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Supplemental Data

Functional and Evolutionary Insights into Human Brain Development Through Global Transcriptome Analysis

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Supplemental Material:

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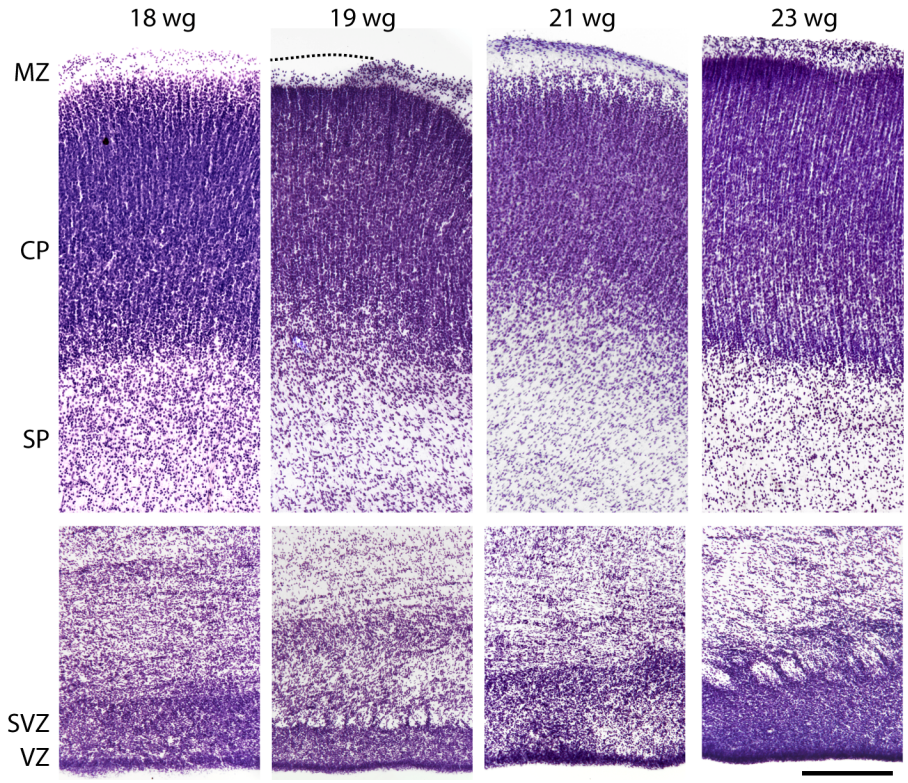
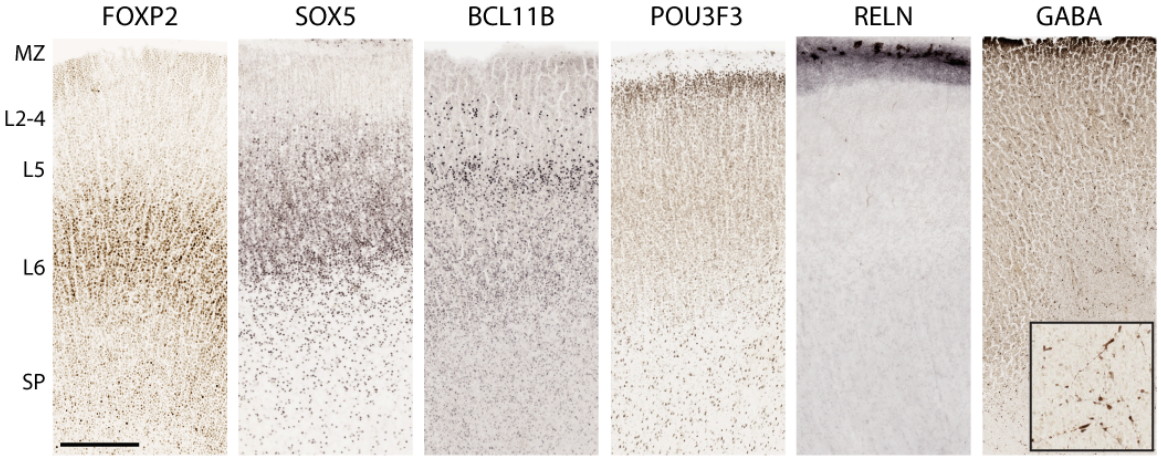


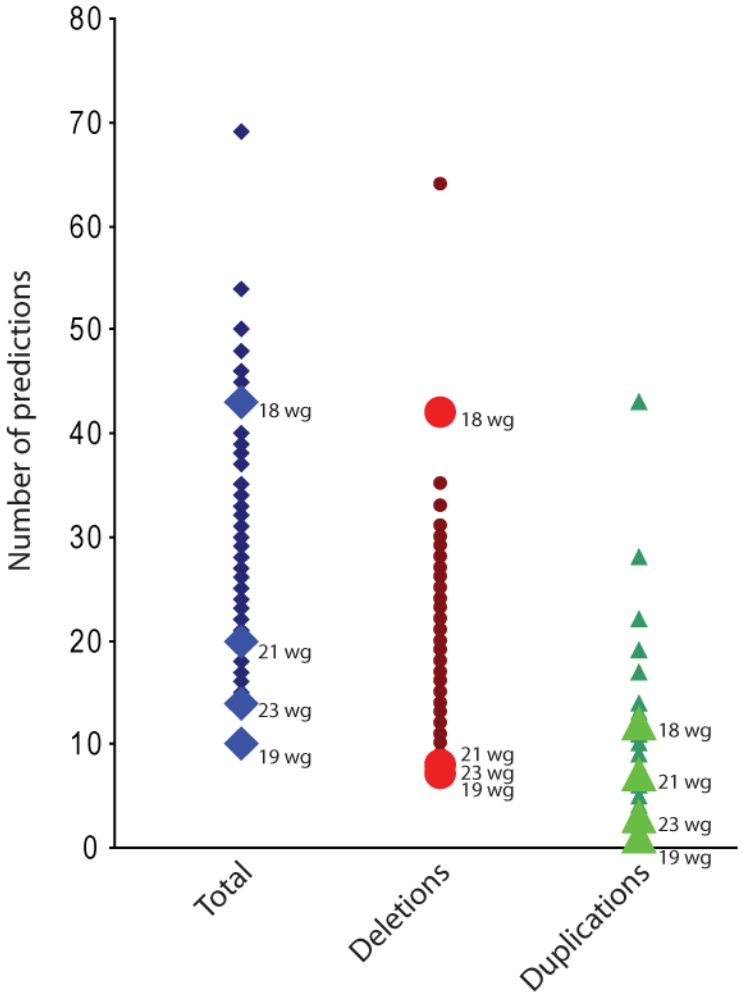
Supplemental Figure 1. Normal Cytoarchitecture of Brain Specimens Used for Exon Array Analysis

Nissl staining of the tissue remaining after microdissection from all four brains used for microarray analysis (specimens 1-4), confirming normal cytoarchitecture and the absence of microscopic neuropathological defects such as periventricular lesions commonly present at this developmental stage. MZ, marginal zone; CP, cortical plate; SP, subplate; SVZ, subventricular zone; VZ, ventricular zone. Scale bar, 250 µm.



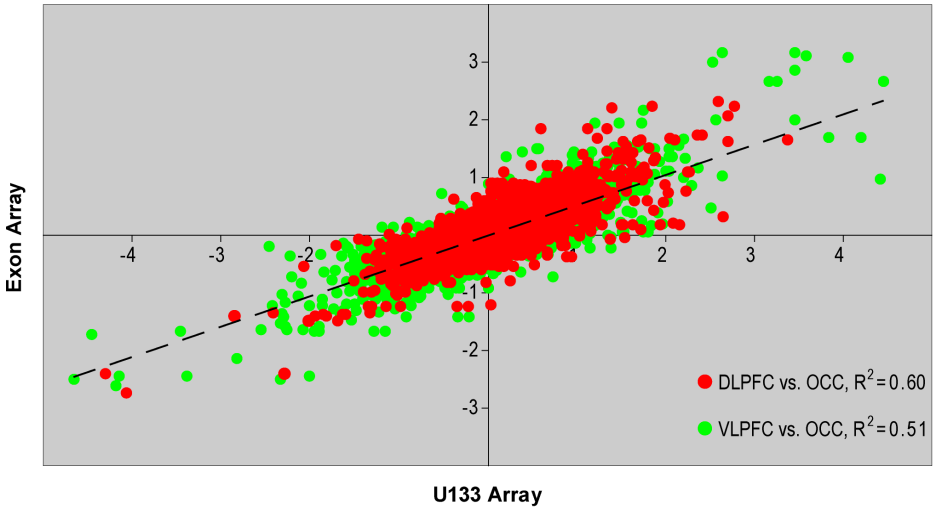
Supplemental Figure 2. Normal Laminar Position of Cortical Neurons in Brain Specimens Used for Exon Array Analysis

Various immunohistochemical markers were used to confirm the presence of all major neuronal and glial cell types present at this developmental age in all four brains. Shown here are selected examples of immunohistochemical staining for markers of layer selective of projection neurons (FOXP2, SOX5, BCL11B, and POU3F3), MZ Cajal-Retzius neurons (RELN) and interneurons (GABA) in the neocortex of the 19 wg brain. The normal laminar position of these neurons indicates absence of obvious defects in neuronal specification and migration. Scale bar, 250 µm.



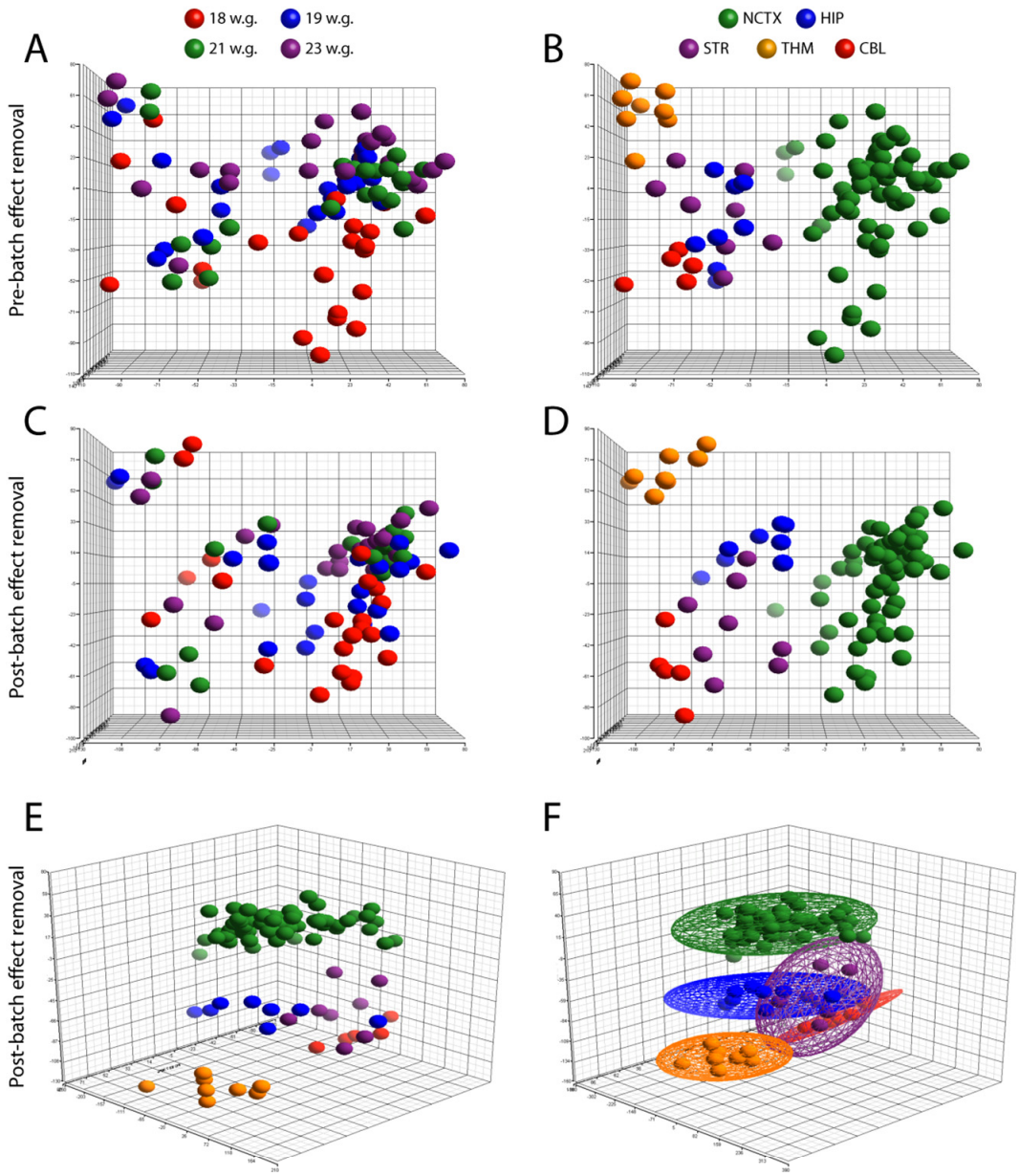
Supplemental Figure 3. Predicted Rates of Copy Number Variation in Brain Specimens Used for Exon Array Analysis

Illumina genotyping microarray data were analyzed for putative copy number variations (CNVs) using the PennCNV algorithm (Wang et al., 2007). We found a total of 88 predicted CNVs, with a median 17 CNVs per individual (Table S2). To place these predictions in the context of expected human genetic variation, we used the same algorithm to analyze 120 well-characterized HapMap samples. We found that predicted CNV rates from our samples (large blue diamonds) fell within the range of expected CNVs per individual (small blue diamonds), and this remained true when predictions were partitioned into putative deletions (red circles) and duplications (green triangles). One brain (18 wg) displayed a higher rate of predicted deletions, but only one predicted duplication; this was likely an effect of a slightly lower call rate on this chip (95%), which may have been due to DNA sample degradation or technical error in the chip. All other call rates were above 99%. Finally, the majority (59%) of predicted CNVs in our samples overlapped known CNVs or segmental duplications, further indicating that these brains were within the normal range of human genetic variation.

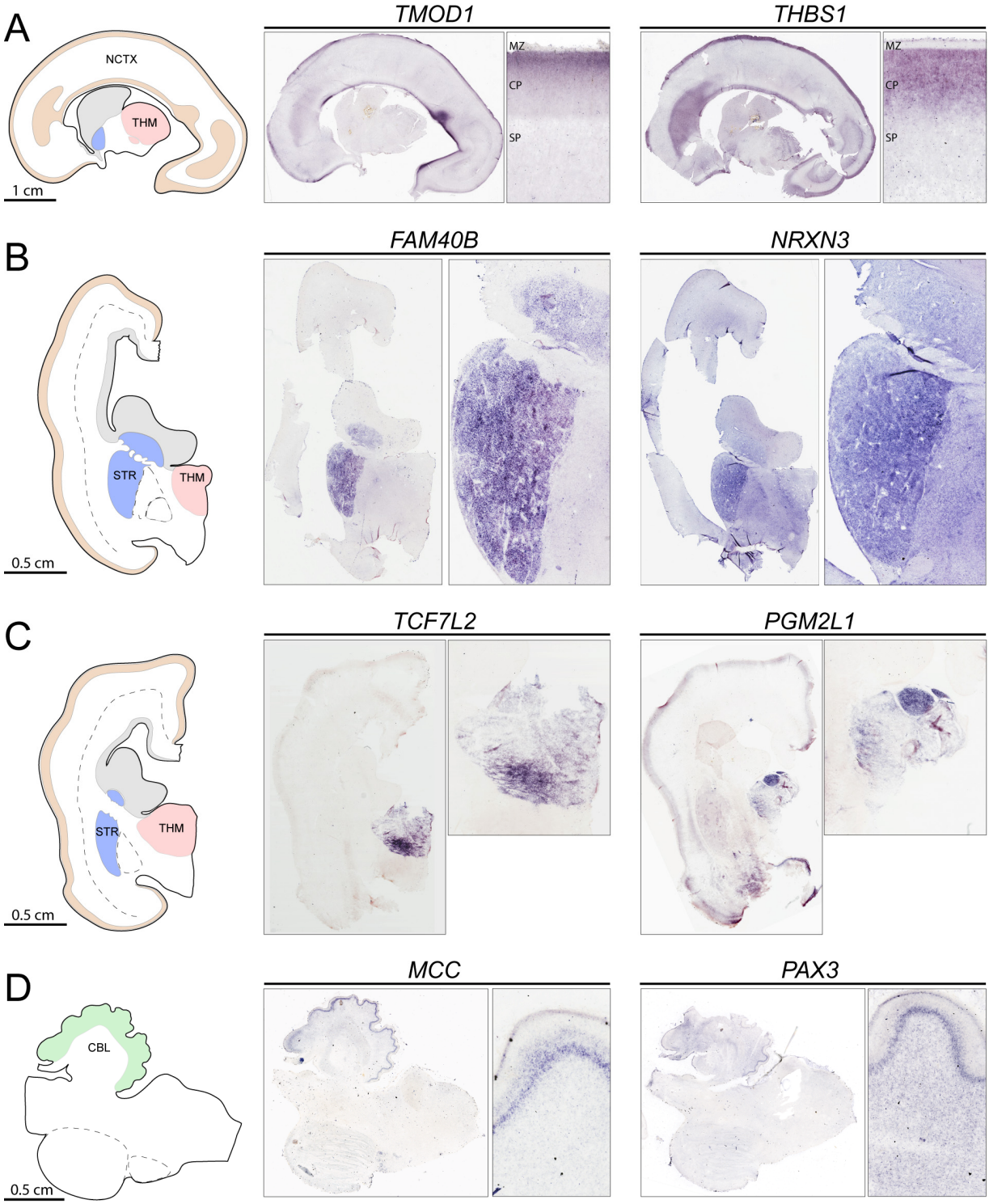


Supplemental Figure 4. Comparison of Exon 1.0 ST and U133 Plus 2 GeneChip Microarrays Using Human Fetal Brain Tissue

The Exon Array features more comprehensive coverage of the human genome than previous generations of arrays (e.g., 1.4 million probesets on the Exon Array, versus 54,000 probesets on the U133 Plus 2 array). However, because of its novelty, the Exon Array lacks a comparable accumulation of biological validation. Therefore, to compare the old 3'-biased array platform with the new exon-based design specifically in terms of detecting gene expression differences in fetal human brain, we hybridized selected samples to both Exon and U133 arrays and compared gene expression levels and log ratios between DLPFC, VLPFC, and OCC. These plots show signal log ratios for DLPFC (red) and VLPFC (green) versus OCC. The two platforms were well correlated in all comparisons (R^2>0.5), providing us with confidence in making meaningful comparisons between Exon Array and extant U133 data from adult human brain, as well as from other tissues and species (see, e.g., Table S11). In addition to this analysis, other published studies using human adult brain and other non-neural tissues have since demonstrated the reliability of the Exon Array platform and its performance in comparison to the U133 Plus 2 Array (Abdueva et al., 2007; Kapur et al., 2007; Clark et al., 2007; Gardina et al., 2006).



