_at	9.12	7.01E-31
HEATR1	218594_at	9.12	1.89E-18
LMO7	242722_at	9.11	6.90E-17
EIF3G	208887_at	9.11	3.73E-18
CENPV	226611_s_at	9.11	1.32E-39
CCNYL1	228810_at	9.10	1.04E-33
RAB4A	203582_s_at	9.10	2.21E-32
NDUFB8	201226_at	9.09	2.86E-23
TBL2	212685_s_at	9.08	5.46E-28
DANCR	224870_at	9.08	1.16E-19
GOLGA3	202106_at	9.07	9.32E-22
TSSC1	217968_at	9.07	1.93E-32
KITLG	226534_at	9.06	8.01E-10
RAD23A	201039_s_at	9.06	1.78E-20
TIMM10	1555764_s_at	9.06	1.22E-19
LEPREL1	218717_s_at	9.06	2.35E-08
LOC100129034	225214_at	9.05	9.07E-29

TMCO1	208716_s_at	9.05	2.98E-16
PRRC2C	211944_at	9.04	1.42E-23
HEATR2	218460_at	9.04	9.47E-25
PRPF18	221547_at	9.03	1.54E-23
TIMM44	203093_s_at	9.03	9.15E-36
ERO1L	225750_at	9.03	3.51E-18
ALS2	226291_at	9.02	4.21E-38
SORBS2	204288_s_at	9.02	1.01E-21
GNAQ	224863_at	9.01	< 2.90E-44
MYH9	211926_s_at	9.01	2.58E-19
ANAPC16	224665_at	9.01	2.49E-24
SGPP1	221268_s_at	9.00	< 2.90E-44
GRINA	212090_at	9.00	3.24E-43
COMMD10	218439_s_at	8.99	1.96E-31
MRGPRF	227727_at	8.99	7.74E-17
SPHK1	219257_s_at	8.99	4.47E-13
PPP1R3B	222662_at	8.99	6.74E-20
VAPA	208780_x_at	8.99	2.54E-22
FNDC3B	218618_s_at	8.99	3.89E-17
GTF2H4	203577_at	8.98	3.15E-36
ACAN	207692_s_at	8.98	3.28E-32
GNPDA2	227022_at	8.98	6.02E-26
MRPL21	225315_at	8.97	1.60E-27
SC5D	211423_s_at	8.97	6.13E-19
SORD	201563_at	8.96	1.51E-21
TMEM147	202475_at	8.96	1.84E-24
ZSWIM8	212359_s_at	8.95	1.99E-27
NNT	202784_s_at	8.95	2.64E-39
TNFAIP8	210260_s_at	8.94	1.06E-08
DAP3	208822_s_at	8.94	3.49E-24
SRXN1	225252_at	8.94	8.58E-30
TGFB1I1	209651_at	8.94	2.71E-12
GSPT2	205541_s_at	8.94	1.54E-19
RYBP	201846_s_at	8.93	3.01E-20
LIMCH1	212327_at	8.93	5.96E-19
TRIM25	224806_at	8.92	8.17E-24
CDC27	217879_at	8.92	2.30E-23
VPS26A	201807_at	8.92	2.21E-12
WWP1	212638_s_at	8.92	4.97E-22
UROD	208971_at	8.91	4.49E-32
EXOSC1	222609_s_at	8.91	4.46E-27

PTMA	200773_x_at	8.90	2.03E-23
XPOT	227117_at	8.90	4.17E-22
RAB6A	201047_x_at	8.89	4.83E-26
POP5	204839_at	8.89	4.26E-29
SPTLC1	202277_at	8.88	1.25E-13
NDUFV3	226616_s_at	8.88	1.82E-27
ATP6V1E1	208678_at	8.88	3.69E-25
LTBR	203005_at	8.88	1.35E-27
ZBED1	1554821_a_at	8.88	1.05E-27
ANKRD27	221522_at	8.88	2.33E-18
SZRD1	212005_at	8.87	3.46E-29
ISLR	207191_s_at	8.87	1.80E-12
GOLT1B	218193_s_at	8.87	3.36E-12
DNAJB14	222850_s_at	8.87	1.38E-21
MPG	203686_at	8.87	4.15E-34
NR2C1	204791_at	8.87	1.74E-24
IDI1	208881_x_at	8.86	8.57E-20
TMEM55B	225287_s_at	8.86	3.61E-25
CYC1	201066_at	8.85	1.04E-17
UBA52	221700_s_at	8.85	1.41E-20
CHD1L	212539_at	8.84	9.80E-22
CTTNBP2NL	226000_at	8.83	3.41E-17
MRPL35	218890_x_at	8.83	3.22E-29
ZMPSTE24	202939_at	8.83	8.57E-17
MCUR1	220094_s_at	8.83	2.06E-20
SDC3	202898_at	8.82	3.56E-30
ARMCX6	214749_s_at	8.81	3.10E-18
SDF2L1	218681_s_at	8.81	1.51E-22
DDX46	202462_s_at	8.81	6.22E-21
NCLN	222206_s_at	8.80	1.93E-39
STK25	201314_at	8.80	2.77E-29
NFIL3	203574_at	8.80	2.68E-11
KLHL7	223250_at	8.80	1.97E-15
LDOC1	204454_at	8.79	1.42E-26
GGCX	205351_at	8.79	1.20E-30
ATP5D	213041_s_at	8.79	8.10E-24
PAK2	208875_s_at	8.78	4.60E-24
BIRC5	202094_at	8.77	4.38E-30
STX12	212112_s_at	8.77	4.00E-18
TPP1	200742_s_at	8.76	6.33E-14
LONP1	209017_s_at	8.76	1.90E-22

ATG3	221492_s_at	8.74	1.75E-19
BOLA3	227291_s_at	8.73	2.49E-16
CDR2L	213230_at	8.73	1.02E-28
MICALL1	55081_at	8.73	2.98E-22
GOT2	200708_at	8.72	1.45E-21
IKBKAP	202491_s_at	8.72	4.09E-23
RFWD2	1552617_a_at	8.72	3.75E-26
PTEN	217492_s_at	8.72	2.12E-17
OR7E37P	217499_x_at	8.72	5.90E-28
PNP	201695_s_at	8.71	5.04E-18
RGS10	204319_s_at	8.70	1.13E-18
UBR5	208884_s_at	8.70	1.90E-29
BET1	202710_at	8.68	9.03E-17
GGNBP2	218079_s_at	8.68	2.20E-19
POFUT2	209578_s_at	8.68	3.24E-29
WISP2	205792_at	8.67	7.27E-18
TMED4	224676_at	8.67	6.23E-19
C1GALT1C1	219283_at	8.67	3.22E-20
SDF2	203090_at	8.67	4.95E-27
ANKHD1	208772_at	8.66	3.05E-20
BEX1	218332_at	8.66	2.11E-07
DMAP1	224163_s_at	8.66	1.87E-29
SCAND1	218206_x_at	8.65	4.39E-18
TMEM131	212507_at	8.65	4.89E-17
NUSAP1	218039_at	8.65	5.14E-10
C2orf68	238768_at	8.64	5.58E-27
MCEE	226238_at	8.64	2.80E-25
COMMD4	209132_s_at	8.62	1.15E-24
PIGX	1563111_a_at	8.62	< 2.90E-44
DDX21	208152_s_at	8.62	1.92E-19
XG	1554062_at	8.61	1.80E-13
LSM12	212532_s_at	8.60	7.34E-20
MSL1	212708_at	8.60	8.45E-25
FAM63B	222111_at	8.59	2.17E-16
FAIM	220643_s_at	8.59	3.47E-16
LOC101060353	205872_x_at	8.59	5.56E-30
FBXO45	225099_at	8.59	2.47E-19
HDLBP	225012_at	8.58	2.77E-20
FLOT1	208749_x_at	8.58	1.90E-21
SLC35E2	217122_s_at	8.58	3.09E-18
MT1E	212859_x_at	8.58	6.56E-15

CANT1	46323_at	8.57	1.91E-25
MKKS	222530_s_at	8.57	4.29E-16
LRPPRC	211615_s_at	8.57	1.15E-18
TMEM237	1553956_at	8.57	9.81E-23
GTF2F1	202356_s_at	8.57	5.70E-44
SEL1L	202061_s_at	8.57	8.35E-16
ADRM1	201281_at	8.56	1.06E-22
MAPKAPK5	212871_at	8.56	1.26E-36
DPY19L1	212792_at	8.56	6.26E-18
LINC00968	243813_at	8.56	8.68E-34
MAP3K7	211537_x_at	8.55	< 2.90E-44
SNRPE	203316_s_at	8.55	3.16E-19
ARL6IP4	218216_x_at	8.55	1.97E-23
FAM20A	226804_at	8.55	2.30E-14
CTNNAL1	202468_s_at	8.55	3.07E-09
PTN	211737_x_at	8.55	2.73E-12
AZIN1	201772_at	8.54	7.67E-17
TMEM245	223005_s_at	8.54	< 2.90E-44
MACF1	208633_s_at	8.53	3.56E-31
PLXND1	212235_at	8.53	8.77E-19
FLJ39739	1568609_s_at	8.53	5.70E-18
RNF13	201779_s_at	8.53	4.54E-21
DDX19A	202578_s_at	8.52	1.15E-36
CHURC1	226736_at	8.52	1.95E-07
SEH1L	221931_s_at	8.51	4.92E-17
RAB12	235059_at	8.51	1.67E-43
OSER1	209020_at	8.51	2.34E-33
DNTTIP1	234942_s_at	8.51	3.33E-32
BLOC1S2	225049_at	8.51	1.01E-17
SRP19	205335_s_at	8.51	5.16E-19
COQ9	212228_s_at	8.50	8.02E-23
MAN2B2	214703_s_at	8.50	5.31E-23
RPL27A	203034_s_at	8.50	3.40E-19
C9orf16	204480_s_at	8.50	3.40E-22
NDN	209550_at	8.50	2.06E-20
LPCAT4	40472_at	8.49	1.71E-29
MCM5	216237_s_at	8.49	2.26E-23
SMAD1	210993_s_at	8.49	3.79E-23
PPP4R1	201594_s_at	8.49	4.99E-18
BAZ1B	208445_s_at	8.49	2.20E-24
BZW2	217809_at	8.49	1.53E-17

ATF7	228829_at	8.48	6.05E-31
C6orf62	213875_x_at	8.48	1.84E-35
PICALM	215236_s_at	8.47	< 2.90E-44
PPAPDC1B	226384_at	8.47	3.60E-31
VEGFA	212171_x_at	8.47	7.28E-24
C3orf14	219288_at	8.47	1.42E-16
NUDT5	223100_s_at	8.47	4.05E-19
RTF1	212301_at	8.46	2.86E-24
ANKRD13C	1554471_a_at	8.46	1.02E-32
STXBP1	202260_s_at	8.45	1.14E-19
SPAG9	212470_at	8.45	1.30E-12
AURKAPS1	202374_s_at	8.44	2.30E-29
SMAP1	218137_s_at	8.44	4.76E-17
PHKB	202738_s_at	8.44	7.90E-21
C21orf59	218123_at	8.44	5.53E-23
ATP6V1G1	208737_at	8.44	3.63E-21
RB1CC1	202033_s_at	8.43	7.50E-21
ORC3	210028_s_at	8.43	7.90E-24
EEF1B2	200705_s_at	8.43	8.87E-17
FGF2	204421_s_at	8.43	1.63E-36
HOMER3	215489_x_at	8.43	4.38E-32
UBE2V2	209096_at	8.43	1.48E-17
ZC3H7A	226897_s_at	8.43	1.17E-39
ASAP1	221039_s_at	8.43	< 2.90E-44
KCTD6	238077_at	8.42	9.55E-24
SYNE1	232027_at	8.42	2.14E-41
PCK2	202847_at	8.42	1.29E-20
BSG	208677_s_at	8.41	3.50E-25
PARK7	200006_at	8.41	4.70E-21
EXOSC7	212627_s_at	8.41	2.15E-24
MIR3658	209825_s_at	8.40	8.25E-29
GTF2E2	202680_at	8.40	5.49E-26
DUSP10	221563_at	8.40	5.48E-17
FAM220A	224452_s_at	8.39	4.94E-20
DCLK1	229800_at	8.39	2.60E-09
HNRNPH2	201132_at	8.38	1.70E-16
STEAP3	218424_s_at	8.36	3.43E-27
BAD	1861_at	8.36	2.09E-31
CTNNB1	1554411_at	8.36	< 2.90E-44
SLC2A6	220091_at	8.36	2.83E-39
NPLOC4	217796_s_at	8.36	1.05E-29

USP22	200083_at	8.35	6.69E-22
CDC25B	201853_s_at	8.35	1.45E-21
ILK	201234_at	8.35	6.46E-22
CRAT	209522_s_at	8.35	5.60E-26
MRPL51	224334_s_at	8.35	8.62E-35
SLC7A11	217678_at	8.35	1.69E-34
PRCC	208938_at	8.33	2.73E-39
LMNB2	216952_s_at	8.33	4.63E-27
ASCC2	215684_s_at	8.33	4.51E-33
HUWE1	208598_s_at	8.33	3.17E-18
SMC4	201663_s_at	8.32	2.86E-16
C16orf72	1568954_s_at	8.32	2.63E-37
SMPD1	209420_s_at	8.31	1.73E-29
TWIST2	229404_at	8.31	1.15E-20
SEC22B	209207_s_at	8.30	3.85E-27
OSTM1	235197_s_at	8.30	3.80E-29
ARL16	234972_at	8.30	2.69E-38
MRPL43	230027_s_at	8.30	1.92E-26
CLDND1	208925_at	8.30	6.67E-24
ABHD10	222697_s_at	8.30	3.49E-43
ALG13	219015_s_at	8.29	< 2.90E-44
FH	214170_x_at	8.29	1.15E-20
HADHB	201007_at	8.29	1.53E-19
CASP2	226032_at	8.28	7.23E-23
FAM229B	225812_at	8.28	3.95E-26
MYEOV2	226845_s_at	8.28	1.83E-18
CCDC71L	229521_at	8.28	1.15E-19
TTK	204822_at	8.27	2.72E-21
METTL22	218945_at	8.26	1.01E-28
XRN2	223002_s_at	8.26	1.18E-23
PIR	207469_s_at	8.25	1.58E-17
L3HYPDH	227699_at	8.25	1.41E-24
TRIP4	203732_at	8.25	1.17E-22
GCN1L1	216232_s_at	8.24	5.15E-35
GPATCH4	224632_at	8.24	4.24E-30
MAP2K4	203266_s_at	8.24	5.35E-28
ARIH1	201881_s_at	8.24	1.05E-26
SRSF6	206108_s_at	8.24	6.68E-39
PLXNA1	221538_s_at	8.24	1.21E-16
DYM	223171_at	8.24	8.36E-21
AP1G1	225771_at	8.23	1.25E-33

PEPD	202108_at	8.23	1.19E-28
LOC101060433	212053_at	8.23	1.72E-24
NIT2	218557_at	8.23	3.56E-22
ARHGDIA	213606_s_at	8.22	< 2.90E-44
ANKRD11	234701_at	8.22	9.28E-33
ZNF106	217781_s_at	8.22	1.03E-19
OXA1L	208717_at	8.21	3.38E-22
SKAP2	216899_s_at	8.21	< 2.90E-44
ARPC5L	220966_x_at	8.21	2.02E-19
UBLCP1	227413_at	8.20	1.00E-18
SF1	208313_s_at	8.20	2.90E-24
SERPINB1	212268_at	8.20	2.73E-21
SPCS3	218817_at	8.19	2.81E-15
LOC101060315	227067_x_at	8.19	3.39E-18
TMEM14A	218477_at	8.19	7.99E-14
RPLP1	200763_s_at	8.19	3.35E-20
EWSR1	210011_s_at	8.19	7.54E-28
FAM65A	218029_at	8.18	7.97E-29
HMGA2	208025_s_at	8.18	6.34E-13
TNFRSF10D	227345_at	8.18	4.95E-22
TAOK1	224769_at	8.18	1.42E-18
CEP55	218542_at	8.18	1.41E-17
DPH5	224060_s_at	8.17	8.51E-25
CAPZA1	208374_s_at	8.17	1.45E-17
CRYZL1	226151_x_at	8.16	2.88E-23
TPST1	204140_at	8.15	4.00E-27
DHRS7B	220690_s_at	8.15	4.19E-24
NCAPG2	219588_s_at	8.15	3.32E-36
HEG1	213069_at	8.15	1.12E-16
GJA1	201667_at	8.14	6.11E-11
SNX12	224684_at	8.14	2.42E-22
NDUFA6	202001_s_at	8.14	3.12E-15
POLR2F	209511_at	8.14	2.62E-24
STAMBPL1	227606_s_at	8.14	1.09E-41
TUBGCP2	202477_s_at	8.13	1.06E-26
DUSP12	218576_s_at	8.13	6.43E-27
BLMH	202179_at	8.13	4.01E-24
EDIL3	225275_at	8.12	2.46E-08
LMAN2	200805_at	8.12	3.50E-25
CREB1	204313_s_at	8.12	2.53E-20
NDUFAB1	202077_at	8.11	2.28E-20