Supplemental Figure 5. Principal Component Analysis of Exon Array Core Transcripts
We performed principal component analysis (PCA) of all core transcripts on the Exon Array to assess variability of the data across brain regions, individuals, and hybridizations. Batch effect removal was performed in Partek GS to remove effects of hybridization date or brain specimen (inter-individual variations). Following batch effect removal, separation between individuals was reduced (compare A and C), while separation between brain regions was improved, especially for subcortical areas (compare B and D). PCA confirmed that inter-individual differences had a smaller effect on gene expression data across all 17,000+ core transcripts than did variation between brain regions, especially between NCTX and sub-cortical areas (compare C and D). The same data in D is shown in E and F with axes rotated to better reveal the separation between brain regions. Finally, ellipses in F show that three NCTX samples lie more than three standard deviations from the cluster center, suggesting potential outlier status. ANOVA analysis excluding these samples did not alter the results for the most significantly DEX genes. Notably, PCA of all core transcripts did not segregate NCTX areas, although some clustering of individuals was apparent, consistent with the observations of Khaitovich et al. (2004) that inter-individual gene expression differences outweighed inter-areal differences in adult human cortex.


A
NCTX
THM
1 cm
TMOD1
MZ
CP
SP
THBS1
MZ
CP
SP
B
STR
THM
0.5 cm
FAM40B
NRXN3
C
STR
THM
0.5 cm
TCF7L2
PGM2L1
D
CBL
0.5 cm
MCC
PAX3

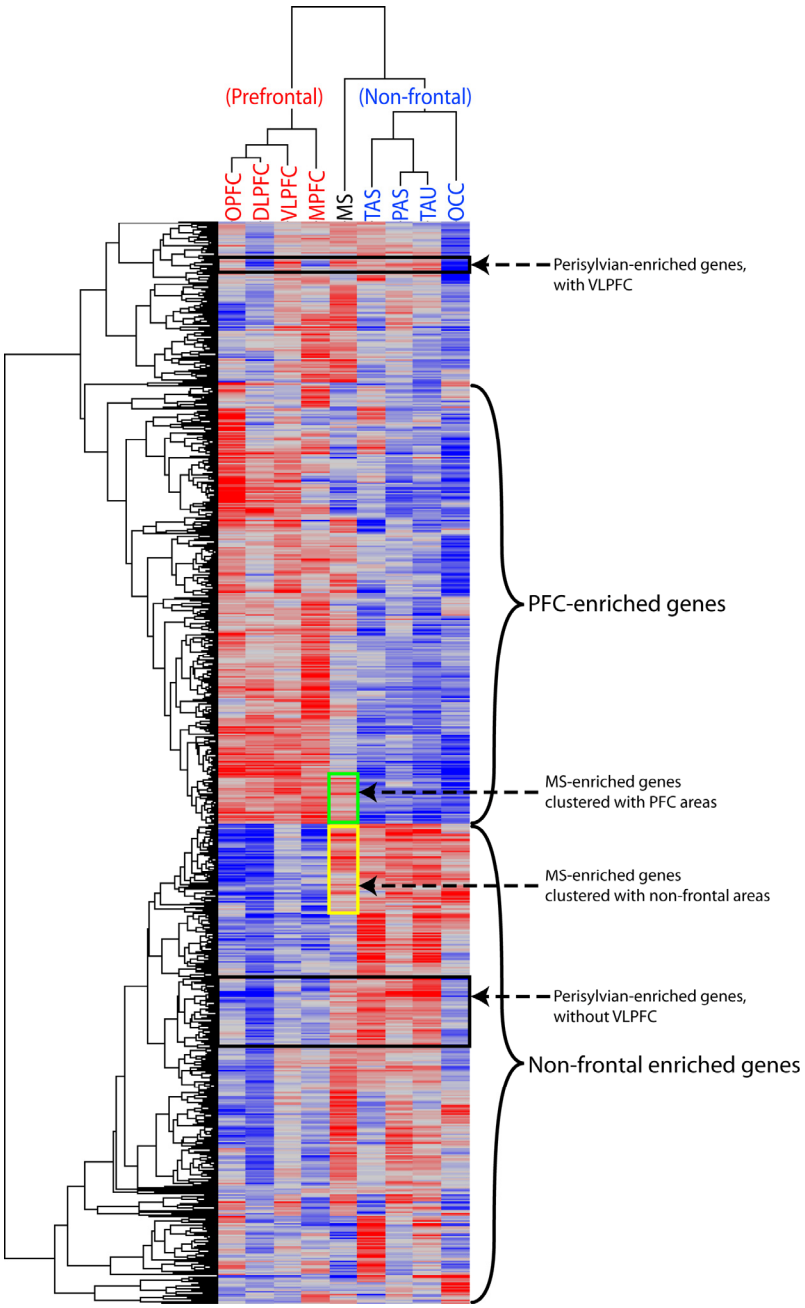
Supplemental Figure 6. *In Situ* Hybridization of Selected Exon Array Candidate Genes
We selected candidate genes from the clusters shown in Figure 2 for further confirmation based on putative function, apparent divergence from expression in mouse, gene novelty, and maximum and fold-change expression levels. In the schematic illustrations at left, the cortical plate (CP) is shaded in beige, the caudate and putamen (STR) in blue, the thalamus (THM) in pink, and the cerebellar cortex (CBL) in green. The grey areas in **(A-C)** are the forebrain neurogenic regions, the cortical ventricular zone and the ganglionic eminence. **(A)** and **(D)** are sagittal sections through the forebrain and cerebellum/brainstem, respectively, while **(B)** and **(C)** are coronal sections through the forebrain, with (B) more rostral than (C). All sections are from late mid-fetal brain specimens (19 to 22 wg).

(A) *TMOD1* and *THBS1* were 6.8- and 7.5-fold enriched in NCTX by Exon Array analysis, respectively, and this specific enrichment was confirmed by qRT-PCR ($p<0.0005$). *In situ* hybridizations shown here indicate that *TMOD1* is specifically enriched in the upper CP, while *THBS1* is expressed throughout the CP, and neither gene is noticeably expressed in the STR or THM. Tmod1 is an actin regulatory protein and a possible transcriptional target of the non-canonical Wnt pathway. Although it has been shown to be expressed in neurons in the adult mouse forebrain, its specific role in neuronal development or function remains unknown. *THBS1* is a member of a family of genes involved in synaptogenesis and plasticity, two others of which have been implicated in primate cortical evolution.

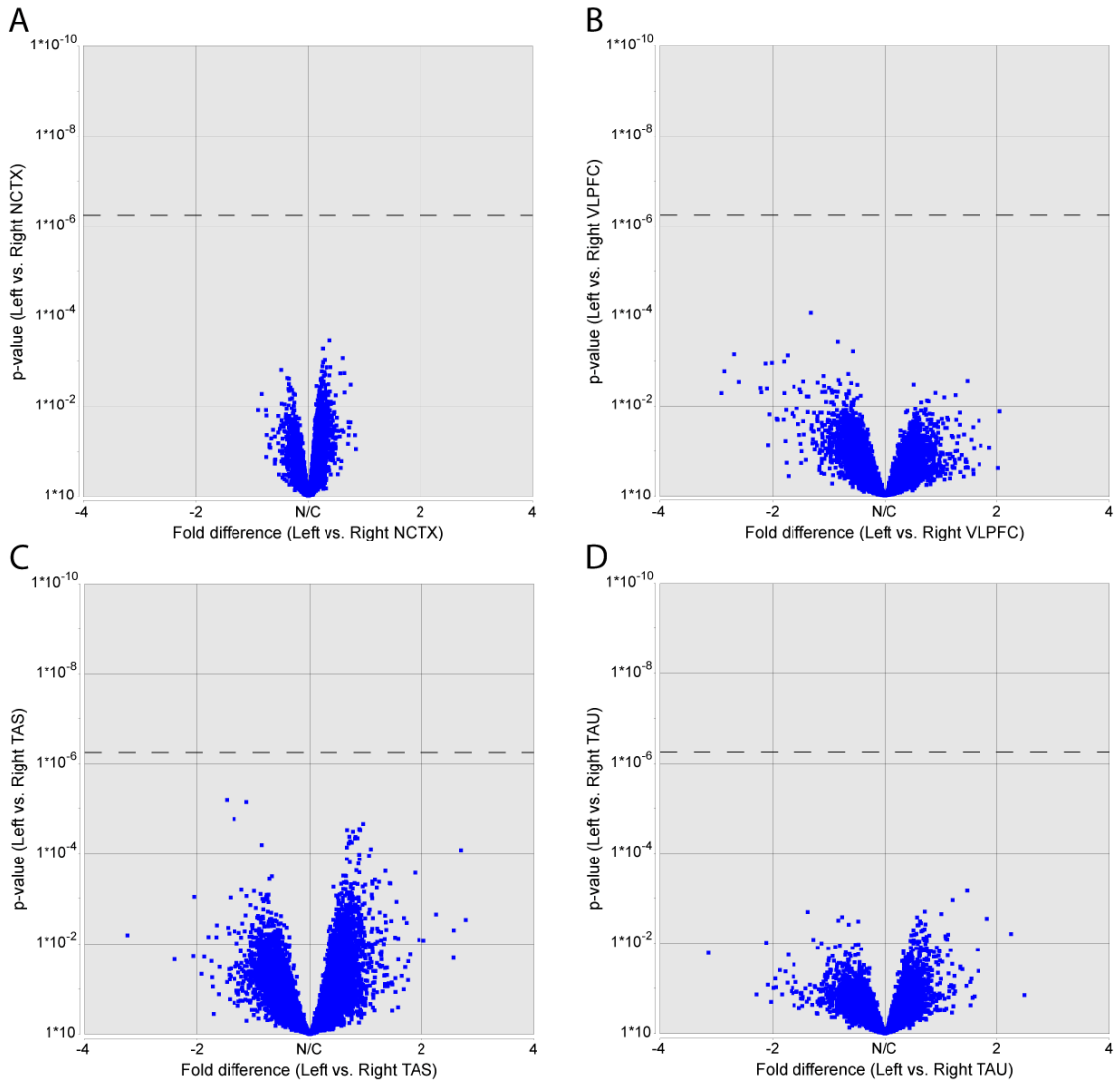
(B) *FAM40B* was one of the most enriched genes in STR (~24-fold), while *NRXN3* was also highly enriched in this structure (~4-fold). Both were confirmed by qRT-PCR as well as ISH, with the *in situs* shown here suggesting restricted expression in the putamen and caudate nucleus. *FAM40B* is a completely unknown transcript encoding a protein with multiple predicted transmembrane domains. According to the Allen Brain Atlas, its mouse homolog is enriched in the upper cortical pyramidal layers, CA fields of the hippocampus, the striatum, and the Purkinje cell layer of the cerebellum. *NRXN3* is one of the lesser known members of the neurexin-neuroligin gene families involved in cell adhesion at the synapse. *NRXN3* polymorphisms have been linked to opioid and alcohol dependence in humans, and the mouse homolog has been shown to be upregulated in the striatum of animals developing cocaine addiction. *NRXN3* has also been shown to be alternatively spliced; our Exon Array and qRT-PCR data suggest that while the full-length isoform is enriched in STR, as shown here also by ISH, the truncated isoform (NM_138970) is specifically enriched in THM relative to other brain regions (data not shown).

(C) *TCF7L2* was one of the most highly THM-enriched genes (>30-fold), consistent with a previous report of its significant enrichment in the macaque monkey thalamus (Murray et al., 2007). ISH shows this Wnt-pathway transcription factor to be specifically enriched in the ventrolateral thalamus. *PGM2L1* was ~4-fold enriched in THM by Exon Array analysis and confirmed by qRT-PCR. ISH shows specific enrichment in the dorsolateral nucleus. *PGM2L1* encodes an enzyme involved in glucose metabolism, and has not yet been studied in the context of the nervous system.

(D) *PAX3* and *MCC* (*mutated in colorectal cancer*) were 6.5- and 2.8-fold enriched in CBL by Exon Array analysis and were confirmed by qRT-PCR (Figure 2 and data not shown) and ISH.

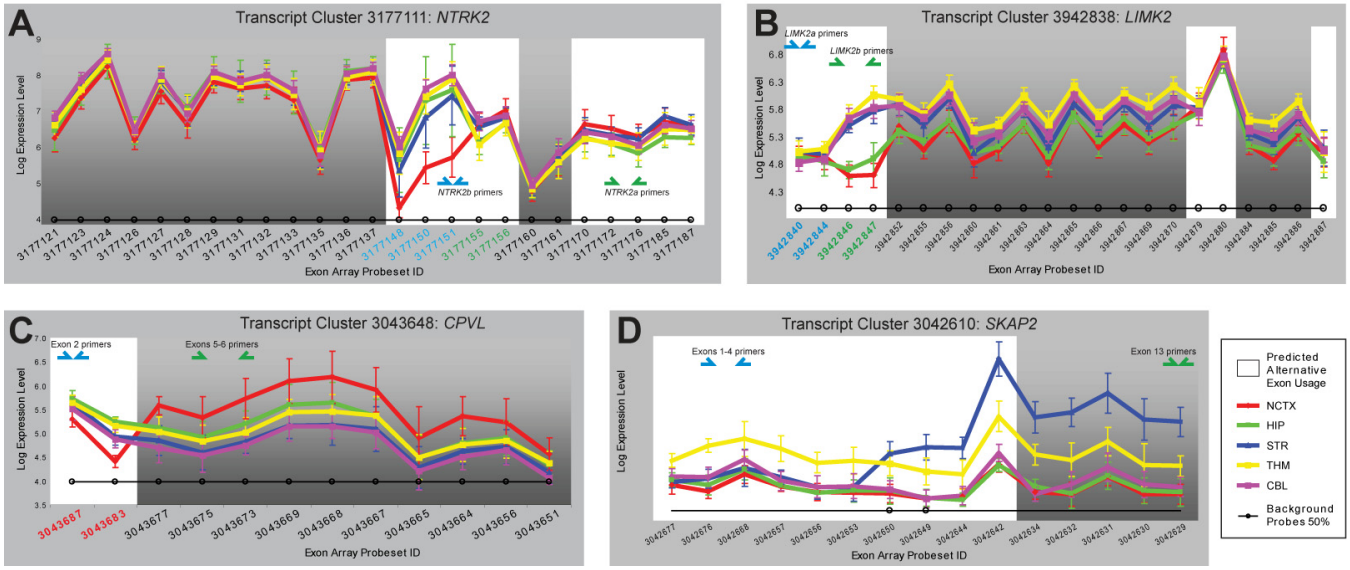


Supplemental Figure 7. Differential Gene Expression in the Mid-Fetal Human Neocortex
Unsupervised hierarchical cluster analysis of 1,753 genes differentially expressed (FDR<0.01) within the late mid-fetal human neocortex. Clustering of areas suggests a broad separation of PFC (r=0.37) from non-frontal (r=0.25) cortical areas. The most similar areas in this analysis were TAU+PAS (r=0.67) followed by OPFC+DLPFC (r=0.57). The MS sample, taken from the border area of the frontal and parietal lobes, does not correlate with either PFC or PAS; rather, genes enriched in MS are divided into those that cluster with PFC and those that cluster with non-PFC areas, reflecting the mixed frontoparietal nature of the sample. These results prompted us to perform the additional, targeted analyses shown in the main Figure 3. Red is higher expression, blue is lower expression, with genes individually median-centered at grey.