NUFIP1	205135_s_at	8.11	1.13E-35
ZDHHC7	218606_at	8.11	1.54E-22
USP1	202413_s_at	8.11	5.18E-13
MED8	213696_s_at	8.10	3.34E-21
CHPF2	221799_at	8.10	4.92E-20
PAFAH1B2	224777_s_at	8.10	1.15E-22
CBX5	209715_at	8.09	2.65E-15
LOC100506248	200772_x_at	8.09	4.81E-15
PCGF5	229194_at	8.08	9.95E-17
OXR1	223879_s_at	8.07	3.43E-40
CDK2AP2	203252_at	8.07	2.98E-30
SAV1	218276_s_at	8.06	6.67E-33
FAM98B	1564637_a_at	8.06	6.89E-28
TRAK2	202124_s_at	8.06	3.39E-19
GFM1	225161_at	8.06	3.57E-26
ZNF512	225050_at	8.06	6.04E-20
CLIC3	219529_at	8.06	1.38E-20
COX4I1	202698_x_at	8.06	3.00E-20
GGH	203560_at	8.05	6.10E-09
TRPV2	219282_s_at	8.05	7.67E-23
STRAP	200870_at	8.05	1.91E-17
HAS3	223541_at	8.04	1.75E-34
GMPPA	218070_s_at	8.03	6.55E-20
ARL3	202641_at	8.03	1.12E-19
ZMYM6	213698_at	8.03	3.41E-19
WASF3	204042_at	8.03	3.33E-12
TCEB1	202824_s_at	8.02	1.07E-17
RABL3	226089_at	8.01	1.67E-43
NRBP1	217765_at	8.01	1.37E-30
LYPLA1	203007_x_at	8.00	6.57E-17
ARMCX3	217858_s_at	8.00	1.85E-19
CXorf40A	213315_x_at	8.00	4.98E-23
CXorf40B	212961_x_at	8.00	4.91E-24
SLC35G2	219569_s_at	7.99	1.55E-30
DIABLO	219350_s_at	7.98	4.02E-25
POLR2G	202306_at	7.97	2.04E-26
NSDHL	209279_s_at	7.97	3.24E-38
IMPAD1	224744_at	7.97	7.60E-19
DCBLD1	226609_at	7.96	4.05E-12
CTSL1	202087_s_at	7.96	6.02E-21
NOL8	218244_at	7.96	6.24E-28

SRPK2	1558254_s_at	7.95	1.51E-27
PACRGL	235260_s_at	7.94	4.30E-36
SEC23IP	216392_s_at	7.94	7.18E-32
SRSF5	212266_s_at	7.94	3.52E-16
CBR1	209213_at	7.93	2.63E-29
SUCLG1	217874_at	7.93	1.64E-22
CRLF1	206315_at	7.93	5.61E-30
RLIM	225416_at	7.93	1.08E-23
SNRPA	201770_at	7.92	1.56E-21
ZNF532	220617_s_at	7.92	2.62E-21
STK24	208854_s_at	7.92	4.55E-27
FAM114A2	222682_s_at	7.92	1.35E-21
STK39	202786_at	7.92	5.90E-22
CBWD1	226193_x_at	7.91	5.88E-20
DAZAP1	218443_s_at	7.91	5.40E-30
RAPGEF1	225738_at	7.91	3.33E-33
SERP1	200971_s_at	7.90	6.60E-20
SART1	200051_at	7.90	3.43E-21
MTMR2	203211_s_at	7.89	6.89E-14
ERI1	226416_at	7.89	5.55E-24
RPL21	200012_x_at	7.89	1.10E-16
SIAE	224391_s_at	7.89	6.30E-31
DCXR	217973_at	7.89	1.01E-20
MAN2A1	205105_at	7.88	4.17E-15
NDUFC2	218101_s_at	7.88	7.68E-21
FBN2	203184_at	7.88	1.24E-09
ZDHHC9	222451_s_at	7.88	6.84E-22
FGFR1	211535_s_at	7.88	9.30E-23
CCNG1	208796_s_at	7.87	1.30E-11
MPP6	205429_s_at	7.86	5.59E-22
KLHDC10	209255_at	7.86	3.95E-23
AGAP1	204066_s_at	7.85	1.35E-27
MALAT1	223940_x_at	7.85	6.36E-11
REPS1	224366_s_at	7.85	5.93E-23
TMEM11	203437_at	7.84	4.41E-34
NDUFB2	218200_s_at	7.84	7.03E-17
CRNKL1	219913_s_at	7.84	6.67E-19
LEPRE1	220750_s_at	7.83	6.29E-20
SETD8	220200_s_at	7.83	< 2.90E-44
MALT1	208309_s_at	7.83	1.31E-27
DLG5	201681_s_at	7.82	1.13E-16

SUMO3	200740_s_at	7.82	2.95E-15
PFDN4	205361_s_at	7.82	1.91E-13
PSMF1	201052_s_at	7.82	5.32E-28
ASMTL	36554_at	7.82	1.08E-26
SAR1B	1554482_a_at	7.79	< 2.90E-44
PRKCI	209678_s_at	7.79	1.77E-14
RAB5B	201276_at	7.79	8.68E-39
WRB	202749_at	7.79	1.94E-17
KDM5D	206700_s_at	7.79	2.54E-30
AHSA1	201491_at	7.78	4.69E-21
SPA17	205406_s_at	7.77	5.86E-26
HMGA1	206074_s_at	7.77	9.02E-20
PCID2	225149_at	7.77	2.36E-28
BGLAP	206956_at	7.77	1.04E-30
C1orf131	226242_at	7.76	4.25E-21
C1orf122	225480_at	7.76	1.89E-24
TSHZ1	223283_s_at	7.76	3.32E-15
ARFIP2	202109_at	7.75	2.37E-25
ANKRD13A	224810_s_at	7.75	3.18E-23
JOSD1	201751_at	7.75	1.43E-24
CHMP1B	218178_s_at	7.75	6.88E-35
SREK1	212721_at	7.75	4.86E-12
GPATCH8	212485_at	7.75	4.11E-23
MT1G	204745_x_at	7.75	5.75E-11
CCDC104	224968_at	7.74	3.05E-21
SUPT20H	226330_s_at	7.74	1.99E-21
SIAH2	209339_at	7.74	8.49E-37
PYROXD1	213878_at	7.74	1.24E-17
HLA-E	200905_x_at	7.73	9.46E-20
U2SURP	212058_at	7.73	4.18E-16
HARS2	209252_at	7.73	3.44E-29
VEGFB	203683_s_at	7.72	4.46E-33
LIN37	213526_s_at	7.72	1.79E-22
NADSYN1	232946_s_at	7.72	2.31E-20
FAM122A	226443_at	7.72	4.25E-27
PSMD7	201705_at	7.72	1.64E-17
BAG3	217911_s_at	7.71	7.20E-21
RP9	227852_at	7.71	3.31E-23
AKAP11	203156_at	7.71	1.95E-15
ZFP36L2	201369_s_at	7.70	1.22E-13
UBA6	218340_s_at	7.70	8.44E-39

ARF6	203311_s_at	7.70	4.24E-40
SNRPB2	202505_at	7.70	2.19E-27
NPR2	204310_s_at	7.70	9.90E-38
H2BFS	208579_x_at	7.69	3.44E-36
COPG2	223457_at	7.69	4.05E-34
NEDD4	213012_at	7.69	1.00E-21
SF3B1	201071_x_at	7.68	1.73E-19
TPR	201730_s_at	7.68	3.84E-15
WIPF2	212051_at	7.68	8.83E-28
MTIF3	223356_s_at	7.68	1.19E-21
MIB1	224726_at	7.68	7.50E-23
DRG1	202810_at	7.67	5.83E-23
BIRC6	224635_s_at	7.67	5.79E-26
RNF5	209111_at	7.67	2.91E-21
FAM89B	32209_at	7.66	2.35E-28
ILVBL	202993_at	7.66	2.16E-17
MELK	204825_at	7.66	4.50E-11
SNX6	217789_at	7.65	7.63E-21
PSMB8	209040_s_at	7.65	1.26E-17
ASH1L	222667_s_at	7.65	1.35E-16
HGSNAT	218017_s_at	7.65	7.87E-19
AGPAT3	223182_s_at	7.65	1.29E-13
SNX8	223241_at	7.64	1.99E-27
KIF3B	225205_at	7.64	4.71E-27
DPP8	220939_s_at	7.64	2.32E-22
NUP93	202188_at	7.64	2.53E-27
OTTHUMG00000163952	235696_at	7.64	< 2.90E-44
SEC61B	203133_at	7.63	1.50E-20
CREB3	209432_s_at	7.63	2.98E-20
STX4	203530_s_at	7.63	1.11E-24
FAM103A1	225210_s_at	7.63	2.75E-13
WBP11	217821_s_at	7.63	3.41E-33
CERS5	224951_at	7.62	6.07E-23
TMEM185A	227880_s_at	7.62	7.52E-23
C15orf40	1552310_at	7.62	1.66E-18
NMRAL1	223206_s_at	7.61	5.67E-18
USP47	221518_s_at	7.60	9.83E-28
C1orf21	223125_s_at	7.60	4.53E-15
EIF1AY	204409_s_at	7.60	2.16E-32
G3BP1	201514_s_at	7.60	2.61E-26
PLK2	201939_at	7.59	1.06E-14

MBOAT2	226726_at	7.59	8.86E-33
TJP2	202085_at	7.59	5.86E-14
SETD7	224928_at	7.59	3.47E-15
ABCF1	200045_at	7.59	1.69E-20
RPL23A	213084_x_at	7.59	1.05E-17
RNASET2	217983_s_at	7.58	4.44E-14
MED15	222175_s_at	7.58	4.53E-26
PCCB	212694_s_at	7.58	9.42E-18
ZMAT2	224782_at	7.56	4.57E-19
SMARCA5	202303_x_at	7.56	2.46E-24
DLAT	212568_s_at	7.56	2.10E-20
TIMM21	223181_at	7.55	6.88E-21
RBM42	205740_s_at	7.55	6.64E-21
EIF4B	211938_at	7.54	1.36E-17
PRNP	215707_s_at	7.54	1.86E-40
NOA1	223157_at	7.53	8.89E-23
STAT1	200887_s_at	7.53	1.15E-10
ATF7IP	218987_at	7.53	6.65E-25
ALG8	203545_at	7.52	4.81E-24
KLHL12	225068_at	7.52	4.86E-17
LDB2	206481_s_at	7.52	1.90E-15
EPB41L2	201718_s_at	7.51	2.31E-30
BACE1	224335_s_at	7.51	< 2.90E-44
BSCL2	208906_at	7.50	1.60E-23
RALBP1	202845_s_at	7.50	2.38E-26
YLPM1	212787_at	7.50	6.37E-19
SERBP1	209669_s_at	7.50	3.74E-19
MRPS27	212145_at	7.50	1.44E-25
KCNE4	1552508_at	7.48	1.50E-31
EIF4G2	200004_at	7.48	2.51E-19
HOXC6	206858_s_at	7.48	6.60E-12
WARS2	222734_at	7.47	4.18E-22
ARHGAP17	218076_s_at	7.47	7.52E-25
WHSC1	209053_s_at	7.47	3.94E-26
AGA	216064_s_at	7.47	2.66E-31
UGDH	203343_at	7.47	7.58E-12
PRKAG2	222582_at	7.47	1.77E-16
KIF2A	203087_s_at	7.47	1.85E-19
ARNTL2	220658_s_at	7.46	1.13E-35
PLGRKT	218992_at	7.45	3.66E-22
LPHN2	206953_s_at	7.44	1.39E-15

APEH	201284_s_at	7.44	4.43E-18
HMG20A	218152_at	7.44	6.53E-19
LRP1	200785_s_at	7.44	9.83E-18
BRK1	224575_at	7.44	1.75E-24
FAM32A	201863_at	7.44	9.34E-24
DEXI	203733_at	7.43	1.59E-28
HNRNPR	208765_s_at	7.43	7.49E-20
KLF4	221841_s_at	7.43	2.17E-07
ICT1	204868_at	7.43	1.39E-25
TEAD2	226408_at	7.43	4.31E-24
IDUA	205059_s_at	7.42	7.81E-29
DCTN4	218013_x_at	7.42	1.10E-39
PPP3CC	207000_s_at	7.42	2.77E-36
ZDHHC13	219296_at	7.42	4.59E-29
METTL17	223528_s_at	7.42	4.44E-24
PHTF1	210191_s_at	7.41	2.77E-34
LOC100288142	201104_x_at	7.41	4.87E-26
DDX5	200033_at	7.41	2.89E-18
ZW10	204812_at	7.41	3.87E-29
SEC16A	215696_s_at	7.41	1.66E-20
FAM46A	221766_s_at	7.41	5.37E-15
HIGD2A	209329_x_at	7.41	9.19E-27
DIDO1	227335_at	7.41	3.18E-35
MRP63	224535_s_at	7.40	2.30E-30
DIAPH3	229097_at	7.40	3.67E-12
SMARCA1	215294_s_at	7.40	2.11E-31
DCPS	218774_at	7.40	7.44E-27
UGGT1	222569_at	7.39	8.57E-40
SH3KBP1	1554168_a_at	7.39	1.97E-14
SP1	224754_at	7.39	5.84E-20
ME2	210154_at	7.38	< 2.90E-44
CNRIP1	226751_at	7.38	2.96E-17
SRGAP1	227484_at	7.38	6.59E-22
CWC15	223067_at	7.37	3.49E-18
ALG6	219649_at	7.37	2.03E-17
MLX	217909_s_at	7.36	2.77E-29
POLR1C	207515_s_at	7.36	1.07E-36
HNRNPA0	201054_at	7.36	2.37E-16
COL6A3	201438_at	7.36	1.48E-21
LOC654342	214110_s_at	7.36	3.83E-21
LPIN1	212276_at	7.36	1.62E-21

SNHG17	65588_at	7.36	1.79E-21
DSE	218854_at	7.35	5.37E-08
HERPUD2	1552628_a_at	7.35	4.24E-25
TIPIN	219258_at	7.34	2.62E-21
KIAA1737	225623_at	7.33	1.26E-23
DEPDC1	232278_s_at	7.33	2.19E-43
TSR3	213104_at	7.33	3.77E-25
SLC30A1	212907_at	7.33	1.98E-12
MINA	213189_at	7.32	1.53E-23
CTD-2336O2.1	227092_at	7.32	4.95E-28
MYO1C	225080_at	7.32	7.56E-28
MET	203510_at	7.31	8.28E-11
LINC00667	226235_at	7.31	3.77E-33
EIF2S1	201144_s_at	7.31	2.26E-17
ZMYM4	202050_s_at	7.31	8.24E-30
PITHD1	223124_s_at	7.31	1.68E-20
SLC6A8	202219_at	7.31	1.67E-12
PDCD5	219275_at	7.30	4.20E-29
EXOC1	222127_s_at	7.30	4.22E-19
GSK3B	209945_s_at	7.30	1.16E-20
EAPP	202623_at	7.30	9.05E-20
MITD1	226329_s_at	7.30	1.86E-22
UBE3A	211285_s_at	7.30	1.12E-21
IDH2	210046_s_at	7.30	6.11E-17
DHFR	202533_s_at	7.29	< 2.90E-44
PIK3CA	204369_at	7.29	3.20E-30
FAH	202862_at	7.29	2.32E-21
U2AF1	202858_at	7.29	6.76E-17
TXNDC15	220495_s_at	7.29	2.97E-17
SH2B3	203320_at	7.29	2.07E-21
NCK1	204725_s_at	7.29	7.82E-32
SNX14	225101_s_at	7.29	9.09E-19
BLCAP	201032_at	7.29	3.96E-20
TBC1D16	228488_at	7.28	1.10E-22
FAM83D	225687_at	7.28	7.19E-14
LY96	206584_at	7.28	3.19E-13
TMEM206	222752_s_at	7.28	6.96E-24
MNAT1	203565_s_at	7.28	9.30E-32
DIXDC1	214724_at	7.27	5.34E-14
JAGN1	223104_at	7.27	2.82E-24
PTPN12	202006_at	7.26	6.06E-16