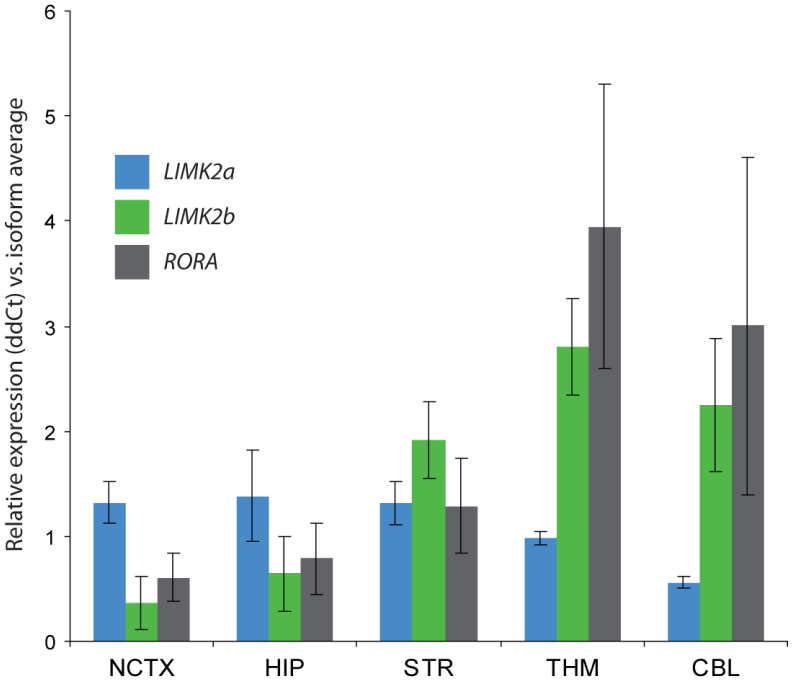
Supplemental Figure 8. Population-Level Left-Right Symmetry of Gene Expression in the Mid-Fetal Human Neocortex

Volcano plots depicting the range of fold-differences and uncorrected p-values in NCTX as a whole (A) and in representative perisylvian cortical areas (B-D). In these as in all other NCTX areas and brain regions tested, no genes showed significant left-right differential expression, even after the most lenient correction for multiple comparisons. Dashed lines indicate a corrected p-value of 0.01 (step-up FDR).



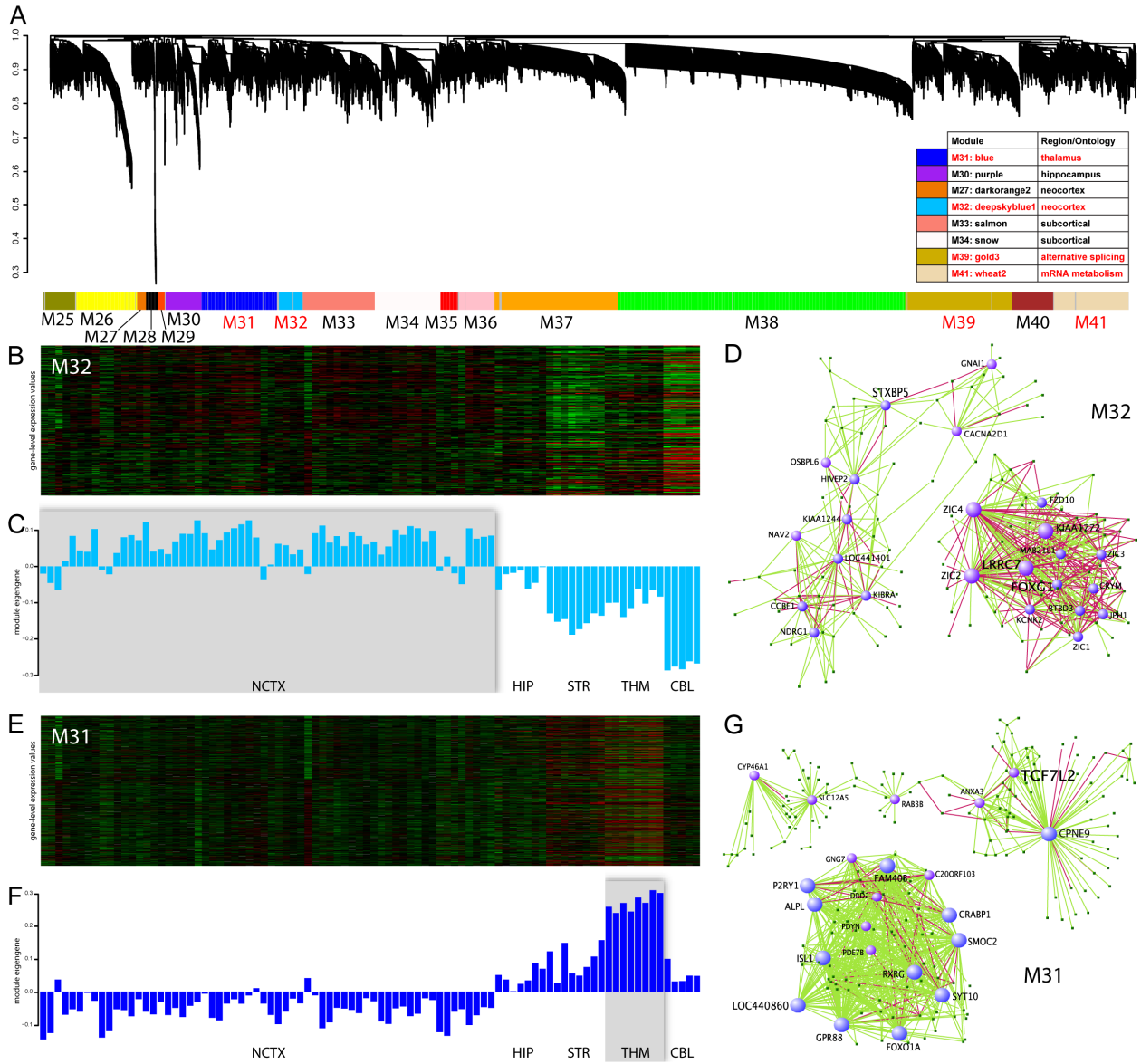
Supplemental Figure 9. Identification of Differential Alternative Splicing Across Brain Regions by Exon Array Probeset-Level Expression Data

Plotted are expression levels (y-axis) for each probeset (x-axis) for genes with a statistically significant interaction between probeset expression ("exon usage") and brain region. Non-parallel probeset expression levels, highlighted in white, indicate region-dependent differential splicing of the corresponding exons. Blue and green arrows indicate the exon locations of isoform- or exon-specific qRT-PCR primers. Plots are adapted from the XRAY auto-generated output.



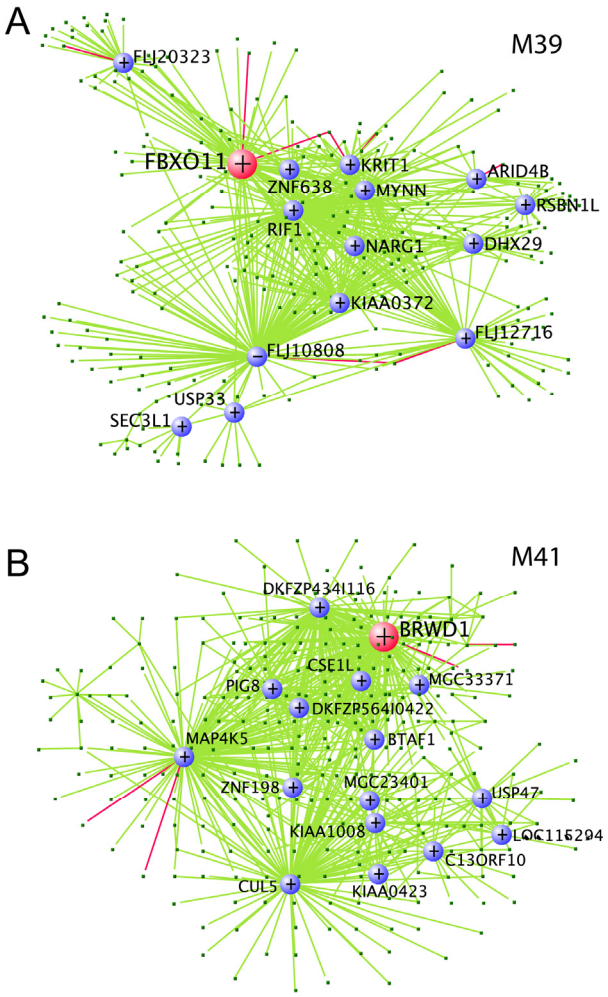
Supplemental Figure 10. Differential Alternative Splicing of *LIMK2* Corresponds to Expression of its Putative Regulator *RORA*

Confirmation by qRT-PCR of the regional differential alternative splicing of *LIMK2*, together with qRT-PCR confirmation of differential expression of *RORA*. Enrichment of *RORA* in THM and CBL correlates with *LIMK2b*, but not *LIMK2a*. Interestingly, the original report of alternative splicing of *LIMK2* also reported evidence for regulation of the *b*, but not the *a* isoform by *RORA* (Nomoto et al., 1999). These data suggest that Exon Array alternative splicing analysis may be useful in predicting or refining isoform-specific transcriptional regulatory relationships. Data are mean±SEM.



Supplemental Figure 11. Network Structure of Gene Co-Expression Relationships in the Mid-Fetal Human Brain

Weighted gene co-expression network analysis (WGCNA) was performed on gene-level expression data to identify modules of co-regulated genes within different brain regions. **(A)** Clustering of genes based on topological overlap (TO) identifies modules of co-regulated genes in the developing human brain. Modules are defined by dynamic tree cutting. **(B-D)** Module M32 corresponds to NCTX and contains many genes specifically enriched or suppressed in NCTX. The hub gene *LRRC7* encodes a well-known post-synaptic density protein, also known as *Densin-180*, involved in dendritic outgrowth and arborization. This module also contains a disproportionate number of TALE-type homeobox transcription factors, including *MEIS1* and the *Iriquois homeobox* family members 1, 2, 3, and 5 (Table S12). **(E-G)** Module M31 corresponds to THM and contains a high proportion of THM-enriched genes. The hub gene *TCF7L2* is a transcription factor in the Wnt signaling pathway and has been found to be enriched in specific thalamic nuclei in adult rhesus macaque. Interestingly, this module contains at least 13 other genes putatively involved in the Wnt pathway (Table S13), suggesting a significant involvement of this pathway in human THM development.



Supplemental Figure 12. Alternative Splicing and mRNA Metabolism Network Modules
Only two modules from the network pictured in Figure S10A contained more genes that were DAS than those that were DEX, suggesting a common program of alternative splicing may underlie these modules' transcriptional co-regulation. **(A)** Gene Ontology analysis of module M39 revealed a significant enrichment of terms related to mRNA splicing and processing. Genes in this module included several HNRP, DEAD box, and Splicing Factor family genes, as well as the neuronal-specific splicing factor *PTBP2* (Table S16). **(B)** Module M41 was annotated with many of the same mRNA splicing and processing GO terms. However, the most significantly enriched terms were more broadly related to mRNA metabolism and transcriptional regulation, suggesting a more general transcriptional machinery network.

Supplemental Experimental Procedures

Human Brain Specimens and Tissue Processing

This study was carried out using post-mortem human brain specimens collected from the Human Fetal Tissue Repository at the Albert Einstein College of Medicine (AECOM), according to guidelines on the research use of human brain tissue and approval by the Human Investigation Committees from the AECOM and Yale University School of Medicine. For each tissue donation, appropriate maternal written informed consent was obtained and all available non-identifying information was recorded. The fetal age was determined by the date of last menstruation, ultrasonographic scanning, and/or foot length. Only brains with no signs of malformations or brain lesions were collected (Table S1). Of these, four mid-fetal brains were inspected for gross anatomical defects, and microdissected to isolate samples from specific brain regions. We chose these brain regions based on their functional importance and our confidence in identifying them at the late mid-fetal stage, and with the additional goals of limiting the time of dissection and thus the total postmortem delay, as well as the maximum difference in dissection time between brain areas. Dissected tissue was fresh-frozen in TRIzol for RNA and DNA extraction, with a post-mortem interval of less than 1 hour. The tissue remaining after microdissection was fixed, cryoprotected, frozen, and stored at –80°C. Tissue sections were analyzed for neuropathological or developmental defects. In addition to normal cellular distribution identified by Nissl staining, we used various immunohistochemical markers to confirm the presence of all major neuronal and glial cell types present at this developmental age (Figures S1-S2 and data not shown).

RNA Processing and Affymetrix Exon Array Hybridization

Total RNA was isolated using TRIzol and further purified using the Qiagen RNeasy kit. The quality of total RNA was determined by A260/A280 ratio to be at least 1.8, and further checked by electrophoresis on an Agilent Bioanalyzer. Ten µg of very high quality total RNA from each sample was provided to the Yale Neuroscience Microarray Center facility for cDNA labeling, hybridization, and data analysis.

Preparation of labeled cDNA for hybridization onto Affymetrix GeneChips followed the recommended Affymetrix protocol. An aliquot of 1 µg of sample was subjected to ribosomal RNA (rRNA) reduction. Quality of the rRNA reduction was determined by comparing the reduced RNA to the total RNA on the Bioanalyzer. Double-stranded cDNA and cRNA were synthesized. After the purification of cRNA, the first strand of cDNA was synthesized and fragmented to the size of 35 to 200 bases. The fragmented sample was then terminally labeled with biotin. Integrity of cDNA and fragmented cDNA was assessed by running aliquots on the Bioanalyzer before proceeding.

The entire fragmented sample was combined with a hybridization cocktail and loaded onto the Exon 1.0 ST Array. The hybridization cocktail contains control oligonucleotide B2 and 20X eukaryotic hybridization controls (bioB, bioC, bioD, Cre). These reagents serve as internal controls for hybridization efficiency. The arrays were hybridized for 16h at 45°C in a rotisserie oven. After hybridization, arrays were washed using the Affymetrix fluidics station and stained with streptavidin-phycoerythrin according to the Affymetrix technical manual. Washed arrays were scanned on an Affymetrix GeneChip Scanner 3000, and the output files visually inspected for hybridization artifacts. The quality of the data was evaluated by checking the following quality control parameters:

Hybridization Controls: Presence of spiked-in control cRNAs bioB, bioC, bioD, and Cre serve as positive controls for hybridization. The data was considered acceptable if the hybridization intensities for these controls were present in increasing amounts, bioB being the lowest and Cre the highest.

Labeling Controls: Poly-A RNA controls are added at the beginning of the process to assess the whole target labeling process. The genes used for labeling controls are *in vitro* synthesized from *B. subtilis* and are absent in eukaryotic samples. These genes are lys, phe, thr, and dap.

Histology and Immunohistochemistry

Additional specimens obtained at AECOM were collected in cold DEPC-treated phosphate buffered saline (D-PBS) and separated from surrounding tissue. To obtain coronal tissue sections, specimens were immediately dissected into approximately 1 cm thick slabs and fixed in 4% (w/v) paraformaldehyde (PFA)/D-PBS for 36 hours at 4°C. To obtain sagittal tissue sections, specimens were cut at the level of the midbrain to separate the brain stem and cerebellum from the cerebrum. Following fixation tissue was cryoprotected in graded sucrose solutions [10%, 20%, and 30% (w/v) in D-PBS] at 4°C, embedded in Tissue-Tek O.C.T. (Sakura Finetek), frozen at –40°C in 2-methylbutane (J.T. Baker), and stored at –80°C. Coronally or sagittally oriented tissue sections (30 µm and 60 µm thick) were prepared using a Leica CM3050S cryostat and mounted onto Superfrost/Plus slides (Fisher Scientific Co.) or stored as free-floating sections in D-PBS at 4°C. The following primary antibodies with listed host animal, dilution, and source information, were used in images shown in this manuscript: anti-BCL11B (Rat, 1:250, Abcam/ab18465), anti-CNTNAP2 (Rabbit, 1:500, US Biological/C2089), anti-FOXP2 (Rabbit, 1:100, Rasin et al., 2007; Rabbit, 1:150000, Abcam/ab58599), anti-GABA (Rabbit, 1:2000, Sigma/A2052), anti-GFAP (Guinea pig, 1:500, Advanced ImmunoChemical/031223), anti-NeuN (mouse, 1:500, Chemicon/MAB377), anti-POU3F3 (Goat, 1:100, Santa Cruz Biotechnology/sc-6028), anti-RELN (Mouse, 1:100, gift of M. Ogawa; Ogawa et al., 1995), and anti-SOX5 (Goat, 1:100, Santa Cruz Biotechnology/sc-17329).

For 3,3'-diaminobenzidine (DAB; a chromogen) immunohistochemistry (IHC), slide mounted (30 or 60 µm) or free-floating (60 µm) tissue sections were first washed in PBS and quenched with 1% hydrogen peroxide in PBS, to block endogenous peroxidase activity. Next, the sections were washed in PBS and incubated in blocking solution (BS) containing 5% (v/v) normal donkey serum (Jackson ImmunoResearch Laboratories), 1% (w/v) bovine serum albumin, 0.1% (w/v) glycine, 0.1% (w/v) L-lysine, and 0.4% (v/v) Triton X-100 in PBS for 1 hr at room temperature. Sections were then incubated for 20 to 36 hrs at 4°C in primary antibodies diluted in BS. The sections were incubated in the appropriate donkey biotinylated secondary antibodies (Jackson ImmunoResearch Labs) diluted 1:250 in BS for 1.5-2 hrs at RT. Following washing in PBS, sections were incubated in avidin-biotin-peroxidase complex (Vectastain ABC Elite kit; Vector Laboratories) for 1 hr at RT. Sections were washed in PBS (3 x 15 min) and incubated for 5 min in 20 ml of PBS containing 0.05% (w/v) DAB, 0.04% (w/v) ammonium chloride, 0.5-1 mg glucose oxidase type VII, and 80 µl of 0.05M nickel ammonium sulfate in 0.2M acetate buffer (pH 6.0). The peroxidase reaction was started by adding 400 µl of 10% (w/v) D-glucose/PBS and stopped 5-10 min later by washing in PB. Alternatively, developing was performed using a DAB peroxidase substrate kit according to the manufacturer's protocol (catalog #SK-4100; Vector Laboratories). Finally, sections were dehydrated, mounted on Superfrost Plus charged slides and coverslipped with Permount (Fisher Scientific Co.).