ST3GAL1	225033_at	7.26	2.11E-24
GBA	209093_s_at	7.26	3.82E-29
GTF3A	201338_x_at	7.26	2.81E-18
ERRFI1	224657_at	7.25	1.60E-11
NDUFAF4	219006_at	7.24	4.50E-23
SLC9A6	203909_at	7.24	5.06E-29
AKAP12	227529_s_at	7.24	8.04E-10
NECAP1	209300_s_at	7.24	5.62E-22
SYAP1	225154_at	7.24	5.83E-24
TIMM22	222841_s_at	7.24	7.11E-41
MAGT1	224899_s_at	7.23	2.37E-13
MDP1	228763_at	7.23	1.03E-17
GEM	204472_at	7.22	1.39E-11
EHD3	218935_at	7.22	9.52E-18
MED16	43544_at	7.22	1.10E-13
DCAF5	224703_at	7.22	4.23E-25
VPS37B	221704_s_at	7.22	1.16E-21
ZDHHC6	218249_at	7.22	5.44E-22
CCDC28A	209479_at	7.21	3.40E-20
CDK16	207239_s_at	7.21	2.35E-32
CD58	205173_x_at	7.20	3.62E-16
RFC4	204023_at	7.20	1.50E-17
GFM2	225392_at	7.20	5.97E-29
C19orf43	223003_at	7.19	1.08E-22
SNX4	205329_s_at	7.19	7.67E-23
MFSD10	209215_at	7.19	5.83E-21
CYB5R4	219079_at	7.19	1.48E-36
BNIP2	226280_at	7.19	6.78E-15
PNPO	222653_at	7.19	4.24E-30
UMPS	202706_s_at	7.19	4.80E-22
SUPT16H	217815_at	7.19	9.68E-23
STEAP1B	217553_at	7.18	1.37E-38
NOTCH2	210756_s_at	7.18	2.90E-44
KMT2E	223189_x_at	7.18	2.98E-15
MYO1E	203072_at	7.17	1.68E-34
FOXF2	206377_at	7.17	7.87E-21
BAALC	222780_s_at	7.17	1.06E-36
APOPT1	225948_at	7.17	3.07E-37
NENF	218407_x_at	7.17	1.50E-27
TUBA4A	212242_at	7.16	3.63E-18
COA4	220647_s_at	7.16	1.45E-25

PXN	201087_at	7.16	2.43E-29
COL27A1	225288_at	7.16	9.83E-15
DAPK3	203890_s_at	7.16	2.90E-44
NDC80	204162_at	7.15	2.48E-11
PGAM1	200886_s_at	7.15	2.97E-19
XPC	209375_at	7.15	1.55E-24
TRIM44	217759_at	7.15	1.70E-19
GTF2B	208066_s_at	7.15	2.17E-20
UROS	203031_s_at	7.14	1.99E-23
LINC00094	203245_s_at	7.14	7.25E-20
MSRB3	1554127_s_at	7.13	1.55E-19
EIF3J	208985_s_at	7.13	3.47E-15
DUSP6	208893_s_at	7.13	4.62E-14
IGF2BP2	218847_at	7.13	1.71E-12
UTP18	203721_s_at	7.12	1.12E-15
NOP16	214011_s_at	7.12	2.06E-21
WDR46	209196_at	7.11	6.86E-23
TWISTNB	226784_at	7.11	1.58E-30
WDSUB1	226668_at	7.11	1.42E-17
HADH	211569_s_at	7.11	2.50E-18
UBAP2L	201378_s_at	7.11	7.68E-30
UBXN7	217100_s_at	7.11	6.10E-33
FUS	200959_at	7.11	6.33E-17
YTHDF3	1564053_a_at	7.11	< 2.90E-44
GOPC	227215_at	7.10	5.38E-16
ACIN1	201715_s_at	7.10	3.09E-26
HLA-C	211799_x_at	7.10	1.58E-16
C12orf10	218220_at	7.10	2.00E-20
ABHD17C	225436_at	7.10	3.96E-27
YARS	212048_s_at	7.10	2.23E-23
PRPF31	202407_s_at	7.10	4.40E-40
ACAD8	221669_s_at	7.10	5.16E-35
TGS1	238346_s_at	7.10	1.64E-17
FOSL1	204420_at	7.10	1.66E-40
PLA2G16	209581_at	7.09	2.17E-13
KLHL21	203068_at	7.09	4.59E-24
CFDP1	203166_at	7.09	4.44E-22
PDPK1	224986_s_at	7.08	2.51E-20
CYFIP1	208923_at	7.08	2.70E-18
FZD6	203987_at	7.08	2.05E-13
TANK	207616_s_at	7.08	1.97E-23

NPIPA1	204538_x_at	7.08	8.31E-20
ABL2	231907_at	7.08	6.44E-35
COMMD9	218072_at	7.07	2.11E-20
RPL22	221726_at	7.07	1.45E-14
CPPED1	222686_s_at	7.07	1.28E-38
HTRA2	203089_s_at	7.07	2.00E-16
BMP1	205574_x_at	7.06	1.00E-13
METTL8	1554667_s_at	7.06	9.33E-25
HCCS	203746_s_at	7.06	8.02E-22
HSPB11	203960_s_at	7.06	2.14E-33
CSNK2A2	203575_at	7.06	1.48E-20
LGALS3BP	200923_at	7.05	2.58E-20
LOC728554	224623_at	7.05	1.83E-14
COX20	224824_at	7.05	4.78E-28
C9orf123	224879_at	7.05	1.01E-21
PHYH	203335_at	7.05	5.41E-14
DST	212254_s_at	7.05	1.89E-14
MUT	202959_at	7.04	2.11E-24
ABI3BP	223395_at	7.04	2.50E-04
KIN	205664_at	7.04	8.99E-20
NAA50	222393_s_at	7.04	2.03E-20
CTPS1	202613_at	7.03	2.46E-19
ABCE1	201873_s_at	7.03	8.61E-18
GNA12	224681_at	7.03	5.50E-25
SCPEP1	218217_at	7.03	2.02E-17
IL6	205207_at	7.03	3.67E-07
ATP1B3	208836_at	7.01	1.99E-16
WBP4	203597_s_at	7.01	4.58E-22
MAP2K1	202670_at	7.00	1.26E-21
FOXN3	218031_s_at	7.00	6.44E-17
EXOSC4	218695_at	7.00	3.40E-24
BRMS1	215631_s_at	7.00	9.14E-28
DPYSL2	200762_at	7.00	4.18E-16
SMIM3	223276_at	6.99	1.83E-11
TMEM60	223396_at	6.99	7.24E-14
SECISBP2	224250_s_at	6.99	8.60E-21
IFNGR1	211676_s_at	6.99	1.61E-14
DIS3	234660_s_at	6.99	< 2.90E-44
LPIN2	202459_s_at	6.99	4.84E-38
NARS	200027_at	6.97	1.55E-14
GCLM	203925_at	6.97	2.15E-12

FAM134C	212697_at	6.97	2.03E-25
LLPH	224446_at	6.96	3.30E-28
UBXN1	201871_s_at	6.96	3.60E-22
SSU72	223053_x_at	6.96	6.51E-31
SFT2D3	222763_s_at	6.96	2.86E-18
STK17B	205214_at	6.96	5.98E-22
MRPS6	224919_at	6.95	1.17E-16
ZCRB1	227416_s_at	6.95	4.46E-34
VPS37A	225378_at	6.95	2.42E-22
PHF5A	225309_at	6.95	1.03E-28
OXSM	219133_at	6.95	8.95E-21
CHCHD10	224932_at	6.95	8.24E-16
TTC9C	226175_at	6.94	3.90E-31
CTBP2	210554_s_at	6.94	1.84E-18
OGDH	201282_at	6.94	1.04E-38
BLVRA	203771_s_at	6.94	2.88E-34
NAP1L4	1560339_s_at	6.94	5.16E-39
VEZF1	202171_at	6.94	5.94E-27
RSL24D1	217915_s_at	6.93	1.95E-17
EBF1	229487_at	6.93	5.41E-21
PNKP	218961_s_at	6.93	5.05E-17
LMCD1	242767_at	6.93	1.38E-12
MFAP3	213123_at	6.92	2.50E-22
CABLES1	225532_at	6.92	1.94E-24
IFT52	218709_s_at	6.92	4.37E-21
GTF3C6	225083_at	6.92	1.18E-14
ZNF286A	227077_at	6.92	2.47E-19
TMEM173	224929_at	6.91	1.47E-18
COG8	219575_s_at	6.91	2.49E-23
DNAJC17	219861_at	6.91	1.71E-37
HLA-G	211529_x_at	6.90	1.78E-18
RPS3A	200099_s_at	6.90	1.47E-17
PEAK1	225913_at	6.90	2.20E-21
TMEM200B	227386_s_at	6.90	3.73E-16
METRNL	225955_at	6.89	7.46E-13
LYPD1	212909_at	6.88	2.88E-09
GPR124	221814_at	6.88	1.90E-21
FKRP	219853_at	6.88	< 2.90E-44
SIGMAR1	214484_s_at	6.87	< 2.90E-44
G6PC3	44654_at	6.87	4.90E-27
TMEM222	221512_at	6.87	2.61E-24

BUB1	209642_at	6.86	4.28E-29
DNMT1	201697_s_at	6.86	1.41E-20
LRP5	209468_at	6.86	2.19E-39
GSR	205770_at	6.86	5.73E-27
CENPE	205046_at	6.86	6.19E-30
SEC24A	212902_at	6.86	3.47E-34
DDX49	210811_s_at	6.86	9.86E-37
GEMIN5	225712_at	6.86	1.05E-29
GIT2	225558_at	6.85	6.25E-18
FAM20C	226722_at	6.85	8.18E-18
RHOG	203175_at	6.85	4.25E-19
TFPI	213258_at	6.85	9.59E-10
PHLPP2	213407_at	6.85	1.81E-32
PPIG	208993_s_at	6.85	1.18E-15
RAB24	225251_at	6.84	1.64E-18
GTF3C3	218343_s_at	6.84	2.22E-25
PSMG1	203405_at	6.84	1.64E-18
ATP6	1553567_s_at	6.84	1.22E-11
RQCD1	1554080_at	6.84	1.89E-20
RABEP2	74694_s_at	6.84	5.65E-18
FAHD1	227960_s_at	6.84	5.80E-15
LARP4B	208954_s_at	6.83	2.67E-26
HMMR	207165_at	6.83	1.43E-09
MAP1LC3A	232011_s_at	6.83	< 2.90E-44
SNRNP40	215905_s_at	6.82	2.12E-31
RFTN1	212646_at	6.82	1.70E-14
RBM23	219816_s_at	6.82	7.57E-24
ELF1	212420_at	6.81	8.64E-20
CDK9	203198_at	6.81	5.05E-34
GPD2	225447_at	6.81	5.81E-22
PABPC3	208113_x_at	6.81	7.13E-20
TOR1B	209593_s_at	6.81	1.17E-23
RAI14	202052_s_at	6.80	2.16E-17
PUF60	209899_s_at	6.80	5.70E-22
JTB	200048_s_at	6.80	1.87E-19
GSTM3	202554_s_at	6.80	5.06E-16
SUGP1	215004_s_at	6.80	2.51E-26
UBASH3B	238462_at	6.79	< 2.90E-44
CHMP4A	218572_at	6.79	5.63E-26
STX2	213434_at	6.79	2.09E-18
ICMT	201611_s_at	6.78	1.33E-21

AIMP2	202138_x_at	6.77	1.24E-19
WNK1	211992_at	6.77	3.73E-17
EML1	204797_s_at	6.77	4.45E-27
CTSC	225647_s_at	6.77	2.84E-21
F8A1	203274_at	6.77	2.42E-24
NXN	219489_s_at	6.77	2.59E-13
MSH3	210947_s_at	6.77	3.60E-35
GRB2	223049_at	6.77	6.18E-22
TYW3	227141_at	6.76	6.07E-16
TAF15	202840_at	6.76	3.75E-21
EHD1	209037_s_at	6.76	4.12E-28
SNTB2	205315_s_at	6.76	2.83E-19
NUP107	218768_at	6.75	3.22E-16
PREB	217861_s_at	6.75	2.81E-20
STYXL1	233982_x_at	6.75	1.43E-29
ZBTB43	204182_s_at	6.75	2.48E-36
MIR1236	209219_at	6.75	2.01E-18
SPTBN1	212071_s_at	6.75	1.82E-16
THOC2	222122_s_at	6.75	3.72E-19
C17orf61	56197_at	6.75	1.43E-18
KPNA4	225267_at	6.75	7.35E-25
TAPBP	208829_at	6.74	9.03E-19
MCM10	220651_s_at	6.74	5.43E-35
APOOL	213289_at	6.74	1.09E-42
CPNE1	206918_s_at	6.74	5.63E-20
LOC100506639	214741_at	6.74	6.12E-18
GLT8D2	221447_s_at	6.74	5.79E-15
ACOX2	205364_at	6.73	2.40E-27
LOC728392	218380_at	6.73	9.67E-14
TUSC2	203272_s_at	6.73	5.88E-38
PPM1A	203966_s_at	6.73	1.14E-15
MYL12B	221474_at	6.73	7.30E-18
PSD3	218613_at	6.72	5.05E-12
TBX3	219682_s_at	6.72	2.23E-18
IFI30	201422_at	6.72	1.12E-11
UNC13B	202893_at	6.72	5.07E-29
PSMD2	200830_at	6.72	4.47E-22
SEC24C	202361_at	6.72	3.16E-20
C14orf142	223273_at	6.72	1.04E-26
ANAPC1	231973_s_at	6.72	3.45E-31
SPG11	203513_at	6.72	1.69E-22

COX17	203880_at	6.71	8.81E-21
YTHDF1	221741_s_at	6.71	3.70E-23
AKT1S1	224982_at	6.71	< 2.90E-44
TRPM7	223324_s_at	6.71	1.08E-28
MIR4800	212347_x_at	6.70	1.40E-30
RAB5A	206113_s_at	6.70	< 2.90E-44
HDGF	200896_x_at	6.70	5.89E-20
KIAA2013	224706_at	6.69	2.90E-24
PLAU	211668_s_at	6.69	5.47E-19
POLD2	201115_at	6.69	2.01E-21
SNRNP27	212440_at	6.69	6.76E-18
IL10RB	209575_at	6.68	8.21E-22
ATR	209902_at	6.68	1.53E-20
ZCCHC10	1559399_s_at	6.68	< 2.90E-44
LARP7	212785_s_at	6.67	8.62E-23
SPATA5L1	222163_s_at	6.67	4.44E-21
UCKL1	218533_s_at	6.67	1.18E-17
EHBP1L1	91703_at	6.67	1.37E-37
ENSA	202596_at	6.67	5.04E-20
PEAR1	228618_at	6.66	4.36E-27
RAB21	203885_at	6.66	2.01E-14
RNF10	207801_s_at	6.66	4.13E-25
NDUFB3	203371_s_at	6.66	2.94E-23
EBNA1BP2	201323_at	6.66	2.73E-20
NDUFS2	201966_at	6.65	6.96E-21
ZFHX4	219779_at	6.65	9.00E-31
MRPL3	208787_at	6.65	1.66E-15
LOC93622	225391_at	6.65	2.20E-20
CMC4	216862_s_at	6.64	3.90E-21
SEL1L3	212314_at	6.64	2.23E-10
DHX16	203694_s_at	6.64	3.21E-24
AGTRAP	1555736_a_at	6.64	1.66E-36
MAVS	229741_at	6.63	3.37E-40
NCS1	230146_s_at	6.63	1.47E-35
CCDC34	226287_at	6.63	1.07E-12
DESI1	212527_at	6.63	3.84E-28
HDAC5	202455_at	6.63	3.40E-27
ACAT2	209608_s_at	6.63	5.31E-28
LOC100506029	228661_s_at	6.63	4.32E-23
PYCARD	221666_s_at	6.63	2.76E-16
SNRPD3	202567_at	6.62	3.66E-19