For triple labeled immunofluorescence staining of CNTNAP2, GFAP, and NeuN, tissue sections were incubated with appropriate donkey secondary antibody conjugated to Cy2, Cy3, or Cy5 (Jackson ImmunoResearch Labs). Single optical images were collected on a Zeiss LSM 510 laser-scanning microscope.

Illumina DNA Microarray Quality Control

Genomic DNA was extracted using the AllPrep Mini Kit (Qiagen) according to the manufacture's instructions. Quality of genomic DNA was confirmed by running an agarose gel (150 ng/sample on a 1% gel). Only samples that had fragments longer than 2 kb were used for Illumina genotyping assays. We performed genotyping with the Illumina Infinium HumanHap 650Y BeadChips, with probes at 660,755 spots on the genome and a mean inter-probe spacing of 4.5kb, using methods previously described (Peiffer et al., 2006). The Illumina chips were scanned with a BeadArray Reader, a confocal fluorescent scanner that excites the fluorophores generated during the signal amplification of the allele-extension products on the BeadChips. The image intensities and genotypes were extracted using

Illumina's BeadScan software. Our four specimens were compared to a standard set of intensities from 120 HapHap samples for the determination of any changes in DNA copy number for each SNP. All chips had call rates above 95%, indicating high data quality. We used both a published algorithm, PennCNV (Wang et al., 2007), and our own in-house software, to predict CNVs from these data.

Exon Microarray Data Analysis

All microarray data analyses were performed on Dell desktop computers. Affymetrix CEL files were imported into Partek Genomics Suite (Partek GS; Partek, Inc.) using the default Robust Multichip Average (RMA) settings: RMA background correction, quantile normalization, GC content adjustment, mean probeset summarization, and log2 transformation. PCA, ANOVA, and t-tests reported here were performed using the core, unbounded probesets, as defined by Affymetrix, which were averaged to yield gene summary scores for 17,421 transcript clusters. All ANOVAs included brain specimen and hybridization date as cofactors to exclude batch effects and individual genetic variation. In addition, repeated analyses were performed after excluding potential outliers (three NCTX samples more than three standard deviations from a PCA cluster center, based on all core transcripts; see Figure S5). These analyses marginally reduced the total number of significant results, but did not affect any of the highly DEX genes discussed in detail in this paper.

Partek GS was similarly used to prepare data for the UCSC Human Genome Browser track, as follows: "full" probesets were imported using RMA settings without log transformation, and untransformed expression values from each array were divided by values from an array hybridized with pooled RNA from all samples of the same brain. This ratio was then log2-transformed to generate the "signal log ratio" (SLR) values presented on the Genome Browser track. SLR values were calculated in this way to be consistent with the "Affy Exon" tissue panel expression track supplied by Affymetrix.

Similarly, the Excel Array Analysis software package (XRAY; Biotique Systems, Inc.) imported core probesets from Affymetrix CEL files using full quantile normalization, and performed GC content-based probe screening, log transformation, and probeset summarization. Detection above background (DABG) was performed at both the probe and the probeset level using GC-matched background probes, and low-variance probesets were excluded. In addition, individual probesets not expressed significantly above background were excluded from tests for alternative exon usage, as these lead to false positives for tissue-specific alternative splicing. XRAY was used to perform a mixed model, nested analysis of variance (ANOVA) to identify genes differentially expressed (DEX) or alternatively spliced (DAS) across brain regions or neocortical areas. Resulting p-values were corrected for multiple comparisons using the Benjamini and Hochberg False Discovery Rate (FDR) method (Benjamini and Hochberg, 1995). See the auto-generated XRAY methods and results paper, available at www.sestanlab.org or www.humanbrainatlas.org, for more XRAY analysis details.

Hierarchical Cluster Analysis

Unsupervised hierarchical clustering was performed in Cluster 3.0 (bonsai.ims.u-tokyo.ac.jp/~mdehoon/software/cluster; de Hoon et al., 2004). Gene-level group median log expression values returned by XRAY for DEX and DAS genes were mean centered across brain regions, and both genes and brain regions were clustered using uncentered Pearson correlation and average linkage. Heatmaps were generated in Java Treeview (jtreeview.sourceforge.net; Saldanha, 2004) and used to identify clusters of correlated transcripts most highly specific for each brain region or neocortical area. Clusters shown in Figures 2 and 3 and listed in the Supplemental Tables were restricted to a minimum correlation of 0.75.

Quantitative Real-Time RT-PCR

Primers for quantitative real-time RT-PCR (qRT-PCR) were designed using the Primer3 software (fokker.wi.mit.edu/primer3/input.htm), or the Roche Universal ProbeLibrary Assay Design Center

(www.roche-applied-science.com/sis/rtpcr/upl/index.jsp), which designs intron-spanning primer pairs whenever possible. All primers were blasted against the Ensembl human cDNA database using BlastView (www.ensembl.org/Homo_sapiens/blastview) to check for non-specific binding.

Whenever possible, alternative exon usage was confirmed by designing primers specific to each known or predicted alternative splice isoform. In the absence of known or computationally predicted isoforms, DAS results were confirmed by comparing primers specific to the known isoform with primers targeting an area common to the known and the predicted transcript.

Template cDNA was synthesized from the same total RNA prepared for Exon Array analyses using the SuperScript III First-Strand Synthesis System (Invitrogen). Real-time PCR was performed on an ABI PRISM 7900 Real Time PCR System (Applied Biosystems) using SYBR Green as the detection method (Power SYBR Green PCR Master Mix, Applied Biosystems). Semi-quantitative RT-PCR, for gel images shown in Figure 6, was performed with the same primers and template, using GoTaq PCR Master Mix (Promega) and a Bio-Rad DNA Engine thermal cycler. PCR products were run on 2% agarose gel with ethidium bromide, photographed with UV illumination, and images inverted in Photoshop.

For quantitative PCR, Ct values greater than two standard deviations from the mean for a given primer pair were excluded as outliers. Duplicate or triplicate reactions were then averaged, and fold-change was calculated by the ddCt method relative to the average dCt across all samples for a given primer pair, with GAPDH as the reference for all genes. DAS candidates were considered confirmed if a two-way ANOVA of sample (brain region or NCTX area) and splice isoform (primer pair) yielded an interaction with $p<0.05$.

In Situ Hybridization Probe Synthesis and Labeling

For ISH probe synthesis, we first PCR-cloned the target DNA, between 300-1000 bp, into the pCRII vector, which contains SP6 and T7 RNA polymerase promoter sites for *in vitro* transcription, and amplified the plasmid in competent E. coli cells overnight (TOPO TA Cloning Kit with Dual Promoter; Invitrogen). The plasmid was sequenced to confirm the sequence and determine the direction of the DNA insert, and thus which RNA polymerase to use for in vitro transcription. The plasmid was then purified and linearized with a restriction enzyme that leaves a 5' overhang, run on an agarose gel to confirm complete digestion, and re-purified with the QIAquick PCR purification kit (Qiagen). The linearized plasmid was resuspended in non-DEPC-treated, nuclease-free water at a concentration of 200-250 µg/ml.

RNA probe synthesis was carried out using the DIG RNA labeling kit (Roche). Briefly, an *in vitro* transcription mixture was prepared with one µg linearized DNA plasmid; two µl 10x transcription buffer; two µl DIG RNA labeling mix; one µl RNase inhibitor; two µl RNA SP6 or T7 polymerase (depending on the direction of the DNA insert); and non-DEPC-treated nuclease-free water to a final volume of 20 µl. After 2 hours at 37°C, an aliquot was run on a native agarose gel to confirm the RNA product. Reaction was then incubated with 2 µl DNase I (RNase free) for 15 min at 37° to remove template DNA, followed by addition of 2 µl of 0.2 M EDTA (pH 8.0) to stop the reaction. Excess free nucleotides were removed by Micro Bio-Spin 30 RNase-free column (Bio-Rad). Labeled RNA probe was run on a native agarose gel to determine its quality and quantity.

In Situ Hybridization

Sections were cut on a Leica cryostat at –20°C; 60 µm sections were immediately mounted on cold, charged Superfrost 2x3" slides, brought to room temperature, and hybridized. Thicker sections, up to 150 µm, were hybridized free-floating in 6-well plates or 60 mm dishes and mounted later.

Sections were washed in PBS at room temperature (rt) for 5 min, post-fixed in 4% PFA for 15 min at rt, washed again in PBS 3x5 min, and pre-hybridized in hybridization solution at 70°C for 30 min. No proteinase K treatment was necessary for embryonic brain tissue, which is relatively porous. DIG-

labeled probe was diluted to 0.3 µg/ml in hybridization buffer, denatured at 75°C for 5 min, and applied to the sections. Sections were hybridized at least overnight at between 60-70°C, depending on probe GC content, specificity of signal, and target abundance.

After washing 3x15 min in TBST at rt, sections were then incubated in AP-conjugated anti-DIG antibody (1:5000 in TBST; Roche) overnight at 4°C. Sections were again washed 3x15 min in TBST and 10 min in staining buffer at rt. Staining buffer was then replaced with fresh staining buffer with PVA and 1:50 NBT/BCIP stock solution (Roche), and sections were incubated in the dark at rt, or overnight at 4°C, until the color reaction was complete. Finally, sections were washed in stop-TE buffer and fixed again with 4% PFC to stop the color reaction, washed in PB, and free-floating sections mounted onto charged Superfrost 2x3" slides.

Gene Ontology Annotation Analysis

Annotation analysis was performed using the NIAID web-based DAVID software (david.abcc.ncifcrf.gov; Dennis et al., 2003). The following categories were used to annotate lists of DEX genes: GO Biological Process, Molecular Function, and Cellular Component terms; SwissProt and InterPro protein domain and family terms; KEGG pathways; BIND protein-protein interactions; and OMIM genetic disorder associations. The EASE score, a modified Fisher's exact test, is used to evaluate the overrepresentation or enrichment of a given annotation in a gene list, in comparison to a background gene list (Hosack et al., 2003). In our case, the background consisted of ~17,000 genes represented by the "core" probesets on the Affymetrix Exon Arrays. The DAVID web tool also enables Functional Annotation Clustering, which takes the annotations of a gene list and clusters terms with overlapping member genes. This reduces redundancy across annotation sources, as well as providing insights into relationships between annotations (e.g., the zinc finger protein domain annotation clusters together with the Biological Process transcriptional regulation term, suggesting that zinc finger proteins tend to be transcription factors or co-factors). The geometric mean of the EASE enrichment scores of the terms in a cluster, called the Group Enrichment Score, is then used to reflect the overall enrichment of a biological function or theme in the gene list. See the DAVID website for further details.

Weighted Gene Co-expression Network Analysis

Gene summary scores were calculated in Partek for all core transcript clusters, and all pairwise Pearson correlations between genes were calculated. Three samples – 18 w.g. left HIP, 19 w.g. left DLPFC, and 19 w.g. right MS – were flagged as potential outliers and excluded from WGCNA. For each gene, the sum of its correlations with all other genes is called connectivity, k, and represents its connectedness to all other genes. Next, each gene's set of correlations is compared to all other genes' sets of correlations, to calculate each pair of genes' *topological overlap* (TO), which represents the degree to which a pair of genes share the same correlations, or network "neighborhood." Hierarchical clustering is then used to group genes based on their TO into "modules," or networks, and intra-network connectivity (k_{in}) is re-calculated for genes in a module based only on the other genes in the module. The genes with the highest k_{in} values are termed "hubs" of the network. Finally, the expression data for genes in a module are subjected to Singular Value Decomposition analysis, and the module eigengene, or first principal component, is plotted to visualize potential relatedness of the module to variables such as brain region, specimen, or hemisphere. Annotated R code used for our network analysis is available at www.sestanlab.org or www.humanbrainatlas.org. General information on network analysis methodology, as well as WGCNA software and R code, is available at www.genetics.ucla.edu/labs/horvath/CoexpressionNetwork. For more details see Horvath et al. (2006), as well as supplementary material published with Oldham et al. (2006) and Oldham et al. (2008).

Supplemental References

Abdueva, D., Wing, M. R., Schaub, B., and Triche, T. J. (2007). Experimental comparison and evaluation of the Affymetrix Exon and U133Plus2 GeneChip Arrays. PLoS ONE *2*, e913.

Benjamini, Y., and Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. J. Roy. Statist. Soc. Ser. B. Met. *57*, 289-300.

Clark, T.A., Schweitzer, A.C., Chen, T.X., Staples, M.K., Lu, G., Wang, H., Williams, A., and Blume, J.E. (2007). Discovery of tissue-specific exons using comprehensive human exon microarrays. Genome Biol. *8*, R64.

de Hoon, M.J., Imoto, S., Nolan, J., and Miyano, S. (2004). Open source clustering software. Bioinformatics *20*, 1453-4.

Gardina, P.J., Clark, T.A., Shimada, B., Staples, M.K., Yang, Q., Veitch, J., Schweitzer, A., Awad, T., Sugnet, C., Dee, S., et al. (2006). Alternative splicing and differential gene expression in colon cancer detected by a whole genome exon array. BMC Genomics *7*, 325.

Horvath, S., Zhang, B., Carlson, M., Lu, K.V., Zhu, S., Felciano, R.M., Laurance, M.F., Zhao, W., Qi, S., Chen, Z., et al. (2006). Analysis of oncogenic signaling networks in glioblastoma identifies ASPM as a molecular target. Proc. Natl. Acad. Sci. USA *103*, 17402-17407.

Hosack, A., Dennis, G., Sherman, T., Lane, C., and Lempicki, A. (2003). Identifying biological themes within lists of genes with EASE. Genome Biol. *4*, R70.

Kapur, K., Xing, Y., Ouyang, Z., and Wong, W. (2007). Exon arrays provide accurate assessments of gene expression. Genome Biol. *8*, R82.

Kudo, L. C., Karsten, S. L., Chen, J., Levitt, P., and Geschwind, D. H. (2007). Genetic analysis of anterior posterior expression gradients in the developing mammalian forebrain. Cereb Cortex *17*, 2108-22.

Leamey, C. A., Glendining, K. A., Kreiman, G., Kang, N., Wang, K. H., Fassler, R., Sawatari, A., Tonegawa, S., and Sur, M. (2007). Differential gene expression between sensory neocortical areas: potential roles for ten_m3 and bcl6 in patterning visual and somatosensory pathways. Cereb Cortex *18*, 53-66.

Murray, K. D., Choudary, P. V., and Jones, E. G. (2007). Nucleus- and cell-specific gene expression in monkey thalamus. Proc. Natl. Acad. Sci. USA. *104*, 1989-1994.

Ogawa, M., Miyata, T., Nakajima, K., Yagyu, K., Seike, M., Ikenaka, K., Yamamoto, H., and Mikoshiba, K. (1995). The reeler gene-associated antigen on Cajal-Retzius neurons is a crucial molecule for laminar organization of cortical neurons. Neuron *14*, 899-912.

Oldham, M. C., Horvath, S., and Geschwind, D. H. (2006). Conservation and evolution of gene coexpression networks in human and chimpanzee brains. Proc Natl Acad Sci U S A *103*, 17973-8.

Peiffer, D.A., Le, J.M., Steemers, F.J., Chang, W., Jenniges, T., Garcia, F., Haden, K., Li, J., Shaw,

C.A., Belmont, J., et al. (2006). High-resolution genomic profiling of chromosomal aberrations using Infinium whole-genome genotyping. Genome Res. *16*, 1136-1148.

Rasin, M.R., Gazula, V.R., Breunig, J.J., Kwan, K.Y., Johnson, M.B., Liu-Chen, S., Li, H.S., Jan, L.Y., Jan, Y.N., Rakic, P., et. al. (2007). Numb and Numbl are required for maintenance of cadherin-based adhesion and polarity of neural progenitors. Nat. Neurosci. *10*, 819-27.

Saldanha, A.J. (2004). Java Treeview - extensible visualization of microarray data. Bioinformatics *20*, 3246-8.

Wang, K., Li, M., Hadley, D., Liu, R., Glessner, J., Grant, S. F., Hakonarson, H., and Bucan, M. (2007). PennCNV: An integrated hidden Markov model designed for high-resolution copy number variation detection in whole-genome SNP genotyping data. Genome Res. *17*, 1665-1674.

Supplemental Table Descriptions

All tables are available as Excel spreadsheets at www.humanbrainatlas.org.

Table S1. Fetal human brain specimens. The first four specimens were microdissected for Affymetrix Exon Array profiling and qRT-PCR validation. Genomic DNA was also hybridized to Illumina genotyping arrays for copy number analysis (Table S2). Leftover tissue was fixed, frozen, and sectioned for histological and immunohistochemical analyses (e.g., Figures S1-S2). The additional thirteen mid-fetal human brains listed here were used for candidate gene validations by qRT-PCR, *in situ* hybridization, and/or immunohistochemistry (e.g., Figures 4 and S6). All specimens had post-mortem intervals less than one hour, and were free of gross morphological defects.

Table S2. Complete list of predicted copy number variations. This table shows the predicted CNVs with the chromosomal location, as well as the first and last SNP, for each brain used for Exon Array analysis. The type of putative CNV is indicated as follows: HOMODEL, homozygous deletion; HETDEL, heterozygous deletion; HETDUP, heterozygous duplication; AMPLIF, amplification. If the CNV hits a gene, it is listed as coding; if it hits an intron, it is listed as intronic; otherwise the CNV is labeled intergenic. Also, the overlap with known CNVs from the Toronto Database of Genomic Variants or Segmental Duplications is noted. The 18 wg specimen shows a higher number of CNVs likely due to its lower genotyping call rate (95%), which is known to introduce more false positive CNVs (Wang et al., 2007); all other chips are at 99% call rate. Total numbers of predicted CNVs for each brain are within the range of variation seen in a control set of 120 well-characterized HapMap individuals (Figure S3).