ZNF318	203521_s_at	6.62	6.07E-29
MIS18A	228597_at	6.62	1.61E-17
EIF2D	218253_s_at	6.62	5.81E-22
PABPC1///RLIM	215823_x_at	6.62	5.03E-19
AGO2	225827_at	6.62	1.46E-32
PSG5	204830_x_at	6.62	6.88E-28
MRPL14	225201_s_at	6.62	2.34E-22
C4orf33	1552370_at	6.62	< 2.90E-44
SAAL1	225614_at	6.61	7.29E-39
PEX19	201707_at	6.61	3.20E-25
FAM134A	218037_at	6.61	5.26E-23
FEN1	204768_s_at	6.61	4.95E-35
SLC22A4	205896_at	6.61	3.09E-31
FAM168B	212017_at	6.61	5.06E-22
RAB11FIP2	203884_s_at	6.61	9.43E-19
ZNF271	211009_s_at	6.60	3.34E-27
CDCA2	226661_at	6.60	1.42E-30
IVNS1ABP	206245_s_at	6.60	2.86E-16
CEBPZ	203341_at	6.60	1.61E-20
CYB5B	201633_s_at	6.60	1.86E-36
DNPEP	201937_s_at	6.60	2.63E-19
C16orf45	212736_at	6.59	7.42E-20
ECHDC1	233124_s_at	6.59	1.40E-21
EIF4A3	201303_at	6.59	2.09E-19
CCDC107	229063_s_at	6.59	1.70E-28
AES	217729_s_at	6.59	3.49E-31
ZBTB38	219221_at	6.59	2.60E-15
TMPO	203432_at	6.59	1.33E-20
TGIF1	203313_s_at	6.59	2.09E-18
TARDBP	200020_at	6.59	4.06E-21
EED	209572_s_at	6.58	8.32E-21
FAM92A1	235391_at	6.58	9.34E-20
IER3IP1	223071_at	6.57	2.73E-13
APRT	203219_s_at	6.57	5.48E-19
UHRF1	225655_at	6.57	9.01E-17
CEP57	203492_x_at	6.57	2.45E-35
MEAF6	218165_at	6.57	1.51E-21
ANGEL2	221826_at	6.57	1.29E-35
ZDHHC24	205634_x_at	6.56	1.64E-29
SUCLA2	202930_s_at	6.56	4.92E-13
NR3C1	211671_s_at	6.56	4.51E-13

ELL2	226982_at	6.55	9.98E-11
APOO	221620_s_at	6.55	5.73E-32
SRP9	201273_s_at	6.55	8.66E-16
RFT1	226060_at	6.55	5.97E-25
TCTA	203054_s_at	6.55	3.07E-28
GJC1	228776_at	6.55	3.99E-11
STAM2	215044_s_at	6.55	1.86E-38
PRPF8	200000_s_at	6.55	1.65E-21
METTL3	209265_s_at	6.54	4.07E-18
LZIC	226087_at	6.54	5.31E-21
FAM129B	223019_at	6.54	1.02E-23
CIRBP	230142_s_at	6.54	2.19E-15
WDR18	209461_x_at	6.54	5.81E-29
WDR70	219193_at	6.53	5.15E-20
RASA3	225562_at	6.53	1.19E-27
HIF1AN	226648_at	6.53	8.32E-23
FAM192A	217896_s_at	6.53	3.46E-23
FAHD2A	218504_at	6.53	5.28E-22
TRIM32	203846_at	6.53	1.67E-29
CDK5RAP2	233540_s_at	6.52	3.16E-17
TPBG	203476_at	6.52	4.39E-13
MINK1	214246_x_at	6.52	7.34E-22
PRDM16	232424_at	6.52	1.55E-29
NEO1	204321_at	6.51	1.35E-27
ZDHHC16	223212_at	6.51	1.02E-18
RBM22	224068_x_at	6.51	5.11E-30
CLN3	210859_x_at	6.50	3.28E-30
SRD5A3	222750_s_at	6.50	2.60E-16
LOC150776	207856_s_at	6.50	6.18E-25
DNTTIP2	202776_at	6.50	4.22E-23
PRKAR2A	225000_at	6.50	2.37E-26
SETX	201964_at	6.50	1.11E-17
FAM173A	219709_x_at	6.50	1.61E-20
GOSR2	210009_s_at	6.50	2.03E-36
KIAA1967	225187_at	6.50	8.02E-31
LOC100506365	227765_at	6.50	1.57E-19
EVA1B	221710_x_at	6.50	8.95E-18
MAT2A	200769_s_at	6.50	< 2.90E-44
PIGP	221689_s_at	6.49	2.53E-18
C18orf21	223526_at	6.49	1.68E-19
YAF2	206238_s_at	6.49	< 2.90E-44

BCKDHB	210653_s_at	6.48	8.83E-35
ISY1	223831_x_at	6.48	1.29E-37
MTHFD2	201761_at	6.48	4.62E-08
KIF20A	218755_at	6.48	1.03E-13
IMPA2	203126_at	6.47	1.45E-14
TRIB3	218145_at	6.47	6.30E-17
ZDHHC2	222730_s_at	6.47	7.23E-36
BIVM	233255_s_at	6.47	1.96E-22
SETD9	238465_at	6.47	3.18E-23
SNUPN	207438_s_at	6.47	1.52E-23
NRD1	208709_s_at	6.47	2.59E-25
AVPI1	218631_at	6.47	1.40E-17
C16orf58	217891_at	6.46	3.07E-26
RASAL2	219026_s_at	6.46	< 2.90E-44
PJA2	201133_s_at	6.46	4.74E-14
ZBTB21	233952_s_at	6.46	2.65E-11
ABHD14B	224821_at	6.46	1.79E-26
LITAF	200706_s_at	6.46	6.12E-17
FNDC1	226930_at	6.46	2.55E-06
FLNB	208613_s_at	6.45	4.37E-22
CCDC115	224946_s_at	6.45	3.61E-20
KIAA0430	202386_s_at	6.45	2.80E-14
RFNG	212968_at	6.44	6.27E-27
PTTG1IP	200677_at	6.44	3.77E-17
CARS	212971_at	6.44	8.07E-20
ZNF622	225152_at	6.44	8.39E-24
LRRC47	212904_at	6.44	2.28E-23
WDFY1	224800_at	6.43	1.03E-12
PDP1	222572_at	6.43	1.99E-11
NFASC	213438_at	6.43	2.15E-13
PAFAH1B3	203228_at	6.43	3.62E-19
GATAD2A	234294_x_at	6.43	2.12E-22
NTN4	223315_at	6.43	1.45E-08
ORC2	204853_at	6.43	8.47E-31
ZNF148	203319_s_at	6.43	1.05E-24
IDS	206342_x_at	6.43	4.95E-18
LINC00493	226236_at	6.43	2.26E-23
PROCR	203650_at	6.42	2.87E-20
SCAMP3	201771_at	6.42	2.88E-20
DDX39A	201584_s_at	6.42	3.06E-13
AGO3	219426_at	6.42	3.99E-24

MXRA8	213422_s_at	6.42	5.73E-17
TMEM54	202090_s_at	6.42	8.79E-17
SART3	209127_s_at	6.41	5.35E-13
CYP20A1	219565_at	6.41	6.95E-35
COA1	209445_x_at	6.41	1.37E-25
KHSRP	204372_s_at	6.41	7.23E-21
LSM14A	212131_at	6.40	3.51E-18
NDUFS6	203606_at	6.40	2.73E-21
MRPL12	203931_s_at	6.40	5.57E-17
IDE	203327_at	6.40	3.73E-18
NFYB	218129_s_at	6.40	2.05E-31
DBN1	202806_at	6.39	1.83E-26
WDR37	211383_s_at	6.39	9.34E-20
DALRD3	221934_s_at	6.39	9.36E-27
CLCN4	214769_at	6.39	5.26E-30
QPCT	205174_s_at	6.39	4.35E-16
TOLLIP	217930_s_at	6.38	1.61E-29
NUMB	209073_s_at	6.37	1.65E-25
AKIP1	219953_s_at	6.37	6.67E-35
ASCC3	212815_at	6.37	6.49E-17
UBAC2	224298_s_at	6.37	5.37E-23
LIMS1	207198_s_at	6.37	1.49E-16
COLEC12	221019_s_at	6.37	5.24E-08
SLC2A14	222088_s_at	6.36	9.07E-15
TPRA1	218855_at	6.35	1.99E-29
PTCD2	1555910_at	6.35	1.57E-23
SMAD5	235451_at	6.35	6.81E-19
IFI16	208966_x_at	6.35	7.34E-13
HOXA5	213844_at	6.35	7.81E-08
NADK2	226946_at	6.35	2.29E-36
BIN1	214439_x_at	6.34	7.18E-18
C11orf31	231045_x_at	6.34	1.56E-22
ZNF689	227445_at	6.34	5.36E-29
TRIP13	204033_at	6.33	5.85E-14
SCAMP4	213244_at	6.33	4.00E-34
BTBD1	217945_at	6.33	4.95E-19
IFT27	205037_at	6.33	2.46E-29
MGEA5	200899_s_at	6.33	2.75E-18
NLN	225943_at	6.33	9.89E-24
GTPBP10	234311_s_at	6.33	4.00E-20
TPST2	204079_at	6.32	7.52E-15

MEGF9	212830_at	6.32	6.53E-26
KDM3B	210878_s_at	6.32	2.19E-18
DPYSL4	205493_s_at	6.31	4.95E-17
ATG12	204833_at	6.31	7.70E-43
SRD5A1	210959_s_at	6.31	2.94E-29
PFKM	210976_s_at	6.31	1.79E-15
HK2	202934_at	6.31	1.06E-11
PDE4DIP	210305_at	6.30	3.81E-26
MPI	202472_at	6.30	4.10E-33
RAE1	211318_s_at	6.30	1.70E-29
FDX1	203647_s_at	6.30	2.80E-12
NXF1	208922_s_at	6.29	2.82E-20
SCARA3	219416_at	6.29	3.86E-26
DHPS	211558_s_at	6.29	6.13E-27
BDKRB1	207510_at	6.29	2.64E-25
BCL7C	219072_at	6.29	4.39E-23
CTSO	203758_at	6.29	1.47E-15
FAM20B	202915_s_at	6.29	1.02E-36
TRIM27	210541_s_at	6.28	2.02E-39
SIVA1	203489_at	6.28	1.52E-27
MAPKAP1	217808_s_at	6.28	1.49E-23
API5	201687_s_at	6.28	6.57E-22
KAT6A	226547_at	6.28	2.60E-19
PARVB	37966_at	6.28	1.44E-23
CASC3	207842_s_at	6.28	2.63E-23
PAPD7	202466_at	6.27	1.02E-25
BRPF3	225217_s_at	6.27	7.36E-34
SNHG1	224610_at	6.26	9.03E-17
NUDC	210574_s_at	6.26	1.89E-19
MLLT1	224993_at	6.26	5.24E-25
MIA3	212305_s_at	6.26	1.42E-30
MFN1	207098_s_at	6.26	9.83E-21
C12orf4	218374_s_at	6.26	3.11E-25
TRIM4	223384_s_at	6.26	1.60E-14
EXOC2	219349_s_at	6.26	1.53E-33
PDAP1	202290_at	6.25	4.49E-29
DYNC1LI1	217976_s_at	6.25	2.18E-19
ADAMTS5	229357_at	6.25	4.75E-06
NAGPA	205090_s_at	6.25	6.07E-22
MN1	205330_at	6.25	4.54E-15
CPT1A	203633_at	6.25	6.46E-26

FAM45A	222955_s_at	6.25	5.48E-39
TOX4	201685_s_at	6.24	6.48E-26
C1S	1555229_a_at	6.24	< 2.90E-44
PPM1D	204566_at	6.24	9.23E-13
MPDU1	209208_at	6.24	3.24E-43
HOTAIRM1	1557051_s_at	6.24	3.85E-26
ENOPH1	217956_s_at	6.24	6.51E-14
MOB4	202919_at	6.23	4.89E-17
GAR1	219110_at	6.23	3.34E-13
MXI1	202364_at	6.23	2.99E-14
CLASP1	212752_at	6.23	2.03E-27
GALNS	206335_at	6.23	5.93E-20
ERBB2IP	222473_s_at	6.23	3.83E-11
C1orf53	1558508_a_at	6.23	5.87E-10
DNAJC14	223420_at	6.22	4.84E-23
CNOT3	203239_s_at	6.22	< 2.90E-44
GPRC5A	203108_at	6.22	4.44E-08
NET1	201830_s_at	6.22	4.89E-06
ALG14	1553954_at	6.22	6.17E-22
OS9	215399_s_at	6.22	2.62E-22
CFLAR	210563_x_at	6.22	6.41E-22
CPSF1	201639_s_at	6.21	1.28E-13
FGFR1OP	205588_s_at	6.21	2.44E-34
SAP30BP	217965_s_at	6.21	9.93E-25
TNFAIP6	206025_s_at	6.21	1.28E-09
CTNND1	208407_s_at	6.20	2.37E-18
SMPDL3A	213624_at	6.20	8.95E-18
MGME1	225890_at	6.20	4.94E-21
EDEM3	223243_s_at	6.20	3.05E-16
MIR4746	223012_at	6.19	5.14E-15
DAGLB	225833_at	6.19	< 2.90E-44
PNKD	225298_at	6.19	1.14E-23
ISCA2	226007_at	6.19	4.00E-15
SUPV3L1	212894_at	6.19	1.51E-21
DTL	218585_s_at	6.18	5.84E-13
PKN2	212629_s_at	6.18	5.79E-15
CHST12	218927_s_at	6.18	6.20E-19
C11orf1	222785_x_at	6.17	7.22E-18
UBR7	218108_at	6.17	9.07E-21
UBL7	225063_at	6.17	4.24E-30
C8orf33	218187_s_at	6.17	1.18E-15

GNE	205042_at	6.17	8.45E-16
UCHL5	219960_s_at	6.17	5.19E-22
STX6	212799_at	6.17	7.37E-18
RAD50	208393_s_at	6.17	6.86E-18
FBXO22	225736_at	6.17	1.53E-16
USP4	211800_s_at	6.16	5.58E-20
TBC1D23	225121_at	6.16	9.49E-22
RAB3GAP1	212932_at	6.16	1.78E-33
CDS2	212862_at	6.16	4.73E-36
TTC17	224852_at	6.16	1.47E-19
NUDCD1	225439_at	6.16	2.57E-19
C6orf48	220755_s_at	6.15	2.66E-14
CAP2	212551_at	6.15	1.98E-14
DNAJC19	225359_at	6.15	5.79E-24
DSEL	232235_at	6.15	1.43E-08
GRN	216041_x_at	6.15	2.91E-15
NEK7	212530_at	6.15	1.01E-07
ROCK1	214578_s_at	6.15	3.14E-39
CARKD	217940_s_at	6.14	1.09E-15
ZNRF1	223383_at	6.14	1.01E-30
ANXA11	206200_s_at	6.14	1.15E-17
C1orf216	212791_at	6.13	6.95E-21
POP7	209482_at	6.13	2.79E-23
ADORA2B	205891_at	6.13	1.40E-43
SLMO2	217851_s_at	6.12	5.53E-13
FMN2	1555471_a_at	6.12	< 2.90E-44
LEPREL2	204854_at	6.12	1.35E-19
CES2	209667_at	6.12	4.85E-21
IWS1	224768_at	6.12	2.48E-31
TRAPPC2	209751_s_at	6.12	4.77E-22
OTTHUMG00000014155	216532_x_at	6.11	< 2.90E-44
PTRHD1	226243_at	6.11	5.63E-13
HLA-A	215313_x_at	6.11	3.86E-18
LRP12	219631_at	6.11	4.83E-27
CEP63	222151_s_at	6.10	3.41E-35
EFTUD2	222398_s_at	6.10	4.96E-24
ADIPOR1	217748_at	6.10	4.28E-22
ARHGAP5	217936_at	6.10	1.07E-14
DNASE2	214992_s_at	6.10	1.81E-36
HYLS1	227687_at	6.10	5.62E-24
LOC339803	227941_at	6.10	2.22E-24

MOV10	223849_s_at	6.10	1.87E-26
FAM118B	223386_at	6.09	2.00E-16
TMEM8A	221882_s_at	6.09	3.97E-31
DNAJC1	222621_at	6.09	2.07E-19
KIAA1468	225508_at	6.09	1.66E-30
TINF2	220052_s_at	6.09	2.26E-30
CPD	201940_at	6.09	7.80E-20
DGCR8	218650_at	6.09	1.26E-21
ISCU	209075_s_at	6.09	2.75E-16
SOWAHC	227034_at	6.09	9.03E-13
SIK3	204156_at	6.08	< 2.90E-44
KIAA0196	201985_at	6.08	4.81E-24
DIS3L	235005_at	6.08	2.68E-25
DYNLT3	203303_at	6.08	3.76E-11
RNF170	220985_s_at	6.08	6.31E-23
ARFGAP2	211975_at	6.08	2.19E-24
AGPAT1	215535_s_at	6.08	3.94E-24
NTPCR	223272_s_at	6.07	8.42E-18
FTSJ2	218356_at	6.07	7.87E-17
DUSP3	201537_s_at	6.07	8.90E-27
FAM19A5	229459_at	6.07	4.39E-13
STX7	212632_at	6.07	1.10E-15
KIF23	204709_s_at	6.07	1.09E-14
CENPA	204962_s_at	6.07	5.76E-11
GTF3C2	212429_s_at	6.06	4.66E-24
CREM	207630_s_at	6.06	1.33E-21
CDC42EP1	204693_at	6.06	4.73E-36
ATRN	211852_s_at	6.06	1.13E-36
MRPS35	217942_at	6.06	9.35E-19
MT1HL1	211456_x_at	6.06	7.60E-11
CUEDC2	218097_s_at	6.06	9.49E-21
CRTC3	218648_at	6.06	3.18E-19
SUMF1	226850_at	6.06	1.37E-17
ATG14	204568_at	6.05	2.92E-25
TUBA1A	209118_s_at	6.05	5.71E-15
CCBL2	209472_at	6.04	9.50E-16
MIR1292	200875_s_at	6.04	1.54E-19
TMEM185B	219253_at	6.04	9.36E-26
ALDH9A1	201612_at	6.03	1.01E-15
GBE1	203282_at	6.03	1.45E-13
VPS45	209268_at	6.03	1.92E-18

ASB8	226861_at	6.02	1.92E-26
BET1L	223023_at	6.02	3.62E-26
FHOD1	218530_at	6.02	9.78E-18
DTNBP1	223446_s_at	6.02	5.34E-29
TMEM167B	222495_at	6.02	7.94E-13
TSPAN6	209109_s_at	6.02	5.41E-13
CCDC47	222432_s_at	6.02	1.44E-20
RPAIN	228183_s_at	6.02	1.52E-23
SGCD	210330_at	6.01	3.60E-22
TBC1D9	212956_at	6.01	1.29E-10
WAPAL	212264_s_at	6.01	1.65E-17
TMEM98	223170_at	6.01	2.93E-19
FBXO5	234863_x_at	6.01	9.98E-36
ZNF605	227822_at	6.01	2.32E-25
SNED1	213488_at	6.01	4.47E-14
TMEM256	227063_at	6.01	1.81E-23
RNF34	219035_s_at	6.00	6.84E-23
PHACTR4	219235_s_at	6.00	1.84E-34
TICAM2	228234_at	6.00	1.09E-08
ELOVL5	208788_at	6.00	3.39E-14
SLC25A4	202825_at	6.00	5.04E-16
RNF149	225414_at	5.99	1.75E-12
MTMR11	205076_s_at	5.99	1.92E-28
EMX2	221950_at	5.99	7.30E-07
ATF4	200779_at	5.99	7.55E-21
ITPR3	201188_s_at	5.99	5.78E-26
LOC100507303	228049_x_at	5.98	4.95E-12
KRR1	203202_at	5.98	3.10E-18
DCAF8	202250_s_at	5.98	3.33E-24
ARV1	223223_at	5.98	3.69E-19
LDOC1L	223228_at	5.98	2.84E-22
ALG2	225621_at	5.98	1.94E-17
UNC50	203583_at	5.98	1.58E-15
AIP	201781_s_at	5.98	1.64E-39
CMSS1	224523_s_at	5.98	4.88E-21
LCLAT1	226996_at	5.98	8.25E-18
MRAP2	227226_at	5.97	3.35E-14
RNF123	224186_s_at	5.97	2.69E-25
HYI	223622_s_at	5.97	2.59E-28
SOGA2	213358_at	5.97	3.60E-14
WHSC1L1	222544_s_at	5.97	3.67E-17

SON	201086_x_at	5.97	1.09E-20
SLC33A1	203165_s_at	5.97	1.15E-14
SPPL3	224640_at	5.97	8.56E-27
FBXO16	223216_x_at	5.97	6.10E-16
RPS17	211487_x_at	5.97	2.53E-15
NDNL2	226008_at	5.96	1.41E-37
CDC34	212540_at	5.96	4.34E-23
SCML1	218793_s_at	5.96	2.91E-14
CRLS1	223978_s_at	5.96	8.29E-15
PDCD2	213581_at	5.95	9.58E-21
CCDC117	225644_at	5.95	1.35E-17
PHGDH	201397_at	5.95	3.19E-16
CCND3	201700_at	5.95	6.01E-17
CHAMP1	226194_at	5.95	6.37E-40
MMAB	225826_at	5.95	8.45E-23
SLC41A1	225570_at	5.94	1.05E-39
MRPS21	222997_s_at	5.94	2.22E-16
HUS1	204883_s_at	5.94	2.49E-27
WDR41	222503_s_at	5.94	1.52E-15
ZNF593	204175_at	5.94	5.54E-21
BRD3	203825_at	5.94	1.81E-18
KATNA1	205526_s_at	5.93	8.37E-19
FUT8	1554930_a_at	5.93	< 2.90E-44
SEC62	208943_s_at	5.93	4.15E-15
PRPSAP1	202529_at	5.92	3.75E-25
FAM214A	225327_at	5.92	2.30E-17
PPP2R1B	202886_s_at	5.92	3.40E-32
RAB13	202252_at	5.92	6.34E-16
RAB2B	225074_at	5.92	4.95E-22
SUMF2	225002_s_at	5.91	1.99E-34
NOC3L	218889_at	5.91	1.16E-18
TWSG1	219201_s_at	5.91	1.01E-19
WBSCR22	207628_s_at	5.91	6.33E-23
LOC101060503	201009_s_at	5.91	6.82E-13
POLI	219317_at	5.91	2.68E-17
DNAJC6	204720_s_at	5.91	1.10E-26
CEPT1	219375_at	5.91	8.51E-16
SMYD2	212922_s_at	5.90	4.54E-19
ITGA10	206766_at	5.90	8.75E-28
AGAP2-AS1	1555907_at	5.90	4.76E-27
TK1	1554408_a_at	5.90	7.04E-33

ASB3	224524_s_at	5.90	2.32E-14
USE1	219348_at	5.90	9.33E-19
ADSS	221761_at	5.90	1.76E-15
PID1	219093_at	5.90	9.42E-10
NUP35	225470_at	5.89	1.01E-18
C5orf30	221823_at	5.89	9.10E-15
SLC25A36	201917_s_at	5.89	4.79E-15
AIFM2	224461_s_at	5.89	2.31E-24
PREP	204117_at	5.89	3.27E-24
EIF1AX	201018_at	5.89	1.14E-16
TMEM19	229126_at	5.89	4.08E-17
ATG13	203364_s_at	5.88	1.42E-24
GPR89A	220642_x_at	5.88	7.30E-24
TENM2	231867_at	5.88	4.82E-11
CHMP2B	202536_at	5.88	1.45E-08
CENPT	218148_at	5.88	1.93E-38
ZNF580	220748_s_at	5.88	5.11E-20
GTDC2	225689_at	5.88	1.37E-23
PMPCA	212088_at	5.87	1.60E-18
ATXN2	202622_s_at	5.87	2.54E-27
CCDC93	209688_s_at	5.87	3.59E-19
KDM1A	212348_s_at	5.87	5.07E-21
CLN5	204084_s_at	5.87	9.73E-21
ISG20L2	208114_s_at	5.87	3.98E-33
NDNF	219747_at	5.87	6.73E-06
LUC7L2	226758_at	5.87	1.01E-21
MARK3	202568_s_at	5.86	6.77E-22
APPL1	222538_s_at	5.86	2.89E-21
CAPZA2	201237_at	5.86	2.43E-08
MAP1S	218522_s_at	5.86	2.16E-23
ANKRD28	226025_at	5.86	4.80E-11
AKR1A1	201900_s_at	5.86	1.85E-18
DPY19L3	225633_at	5.85	8.61E-13
AASDHPPT	202170_s_at	5.85	1.67E-19
TMEM18	225489_at	5.85	5.10E-20
PFAS	213302_at	5.85	1.07E-20
ACYP2	206833_s_at	5.85	4.64E-25
EYA2	209692_at	5.84	1.08E-14
LSM5	211747_s_at	5.84	2.88E-15
AP5M1	218139_s_at	5.84	3.48E-14
UGGT2	218801_at	5.84	6.72E-21

BARD1	227545_at	5.84	8.46E-23
AAMP	201511_at	5.83	2.09E-27
C2orf76	227840_at	5.83	2.82E-17
AP3S1	202442_at	5.83	7.28E-17
RBMX	225310_at	5.83	8.13E-15
SNX30	226249_at	5.83	9.05E-14
STT3B	224700_at	5.83	7.62E-15
XPO6	211982_x_at	5.83	2.22E-22
LOC101060511	225278_at	5.82	8.05E-18
TFDP2	203588_s_at	5.82	6.00E-17
POGLUT1	218587_s_at	5.82	1.86E-28
POLDIP2	217806_s_at	5.82	2.06E-24
GORASP1	215749_s_at	5.81	2.14E-28
TAX1BP1	200976_s_at	5.81	1.63E-23
MANF	202655_at	5.81	1.14E-17
CREB3L1	213059_at	5.81	8.53E-21
TRIM22	213293_s_at	5.81	3.93E-14
PURB	225120_at	5.81	1.56E-17
CCPG1	221511_x_at	5.80	1.82E-11
TMEM199	225375_at	5.80	1.19E-26
IFT46	218483_s_at	5.80	1.29E-28
RPS4X	200933_x_at	5.80	5.39E-18
TMBIM4	223892_s_at	5.80	1.49E-21
ND2	1553551_s_at	5.80	2.54E-09
ZNF12	1559881_s_at	5.79	1.14E-43
ZNF638	213775_x_at	5.79	3.26E-15
OSBPL3	209627_s_at	5.79	7.14E-25
HIATL1	223073_at	5.79	9.23E-17
UFSP2	218449_at	5.79	2.15E-15
NDST1	1554010_at	5.78	8.36E-35
MAPK9	203218_at	5.78	2.26E-16
STK38L	212572_at	5.78	1.72E-09
RNF114	200867_at	5.78	2.08E-20
RPS27A	200017_at	5.78	5.12E-18
GMFB	202544_at	5.78	9.49E-14
SMARCE1	211989_at	5.77	2.63E-19
DHRS3	202481_at	5.77	2.02E-12
RRP15	219037_at	5.77	4.50E-13
CDC42	208727_s_at	5.77	8.71E-17
SIN3A	225135_at	5.77	3.91E-25
KDELC1	219479_at	5.76	4.93E-16

SF3A2	37462_i_at	5.76	2.85E-17
STAT6	201331_s_at	5.75	1.21E-19
PARN	203905_at	5.75	5.07E-17
DAZAP2	200794_x_at	5.75	4.11E-22
ECT2	219787_s_at	5.74	9.47E-10
MLF1IP	218883_s_at	5.74	6.78E-12
C14orf28	238647_at	5.74	2.69E-15
PJA1	218667_at	5.74	3.28E-19
UBE2W	222657_s_at	5.74	2.81E-11
CENPW	226936_at	5.73	1.19E-16
GTF2IRD2	228765_at	5.73	1.06E-18
SH3GL1	201851_at	5.73	2.88E-28
SPAG7	200053_at	5.73	4.15E-24
PLOD1	200827_at	5.73	1.19E-17
MRPL55	225719_s_at	5.73	6.08E-22
CBY1	203450_at	5.73	9.67E-21
PIK3C3	204297_at	5.72	2.94E-20
PLEC	201373_at	5.72	1.51E-22
DDX17	208719_s_at	5.72	7.84E-32
ARHGEF10	216620_s_at	5.72	1.45E-24
KEAP1	202417_at	5.72	2.95E-26
PLAUR	211924_s_at	5.72	3.42E-19
TSPYL4	212928_at	5.72	7.09E-18
PARP4	202239_at	5.72	1.06E-21
ATL1	223340_at	5.72	7.16E-14
LPCAT1	201818_at	5.71	2.05E-19
LOC101060460	209382_at	5.71	2.97E-27
RHBDD2	222995_s_at	5.71	8.13E-15
OIP5	213599_at	5.71	2.13E-30
METTL13	212407_at	5.71	4.45E-18
LONP2	223099_s_at	5.71	1.24E-18
SLC2A3	202498_s_at	5.70	5.54E-26
CEBPB	212501_at	5.70	2.19E-12
PGGT1B	206288_at	5.70	< 2.90E-44
ZFR	201857_at	5.70	8.50E-16
RAB27A	210951_x_at	5.70	9.58E-16
SNAP29	218327_s_at	5.70	5.50E-23
ASS1	207076_s_at	5.70	2.07E-14
RNF41	201961_s_at	5.70	8.91E-23
ZNF655	225945_at	5.70	1.13E-14
TMEM160	219219_at	5.70	6.34E-24

TRNT1	1552625_a_at	5.69	< 2.90E-44
ARSA	204443_at	5.69	3.13E-32
ZFP82	1555793_a_at	5.69	1.91E-22
TEAD4	41037_at	5.69	1.01E-28
OARD1	213322_at	5.69	8.43E-13
DDX50	221699_s_at	5.69	3.21E-19
NFE2L1	200758_s_at	5.68	6.03E-25
ZFAND2B	226168_at	5.68	4.57E-22
MTCH1	221619_s_at	5.68	1.42E-19
TMEM243	204215_at	5.68	1.01E-17
ALDH4A1	203722_at	5.68	2.84E-29
LOC100507165	236640_at	5.67	3.21E-18
CTB-193M12.5	227249_at	5.67	1.24E-15
MIEN1	224447_s_at	5.67	3.20E-18
FBXO28	202272_s_at	5.67	9.69E-20
ZNF585B	1557302_at	5.66	2.30E-29
DDX18	208895_s_at	5.66	2.02E-23
MRTO4	220688_s_at	5.66	7.36E-23
NBN	202907_s_at	5.66	1.08E-15
BCAS2	203053_at	5.66	6.12E-14
HAGH	205012_s_at	5.66	7.85E-21
RHNO1	225837_at	5.65	1.60E-21
LOC101060412	214870_x_at	5.65	1.43E-15
AP4M1	209837_at	5.65	9.90E-28
RNF113A	209565_at	5.64	1.17E-18
ADAMTS6	237411_at	5.64	1.18E-11
CYGB	226632_at	5.64	2.94E-13
PDCD10	210907_s_at	5.64	1.99E-11
CPQ	208454_s_at	5.63	7.30E-24
GADD45B	209305_s_at	5.63	2.98E-10
WDR34	224715_at	5.63	8.41E-16
CKLF	223451_s_at	5.63	1.53E-18
CLIP2	211031_s_at	5.63	4.96E-26
TBC1D2B	212796_s_at	5.63	1.75E-23
TNPO3	214550_s_at	5.63	3.88E-27
ABHD16A	224756_s_at	5.63	1.36E-23
SCAMP1	1552978_a_at	5.62	< 2.90E-44
ETFB	202942_at	5.62	2.03E-18
BOD1	225030_at	5.62	3.02E-21
ZNF667-AS1	244741_s_at	5.62	1.93E-14
NDUFA9	208969_at	5.61	2.10E-20

AHNAK	211986_at	5.61	8.75E-18
TEX261	212083_at	5.61	3.91E-18
CASP6	209790_s_at	5.61	6.42E-17
UTP14A	221514_at	5.60	7.28E-22
FARSA	216602_s_at	5.60	7.05E-39
RPP30	203436_at	5.59	1.14E-22
UBB	200633_at	5.59	2.23E-15
KRTAP2-3	1555673_at	5.59	2.04E-27
MAP4	212566_at	5.59	6.12E-20
IGF2	202409_at	5.59	5.91E-06
SUDS3	233841_s_at	5.58	1.40E-21
ASAP3	219103_at	5.58	1.56E-28
MME	203434_s_at	5.58	2.87E-07
MCU	225320_at	5.58	1.58E-27
GDF5	206614_at	5.58	2.88E-35
VAT1	208626_s_at	5.58	9.23E-24
FGFR1OP2	1556283_s_at	5.57	1.89E-12
KLHL9	213233_s_at	5.57	2.52E-19
RCOR1	212612_at	5.57	6.80E-16
RBBP7	201092_at	5.57	2.37E-15
KHNYN	212355_at	5.57	1.60E-20
DCAF6	217908_s_at	5.56	4.42E-16
COX7A1	204570_at	5.56	3.38E-12
KDM4B	212492_s_at	5.56	2.00E-12
CPEB1	219578_s_at	5.56	1.31E-28
KIF11	204444_at	5.56	1.88E-12
NDUFB5	203621_at	5.56	1.19E-14
C19orf12	225863_s_at	5.56	1.93E-21
EIF4ENIF1	218626_at	5.55	7.36E-21
ANXA2P2	208816_x_at	5.55	2.96E-14
DHX40	222574_s_at	5.55	2.30E-20
GEMIN2	211115_x_at	5.55	6.78E-23
TMEM129	225588_s_at	5.55	8.29E-19
DOK5	214844_s_at	5.55	1.91E-10
ADM	202912_at	5.55	2.67E-07
TMEM42	226361_at	5.54	3.40E-24
GPATCH2L	235302_at	5.54	4.27E-40
SH3BP5	201810_s_at	5.54	3.90E-18
SMS	202043_s_at	5.54	7.69E-12
TXNL1	201588_at	5.54	2.31E-14
GNPTG	224887_at	5.54	1.88E-20