Table S3. Exon Array hybridizations and sample info. RNA isolated from each area illustrated in Figure 1 was hybridized independently from each of the four brains, with the following exceptions: left and right sides of the cerebellum were collected separately only from the 19 wg specimen; OPFC was obtained only from the 19 wg specimen.

Table S4. Numbers of expressed and region-specific genes. Tables display numbers of expressed (present), DEX, and DAS core transcripts from each of four distinct XRAY mixed model analyses of variance, as described in the main text.

Table S5. Numbers of genes and correlations of clusters illustrated in Figures 2 and 3. Uncentered Pearson correlations were obtained by unsupervised hierarchical clustering as described in the Supplemental Experimental Procedures.

Table S6. Gene lists for clusters illustrated in Figure 2.

Table S7. Gene lists for intra-NCTX clusters illustrated in Figure 3a.

Table S8. Gene lists for PFC clusters illustrated in Figure 3b.

Table S9. Additional DEX genes validated by qRT-PCR, ISH, and IHC.

Table S10. Perisylvian NCTX-enriched genes.

Table S11. Comparison with adult human brain microarray data. Roth et al. (2006) represents the most spatially comprehensive microarray analysis of human brain previously published. "Probe ID"

corresponds to the probeset ID from Affymetrix U133 Plus 2.0 arrays. ND, No Data: equivalent probesets not present or not analyzed, due to contraindications such as discontinued gene records.

Table S12. Comparison with published developing mouse cortex microarray data. ND, No Data: equivalent probesets not present or not analyzed, due to contraindications such as discontinued gene records or lack of homology.

Table S13. DEX genes with associated haCNSs, which are numbered as in Prabhakar et al. (2006). Genomic locations of haCNSs are in hg18 coordinates (NCBI build 36.1).

Table S14. Gene ontology functional annotation clustering.

Table S15. M32 (deepskyblue1): NCTX module.

Table S16. M31 (blue): THM module.

Table S17. M15 (cyan): PFC module.

Table S18. M24 (orange): non-PFC module.

Table S19. M39 (gold3): alternative splicing module.

Table S20. M41 (wheat2): mRNA metabolism module.

Tables S15 to S20 list all genes found in network modules described in the main text. In these tables, genes are sorted by kWithin-Connectivity, which represents the within-module connectivity or "hub status" of each gene. In addition, the total connectivity of the gene to the entire network is given (kTotal), as well as the correlation of the gene's expression data to the module "eigengene," or first principal component (eigencorr), and the significance of this correlation (eigenpval) which determines the module membership. Genes with negative correlations are indicated in red. Finally, at the right are appended the FDR-corrected p-values for module genes that were also DEX or DAS. All additional network modules are available at www.humanbrainatlas.org.

Table S1. Human Fetal Brain Specimens

	Code	Age (wg)	Fetal gender	Facial or bodily abnormalities	Gross brain abnormalities	Microscopic brain abnormalities	Chromosomal abnormalities	Maternal ethnicity	Maternal age (years old)	Maternal medical history	EtOH use (donor)	Cigarette and drug use (donor)
Microdissected for Affymetrix Exon Microarrays	**1**	**18**	**Male**	**None**	**None**	**None**	**None**	**Hispanic**	**20**	**Low grade squamous intraepithelial lesion**	**None**	**None**
	2	**19**	**Female**	**None**	**None**	**None**	**None**	**Caucasian**	**39**	**Asthma (Rx: Albuterol); Migraines (Rx: T#3 prn); Depression (Rx: Celexa); Pregnancy risk category C; Respiratory Px; Increased CNS irritability.**	**Occasional**	**None**
	3	**21**	**Female**	**None**	**None**	**None**	**None**	**Hispanic**	**27**	**Healthy**	**None**	**None**
	4	**23**	**Female**	**None**	**None**	**None**	**None**	**Asian**	**36**	**Healthy**	**None**	**None**
Additional brains used for validation by qRT-PCR, immunohistochemistry, and in situ hybridization	5	18	M	None	None	None	---	Hispanic	22	Healthy	None	None
	6	19	F	None	None	None	---	African-American	19	Healthy	None	None
	7	19	F	None	None	None	---	African-American	17	Healthy	None	None
	8	20	F	None	None	None	---	African-American	16	Healthy	None	None
	9	20	F	None	None	None	---	No data	26	Allergy: Brethine, Dilantin	No data	No data
	10	20	M	None	None	None	---	Caucasian	20	Healthy	None	None
	11	21	No data	None	None	None	---	Hispanic	21	Anemia	None	None
	12	21	M	None	None	None	---	African-American	16	Healthy	None	None
	13	21	M	None	None	None	---	Hispanic	22	Asthma (attack 2 y ago; Rx: albuterol); Allergy (PCN = anaphylaxis)	None	None
	14	22	M	None	None	None	---	No data	15	Elevated WBC	None	None
	15	22	F	None	None	None	---	African-American	23	Healthy	None	None
	16	22	F	None	None	None	---	Hispanic	29	Depression; Allergy (shellfish); Hx: lead poisoning (@ 8yo); Polycystic ovarian syndrome	None	Marijuana
	17	24	F	None	None	None	---	African-American	26	abNl PAP	None	None

Table S2. Complete list of predicted copy number variations

brain	chr	start	stop	first SNP	last SNP	# snps	CNV size	CNV type	region	SegDups	known CNV?
23 w.g.	chr17	14,984,724	14,998,961	rs7212945	rs1122073	7	14,238	HOMODEL	intergenic	0	yes
23 w.g.	chr1	12,805,593	12,848,162	rs864728	rs11810835	4	42,570	HETDEL	coding	21	yes
23 w.g.	chr2	72,163,406	72,182,606	rs1878503	rs1400681	6	19,201	HETDEL	intergenic	0	no
23 w.g.	chr5	110,933,970	110,938,684	rs384970	rs421880	4	4,715	HETDEL	intergenic	0	no
23 w.g.	chr7	141,225,812	141,241,903	rs4329195	rs12535134	10	16,092	HETDEL	coding	0	no
23 w.g.	chr9	9,780,222	9,786,577	rs1174590	rs10977985	8	6,356	HETDEL	intergenic	0	yes
23 w.g.	chr14	43,575,763	43,600,472	rs12895857	rs1950538	8	24,710	HETDEL	intergenic	0	yes
23 w.g.	chr4	68,961,744	68,967,409	rs11933242	rs7670560	3	5,666	HETDUP	intergenic	1	yes
23 w.g.	chr5	28,842,013	28,851,719	rs2548005	rs16898178	3	9,707	HETDUP	intergenic	0	yes
23 w.g.	chr5	178,863,857	178,915,052	rs6886690	rs4701131	10	51,196	HETDUP	coding	4	yes
23 w.g.	chr8	145,064,091	145,247,517	rs6558406	rs13264654	17	183,427	HETDUP	coding	0	yes
23 w.g.	chr12	11,367,992	11,434,269	rs10845332	rs10743954	15	66,278	HETDUP	coding	6	yes
23 w.g.	chr12	130,446,153	130,722,540	rs7138697	rs6598159	54	276,388	HETDUP	coding	13	yes
23 w.g.	chr14	85,926,044	85,933,039	rs7143328	rs17122289	4	6,996	HETDUP	intergenic	0	no
21 w.g.	chr7	141,702,280	141,711,358	rs12668690	rs17163396	5	9,079	HOMODEL	intergenic	1	yes
21 w.g.	chr1	67,701,712	67,711,010	rs11209101	rs4655724	8	9,299	HETDEL	intergenic	0	no
21 w.g.	chr6	2,541,933	2,548,332	rs4959195	rs12526493	3	6,400	HETDEL	intergenic	0	yes
21 w.g.	chr6	31,416,609	31,426,123	rs9265797	rs2523619	5	9,515	HETDEL	intergenic	0	yes
21 w.g.	chr6	81,341,226	81,344,394	rs4706852	rs1454466	3	3,169	HETDEL	intergenic	0	yes
21 w.g.	chr11	62,594,645	62,604,138	rs12290156	rs7926818	5	9,494	HETDEL	intergenic	0	yes
21 w.g.	chr13	83,000,441	83,055,928	rs1412856	rs9805405	19	55,488	HETDEL	intergenic	0	yes
21 w.g.	chr18	1,903,316	1,970,668	rs313038	rs12604106	20	67,353	HETDEL	intergenic	0	yes
21 w.g.	chr3	12,653,013	12,738,841	rs13060691	rs6442325	13	85,829	HETDUP	coding	1	yes
21 w.g.	chr5	104,124,529	104,167,702	rs161641	rs1606554	12	43,174	HETDUP	intergenic	0	yes
21 w.g.	chr6	29,944,503	29,976,963	rs9258866	rs2517904	8	32,461	HETDUP	coding	2	yes
21 w.g.	chr7	18,025,122	18,033,655	rs1919315	rs366909	5	8,534	HETDUP	intergenic	0	no
21 w.g.	chr8	139,851,720	139,855,420	rs4736183	rs11781300	4	3,701	HETDUP	intron	0	no
21 w.g.	chr8	145,064,091	145,247,517	rs6558406	rs13264654	17	183,427	HETDUP	coding	0	yes
21 w.g.	chr9	131,425,241	131,467,282	rs2277153	rs7024039	19	42,042	HETDUP	coding	0	no
21 w.g.	chr13	79,240,187	79,309,824	rs9574473	rs6563138	7	69,638	HETDUP	intergenic	0	no
21 w.g.	chr19	58,224,973	58,244,108	rs2870438	rs12151194	5	19,136	HETDUP	intron	0	yes
21 w.g.	chr19	59,423,491	59,435,029	rs17207328	rs17239607	6	11,539	HETDUP	coding	0	yes
21 w.g.	chr4	955,609	1,068,426	rs11724804	rs17164229	14	112,818	AMPLIF	coding	0	no
21 w.g.	chr17	76,034,556	76,050,172	rs4074302	rs4563088	4	15,617	AMPLIF	intergenic	0	no
19 w.g.	chr5	117,418,263	117,421,055	rs10071435	rs2900114	6	2,793	HOMODEL	intergenic	0	yes
19 w.g.	chr3	89,488,444	89,499,754	rs9836340	rs870898	4	11,311	HETDEL	intron	0	yes
19 w.g.	chr5	104,240,839	104,339,732	rs10069629	rs10066783	28	98,894	HETDEL	intergenic	0	yes
19 w.g.	chr6	67,075,448	67,105,019	rs9453702	rs1634207	13	29,572	HETDEL	intergenic	0	yes
19 w.g.	chr12	11,411,688	11,466,837	rs10845343	rs7134383	6	55,150	HETDEL	coding	5	yes
19 w.g.	chr13	83,000,441	83,055,928	rs1412856	rs9805405	19	55,488	HETDEL	intergenic	0	yes
19 w.g.	chr21	18,463,191	18,475,103	rs11911479	rs4816766	4	11,913	HETDEL	intron	0	yes
19 w.g.	chr4	36,993,280	37,006,227	rs1648408	rs1365338	6	12,948	HETDUP	intergenic	0	no
19 w.g.	chr8	122,391,890	122,468,048	rs10156248	rs2386121	22	76,159	HETDUP	intergenic	0	no
19 w.g.	chr19	58,028,179	58,036,513	rs10401828	rs10420793	4	8,335	HETDUP	coding	1	yes
18 w.g.	chr9	84,250,769	84,262,073	rs11999685	rs12684844	4	11,305	HOMODEL	intergenic	0	no
18 w.g.	chr13	32,110,785	32,111,330	rs399622	rs7335992	3	546	HOMODEL	intron	0	no
18 w.g.	chr14	41,839,034	41,860,993	rs7151396	rs2086797	4	21,960	HOMODEL	intergenic	0	no
18 w.g.	chr20	58,064,721	58,073,135	rs6027262	rs7263401	7	8,415	HOMODEL	coding	0	no
18 w.g.	chr1	101,777,242	101,832,947	rs1199582	rs12067639	28	55,706	HETDEL	intergenic	0	yes
18 w.g.	chr1	173,879,950	173,899,093	rs16848901	rs875410	8	19,144	HETDEL	intron	0	yes
18 w.g.	chr2	69,617,587	69,768,879	rs6743528	rs4852918	34	151,293	HETDEL	coding	0	yes
18 w.g.	chr3	64,832,568	64,883,916	rs2197116	rs6779770	22	51,349	HETDEL	intergenic	0	no
18 w.g.	chr3	112,197,449	112,396,662	rs9835919	rs7610754	14	199,214	HETDEL	coding	0	no
18 w.g.	chr3	112,662,011	112,690,660	rs9826798	rs1391364	8	28,650	HETDEL	intergenic	0	no
18 w.g.	chr3	145,021,698	145,042,360	rs9822158	rs16854463	17	20,663	HETDEL	coding	0	no
18 w.g.	chr3	163,613,385	163,712,278	rs4856685	rs7627193	19	98,894	HETDEL	intergenic	0	yes
18 w.g.	chr3	189,969,724	190,002,946	rs2030582	rs3856919	15	33,223	HETDEL	intron	0	no
18 w.g.	chr3	190,163,952	190,189,143	rs16863811	rs848977	11	25,192	HETDEL	intergenic	0	no
18 w.g.	chr5	14,204,799	14,343,274	rs6554843	rs30628	50	138,476	HETDEL	coding	0	yes
18 w.g.	chr5	57,310,077	57,336,759	rs13189262	rs12651995	7	26,683	HETDEL	intergenic	0	no
18 w.g.	chr5	89,718,678	89,737,997	rs16868602	rs16868636	7	19,320	HETDEL	coding	0	no
18 w.g.	chr5	120,115,986	120,218,258	rs1449172	rs10900744	24	102,273	HETDEL	intergenic	0	yes
18 w.g.	chr7	7,327,796	7,365,929	rs2018625	rs10486158	20	38,134	HETDEL	coding	0	yes
18 w.g.	chr7	11,851,207	11,984,324	rs6942789	rs10256171	56	133,118	HETDEL	intergenic	0	yes
18 w.g.	chr7	54,392,941	54,567,606	rs1404665	rs577570	28	174,666	HETDEL	intergenic	4	no
18 w.g.	chr7	81,693,530	81,722,923	rs10954669	rs38559	13	29,394	HETDEL	intron	0	no
18 w.g.	chr7	105,870,604	105,937,636	rs2704936	rs17153267	20	67,033	HETDEL	intergenic	0	no
18 w.g.	chr7	138,906,412	138,980,099	rs6956628	rs11979698	17	73,688	HETDEL	coding	0	no

18 w.g.	chr8	9,452,106	9,659,969	rs7013960	rs6986755	37	207,864	HETDEL	coding	0	yes
18 w.g.	chr8	10,891,278	10,912,329	rs7837828	rs10087512	9	21,052	HETDEL	coding	0	yes
18 w.g.	chr9	5,039,065	5,203,687	rs1328917	rs10975003	33	164,623	HETDEL	coding	0	yes
18 w.g.	chr10	26,560,493	26,608,711	rs8190645	rs4144102	22	48,219	HETDEL	coding	0	no
18 w.g.	chr10	49,511,555	49,556,819	rs4838429	rs6537571	10	45,265	HETDEL	intergenic	0	no
18 w.g.	chr10	54,194,664	54,201,241	rs10450310	rs1800450	9	6,578	HETDEL	coding	0	no
18 w.g.	chr10	86,875,190	87,011,383	rs17296623	rs11201526	43	136,194	HETDEL	intergenic	0	no
18 w.g.	chr11	2,933,287	2,944,899	rs11602817	rs7124487	10	11,613	HETDEL	coding	0	yes
18 w.g.	chr11	63,407,501	63,530,946	rs12271959	rs10897471	19	123,446	HETDEL	coding	1	yes
18 w.g.	chr12	70,593,386	70,652,453	rs17110391	rs7963720	17	59,068	HETDEL	coding	0	yes
18 w.g.	chr14	44,150,945	44,372,831	rs17115331	rs12147665	45	221,887	HETDEL	intergenic	0	yes
18 w.g.	chr16	6,278,695	6,288,493	rs17220612	rs11645065	10	9,799	HETDEL	intergenic	0	no
18 w.g.	chr18	60,441,471	60,528,062	rs1506239	rs10871573	32	86,592	HETDEL	intergenic	0	no
18 w.g.	chr18	72,035,716	72,127,143	rs9945897	rs11875168	17	91,428	HETDEL	intergenic	0	no
18 w.g.	chr19	36,725,286	36,762,404	rs10164284	rs10403928	10	37,119	HETDEL	intergenic	0	no
18 w.g.	chr20	24,046,673	24,093,833	rs6036659	rs6036670	20	47,161	HETDEL	intergenic	0	no
18 w.g.	chr21	14,087,640	14,197,852	rs2258197	rs7276618	11	110,213	HETDEL	coding	36	yes
18 w.g.	chr22	34,330,493	34,403,989	rs4821422	rs5755867	26	73,497	HETDEL	coding	0	no
18 w.g.	chr6	168,078,127	168,340,401	rs2340910	rs9364232	133	262,275	HETDUP	coding	0	yes

Table S3. Exon Array Hybridizations (NCBI GEO Accession GSE13344)