MED7	204350_s_at	5.53	1.77E-32
ACVR1	203935_at	5.53	1.37E-13
G3BP2	208840_s_at	5.53	1.45E-23
CACUL1	227257_s_at	5.53	< 2.90E-44
ZNF827	226764_at	5.53	1.20E-14
LOC100508408	200018_at	5.53	1.46E-16
ZADH2	227978_s_at	5.53	2.57E-40
NUDT1	204766_s_at	5.53	2.19E-20
GSS	201415_at	5.53	1.11E-18
COQ4	218328_at	5.53	2.30E-26
RERE	200940_s_at	5.53	3.22E-19
RSBN1L-AS1	227431_at	5.52	1.03E-24
SCYL2	224960_at	5.52	4.60E-14
TBC1D20	226409_at	5.52	1.43E-22
CYCS	208905_at	5.52	2.56E-17
SMIM20	225014_at	5.52	5.35E-15
TSPAN31	203226_s_at	5.52	9.09E-37
DSCR3	203635_at	5.52	2.10E-26
NT5DC1	223177_at	5.52	8.79E-17
MND1	223700_at	5.52	3.16E-39
CEP76	219311_at	5.52	1.66E-26
MSANTD4	227418_at	5.52	2.72E-11
TUBGCP4	211337_s_at	5.52	1.19E-38
ANKRD37	227337_at	5.52	3.48E-11
DVL1	203230_at	5.52	1.60E-21
ECM1	209365_s_at	5.51	1.81E-07
CSNK2A1	212075_s_at	5.51	1.66E-20
ZAK	223519_at	5.51	4.32E-12
KTI12	225642_at	5.51	7.02E-33
NDUFA7	202785_at	5.50	1.16E-23
PPM1G	200913_at	5.50	3.62E-18
PSME1	200814_at	5.50	5.00E-21
FAM50B	205775_at	5.50	1.75E-24
AIMP1	202542_s_at	5.49	6.55E-21
VPS41	210849_s_at	5.49	3.22E-17
SPTAN1	208611_s_at	5.49	5.24E-17
MRPS7	217932_at	5.49	4.41E-20
PBX3	204082_at	5.49	1.09E-14
SUPT5H	201480_s_at	5.49	3.80E-28
RPS23	200926_at	5.49	1.11E-16
MFSD11	223242_s_at	5.49	1.37E-26

SRRT	201680_x_at	5.49	5.50E-19
RPL32	200674_s_at	5.48	3.48E-17
SMUG1	218685_s_at	5.48	5.88E-30
NIPAL3	225876_at	5.48	1.77E-18
ZFYVE20	226581_at	5.48	3.23E-21
MYLK	202555_s_at	5.48	4.91E-14
HSD3B7	222817_at	5.48	2.52E-23
CWC27	1555495_a_at	5.48	5.46E-11
SCAF11	206989_s_at	5.47	9.79E-16
NAAA	227135_at	5.47	1.72E-10
TMED1	203679_at	5.47	5.11E-20
VPS51	217969_at	5.47	1.25E-17
MAT2B	217993_s_at	5.47	7.13E-11
COX5A	203663_s_at	5.47	2.44E-17
TLK2	212986_s_at	5.46	2.08E-26
AUTS2	212599_at	5.46	1.30E-16
NCOA5	225145_at	5.46	2.23E-26
SLC30A9	202614_at	5.46	1.93E-14
SBF1	212393_at	5.46	4.12E-42
ERBB2	216836_s_at	5.46	1.02E-20
TLE3	206472_s_at	5.46	1.35E-38
NUP98	210793_s_at	5.45	7.74E-24
YWHAG	222985_at	5.45	3.24E-19
NUP155	206550_s_at	5.44	4.56E-22
DNAJC16	212908_at	5.44	1.07E-19
TFCP2	209338_at	5.44	1.34E-21
MAGI1	225474_at	5.44	2.98E-28
TM9SF4	212194_s_at	5.44	2.68E-22
CARM1	212512_s_at	5.44	2.22E-22
RNF146	221430_s_at	5.43	< 2.90E-44
CBR3	205379_at	5.43	5.17E-16
MLH1	202520_s_at	5.43	3.92E-19
FAM193A	203600_s_at	5.43	9.37E-18
BTBD10	223174_at	5.42	2.18E-16
C9orf3	212848_s_at	5.42	1.19E-18
GTF2H2	223758_s_at	5.42	1.42E-34
MRPL1	223154_at	5.42	2.33E-25
RPAP3	218842_at	5.42	2.09E-21
AP4E1	228164_at	5.42	4.91E-24
TTC8	226120_at	5.42	2.30E-13
UNC119B	202365_at	5.42	5.52E-19

PKIG	202732_at	5.42	6.62E-18
TIAL1	202406_s_at	5.42	2.16E-17
EXOC6B	225900_at	5.42	5.78E-40
MORC2	216863_s_at	5.41	1.39E-26
PIP4K2A	212829_at	5.41	1.22E-12
METAP1	212673_at	5.41	1.00E-20
ARHGEF18	213039_at	5.41	5.87E-21
GGCT	215380_s_at	5.41	2.49E-18
FLAD1	205661_s_at	5.41	2.57E-33
CUTC	218970_s_at	5.41	4.96E-29
PRPF3	202251_at	5.41	1.68E-18
AIFM1	205512_s_at	5.40	5.28E-20
XPO1	208775_at	5.40	2.28E-16
FNBP1	212288_at	5.40	2.37E-18
TP53TG1	209917_s_at	5.40	8.87E-23
SF3A3	203818_s_at	5.40	5.00E-22
DCAF17	231921_at	5.39	< 2.90E-44
SEC22C	225460_at	5.39	2.99E-12
RNF4	212696_s_at	5.39	8.64E-20
NKTR	215338_s_at	5.39	1.05E-07
SNAPC5	1554093_a_at	5.39	5.37E-24
PHAX	231812_x_at	5.39	1.69E-41
C3orf62	202681_at	5.39	6.04E-28
BDH2	218285_s_at	5.39	1.50E-17
EI24	216396_s_at	5.39	8.90E-23
VANGL1	219330_at	5.39	3.72E-26
IRGQ	1555833_a_at	5.39	9.86E-24
TXNDC12	223017_at	5.39	9.60E-19
NAGLU	204360_s_at	5.38	3.21E-21
GMPS	214431_at	5.38	2.23E-18
WBP5	217975_at	5.38	7.40E-12
CSTF1	202190_at	5.38	1.75E-26
AAMDC	221600_s_at	5.38	1.72E-30
ITM2C	221004_s_at	5.38	1.20E-16
CIZ1	213977_s_at	5.38	8.47E-26
FBXO8	1554806_a_at	5.38	1.25E-11
GPS2	209350_s_at	5.38	3.77E-23
QTRT1	221270_s_at	5.37	1.34E-15
CMAS	218111_s_at	5.37	1.19E-21
COMMD7	224815_at	5.37	3.55E-22
CDV3	212010_s_at	5.37	7.91E-17

HCFC2	219484_at	5.37	2.23E-27
SGSH	35626_at	5.37	1.93E-17
C14orf132	231859_at	5.37	1.73E-28
CSNK1D	208774_at	5.37	3.84E-19
SORT1	224818_at	5.37	3.15E-15
GOLPH3L	218361_at	5.36	7.68E-20
MRPL11	219162_s_at	5.36	6.63E-18
GDF11	216860_s_at	5.36	4.29E-34
HDAC2	201833_at	5.36	4.04E-19
MPHOSPH10	212885_at	5.35	1.29E-19
HNRNPH1	213470_s_at	5.35	< 2.90E-44
SNAPIN	223066_at	5.35	1.19E-22
PMM2	203201_at	5.35	7.59E-19
GOLGA1	203384_s_at	5.35	6.46E-31
PLXNB2	208890_s_at	5.34	6.66E-19
PARP2	214086_s_at	5.34	5.86E-23
OXCT1	202780_at	5.34	9.19E-13
NPIPA2	221501_x_at	5.34	2.74E-15
CYB5D1	226833_at	5.34	1.16E-21
HAUS7	213334_x_at	5.34	5.21E-16
STRADB	223266_at	5.34	1.63E-21
C11orf95	218641_at	5.34	1.43E-17
LINC00662	235191_at	5.34	2.72E-41
PANK4	218771_at	5.33	1.11E-21
PROSER1	225887_at	5.33	9.98E-19
MIR4680	202731_at	5.33	1.51E-16
TPRKB	219030_at	5.32	1.07E-16
CYB5D2	225804_at	5.32	7.89E-26
TMEM158	213338_at	5.32	1.85E-05
ATL2	222700_at	5.32	1.28E-16
RPL38	202029_x_at	5.32	1.40E-17
CHMP5	219356_s_at	5.32	8.41E-14
FGF5	210310_s_at	5.32	6.52E-39
NSMAF	232149_s_at	5.32	2.22E-26
C7orf60	228149_at	5.31	3.01E-13
C9orf69	224962_at	5.31	4.06E-23
TNIP1	207196_s_at	5.31	1.80E-20
MIR31HG	1554097_a_at	5.31	1.32E-30
MPDZ	205079_s_at	5.31	2.00E-23
BCL7B	202518_at	5.31	1.01E-23
C4orf46	201812_s_at	5.31	3.21E-16

TRIP11	209778_at	5.30	3.45E-23
NPM3	205129_at	5.30	1.49E-27
DPH3P1	204849_at	5.30	4.30E-13
TOM1	202807_s_at	5.30	7.97E-25
MRPS22	219220_x_at	5.30	1.13E-22
ABHD17A	221267_s_at	5.30	1.30E-15
NUP88	202900_s_at	5.29	2.72E-17
PNPLA6	203718_at	5.29	3.76E-22
IP6K2	223165_s_at	5.29	7.13E-10
SLC38A7	218727_at	5.29	3.01E-24
NAP1L3	204749_at	5.29	6.02E-08
FEM1C	213341_at	5.29	2.42E-20
ADNP2	203322_at	5.29	3.54E-20
ZFAND5	210275_s_at	5.29	1.84E-19
AARS	201000_at	5.29	1.01E-18
LMNB1	203276_at	5.29	1.29E-24
KDELC2	225128_at	5.28	1.56E-16
SLC25A15	218653_at	5.28	1.67E-30
STK16	209622_at	5.27	6.23E-36
DDX47	220890_s_at	5.27	2.29E-21
TRIQK	225600_at	5.27	2.23E-24
AP3B1	203142_s_at	5.27	4.20E-26
DHTKD1	227094_at	5.27	9.84E-19
TBL1X	201867_s_at	5.27	3.56E-17
TDRD7	213361_at	5.27	1.64E-23
CCS	203522_at	5.27	4.28E-17
TP53INP2	224836_at	5.27	1.77E-21
TRA2A	204658_at	5.26	2.49E-19
NUDT11	219855_at	5.26	1.26E-16
GAS5	224841_x_at	5.26	2.47E-09
GPN2	218799_at	5.26	1.83E-25
RHBDF1	218686_s_at	5.26	1.23E-23
CDO1	204154_at	5.26	2.16E-07
GM2A	212737_at	5.26	2.98E-17
LOC100506710	225635_s_at	5.25	4.46E-23
KCTD11	235857_at	5.25	1.53E-20
MR1	210223_s_at	5.25	2.80E-25
SMC2	204240_s_at	5.25	3.04E-15
ABHD5	218739_at	5.25	2.46E-34
RBM10	208984_x_at	5.25	2.63E-18
DENND1A	219763_at	5.25	1.88E-32

HNRNPA1	214280_x_at	5.25	8.41E-15
CTR9	202060_at	5.25	1.50E-17
PRKACB	202741_at	5.25	1.36E-11
ATF1	1565269_s_at	5.25	4.05E-41
TIPRL	1554351_a_at	5.24	2.19E-43
TMEM184B	202027_at	5.24	3.01E-19
GPAA1	215690_x_at	5.24	2.30E-21
RPL7	212042_x_at	5.24	1.56E-16
TBC1D5	201813_s_at	5.23	1.23E-23
TFE3	212457_at	5.23	3.10E-19
ANAPC15	204218_at	5.23	3.38E-23
NOL9	1554082_a_at	5.23	2.90E-30
CERS6	212442_s_at	5.23	3.62E-17
POLR2D	203664_s_at	5.23	5.92E-32
NDUFAF5	222894_x_at	5.23	1.96E-29
RPSA	213801_x_at	5.22	1.09E-18
CLCC1	1555543_a_at	5.22	4.36E-37
PDE5A	227088_at	5.22	2.00E-08
PIGO	209998_at	5.22	1.71E-24
FBLIM1	1554795_a_at	5.22	5.78E-16
SDSL	228274_at	5.22	4.46E-27
FBXL4	209943_at	5.22	2.45E-21
IRS1	204686_at	5.21	1.49E-09
NDUFAF3	209177_at	5.21	4.34E-22
NOB1	223018_at	5.21	7.20E-16
TBCEL	227395_at	5.21	3.18E-19
DCAF7	221744_at	5.21	2.90E-44
GOT1	208813_at	5.21	3.37E-21
PDE8A	212522_at	5.21	3.70E-13
FAM172A	212936_at	5.21	4.07E-14
BTBD7	224943_at	5.21	1.26E-23
PNO1	203622_s_at	5.21	5.86E-21
PPP2R5D	211159_s_at	5.21	2.34E-34
ACTA2	200974_at	5.21	3.04E-12
FAM216A	204521_at	5.21	2.19E-19
ELMOD2	1553928_at	5.21	4.08E-14
MYO6	203215_s_at	5.21	2.53E-12
DET1	219641_at	5.20	1.35E-23
CEBPD	213006_at	5.20	9.73E-25
NUDT2	218609_s_at	5.20	9.64E-25
SLC25A33	223296_at	5.20	8.09E-14

SLC35A3	226894_at	5.20	2.19E-16
ADAT1	219384_s_at	5.19	4.46E-25
TLCD1	227804_at	5.19	1.98E-26
C2orf47	219176_at	5.19	3.63E-20
TMED9	208757_at	5.19	2.46E-21
C17orf89	225967_s_at	5.19	2.02E-18
GAPVD1	214869_x_at	5.19	1.08E-33
TRAM2-AS1	227298_at	5.19	1.35E-25
KRTCAP2	224885_s_at	5.18	3.69E-17
MOGS	210627_s_at	5.18	1.09E-20
ATOH8	228890_at	5.18	7.75E-25
ISCA1	209274_s_at	5.18	5.76E-15
LOC645638	229566_at	5.18	1.22E-34
XRCC4	205071_x_at	5.18	3.17E-27
ASXL1	244519_at	5.18	1.26E-24
ZCCHC9	225538_at	5.18	4.89E-16
TMX4	201580_s_at	5.18	5.48E-23
LCMT1	221515_s_at	5.18	8.05E-21
GNB4	225710_at	5.18	6.65E-10
IFT20	210312_s_at	5.18	3.41E-19
BTF3L4	225976_at	5.18	1.57E-12
BTBD19	1557049_at	5.17	4.53E-23
LOC100505806	227655_at	5.17	4.23E-15
GIN1	219467_at	5.17	4.67E-14
ABCF3	202394_s_at	5.17	1.34E-25
SMIM13	227124_at	5.17	3.80E-16
KDM2B	226215_s_at	5.16	2.31E-23
NFYC	202216_x_at	5.16	7.32E-38
SKA2	225684_at	5.15	2.85E-15
DRAM1	218627_at	5.15	8.12E-17
PTPMT1	225901_at	5.15	5.38E-27
CSTF3	203947_at	5.15	9.85E-20
PTCD3	217895_at	5.15	2.02E-19
C12orf29	228378_at	5.15	6.05E-31
NUDT9	218375_at	5.15	8.22E-18
FAM127B	217948_at	5.15	2.59E-29
ITGA8	214265_at	5.15	2.00E-18
EVL	217838_s_at	5.15	1.90E-19
PSMG3	223363_at	5.15	1.71E-21
SULF2	233555_s_at	5.15	1.70E-14
TRIM13	203659_s_at	5.15	5.93E-20