CEL file	Sample description	Age (weeks gestation)	Brain specimen code
Aud_18L.CEL	temporal auditory neocortex, left, biological rep1	18	1
Aud_18R.CEL	temporal auditory neocortex, right, biological rep1	18	1
Cbllm_18NA.CEL	cerebellum, biological rep1	18	1
DLPFC_18L.CEL	dorsolateral prefrontal neocortex, left, biological rep1	18	1
DLPFC_18R.CEL	dorsolateral prefrontal neocortex, right, biological rep1	18	1
Hipp_18L.CEL	hippocampus, left, biological rep1	18	1
Hipp_18R.CEL	hippocampus, right, biological rep1	18	1
MPFC_18L.CEL	medial prefrontal neocortex, left, biological rep1	18	1
MPFC_18R.CEL	medial prefrontal neocortex, right, biological rep1	18	1
MS_18L.CEL	motor-somatosensory neocortex, left, biological rep1	18	1
MS_18R.CEL	motor-somatosensory neocortex, right, biological rep1	18	1
Occ_18L.CEL	occipital visual neocortex, left, biological rep1	18	1
Occ_18R.CEL	occipital visual neocortex, right, biological rep1	18	1
Par_18L.CEL	parietal association neocortex, left, biological rep1	18	1
Par_18R.CEL	parietal association neocortex, right, biological rep1	18	1
Striat_18L.CEL	striatum: putamen and caudate nucleus, left, biological rep1	18	1
Striat_18R.CEL	striatum: putamen and caudate nucleus, right, biological rep1	18	1
Temp_18L.CEL	temporal association cortex, left, biological rep1	18	1
Temp_18R.CEL	temporal association cortex, right, biological rep1	18	1
Thal_18L.CEL	mediodorsal thalamus, left, biological rep1	18	1
Thal_18R.CEL	mediodorsal thalamus, right, biological rep1	18	1
VLPFC_18L.CEL	ventrolateral prefrontal neocortex, left, biological rep1	18	1
VLPFC_18R.CEL	ventrolateral prefrontal neocortex, right, biological rep1	18	1
Aud_19L.CEL	temporal auditory neocortex, left, biological rep2	19	2
Aud_19R.CEL	temporal auditory neocortex, right, biological rep2	19	2
Cbllm_19L.CEL	cerebellum, left, biological rep2	19	2
Cbllm_19R.CEL	cerebellum, right, biological rep2	19	2
DLPFC_19L.CEL	dorsolateral prefrontal neocortex, left, biological rep2	19	2
DLPFC_19R.CEL	dorsolateral prefrontal neocortex, right, biological rep2	19	2
Hipp_19L.CEL	hippocampus, left, biological rep2	19	2
Hipp_19R.CEL	hippocampus, right, biological rep2	19	2
MPFC_19L.CEL	medial prefrontal neocortex, left, biological rep2	19	2
MPFC_19R.CEL	medial prefrontal neocortex, right, biological rep2	19	2
MS_19L.CEL	motor-somatosensory neocortex, left, biological rep2	19	2
MS_19R.CEL	motor-somatosensory neocortex, right, biological rep2	19	2
Occ_19L.CEL	occipital visual neocortex, left, biological rep2	19	2
Occ_19R.CEL	occipital visual neocortex, right, biological rep2	19	2
Orbito_19L.CEL	orbital prefrontal neocortex, left, biological rep2	19	2
Orbito_19R.CEL	orbital prefrontal neocortex, right, biological rep2	19	2
Par_19L.CEL	parietal association neocortex, left, biological rep2	19	2
Par_19R.CEL	parietal association neocortex, right, biological rep2	19	2
Striat_19L.CEL	striatum: putamen and caudate nucleus, left, biological rep2	19	2
Striat_19R.CEL	striatum: putamen and caudate nucleus, right, biological rep2	19	2
Temp_19L.CEL	temporal association cortex, left, biological rep2	19	2
Temp_19R.CEL	temporal association cortex, right, biological rep2	19	2
Thal_19L.CEL	mediodorsal thalamus, left, biological rep2	19	2
Thal_19R.CEL	mediodorsal thalamus, right, biological rep2	19	2
VLPFC_19L.CEL	ventrolateral prefrontal neocortex, left, biological rep2	19	2
VLPFC_19R.CEL	ventrolateral prefrontal neocortex, right, biological rep2	19	2
Aud_21L.CEL	temporal auditory neocortex, left, biological rep3	21	3
Aud_21R.CEL	temporal auditory neocortex, right, biological rep3	21	3
Cbllm_21NA.CEL	cerebellum, biological rep3	21	3
DLPFC_21L.CEL	dorsolateral prefrontal neocortex, left, biological rep3	21	3
DLPFC_21R.CEL	dorsolateral prefrontal neocortex, right, biological rep3	21	3
Hipp_21L.CEL	hippocampus, left, biological rep3	21	3
Hipp_21R.CEL	hippocampus, right, biological rep3	21	3
MPFC_21L.CEL	medial prefrontal neocortex, left, biological rep3	21	3
MPFC_21R.CEL	medial prefrontal neocortex, right, biological rep3	21	3
MS_21L.CEL	motor-somatosensory neocortex, left, biological rep3	21	3
MS_21R.CEL	motor-somatosensory neocortex, right, biological rep3	21	3
Occ_21L.CEL	occipital visual neocortex, left, biological rep3	21	3
Occ_21R.CEL	occipital visual neocortex, right, biological rep3	21	3
Par_21L.CEL	parietal association neocortex, left, biological rep3	21	3
Par_21R.CEL	parietal association neocortex, right, biological rep3	21	3
Striat_21L.CEL	striatum: putamen and caudate nucleus, left, biological rep3	21	3
Striat_21R.CEL	striatum: putamen and caudate nucleus, right, biological rep3	21	3
Temp_21L.CEL	temporal association cortex, left, biological rep3	21	3
Temp_21R.CEL	temporal association cortex, right, biological rep3	21	3
Thal_21L.CEL	mediodorsal thalamus, left, biological rep3	21	3

Thal_21R.CEL	mediodorsal thalamus, right, biological rep3	21	3
VLPFC_21L.CEL	ventrolateral prefrontal neocortex, left, biological rep3	21	3
VLPFC_21R.CEL	ventrolateral prefrontal neocortex, right, biological rep3	21	3
Aud_23L.CEL	temporal auditory neocortex, left, biological rep4	23	4
Aud_23R.CEL	temporal auditory neocortex, right, biological rep4	23	4
Cbllm_23NA.CEL	cerebellum, biological rep4	23	4
DLPFC_23L.CEL	dorsolateral prefrontal neocortex, left, biological rep4	23	4
DLPFC_23R.CEL	dorsolateral prefrontal neocortex, right, biological rep4	23	4
Hipp_23L.CEL	hippocampus, left, biological rep4	23	4
Hipp_23R.CEL	hippocampus, right, biological rep4	23	4
MPFC_23L.CEL	medial prefrontal neocortex, left, biological rep4	23	4
MPFC_23R.CEL	medial prefrontal neocortex, right, biological rep4	23	4
MS_23L.CEL	motor-somatosensory neocortex, left, biological rep4	23	4
MS_23R.CEL	motor-somatosensory neocortex, right, biological rep4	23	4
Occ_23L.CEL	occipital visual neocortex, left, biological rep4	23	4
Occ_23R.CEL	occipital visual neocortex, right, biological rep4	23	4
Par_23L.CEL	parietal association neocortex, left, biological rep4	23	4
Par_23R.CEL	parietal association neocortex, right, biological rep4	23	4
Striat_23L.CEL	striatum: putamen and caudate nucleus, left, biological rep4	23	4
Striat_23R.CEL	striatum: putamen and caudate nucleus, right, biological rep4	23	4
Temp_23L.CEL	temporal association cortex, left, biological rep4	23	4
Temp_23R.CEL	temporal association cortex, right, biological rep4	23	4
Thal_23L.CEL	mediodorsal thalamus, left, biological rep4	23	4
Thal_23R.CEL	mediodorsal thalamus, right, biological rep4	23	4
VLPFC_23L.CEL	ventrolateral prefrontal neocortex, left, biological rep4	23	4
VLPFC_23R.CEL	ventrolateral prefrontal neocortex, right, biological rep4	23	4
			4

Table S4. Numbers of expressed and region-specific genes

Total "core" transcript clusters (genes) tested: **17,421**

Regional ANOVA	Number of genes expressed	% of core genes	Region-specific genes	% of core genes
Total	**13,223**	**75.9%**		
NCTX	8,876	51.0%	659	3.8%
HIP	9,586	55.0%	114	0.7%
STR	9,764	56.0%	83	0.5%
THM	9,866	56.6%	135	0.8%
CBL	10,020	57.5%	316	1.8%
DEX (FDR<1E-5)	**4369**	**25.1%**	**(33% of genes expressed)**	
DAS (FDR<1E-5)	**3755**	**21.6%**	**(28% of genes expressed)**	

NCTX ANOVA	Number of genes expressed	% of core genes	Region-specific genes	% of core genes
Total	**11,407**	**65.5%**		
OPFC	10,135	58.2%	457	2.6%
MPFC	9,910	56.9%	50	0.3%
DLPFC	9,404	54.0%	4	0.0%
VLPFC	9,721	55.8%	6	0.0%
MS	9,812	56.3%	26	0.1%
PAS	9,549	54.8%	1	0.0%
TAS	9,686	55.6%	15	0.1%
TAU	9,500	54.5%	4	0.0%
OCC	9,497	54.5%	21	0.1%
DEX (FDR<1E-5)	**471**	**2.7%**	**(4.1% of genes expressed)**	
DAS (FDR<1E-5)	**496**	**2.8%**	**(4.3% of genes expressed)**	
DEX (FDR<0.01)	**1753**	**10.1%**	**(15.4% of genes expressed)**	
DAS (FDR<0.01)	**828**	**4.8%**	**(7.3% of genes expressed)**	

PFC-grouped ANOVA	Number of genes expressed	% of core genes	Region-specific genes	% of core genes
Total	**11,064**	**63.5%**		
PFC	9,215	52.9%	484	2.8%
MS	9,487	54.5%	73	0.4%
PAS	9,260	53.2%	14	0.1%
TAS	9,135	52.4%	41	0.2%
TAU	9,344	53.6%	13	0.1%
OCC	9,123	52.4%	43	0.2%
DEX (FDR<0.01)	**1425**	**8.2%**	**(12.9% of genes expressed)**	
DAS (FDR<0.01)	**827**	**4.7%**	**(7.5% of genes expressed)**	

Intra-PFC ANOVA	Number of genes expressed	% of core genes	Region-specific genes	% of core genes
Total	**11,163**	**64.1%**		
OPFC	10,061	57.8%	491	2.8%
MPFC	9,881	56.7%	93	0.5%
DLPFC	9,337	53.6%	12	0.1%
VLPFC	9,685	55.6%	10	0.1%
MS	9,763	56.0%	52	0.3%
DEX (FDR<0.01)	**233**	**1.3%**	**(2.1% of genes expressed)**	
DAS (FDR<0.01)	**219**	**1.3%**	**(2.0% of genes expressed)**	

Table S5. Numbers of genes and correlations for clusters illustrated in Figures 2 and 3

Figure 2	Pearson correlation	Number of genes	% of genes clustered (total: 1964)
Cluster 1: Cortex	0.71	109	5.5%
Cluster 1a: NCTX	0.76	52	2.6%
Cluster 1b: NCTX+HIP	0.78	57	2.9%
Cluster 2: HIP	0.80	109	5.5%
Cluster 3: STR	0.80	105	5.3%
Cluster 4: THM	0.80	137	7.0%
Cluster 5: CBL	0.81	140	7.1%

Figure 3a: NCTX	Pearson correlation	Number of genes	% of genes clustered (total: 1425)
Cluster 1: PFC (+MS)	0.91	29	2.0%
Cluster 2: PFC (+TAS)	0.82	28	2.0%
Cluster 3: Non-Frontal	0.86	18	1.3%
Cluster 4: TAU+TAS	0.90	25	1.8%
Cluster 5: PFC+TAS	0.89	15	1.1%
Cluster 6: OCC	0.82	11	0.8%

Figure 3b: Frontal Cortex	Pearson correlation	Number of genes	% of genes clustered (total: 233)
Cluster 1: PFC > MS	0.81	10	4.3%
Cluster 2: OPFC	0.94	5	2.1%
Cluster 3: OPFC+DLPFC+VLPFC	0.89	11	4.7%
Cluster 4: MPFC	0.87	13	5.6%
Cluster 5: MPFC+MS	0.85	13	5.6%
Cluster 6: VLPFC+MS	0.88	11	4.7%

Table S6. Gene lists for clusters illustrated in Figure 2

Cluster 1a: NCTX

Exon Array Transcript Cluster ID	Official Gene Symbol	Gene Name	Confirmation	Cytoband	RefSeq Accession	Entrez GeneID	Maximum Fold Change	corrected p-value (False Discovery Rate)	OMIM and Genetic Association Database annotations Numbered annotations refer to OMIM; references are retrieved from the NCBI GAD at geneticassociationdb.nih.gov
2381177	MARK1	MAP/microtubule affinity-regulating kinase 1		1q41	NM_018650	4139	2.4	6.1E-14	
2413685	SSBP3	single stranded DNA binding protein 3		1p32.3	NM_001009955	23648	2.0	3.0E-17	
2420521	SSX2IP	synovial sarcoma X breakpoint 2 interacting protein		1p22.3	NM_014021	117178	2.9	8.4E-15	
2566848	AFF3	AF4/FMR2 family member 3		2q11.2-q12	NM_002285	3899	3.1	5.7E-31	
2581726	RPRM	reprimo TP53 dependent G2 arrest mediator candidate	qRT-PCR, ISH	2q23.3	NM_019845	56475	4.9	3.3E-22	
2594089	SATB2	SATB homeobox 2	IHC	2q33	NM_015265	23314	17.1	7.4E-58	
2642995	TMEM108	transmembrane protein 108		3q21	NM_023943	66000	4.2	4.7E-38	
2657967	OSTN	osteocrin		3q28	NM_198184	344901	2.1	2.5E-07	
2727116	RASL11B	RAS-like family 11 member B		4q12	NM_023940	65997	3.9	2.9E-19	
2761842	PROM1	prominin 1		4p15.32	NM_006017	8842	2.5	4.0E-11	
2776998	KLHL8	kelch-like 8 (Drosophila)		4q22.1	NM_020803	441028	2.1	2.4E-13	
2866225	MEF2C	myocyte enhancer factor 2C		5q14	NM_002397	4208	6.2	1.7E-36	
2890517	RASGEF1C	RasGEF domain family member 1C		5q35.3	NM_001031799	255426	2.3	1.7E-20	
2918388	POU3F2	POU domain class 3 transcription factor 2	IHC	6q16	NM_005604	5454	6.7	4.9E-25	
2924081	TCBA1	T-cell lymphoma breakpoint associated target 1		6q21	NM_001040214	154215	4.0	4.0E-31	
2925724	AKAP7	A kinase (PRKA) anchor protein 7		6q23	NM_016377	9465	2.2	2.3E-06	
2939298	C6orf85	chromosome 6 open reading frame 85	qRT-PCR	6p25.2	NM_021945	63027	2.1	9.7E-24	
2964553	BACH2	BTB and CNC homology 1 basic leucine zipper transcription factor 2	qRT-PCR	6q15	NM_021813	60468	2.8	3.1E-30	
3018605	SLC26A4	solute carrier family 26 member 4		7q31	NM_000441	5172	3.0	4.7E-23	
3025005	EXOC4	exocyst complex component 4		7q31	NM_021807	60412	2.1	1.2E-19	
3028858	EPHB6	EPH receptor B6	qRT-PCR	7q33-q35	NM_004445	2051	2.9	6.4E-17	
3043648	CPVL	carboxypeptidase vitellogenic-like	qRT-PCR	7p15-p14	NM_019029	54504	2.5	1.7E-06	
3059464	SEMA3A	sema domain immunoglobulin domain (Ig) short basic domain secreted (semaphorin) 3A	IHC	7p12.1	NM_006080	10371	3.7	2.2E-26	
3087501	ZDHHC2	zinc finger DHHC-type containing 2		8p21.3-p22	NM_016353	51201	2.4	1.3E-08	
3088486	LPL	lipoprotein lipase		8p22	NM_000237	4023	6.3	1.3E-18	Alzheimer's Disease (Baum, L et al. 2000)
3093526	UNC5D	unc-5 homolog D (C. elegans)		8p12	NM_080872	137970	2.8	2.8E-14	
3117384	KHDRBS3	KH domain containing RNA binding signal transduction associated 3		8q24.2	NM_006558	10656	2.4	2.3E-14	epilepsy (Chen, Y. C. et al. 2003)
3148963	KCNV1	potassium channel subfamily V member 1		8q22.3-q24.1	NM_014379	27012	4.4	7.9E-25	
3154263	SLA	Src-like-adaptor		8q22.3-qter	NM_006748	6503	18.7	7.9E-70	
3159946	SMARCA2	SWI/SNF related matrix associated actin dependent regulator of chromatin subfamily a member 2		9p22.3	NM_003070	6595	2.5	4.4E-14	
3174967	RORB	RAR-related orphan receptor B	qRT-PCR	9q22	NM_006914	6096	3.1	1.2E-24	
3200982	MLLT3	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog Drosophila); translocated to 3		9p22	NM_004529	4300	2.1	4.8E-14	
3254521	TSPAN14	tetraspanin 14		10q23.1	NM_030927	81619	2.1	3.6E-18	
3258384	CYP26A1	cytochrome P450 family 26 subfamily A polypeptide 1		10q23-q24	NM_057157	1592	2.1	6.4E-16	
3264059	ADRA2A	adrenergic alpha-2A- receptor		10q24-q26	NM_000681	150	6.4	3.7E-36	suicide (Sequeira, A. et al. 2004)
3385509	FZD4	frizzled homolog 4 (Drosophila)		11q14.2	NM_012193	8322	3.1	2.4E-24	
3447348	SOX5	SRY (sex determining region Y)-box 5	IHC	12p12.1	NM_006940	6660	5.6	2.1E-31	
3459722	AVPR1A	arginine vasopressin receptor 1A		12q14-q15	NM_000706	552	2.3	2.9E-17	autism (Yirmiya, N. et al., 2006)
3517051	KLHL1	kelch-like 1 (Drosophila)	qRT-PCR*	13q21	NM_020866	57626	5.7	1.0E-33	
3538087	DACT1	dapper antagonist of beta-catenin homolog 1 (Xenopus laevis)	qRT-PCR	14q23.1	NM_016651	51339	5.0	3.3E-31	
3551485	EML1	echinoderm microtubule associated protein like 1		14q32	NM_001008707	2009	4.8	2.8E-45	
3566495	C14orf37	chromosome 14 open reading frame 37	qRT-PCR	14q23.1	NM_001001872	145407	2.0	6.8E-15	
3567873	KCNH5	potassium voltage-gated channel subfamily H (eag-related) member 5		14q23.1	NM_172376	27133	2.3	4.2E-09	
3605268	TM6SF1	transmembrane 6 superfamily member 1		15q24-q26	NM_023003	53346	2.3	1.2E-09	
3635737	RKHD3	ring finger and KH domain containing 3	qRT-PCR	15q25.2	NM_032246	84206	2.3	4.5E-20	
3759335	GJA7	gap junction protein alpha 7 45kDa		17q21.31	NM_001080383	10052	2.8	2.3E-25	
3790529	GRP	gastrin-releasing peptide		18q21.1-q21.32	NM_001012512	2922	3.1	1.4E-08	
3811339	BCL2	B-cell CLL/lymphoma 2		18q21.33	NM_000657	596	2.4	1.5E-10	
3858285	TSHZ3	teashirt family zinc finger 3	qRT-PCR	19q12	NM_020856	57616	7.1	1.8E-34	
3889833	DOK5	docking protein 5	qRT-PCR	20q13.2	NM_018431	55816	9.2	1.9E-38	
3962839	SCUBE1	signal peptide CUB domain EGF-like 1		22q13	NM_173050	80274	5.1	3.7E-42	
3969633	GLRA2	glycine receptor alpha 2		Xp22.1-p21.3	NM_002063	2742	2.6	8.9E-20	