BBS12	229603_at	5.14	3.93E-17
MAP3K6	219278_at	5.14	1.02E-16
LOC100996752	206303_s_at	5.14	2.00E-36
TMX3	225302_at	5.14	1.04E-12
ZFAND3	218020_s_at	5.14	7.77E-28
EEF2K	225545_at	5.14	7.44E-18
SMC6	218781_at	5.14	3.98E-18
C1orf198	223063_at	5.14	1.67E-13
LOC100996626	222406_s_at	5.13	7.57E-19
GCDH	203500_at	5.13	7.18E-23
KCTD7	218310_at	5.13	2.26E-15
NCDN	209556_at	5.13	4.25E-36
CARS2	218153_at	5.13	2.09E-17
SLC31A1	235013_at	5.13	1.06E-32
NELFB	202757_at	5.13	1.21E-19
CRIPT	222702_x_at	5.12	1.81E-14
GCC2	202832_at	5.12	7.83E-14
SENP6	202318_s_at	5.12	4.76E-18
PCTP	218676_s_at	5.12	7.65E-19
ZNF75A	227670_at	5.12	2.84E-32
CAB39L	225915_at	5.12	1.08E-13
FIGNL1	222843_at	5.12	4.04E-11
CNIH	201653_at	5.12	1.08E-09
SCO2	205241_at	5.12	6.37E-13
DTD2	227158_at	5.12	6.42E-13
SELENBP1	214433_s_at	5.12	1.46E-10
MTMR9	213278_at	5.12	2.54E-13
LUC7L	1557067_s_at	5.11	9.60E-35
C6orf1	226306_at	5.11	7.03E-28
USP25	220419_s_at	5.11	5.46E-14
LRP11	225060_at	5.11	1.55E-08
SPATC1L	223360_at	5.11	2.99E-23
ZRANB1	225131_at	5.11	8.37E-24
GID8	225376_at	5.11	1.40E-16
TWF1	214007_s_at	5.11	1.33E-25
WDR7	212880_at	5.11	8.31E-21
RFXANK	202758_s_at	5.10	4.70E-16
SLC38A6	214830_at	5.10	1.64E-13
GABPB1	204618_s_at	5.10	1.27E-19
FAM73A	243042_at	5.10	< 2.90E-44
MED25	1553993_s_at	5.10	5.86E-17

NAT14	223284_at	5.09	7.53E-19
PTTG1	203554_x_at	5.09	1.34E-11
NRN1	218625_at	5.09	4.87E-28
FAM89A/	226448_at	5.09	9.85E-15
MRPL45	224479_s_at	5.09	6.02E-26
PPT1	200975_at	5.08	5.20E-14
PPP1R15A	37028_at	5.08	1.39E-19
SLC26A2	224959_at	5.08	5.63E-11
AP3S2	202399_s_at	5.08	4.51E-19
UBTF	1558215_s_at	5.08	2.39E-25
WDR36	226180_at	5.08	2.62E-13
PA2G4	214794_at	5.07	7.90E-43
CTNNBL1	221021_s_at	5.07	1.08E-20
COG6	225769_at	5.07	2.90E-09
SNORA1	221580_s_at	5.07	5.68E-20
SMIM12	225404_at	5.07	1.99E-21
TRNAU1AP	218977_s_at	5.07	6.17E-32
TCF7L1	221016_s_at	5.07	6.11E-18
TRNP1	227862_at	5.07	2.04E-27
RPS18	201049_s_at	5.07	6.74E-20
ATP6V1F	201527_at	5.07	1.01E-21
NAA10	203025_at	5.06	2.67E-17
MLST8	220587_s_at	5.06	6.23E-23
PDE7B	230109_at	5.06	3.43E-14
ZBTB8A	235142_at	5.06	1.89E-13
GOLGB1	201057_s_at	5.06	9.58E-16
NRXN2	209982_s_at	5.05	1.88E-18
ITGB5	214021_x_at	5.05	1.44E-15
SAFB	201748_s_at	5.05	1.57E-17
FIP1L1	221007_s_at	5.05	3.21E-14
LOC101060455	211996_s_at	5.05	1.22E-04
C19orf60	51200_at	5.05	1.34E-20
ANKRD9	230972_at	5.04	3.20E-16
MFAP1	203406_at	5.04	3.73E-20
COL4A3BP	219625_s_at	5.04	3.78E-13
CHEK1	205393_s_at	5.04	3.34E-34
FAM204A	222617_s_at	5.04	5.71E-22
RGS3	203823_at	5.04	9.28E-16
C16orf62	203173_s_at	5.04	7.58E-29
BCS1L	207618_s_at	5.03	1.09E-20
MCM2	202107_s_at	5.03	2.23E-13

COMMD5	223819_x_at	5.03	1.61E-22
CHST14	226314_at	5.03	7.43E-25
AMMECR1	204976_s_at	5.03	7.18E-10
SUPT7L	201837_s_at	5.03	3.23E-18
SUGT1	223329_x_at	5.03	5.60E-14
NBAS	202926_at	5.03	1.50E-23
NGFRAP1	217963_s_at	5.03	8.79E-15
DHDDS	218547_at	5.03	1.67E-24
KIAA1715	225718_at	5.03	5.51E-29
CTBS	218924_s_at	5.03	7.15E-17
NIPBL	207108_s_at	5.02	1.29E-40
POLD4	202996_at	5.02	3.95E-32
MTMR12	225232_at	5.02	6.37E-13
POLRMT	203782_s_at	5.02	2.35E-15
BYSL	203612_at	5.01	5.14E-19
PUSL1	228733_at	5.01	3.27E-25
BLOC1S4	223431_at	5.01	2.55E-20
LAYN	228080_at	5.01	1.47E-14
BBS7	219688_at	5.01	9.24E-30
SLC39A13	1552295_a_at	5.01	3.75E-22
GTF2IRD1	218412_s_at	5.01	1.37E-25
TAMM41	226815_at	5.01	1.40E-36
AAGAB	202852_s_at	5.00	8.38E-16
ANP32B	201305_x_at	5.00	2.56E-13

Downregulated genes (Fold change>5; Two-tailed Moderated *t*-test with Benjamini-Hochberg multiple testing adjusted P<0.05)

Gene symbol	Probe set ID	Fold change	P-value
TCTE3	1554400_at	-51.52	2.00E-25
LRRC25	1559502_s_at	-22.51	2.57E-20
LINC00520	1555786_s_at	-18.15	7.83E-27
ZNF548	1553718_at	-17.41	4.10E-20
ABCB9	1555323_at	-16.81	3.84E-32
LOC100133089	1558784_at	-16.68	1.51E-26
SPATA24	1558641_at	-14.72	4.29E-28
LOC101060557	1553657_at	-14.60	1.58E-25
RNGTT	211387_x_at	-14.44	3.74E-34
SFTPB	213936_x_at	-11.94	1.08E-29
KCNS1	207366_at	-11.61	1.08E-27
LINC00491	1564281_at	-11.43	3.85E-29
SLAMF6	1552497_a_at	-11.22	2.69E-33

OTTHUMG00000035180	1561044_at	-11.13	2.41E-22
SAMD15	1557680_at	-10.64	1.20E-14
MPV17L	1559167_x_at	-9.93	4.99E-30
GNAO1	204763_s_at	-9.72	2.89E-25
ACACB	1552615_at	-9.39	1.29E-27
GOLGA6L1	1561171_a_at	-9.18	1.21E-27
HIF3A	222124_at	-9.15	2.88E-20
KLC3	1552749_a_at	-9.11	1.47E-32
SYT15	1560878_at	-8.82	3.92E-19
ZNF236	47571_at	-8.62	1.06E-19
G3BP1	222187_x_at	-8.61	3.64E-29
OTTHUMG00000175500	233116_at	-8.53	6.00E-19
TCP11L2	1569206_at	-8.53	1.75E-12
PLAC4	214750_at	-8.30	1.42E-30
ASB12	236033_at	-8.25	7.26E-18
ADRBK1	38447_at	-8.13	2.80E-33
BTNL8	220421_at	-8.11	1.54E-21
BEST1	1554442_at	-7.91	4.70E-21
GLP1R	208390_s_at	-7.89	1.79E-29
MCF2L	1563808_at	-7.54	1.41E-16
OR7E104P	1566956_at	-7.43	3.90E-28
OTTHUMG00000169306	228691_at	-7.31	8.71E-22
OTTHUMG00000020566	237345_at	-7.23	1.48E-20
PNPLA2	39854_r_at	-7.17	7.38E-32
C14orf159	1554039_at	-7.12	5.87E-29
SERPINB6	231628_s_at	-7.05	2.67E-08
LOC100505478	231203_at	-6.96	2.79E-23
AC093162.5	1566471_at	-6.92	3.08E-21
NKX1-1	1565537_at	-6.89	7.16E-19
WHAMMP2	1557450_s_at	-6.88	2.75E-22
LOC100129098	1569361_a_at	-6.74	3.78E-27
CYP19A1	239459_s_at	-6.68	1.13E-12
SYN1	1553264_a_at	-6.57	3.89E-21
MAP3K19	221180_at	-6.56	2.08E-27
OTTHUMG00000177665	1558275_at	-6.46	7.05E-24
RBMY3AP	1565320_at	-6.44	3.95E-12
RAB6B	221792_at	-6.37	2.80E-33
MESP1	229195_at	-6.36	1.35E-25
SMPDL3B	1554050_at	-6.36	7.46E-30
LOC541473	1554318_at	-6.17	3.01E-31
LEPREL1	230813_at	-6.16	3.09E-16

C19orf26	1552354_at	-6.15	8.70E-12
PTAFR	211661_x_at	-5.83	9.28E-28
SLC7A8	216604_s_at	-5.82	3.84E-19
LINC00944	1560818_at	-5.81	1.41E-27
DKFZp434E1119	1565771_at	-5.75	3.46E-21
GPR4	211266_s_at	-5.59	3.93E-19
SEMA4G	219194_at	-5.57	1.64E-28
APOC2	206738_at	-5.56	1.22E-21
SLC8A3	1568859_a_at	-5.52	1.29E-27
FANCD2	1568889_at	-5.51	1.13E-26
FAM170B-AS1	1563255_at	-5.44	3.48E-21
FUT6	210399_x_at	-5.40	1.80E-27
FGD2	1565752_at	-5.38	2.68E-27
CTD-2309H9.3	1569841_x_at	-5.37	1.51E-24
CTD-2010I22.2	241945_at	-5.36	7.30E-17
OTTHUMG00000172987	1556994_at	-5.34	3.21E-14
IFT122	216678_at	-5.31	6.04E-29
CA9	205199_at	-5.30	1.92E-16
LOC286149	1556755_s_at	-5.30	2.34E-25
MCM3AP	215582_x_at	-5.19	1.64E-18
LOC100652911	1556914_at	-5.15	2.06E-21
HNF1B	205313_at	-5.15	1.61E-23
LINC00642	1557656_at	-5.12	4.39E-23
TAF1L	1553011_at	-5.12	8.53E-26
TIRAP	1554091_a_at	-5.12	8.54E-20
OTTHUMG00000175668	1569615_at	-5.11	2.80E-32
PLIN5	241368_at	-5.09	8.80E-22
LOC100505711	237779_at	-5.09	7.07E-27
CTC-774J1.1	1561107_at	-5.06	7.82E-26
OTTHUMG00000165624	220583_at	-5.03	7.19E-17

P-values were calculated by Moderated *t*-tests with Benjamini-Hochberg multiple testing adjustment. All statistical tests were two-sided.

Supplementary Table 4. Clinical and histopathological information for the 46 high grade serous ovarian cancer specimens used in the survival analysis.

	No. (%)	
	CAF-C	**CAF-N**
Characteristic	(n=23)	(n=23)
Age at diagnosis, median (interquartile range), year	56 (49-70)	58 (53.5-69.5)
Disease grade		
3	23 (100)	23 (100)
Disease stage		
3	22 (96)	20 (87)
4	1 (4)	3 (13)
Overall survival, median (interquartile range), month	16 (13-32)	33 (22.5-43.5)
Progress-free survival, median (interquartile range), month	5.5 (3.25-14)	11 (5.5-15.5)
Debulking status		
Optimal	15 (65%)	18 (79%)
Suboptimal	6 (26%)	4 (17%)
Unclear	2 (9%)	1 (4%)

Supplementary Table 5. Differentially expressed secretory ligands in cancer cells in group C compared with cancer cells in group N

Upregulated ligands in cancer cells (Group C vs group N) (Fold change>=2; Two-tailed Student *t*-test P<0.05)

Gene symbol	Fold change	P-value
VCAN	3.13	1.91E-02
COL5A2	3.10	3.92E-02
INHBA	2.76	1.91E-02
IGF1	2.50	2.77E-02
COL5A1	2.46	2.30E-02
COL11A1	2.35	4.63E-02
COL6A3	2.33	4.27E-02
COL1A1	2.22	3.60E-02
FN1	2.04	2.10E-02
COL3A1	1.87	4.63E-02
EFNB2	1.59	4.63E-02
CXCL5	1.09	2.05E-02

P-values were calculated by Student *t*-tests. All statistical tests were two-sided.

Supplementary Table 6. Activated transcription factors in CAFs of patients with CAF-C gene signature

Gene symbol	P-value
HIF1A	2.00E-03
TP53	5.50E-03
STAT5A	8.70E-03
STAT5B	8.70E-03
STAT1	1.57E-02
STAT4	2.04E-02
SMAD3	2.70E-02
ARNT	3.08E-02
FLI1	3.57E-02
CREBBP	4.55E-02
EP300	4.55E-02
STAT2	4.73E-02
STAT6	4.73E-02

P-values were calculated by Fisher's exact test. All statistical tests were one-sided.

Supplementary Table 7. Activated signaling pathways in CAF-C when compared to CAF-N induced by differentially expressed ligands from the corresponding cancer cells

Pathway name	P-value	Number of KEGG pathway genes observed in the input data set	% of KEGG pathway genes observed in the input data set
PI3K-Akt signaling pathway	< 1.00E-04	160	46.9%
Thyroid hormone signaling pathway	< 1.00E-04	58	52.7%
Smad signaling pathway	3.00E-04	35	47.9%
Toll-like receptor signaling pathway	4.06E-02	39	38.2%

P-values were calculated by Fisher's exact test. All statistical tests were one-sided.

Supplementary Table 8. Differentially expressed receptors in CAFs of patients with CAF-C gene signature when compared to patients with CAF-N gene signature

Upregulated receptor in CAFs (Group C vs group N) (Fold change>=1.5; Two-tailed Student *t*-test P<=0.5)

Gene symbol	Fold change	P-value
CD47	9.73	< 1.00E-04
ITGB1	9.60	< 1.00E-04
EDNRA	8.21	< 1.00E-04
TGFBR2	6.86	< 1.00E-04
CD14	6.37	< 1.00E-04
FZD1	5.92	< 1.00E-04
PLAUR	5.67	< 1.00E-04
SDC1	5.62	< 1.00E-04
IL7R	5.29	< 1.00E-04
OSMR	5.25	< 1.00E-04
PLXNA1	5.24	< 1.00E-04
CD93	5.16	< 1.00E-04
CD74	4.83	< 1.00E-04
ITGB2	4.82	< 1.00E-04
TFRC	4.77	< 1.00E-04
IL1R1	4.64	< 1.00E-04
TNFRSF10B	4.60	< 1.00E-04
IL13RA1	4.32	< 1.00E-04
SDC4	4.30	< 1.00E-04
FZD7	4.29	< 1.00E-04
BMPR2	4.24	< 1.00E-04
IL10RA	4.21	< 1.00E-04
TNFRSF12A	4.18	< 1.00E-04
PTPRC	4.17	< 1.00E-04
FZD2	4.03	< 1.00E-04
ROBO1	4.02	< 1.00E-04
ITGB5	4.02	< 1.00E-04
UNC5B	4.02	< 1.00E-04
F2RL1	4.00	< 1.00E-04
IGFBP3	3.98	< 1.00E-04
ATP6AP2	3.94	< 1.00E-04
CXCR4	3.93	< 1.00E-04
CD44	3.90	< 1.00E-04
ACVR1	3.74	< 1.00E-04
ITGAV	3.54	< 1.00E-04

TNFRSF1A	3.52	< 1.00E-04
DAG1	3.48	< 1.00E-04
FGFR2	3.48	< 1.00E-04
ACKR3	3.48	< 1.00E-04
ITGB8	3.39	< 1.00E-04
NRP2	3.38	< 1.00E-04
ITGA11	3.30	< 1.00E-04
APP	3.29	< 1.00E-04
IGF2R	3.24	< 1.00E-04
NOTCH2	3.19	< 1.00E-04
NRP1	3.19	< 1.00E-04
AXL	3.15	< 1.00E-04
ITGA5	3.10	< 1.00E-04
IGF1R	3.08	< 1.00E-04
PDGFRA	3.05	< 1.00E-04
MARCO	3.03	2.41E-02
FAS	2.98	< 1.00E-04
ERBB3	2.96	1.42E-02
TGFBR1	2.95	< 1.00E-04
ITGA1	2.92	< 1.00E-04
IL6ST	2.89	< 1.00E-04
ACVR2A	2.87	< 1.00E-04
MET	2.83	< 1.00E-04
LRP1	2.78	< 1.00E-04
IFNGR1	2.76	< 1.00E-04
CSF2RB	2.65	< 1.00E-04
INSR	2.63	< 1.00E-04
ITGAM	2.51	< 1.00E-04
SORT1	2.50	< 1.00E-04
C5AR1	2.47	< 1.00E-04
BMPR1B	2.40	1.00E-04
IGFBP5	2.38	1.00E-04
RYK	2.35	< 1.00E-04
EPHA2	2.34	< 1.00E-04
F2R	2.26	< 1.00E-04
IL10RB	2.23	< 1.00E-04
CX3CR1	2.22	1.98E-02
ROR2	2.22	< 1.00E-04
IFNAR1	2.20	< 1.00E-04
CCR2	2.17	5.9E-04
IL4R	2.15	< 1.00E-04

ITGA6	2.07	< 1.00E-04
PDGFRB	2.05	< 1.00E-04
GHR	2.03	4.00E-04
FZD5	2.02	< 1.00E-04
BMPR1A	2.01	1.00E-04
FGFR1	2.01	< 1.00E-04

P-values were calculated by Student *t*-tests with Benjamini-Hochberg multiple testing adjustment. All statistical tests were two-sided.