Cluster 1b: NCTX+HIP (Cortex)

Exon Array Transcript Cluster ID	Official Gene Symbol	Gene Name	Confirmation	Cytoband	RefSeq Accession	Entrez GeneID	Maximum Fold Change	p-value (False Discovery Rate)	OMIM and Genetic Association Database annotations
2991395	HDAC9	histone deacetylase 9		7p21.1	NM_178425	9734	2.5	2.2E-18	
2977265	HIVEP2	human immunodeficiency virus type I enhancer binding protein 2		6q23-q24	NM_006734	3097	3.0	7.0E-14	
3058759	SEMA3C	sema domain immunoglobulin domain (Ig) short basic domain secreted (semaphorin) 3C		7q21-q31	NM_006379	10512	6.4	1.6E-22	
3940631	YES1	v-yes-1 Yamaguchi sarcoma viral oncogene homolog 1		22q11	NM_005433	157	2.5	8.0E-11	
2707045	PEX5L	peroxisomal biogenesis factor 5-like		3q26.33	NM_016559	51555	4.3	8.0E-32	
2805635	NPR3	natriuretic peptide receptor C/guanylate cyclase C (atrionatriuretic peptide receptor C)		5p14-p13	NM_000908	4883	3.7	1.3E-21	
2679377	FEZF2	FEZ family zinc finger 2	ISH	3p14.2	NM_018008	55079	10.7	2.1E-41	
3013565	DYNC1I1	dynein cytoplasmic 1 intermediate chain 1		7q21.3-q22.1	NM_004411	1780	6.7	5.1E-31	
3059393	SEMA3E	sema domain immunoglobulin domain (Ig) short basic domain secreted (semaphorin) 3E		7q21.11	NM_012431	9723	3.1	2.0E-13	
3970714	PPEF1	protein phosphatase EF-hand calcium binding domain 1		Xp22.2-p22.1	NM_152224	5475	3.4	2.2E-16	
3041294	FAM126A	family with sequence similarity 126 member A		7p15.3	NM_032581	84668	3.6	3.3E-23	
3436117	DNAH10	dynein axonemal heavy chain 10		12q24.31	NM_207437	196385	2.3	3.8E-18	
2582124	NR4A2	nuclear receptor subfamily 4 group A member 2	qRT-PCR	2q22-q23	NM_006186	4929	6.6	9.5E-20	schizophrenia (Chen, Y. H. et al. 2001)
2512752	TBR1	T-box brain 1	IHC	2q24	NM_006593	10716	22.7	5.9E-57	
3436082	DNAH10	dynein axonemal heavy chain 10		12q24.31	NM_207437	196385	3.2	1.5E-20	
2348437	SNX7	sorting nexin 7		1p21.3	NM_015976	51375	4.3	5.1E-21	
2896888	CAP2	CAP adenylate cyclase-associated protein 2 (yeast)		6p22.3	NM_006366	10486	2.5	1.1E-19	

3605395	ADAMTSL3	ADAMTS-like 3		15q25.2	NM_207517	57188	3.0	9.0E-31
3389976	SLC35F2	solute carrier family 35 member F2		11q22.3	NM_017515	54733	3.0	7.3E-19
3807595	MYO5B	myosin VB		9q12	NM_001080467	392335	3.4	1.4E-17
3803290	FAM59A	family with sequence similarity 59 member A		18q12.1	NM_022751	64762	2.8	2.2E-22
2725061	DKFZP686A01247	hypothetical protein	qRT-PCR	4p13	NM_014988	22998	3.8	3.0E-27
2449104	B3GALT2	UDP-Gal:betaGlcNAc beta 1 3-galactosyltransferase polypeptide 2		1q31	NM_003783	8707	2.2	2.0E-11
3039671	SOSTDC1	sclerostin domain containing 1		7p21.1	NM_015464	25928	3.3	3.4E-15
2789957	FBXW7	F-box and WD repeat domain containing 7		7	NM_001013415	402521	3.1	2.0E-17
3799461	SPIRE1	spire homolog 1 (Drosophila)		18p11.21	NM_020148	56907	3.2	2.4E-28
3451814	NELL2	NEL-like 2 (chicken)		12q13.11-q13.12	NM_006159	4753	2.9	6.5E-26
2895792	RNF182	ring finger protein 182	qRT-PCR	6p23	NM_152737	221687	4.9	3.0E-19
3323052	NAV2	neuron navigator 2	qRT-PCR	11p14.3	NM_145117	89797	3.3	1.3E-23
3147286	RRM2B	ribonucleotide reductase M2 B (TP53 inducible)		8q23.1	NM_015713	50484	2.4	9.9E-14
2742581	FAT4	FAT tumor suppressor homolog 4 (Drosophila)		4q28.1	NM_024582	79633	4.7	2.0E-31
2910779	C6orf142	chromosome 6 open reading frame 142		6p12.1	NM_138569	90523	3.0	2.9E-10
2579439	GTDC1	glycosyltransferase-like domain containing 1		2q23.1	NM_001006636	79712	4.1	4.8E-26
3867842	SLC17A7	solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter) member 7		19q13	NM_020309	57030	6.5	1.8E-30
2924851	RSPO3	R-spondin 3 homolog (Xenopus laevis)		6q22.33	NM_032784	84870	4.2	2.4E-29
2930418	UST	uronyl-2-sulfotransferase		6q25.1	NM_005715	10090	2.5	1.1E-15
2778856	TSPAN5	tetraspanin 5	qRT-PCR	4q23	NM_005723	10098	2.1	2.7E-21
3822122	NFIX	nuclear factor I/X (CCAAT-binding transcription factor)	qRT-PCR	19p13.3	NM_002501	4784	6.0	1.6E-26
2665199	SATB1	SATB homeobox 1		3p23	NM_002971	6304	2.8	7.7E-16
2633256	ST3GAL6	ST3 beta-galactoside alpha-2 3-sialyltransferase 6		3q12.1	NM_006100	10402	2.5	1.9E-11
3150715	DCC1	defective in sister chromatid cohesion homolog 1 (S. cerevisiae)		8q24.12	NM_024094	79075	2.0	2.6E-11
3044518	NEUROD6	neurogenic differentiation 6		7p15.1	NM_022728	63974	47.0	1.0E-55
3755790	NEUROD2	neurogenic differentiation 2		17p13.1	NM_006160	4761	30.9	1.9E-48
2782267	NEUROG2	neurogenin 2		4q25	NM_024019	63973	3.2	5.6E-14
3589458	THBS1	thrombospondin 1	qRT-PCR, ISH	15q15	NM_003246	7057	7.5	2.8E-16
2388794	ZNF238	zinc finger protein 238	qRT-PCR	1q44-qter	NM_205768	10472	11.3	3.9E-43
3829471	KCTD15	potassium channel tetramerisation domain containing 15		19q13.11	NM_024076	79047	2.3	2.7E-22
3070873	GPR37	G protein-coupled receptor 37 (endothelin receptor type B-like)		7q31	NM_005302	2861	3.3	1.0E-19
4038415	GALNAC4S-6ST	B cell RAG associated protein		10q26	NM_015892	51363	7.4	1.1E-34
3268940	GALNAC4S-6ST	B cell RAG associated protein		10q26	NM_015892	51363	7.6	1.9E-33
3181240	TMOD1	tropomodulin 1	qRT-PCR, ISH	9q22.3	NM_003275	7111	6.8	7.6E-29
2381249	C1orf115	chromosome 1 open reading frame 115		1q41	NM_024709	79762	3.0	2.1E-25
3463056	CSRP2	cysteine and glycine-rich protein 2		12q21.1	NM_001321	1466	5.4	1.7E-19
2973376	PTPRK	protein tyrosine phosphatase receptor type K		6q22.2-23.1	NM_002844	5796	4.1	1.9E-18
2961177	COL12A1	collagen type XII alpha 1		6q12-q13	NM_004370	1303	2.4	4.4E-18
2867443	MCTP1	multiple C2 domains transmembrane 1		5q15	NM_024717	79772	2.8	3.5E-13
2777487	FAM13A1	family with sequence similarity 13 member A1		4q22.1	NM_014883	10144	3.6	5.8E-26

Cluster 2: HIP

Exon Array Transcript Cluster ID	Official Gene Symbol	Gene Name	Confirmation	Cytoband	RefSeq Accession	Entrez GeneID	Maximum Fold Change	p-value (False Discovery Rate)	OMIM and Genetic Association Database annotations
2487963	ANKRD53	ankyrin repeat domain 53		2p13.3	NM_024933	79998	2.0	1.1E-09	
3472183	RASAL1	RAS protein activator like 1 (GAP1 like)		12q23-q24	NM_004658	8437	2.9	1.4E-11	
2648991	KCNAB1	potassium voltage-gated channel shaker-related subfamily beta member 1		3q26.1	NM_003471	7881	3.4	3.1E-17	
2689516	ZBTB20	zinc finger and BTB domain containing 20	qRT-PCR	3q13.2	NM_015642	26137	10.4	2.4E-29	
2992243	DNAH11	dynein axonemal heavy chain 11		7p21	NM_003777	8701	2.0	5.0E-25	242650; 603339: Kartagener syndrome; Situs inversus viscerum
3731826	PRKCA	protein kinase C alpha		17q22-q23.2	NM_002737	5578	2.2	8.0E-08	176960: Pituitary tumor, invasive
3509677	SOHLH2	spermatogenesis and oogenesis specific basic helix-loop-helix 2		13q13.3	BC037403	54937	2.5	1.2E-08	
2378019	CAMK1G	calcium/calmodulin-dependent protein kinase IG		1q32-q41	NM_020439	57172	2.1	6.4E-09	
2816536	CRHBP	corticotropin releasing hormone binding protein		5q11.2-q13.3	NM_001882	1393	2.9	3.5E-18	major depression (Claes S 2003)
3134468	EFCAB1	EF-hand calcium binding domain 1		8q11.21	NM_024593	79645	2.4	2.9E-11	
3332964	C11orf66	chromosome 11 open reading frame 66		11q12.2	NM_145017	220004	2.0	3.1E-12	
3516228	PCDH20	protocadherin 20	qRT-PCR	13q21	NM_022843	64881	5.4	5.6E-23	
2816298	IQGAP2	IQ motif containing GTPase activating protein 2		5q13.3	NM_006633	10788	2.2	1.1E-07	
3430620	WSCD2	WSC domain containing 2		12q23.3	NM_014653	9671	2.7	1.0E-22	
4018729	IL13RA2	interleukin 13 receptor alpha 2		Xq13.1-q28	NM_000640	3598	3.2	1.2E-17	
2414440	C1orf168	chromosome 1 open reading frame 168		1p32.2	NM_001004303	199920	2.4	4.8E-29	
2906333	DAAM2	dishevelled associated activator of morphogenesis 2		6p21.2	NM_015345	23500	2.7	4.5E-19	
2430422	SPAG17	sperm associated antigen 17		1p12	NM_206996	200162	2.1	3.7E-24	
3671607	LRRC50	leucine rich repeat containing 50	qRT-PCR	16q24.1	NM_178452	123872	2.5	2.1E-25	
2524301	NRP2	neuropilin 2		2q33.3	NM_201279	8828	2.8	3.3E-09	autism (Wu, S. et al. 2007)
2473831	C2orf39	chromosome 2 open reading frame 39		2p23.3	NM_145038	92749	2.0	1.1E-22	
2801694	ROPN1L	ropporin 1-like		5p15.2	NM_031916	83853	2.7	7.3E-24	
2886174	SLIT3	slit homolog 3 (Drosophila)		5q35	NM_003062	6586	2.8	1.5E-20	
3098977	LYN	v-yes-1 Yamaguchi sarcoma viral related oncogene homolog		8q13	NM_002350	4067	3.1	2.5E-13	
2323899	UBXD3	UBX domain containing 3		1p36.12	NM_152376	127733	2.0	1.2E-06	
3294361	TTC18	tetratricopeptide repeat domain 18		10q22.2	NM_145170	118491	2.3	5.1E-24	
3362159	NRIP3	nuclear receptor interacting protein 3		11p15.3	NM_020645	56675	4.5	2.7E-19	
2931700	C6orf97	chromosome 6 open reading frame 97		6q25.1	NM_025059	80129	2.2	8.1E-14	
2340819	TCTEX1D1	Tctex1 domain containing 1		1p31.3	NM_152665	200132	2.8	1.3E-22	
2417016	WDR78	WD repeat domain 78		1p31.3	NM_024763	79819	2.0	1.8E-17	
3695631	TPPP3	tubulin polymerization-promoting protein family member 3		16q22.1	NM_016140	51673	6.0	3.8E-19	
3634811	CTSH	cathepsin H		15q24-q25	NM_004390	1512	2.1	1.3E-14	
3361381	CYB5R2	cytochrome b5 reductase 2		11p15.4	NM_016229	51700	2.2	1.4E-07	
3797032	EPB41L3	erythrocyte membrane protein band 4.1-like 3		18p11.32	NM_012307	23136	2.5	8.2E-11	
7385641	CLSTN2	calsyntenin 2	qRT-PCR, ISH	3q23-q24	NM_022131	64084	5.2	3.8E-15	
2329196	ADC	arginine decarboxylase		1p33-p34.3	NM_052998	113451	2.3	3.3E-09	
2967276	POPDC3	popeye domain containing 3		6q21	NM_022361	64208	3.2	4.2E-07	