Supplementary Table 9. Activated signaling pathways in CAF-C when compared to CAF-N that are mediated though upregulated receptors in CAFs

Pathway name	P-value	Number of KEGG pathway genes observed in the input data set	% of KEGG pathway genes observed in the input data set
PI3K-Akt signaling pathway	< 1.00E-04	205	60.1%
FoxO signaling pathway	< 1.00E-04	69	55.6%
Hippo signaling pathway	< 1.00E-04	85	56.3%
Adherens junction	< 1.00E-04	38	55.1%
HIF-1 signaling pathway	< 1.00E-04	55	56.1%
Thyroid hormone signaling pathway	< 1.00E-04	53	48.2%
MAPK signaling pathway	< 1.00E-04	120	47.6%
Smad signaling pathway	3.00E-04	47	64.4%
Chemokine signaling pathway	7.00E-04	88	48.4%
Wnt signaling pathway	8.00E-04	61	44.5%
Osteoclast differentiation	2.10E-03	55	46.2%
ErbB signaling pathway	3.90E-03	45	52.3%
Melanogenesis	2.28E-02	44	43.6%
Toll-like receptor signaling pathway	4.06E-02	55	53.9%

P-values were calculated by Fisher's exact test. All statistical tests were one-sided.

Supplementary Table 10. Activated signaling pathways identified in robustness assessment of CCCExplorer using randomly generated data sets.

Differentially expressed ligand-mediated crosstalk		Differentially expressed receptor-mediated crosstalk	
Pathway name	**Appearance**	**Pathway name**	**Appearance**
Rap1 signaling pathway	28 / 1,000 runs	Thyroid hormone signaling pathway	29 / 1,000 runs
Jak-STAT signaling pathway	21 / 1,000 runs	Osteoclast differentiation	28 / 1,000 runs
MAPK signaling pathway	19 / 1,000 runs	Prolactin signaling pathway	28 / 1,000 runs
Regulation of actin cytoskeleton	16 / 1,000 runs	Apoptosis	25 / 1,000 runs
Thyroid hormone signaling pathway	15 / 1,000 runs	FoxO signaling pathway	25 / 1,000 runs
Axon guidance	14 / 1,000 runs	MAPK signaling pathway	25 / 1,000 runs
PI3K-Akt signaling pathway	14 / 1,000 runs	TNF signaling pathway	25 / 1,000 runs
Focal adhesion	13 / 1,000 runs	cGMP-PKG signaling pathway	23 / 1,000 runs
Leukocyte transendothelial migration	13 / 1,000 runs	Neurotrophin signaling pathway	23 / 1,000 runs
Ras signaling pathway	12 / 1,000 runs	PI3K-Akt signaling pathway	23 / 1,000 runs
Osteoclast differentiation	11 / 1,000 runs	Axon guidance	21 / 1,000 runs
HIF-1 signaling pathway	9 / 1,000 runs	Jak-STAT signaling pathway	21 / 1,000 runs
Smad signaling pathway	9 / 1,000 runs	Leukocyte transendothelial migration	21 / 1,000 runs
Chemokine signaling pathway	8 / 1,000 runs	Melanogenesis	21 / 1,000 runs
FoxO signaling pathway	8 / 1,000 runs	Smad signaling pathway	21 / 1,000 runs
Apoptosis	7 / 1,000 runs	Hippo signaling pathway	20 / 1,000 runs
Melanogenesis	7 / 1,000 runs	HIF-1 signaling pathway	19 / 1,000 runs
Prolactin signaling pathway	6 / 1,000 runs	mTOR signaling pathway	19 / 1,000 runs
Toll-like receptor signaling pathway	6 / 1,000 runs	Rap1 signaling pathway	19 / 1,000 runs
Inflammatory mediator regulation of TRP channels	5 / 1,000 runs	Ras signaling pathway	18 / 1,000 runs
Endocytosis	4 / 1,000 runs	Regulation of actin cytoskeleton	18 / 1,000 runs
ErbB signaling pathway	4 / 1,000 runs	T cell receptor signaling pathway	17 / 1,000 runs
Hippo signaling pathway	4 / 1,000 runs	Focal adhesion	14 / 1,000 runs
mTOR signaling pathway	4 / 1,000 runs	Wnt signaling pathway	13 / 1,000 runs
Notch signaling pathway	4 / 1,000 runs	Toll-like receptor signaling pathway	12 / 1,000 runs
Wnt signaling pathway	4 / 1,000 runs	Adipocytokine signaling pathway	11 / 1,000 runs
Adherens junction	3 / 1,000 runs	Chemokine signaling pathway	10 / 1,000 runs
cGMP-PKG signaling pathway	2 / 1,000 runs	ErbB signaling pathway	10 / 1,000 runs
GnRH signaling pathway	2 / 1,000 runs	NOD-like receptor signaling pathway	10 / 1,000 runs
Natural killer cell mediated cytotoxicity	2 / 1,000 runs	Estrogen signaling pathway	9 / 1,000 runs
NF-kappa B signaling pathway	2 / 1,000 runs	B cell receptor signaling pathway	8 / 1,000 runs

Oxytocin signaling pathway	2 / 1,000 runs
TNF signaling pathway	2 / 1,000 runs
Adipocytokine signaling pathway	1 / 1,000 runs
Aldosterone-regulated sodium reabsorption	1 / 1,000 runs
Antigen processing and presentation	1 / 1,000 runs
Calcium signaling pathway	1 / 1,000 runs
Estrogen signaling pathway	1 / 1,000 runs
Insulin signaling pathway	1 / 1,000 runs
Neurotrophin signaling pathway	1 / 1,000 runs
NOD-like receptor signaling pathway	1 / 1,000 runs
RIG-I-like receptor signaling pathway	1 / 1,000 runs
T cell receptor signaling pathway	1 / 1,000 runs
Thyroid hormone synthesis	1 / 1,000 runs

Endocytosis	8 / 1,000 runs
NF-kappa B signaling pathway	8 / 1,000 runs
Dorso-ventral axis formation	7 / 1,000 runs
GnRH signaling pathway	7 / 1,000 runs
Insulin secretion	7 / 1,000 runs
Inflammatory mediator regulation of TRP channels	6 / 1,000 runs
Notch signaling pathway	6 / 1,000 runs
RIG-I-like receptor signaling pathway	6 / 1,000 runs
Adherens junction	5 / 1,000 runs
Gap junction	5 / 1,000 runs
Calcium signaling pathway	4 / 1,000 runs
Fc gamma R-mediated phagocytosis	4 / 1,000 runs
Natural killer cell mediated cytotoxicity	4 / 1,000 runs
Thyroid hormone synthesis	4 / 1,000 runs
VEGF signaling pathway	4 / 1,000 runs
Aldosterone-regulated sodium reabsorption	3 / 1,000 runs
Cytosolic DNA-sensing pathway	3 / 1,000 runs
Insulin signaling pathway	3 / 1,000 runs
Oxytocin signaling pathway	3 / 1,000 runs
Bile secretion	2 / 1,000 runs
Long-term depression	2 / 1,000 runs
Vascular smooth muscle contraction	2 / 1,000 runs
Endocrine and other factor-regulated calcium reabsorption	1 / 1,000 runs
Oocyte meiosis	1 / 1,000 runs
p53 signaling pathway	1 / 1,000 runs

With randomized gene lists as input data sets, for differentially expressed ligand-mediated crosstalk, only 218 out of 1,000 runs identified at least one activated signaling pathway with $P<0.05$. All pathways were predicted for less than 28 times out of 1,000 runs ($P=0.028$) and most of the pathways appeared less than 10 times out of 1,000 runs ($P<0.01$). The Smad signaling pathway appeared only in 9 of the 1,000 runs performed using randomly generated gene lists ($P=0.009$). For differentially expressed receptor-mediated crosstalk, 402 out of 1,000 runs identified at least one activated signaling pathway with $P<0.05$. All pathways were predicted for less than 29 times out of 1,000 runs ($P=0.029$) and 30 out of 56 signaling pathways appeared less than 10 times out of 1,000 runs ($P<0.01$). The Smad signaling pathway appeared only in 21 of the 1,000 runs performed using randomly generated gene lists ($P=0.021$).

Supplementary Table 11. Activated signaling pathways identified in robustness assessment of CCCExplorer by random candidate gene addition or deletion.

Differentially expressed ligand-mediated crosstalk

	Data set with random gene addition	Data set with random gene deletion
Pathway name	**Appearance**	**Appearance**
PI3K-Akt signaling pathway	1,000 / 1,000 runs	989 / 1,000 runs
Thyroid hormone signaling pathway	1,000 / 1,000 runs	980 / 1,000 runs
Smad signaling pathway	1,000 / 1,000 runs	891 / 1,000 runs
Toll-like receptor signaling pathway	481 / 1,000 runs	380 / 1,000 runs

For differentially expressed ligand-mediated crosstalk, adding randomly selected unimportant genes to all lists had minimal effect on the prediction of truly important pathways. Using data sets containing 10% of randomly selected genes as input data, 3 out of 4 (75%) pathways predicted using the original data set, including SMAD signaling pathways, were still predicted by the CCCExplorer in all 1,000 runs with $P<0.05$. Similarly, 3 out of 4 (75%) signaling pathways predicted using the original data set, including SMAD signaling pathways, were still predicted by the CCCExplorer in more than 890 out of 1,000 runs with $P<0.05$ using input data with 10% of randomly selected genes deleted.

Differentially expressed receptor-mediated crosstalk

	Data set with random gene addition	Data set with random gene deletion
Pathway name	**Appearance**	**Appearance**
FoxO signaling pathway	1,000 / 1,000 runs	1,000 / 1,000 runs
Hippo signaling pathway	1,000 / 1,000 runs	1,000 / 1,000 runs
HIF-1 signaling pathway	1,000 / 1,000 runs	1,000 / 1,000 runs
Chemokine signaling pathway	1,000 / 1,000 runs	996 / 1,000 runs
Smad signaling pathway	1,000 / 1,000 runs	995 / 1,000 runs
PI3K-Akt signaling pathway	1,000 / 1,000 runs	993 / 1,000 runs
MAPK signaling pathway	1,000 / 1,000 runs	993 / 1,000 runs
Wnt signaling pathway	1,000 / 1,000 runs	990 / 1,000 runs
Adherens junction	1,000 / 1,000 runs	989 / 1,000 runs
Osteoclast differentiation	1,000 / 1,000 runs	989 / 1,000 runs
Thyroid hormone signaling pathway	1,000 / 1,000 runs	988 / 1,000 runs
ErbB signaling pathway	1,000 / 1,000 runs	874 / 1,000 runs
Melanogenesis	783 / 1,000 runs	720 / 1,000 runs
Toll-like receptor signaling pathway	490 / 1,000 runs	478 / 1,000 runs

For differentially expressed receptor-mediated crosstalk, using data sets containing 10% of randomly selected genes as input data, 12 out of 14 (85.7%) pathways predicted using the original data set, including SMAD signaling pathways, were still predicted by the CCCExplorer in all 1,000 runs with $P<0.05$. Similarly, 12 out of 14 (85.7%) pathways predicted using the original data set, including SMAD signaling pathways, were still predicted by the CCCExplorer in more than 870 out of 1,000 runs with $P<0.05$ using input data with 10% of randomly selected genes deleted.

Supplementary Table 12. List of Smad-regulated genes included in unsupervised clustering analysis of CAF samples

Gene symbol	Gene symbol	Gene symbol	Gene symbol	Gene symbol
ABI2	COL10A1	GZMA	LY6A	SMAD1
ACTA2	COL1A1	GZMB	MBOAT2	SMAD2
ACTA2	COL2A1	HBEGF	MMP13	SMAD3
ALB	COL3A1	HEY1	MMP2	SMAD4
Alp	CRP	HNF4A	MMP9	SMAD5
AREG	CTGF	HP	MSTN	SMAD7
ASPN	CTNNB1	IFNB1	MUC4	SMURF2
BCL2	CXCL10	IFNG	MYC	SNAI1
BCL2L11	CXCL3	IL13	MYF5	SNAI2
BECN1	CYP11A1	IL15	NANOG	SOX17A
BGLAP	CYP19A1	IL1B	NET1	TBX21
BGN	DEPTOR	IL2	NODAL	TERT
BMP2	DOCK4	IL23A	NOS2	TGFA
BMP6	DUSP4	IL4	NOV	TGFB1
CBLB	EGR1	IL5	NR5A1	TGFB3
CCL2	ELN	IL6	ORM1	TGFBR1
CCL3L3	EREG	IL6R	PARGC1A	TGFBR2
CCL4	ESR1	IL9	PCNA	THBS1
CCND1	ESR2	INHA	PITX2	TIMP3
CCND2	FLT1	INHBA	PPARD	TNC
CCNE1	FN1	ITGB1	PTGS2	TNF
CDH1	FNDC5	JAG1	RAC1	TPM1
CDH2	FOS	JAM2	RNA	TPM2
CDH5	FOXP3	JUN	RORC	TPM3
CDK4	FPR2	JUNB	RUNX2	VEGFA
CDKN1A	FSHB	JUND	S1PR1	VEGFC
CDKN2A	FSTL3	KLK3	S1PR4	VIM
CDKN2B	GAST	LEFTY2	SELE	WNT8
CDX2	GATA3	LGALS9B	SERPINE1	XIAP
CHRD	GLI1	LPAR1	SKIL	
CIITA	GLI2	LUM	SLC51B	

Supplementary Table 13. Drug candidates in the two largest repositioned drug clusters after false positive filtering by affinity propagation clustering

First drug cluster		Second drug cluster	
Drug ID	**Drug Name**	**Drug ID**	**Drug Name**
BRD-K27316855	Calcitriol	BRD-A16444946	Acarbose
BRD-K16336526	Capsaicin	BRD-A22032524	Amlodipine
BRD-K16508793	Diazepam	BRD-K67017579	Cilostazol
BRD-K45330754	Diethylstilbestrol	BRD-K45252063	Clofibrate
BRD-A54845972	Dihydroergotamine	BRD-K40758068	Efavirenz
BRD-K38305202	Domperidone	BRD-K66296774	Fluvastatin
BRD-K18910433	Estradiol	BRD-A95869247	Indapamide
BRD-A97104540	Fenoterol	BRD-A49172652	Lansoprazole
BRD-K98769987	Flumazenil	BRD-A11170096	Pravastatin
BRD-K32830106	Guanfacine	BRD-K89348303	Ramipril
BRD-A07440155	Labetalol	BRD-K82846253	Repaglinide
BRD-K52662033	Lidocaine	BRD-K82941592	Rosuvastatin
BRD-K89152108	Liothyronine	BRD-A81772229	Simvastatin
BRD-K88871508	Lisuride	BRD-K19416115	Sitagliptin
BRD-K77641333	Naphazoline		
BRD-K76810206	Nicergoline		
BRD-K05395900	Nicotine		
BRD-K96354014	Nifedipine		
BRD-A91555231	Norepinephrine		
BRD-A97701745	Pindolol		
BRD-K95921201	Reserpine		
BRD-A50157456	Terbutaline		
BRD-A55393291	Testosterone		
BRD-A43974575	Tranylcypromine		