2518272	ITGA4	integrin alpha 4 (antigen CD49D alpha 4 subunit of VLA-4 receptor)		2q31.3	NM_000885	3676	3.1	3.0E-20	
2974330	CTGF	connective tissue growth factor		6q23.1	NM_001901	1490	3.5	3.1E-12	
2772876	ADAMTS3	ADAM metallopeptidase with thrombospondin type 1 motif 3		4q13.3	NM_014243	9508	3.1	4.9E-10	
2814693	CARTPT	CART prepropeptide		5q13.2	NM_004291	9607	3.2	8.4E-23	602606: Obesity, susceptibility to
2726910	SPATA18	spermatogenesis associated 18 homolog (rat)		4q11	NM_145263	132671	2.7	1.4E-16	
2788926	NR3C2	nuclear receptor subfamily 3 group C member 2	qRT-PCR	4q31.1	NM_000901	4306	5.2	1.2E-23	
3248470	C10orf107	chromosome 10 open reading frame 107		10q21.2	NM_173554	219621	2.2	4.2E-11	
3348551	FLJ46266	FLJ46266 protein		11q23.1	NM_207430	399949	2.2	4.8E-19	
3743230	TEKT1	tektin 1		17p13.2	NM_053285	83659	2.7	1.8E-18	
2476510	LTBP1	latent transforming growth factor beta binding protein 1		2p22-p21	NM_000627	4052	3.2	1.0E-07	
2989316	LOC222967	hypothetical protein LOC222967		7p22.1	NM_173565	222967	2.0	1.5E-23	
3460198	WIF1	WNT inhibitory factor 1		12q14.3	NM_007191	11197	2.3	1.3E-08	
2857042	CDC20B	cell division cycle 20 homolog B (S. cerevisiae)		5q11.2	NM_152623	166979	3.3	1.5E-20	
3748909	ULK2	unc-51-like kinase 2 (C. elegans)		17p11.2	NM_014683	146802	3.1	1.5E-18	
3510344	STOML3	stomatin (EPB72)-like 3		13q13.3	NM_145286	161003	2.0	2.4E-14	
3450234	PKP2	plakophilin 2		12p11	NM_004572	5318	3.8	7.4E-23	
2332999	WDR65	WD repeat domain 65		1p34.2	NM_152498	440586	2.4	1.6E-20	
3305198	C10orf79	chromosome 10 open reading frame 79		10q25.1	NM_025145	80217	2.4	7.4E-18	
3550343	AK7	adenylate kinase 7		14q32.2	NM_152327	122481	2.2	7.7E-18	
3238528	SPAG6	sperm associated antigen 6		10p12.2	NM_012443	9576	3.7	1.1E-15	
3710018	WDR16	WD repeat domain 16		17p13.1	NM_145054	146845	3.2	2.3E-20	
2955556	CLIC5	chloride intracellular channel 5		6p12.1-21.1	NM_016929	53405	3.0	2.0E-10	
3174816	ANXA1	annexin A1		9q12-q21.2	NM_000700	301	2.8	7.3E-18	
2704052	FLJ23049	hypothetical protein FLJ23049		3q26.1	NM_024687	79740	2.0	6.5E-12	
3724895	LRRC46	leucine rich repeat containing 46		17q21.32	NM_033413	90506	2.9	1.0E-15	
3818193	CAPS	calcyphosine		19p13.3	NM_080590	828	4.5	1.1E-17	
2344731	WDR63	WD repeat domain 63		1p22.3	NM_145172	126820	2.1	3.9E-20	
3300115	PPP1R3C	protein phosphatase 1 regulatory (inhibitor) subunit 3C		10q23-q24	NM_005398	5507	2.5	1.3E-11	
3146455	RGS22	regulator of G-protein signalling 22		8q22.2	NM_015668	26166	2.4	9.5E-13	
3712835	LRRC48	leucine rich repeat containing 48		17p11.2	NM_031294	83450	2.4	2.8E-17	
2941632	MAK	male germ cell-associated kinase		6q22	NM_005906	4117	2.0	3.7E-18	
2660617	IL5RA	interleukin 5 receptor alpha		3p26-p24	NM_175726	3568	2.7	1.4E-16	
3487360	C13orf30	chromosome 13 open reading frame 30	qRT-PCR	13q14.11	NM_182508	144809	5.4	7.8E-22	
3546213	TSHR	thyroid stimulating hormone receptor		14q31	NM_000369	7253	3.0	4.1E-27	
2820813	FAM81B	family with sequence similarity 81 member B		5q15	NM_152548	153643	2.1	5.8E-18	
3184710	MUSK	muscle skeletal receptor tyrosine kinase		8p21.2	NM_005592	440258	2.0	2.1E-14	
3188014	C9orf18	chromosome 9 open reading frame 18	qRT-PCR	9q33.2	NM_198469	254956	3.1	4.6E-30	
3710515	DNAH9	dynein axonemal heavy chain 9		17p12	NM_001372	1770	2.4	1.8E-25	
3238702	ARMC3	armadillo repeat containing 3		10p12.31	NM_173081	219681	2.6	2.7E-17	
3504526	LATS2	LATS large tumor suppressor homolog 2 (Drosophila)		13q11-q12	NM_014572	26524	2.7	3.5E-19	
3871142	C19orf51	chromosome 19 open reading frame 51		19q13.4	NM_178837	352909	3.0	1.1E-14	
3301218	PDLIM1	PDZ and LIM domain 1 (elfin)		10q22-q26.3	NM_020992	9124	2.4	3.5E-09	
3978295	RIBC1	RIB43A domain with coiled-coils 1		Xp11.22	NM_144968	158787	2.0	4.3E-20	
2329131	HPCA	hippocalcin		1p35-p34.2	NM_002143	3208	5.1	8.7E-18	
2530733	WDR69	WD repeat domain 69		2q36.3	NM_178821	164781	3.3	3.0E-26	
2865327	HAPLN1	hyaluronan and proteoglycan link protein 1		5q14.3	NM_001884	1404	2.6	2.5E-14	
4006326	RRM2	ribonucleotide reductase M2 polypeptide		Xp11.3	NM_001034	80258	2.4	1.2E-18	
2351787	C1orf88	chromosome 1 open reading frame 88	qRT-PCR	1p13.2	BC101501	128344	5.3	7.0E-29	
3878972	C20orf26	chromosome 20 open reading frame 26		20p11.23	NM_015585	26074	2.3	4.3E-25	
3257670	PCGF5	polycomb group ring finger 5		10q23.32	NM_032373	84333	2.0	5.7E-08	
2705030	SLC7A14	solute carrier family 7 (cationic amino acid transporter y+ system) member 14		3q26.2	NM_020949	57709	2.3	7.8E-17	
3427282	C12orf63	chromosome 12 open reading frame 63		12q23.1	NM_198520	374467	2.6	2.2E-23	
2826118	ZNF474	zinc finger protein 474		5q23.1-q23.2	NM_207317	133923	2.1	4.2E-17	
3538403	LRRC9	leucine rich repeat containing 9		14q23.1	AK128037	341883	2.0	3.8E-18	
2330723	DNALI1	dynein axonemal light intermediate chain 1		1p35.1	NM_003462	7802	2.0	2.9E-20	
3281762	C10orf63	chromosome 10 open reading frame 63		10p12.1	NM_145010	219670	2.6	1.4E-17	
2675239	TUSC4	tumor suppressor candidate 4		3p21.3	NM_006545	51364	2.5	4.2E-25	
2719656	CD38	CD38 molecule		4p15	NM_001775	952	2.3	1.3E-11	
3424705	LRRIQ1	leucine-rich repeats and IQ motif containing 1		12q21	NM_001079910	84125	2.5	3.1E-17	
3753568	SLFN13	schlafen family member 13		17q12	NM_144682	146857	2.0	1.8E-18	
2782822	NDST4	N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 4		4q25-q26	NM_022569	64579	2.7	7.2E-40	
2916307	SLC35A1	solute carrier family 35 (CMP-sialic acid transporter) member A1		6q15	NM_006416	10559	2.7	1.5E-23	
3574121	STON2	stonin 2		14q31.1	NM_033104	85439	2.6	7.7E-25	
3297536	ANXA11	annexin A11		10q23	NM_145869	311	3.0	3.3E-14	
3728037	SCPEP1	serine carboxypeptidase 1		17q22	NM_021626	59342	2.5	7.4E-26	
2491089	FLJ37357	hypothetical protein FLJ37357		2p11.2	NM_173645	440870	2.0	9.8E-20	
3699634	CHST5	carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 5		16q22	NM_024533	4166	2.3	1.1E-16	
2636695	ZDHHC23	zinc finger DHHC-type containing 23	qRT-PCR	3q13.31	NM_173570	254887	4.1	4.2E-23	
3987876	HTR2C	5-hydroxytryptamine (serotonin) receptor 2C		Xq24	NM_000868	3358	3.9	2.4E-12	tardive dyskinesia (Segman, R. H. et al. 2000)
2838462	GABRG2	gamma-aminobutyric acid (GABA) A receptor gamma 2		5q31.1-q33.1	NM_198904	2566	2.0	9.6E-08	607681: Epilepsy, childhood absence, 2
3203996	C9orf24	chromosome 9 open reading frame 24	qRT-PCR	9p13.3	NM_147169	84688	2.9	5.4E-31	
4006210	MAOB	monoamine oxidase B		Xp11.23	NM_000898	4129	2.1	9.5E-17	Parkinson's disease (Parsian, A. et al. 2004)

Cluster 3: STR

Exon Array Transcript Cluster ID	Official Gene Symbol	Gene Name	Confirmation	Cytoband	RefSeq Accession	Entrez GeneID	Maximum Fold Change	p-value (False Discovery Rate)	OMIM and Genetic Association Database annotations
2692319	ADCY5	adenylate cyclase 5		3q13.2-q21	NM_183357	111	2.7	5.5E-13	
2682436	RYBP	RING1 and YY1 binding protein		3p13	NM_012234	23429	2.4	3.4E-16	
2682271	PROK2	prokineticin 2		3p21.1	NM_021935	60675	2.2	1.4E-21	
3649052	MKL2	MKL/myocardin-like 2		17p11.2	NM_014048	51030	5.6	2.0E-21	
2748830	GUCY1A3	guanylate cyclase 1 soluble alpha 3		4q31.3-q33	NM_000856	2982	5.6	7.1E-20	

2748923	GUCY1B3	guanylate cyclase 1 soluble beta 3		4q31.3-q33	NM_000857	2983	3.4	2.7E-12	
3295376	ZNF503	zinc finger protein 503		10q22.2	NM_032772	84858	3.8	1.7E-17	
2591837	SLC40A1	solute carrier family 40 (iron-regulated transporter) member 1		2q32	NM_014585	30061	2.3	1.5E-09	
2843091	RGS14	regulator of G-protein signalling 14		5q35.3	NM_006480	10636	2.2	2.2E-20	
3402039	KCNA5	potassium voltage-gated channel shaker-related subfamily member 5		12p13	NM_002234	3741	2.2	6.6E-17	
3391653	DRD2	dopamine receptor D2		11q23	NM_000795	1813	6.8	2.7E-37	attention deficit hyperactivity disorder (Auerbach, J. G. et al. 2001)
3001479	IKZF1	IKAROS family zinc finger 1 (Ikaros)		7p13-p11.1	NM_006060	10320	2.6	3.3E-21	
3242353	CREM	cAMP responsive element modulator		10p11.21	NM_183011	1390	2.2	1.6E-19	
2926969	PDE7B	phosphodiesterase 7B		6q23-q24	NM_018945	27115	5.2	7.5E-32	
3042610	SKAP2	src kinase associated phosphoprotein 2	qRT-PCR	7p21-p15	NM_003930	8935	6.1	2.4E-30	
2985497	DACT2	dapper antagonist of beta-catenin homolog 2 (Xenopus laevis)		6q27	NM_214462	168002	2.3	4.1E-24	
2339139	INADL	InaD-like (Drosophila)		1p31.3	NM_176877	10207	3.0	1.1E-22	
3845944	GNG7	guanine nucleotide binding protein (G protein) gamma 7		19p13.3	NM_052847	2788	4.4	6.0E-31	
3984702	DRP2	dystrophin related protein 2		Xq22	NM_001939	1821	2.0	1.9E-20	schizophrenia (Hong, L. E. et al. 2005)
2837970	ADRA1B	adrenergic alpha-1B- receptor		5q23-q32	NM_000679	147	2.6	3.3E-18	
2951999	CPNE5	copine V	qRT-PCR	6p21.1	NM_020939	57699	3.5	1.4E-24	
2539125	LOC129607	hypothetical protein LOC129607		2p25.2	NM_207315	129607	2.1	2.2E-20	
3596147	GCNT3	glucosaminyl (N-acetyl) transferase 3 mucin type		15q21.3	NM_004751	9245	2.0	1.6E-13	
2417362	DIRAS3	DIRAS family GTP-binding RAS-like 3		1p31	NM_004675	9077	3.8	1.2E-14	
3779207	GNAL	guanine nucleotide binding protein (G protein) alpha activating activity polypeptide olfactory type		18p11.22-p11.21	NM_182978	2774	2.9	1.1E-12	
2943236	DTNBP1	dystrobrevin binding protein 1		6p22.3	NM_183040	84062	2.4	1.3E-15	schizophrenia (Van Den Bogaert, A. et al. 2003)
3386038	TRIM49	tripartite motif-containing 49		11p11.12	NM_020358	340970	2.0	2.5E-20	
2647898	MED12L	mediator of RNA polymerase II transcription subunit 12 homolog (S. cerevisiae)-like		3q25.1	NM_053002	116931	2.0	5.4E-19	
3834176	TMEM91	transmembrane protein 91		19q13.1-q13.2	NM_001042595	593	2.0	4.8E-20	
2663714	WNT7A	wingless-type MMTV integration site family member 7A		3p25	NM_004625	7476	4.2	5.4E-16	
2888010	DRD1	dopamine receptor D1		5q35.1	NM_000794	1812	5.0	3.3E-24	attention deficit hyperactivity disorder (Bobb, A. J. et al. 2005)
3127584	EGR3	early growth response 3		8p23-p21	NM_004430	1960	3.1	8.3E-12	
3315907	LRRC56	leucine rich repeat containing 56		11p15.5	NM_198075	115399	2.7	2.0E-15	
3458230	MYO1A	myosin IA		12q13-q21	NM_005379	6866	2.3	2.4E-22	
2614369	RARB	retinoic acid receptor beta		3p24	NM_000965	5915	8.9	3.6E-29	
2808931	ISL1	ISL1 transcription factor LIM/homeodomain (islet-1)		5q11.2	NM_002202	3670	6.1	4.3E-38	
2648677	MME	membrane metallo-endopeptidase		3q25.1-q25.2	NM_007289	4311	3.4	3.1E-24	Alzheimer's Disease (Sakai, A. et al. 2004)
2348962	GPR88	G protein-coupled receptor 88		1p21.3	NM_022049	54112	9.8	4.0E-39	
3561381	NKX2-1 (TITF1)	thyroid transcription factor 1	IHC	14q13	NM_003317	7080	2.7	7.0E-26	
2372858	RGS2	regulator of G-protein signalling 2 24kDa		1q31	NM_002923	5997	5.2	3.2E-32	
3953374	RIMBP3	RIMS binding protein 3		22	XM_371429	85376	2.0	1.6E-09	
2681753	FOXP1	forkhead box P1		3p14.1	NM_032682	27086	6.5	2.1E-13	
2984275	PDE10A	phosphodiesterase 10A		6q26	NM_006661	10846	7.3	3.7E-39	
2603987	NGEF	neuronal guanine nucleotide exchange factor		2q37	NM_019850	25791	4.8	6.5E-19	
3588658	LARP4	La ribonucleoprotein domain family member 4		1q21.2	NM_052879	7170	2.2	3.8E-18	
2342475	LHX8	LIM homeobox 8	qRT-PCR	1p31.1	NM_001001933	431707	3.3	4.4E-29	
3011180	GRM3	glutamate receptor metabotropic 3		7q21.1-q21.2	NM_000840	2913	2.9	4.0E-16	schizophrenia (Chen, Q. et al. 2005)
2442008	RXRG	retinoid X receptor gamma		1q22-q23	NM_006917	6258	39.1	6.5E-36	
3122489	ANGPT2	angiopoietin 2		8p23.1	NM_001147	285	2.7	2.4E-28	
2937144	SMOC2	SPARC related modular calcium binding 2		6q27	NM_022138	64094	3.5	5.6E-34	
3450362	SYT10	synaptotagmin X		12p11.1	NM_198992	341359	6.0	2.2E-38	
2560524	TACR1	tachykinin receptor 1		2p13.1	NM_015727	6869	2.4	1.0E-22	
3894906	PDYN	prodynorphin		20pter-p12	NM_024411	5173	10.9	1.8E-36	schizophrenia (Zhang, C. S. et al. 2004)
2689378	DRD3	dopamine receptor D3		3q13.3	NM_000796	1814	3.8	6.7E-26	tardive dyskinesia (Zhang, Z. et al. 2003)
3484393	RXFP2	relaxin/insulin-like family peptide receptor 2		13q13.1	NM_130806	122042	2.0	1.1E-16	
3733275	KCNJ2	potassium inwardly-rectifying channel subfamily J member 2		17q23.1-q24.2	NM_000891	3759	3.4	3.0E-30	
3992512	BRS3	bombesin-like receptor 3		Xq26-q28	NM_001727	680	4.3	1.2E-35	
3023483	FAM40B	family with sequence similarity 40 member B	qRT-PCR, ISH	7q32.1	BC019064	57464	24.2	4.5E-51	
3461496	BEST3	bestrophin 3		12q14.2-q15	NM_032735	84821	2.1	5.8E-13	
3990927	RP13-102H20.1	hypothetical protein FLJ30058		Xq26.1	NM_144967	158763	2.7	4.3E-32	
3252690	C10orf11	chromosome 10 open reading frame 11	qRT-PCR	10q22.2-q22.3	NM_032024	83938	2.3	6.1E-38	
3774906	SECTM1	secreted and transmembrane 1		17q25	NM_003004	6398	2.0	1.1E-21	
3940099	ADORA2A	adenosine A2a receptor		22q11.23	NM_000675	135	3.6	5.4E-22	anxiety disorder (Alsene, K. et al. 2003)
2503929	CNTNAP5	contactin associated protein-like 5	qRT-PCR	2q14.3	NM_130773	129684	2.8	1.2E-18	
2592356	STAT4	signal transducer and activator of transcription 4		2q32.2-q32.3	NM_003151	6775	2.3	1.1E-30	
2498806	SLC5A7	solute carrier family 5 (choline transporter) member 7		2q12	NM_021815	60482	2.6	3.9E-14	
3886938	WFDC2	WAP four-disulfide core domain 2		20q12-q13.2	NM_006103	10406	2.5	3.0E-18	
2763550	PPARGC1A	peroxisome proliferator-activated receptor gamma coactivator 1 alpha		4p15.1	NM_013261	10891	2.0	1.0E-13	
3528944	REM2	RAS (RAD and GEM)-like GTP binding 2		14q11.2	NM_173527	161253	4.3	3.0E-30	
2840270	KCNIP1	Kv channel interacting protein 1		5q35.1	NM_001034838	442143	3.0	5.9E-30	
3732049	CACNG5	calcium channel voltage-dependent gamma subunit 5		17q24	NM_014404	27091	5.7	3.0E-39	
3247712	ZCD1	zinc finger CDGSH-type domain 1		10q21.1	NM_018464	55847	2.0	7.9E-13	
3353914	LOH11CR2A	loss of heterozygosity 11 chromosomal region 2 gene A		11q23	NM_014622	4013	2.3	3.4E-22	
3002420	VSTM2	V-set and transmembrane domain containing 2		7p11.2	NM_182546	222008	2.7	8.7E-13	
3464860	DUSP6	dual specificity phosphatase 6		12q22-q23	NM_001946	1848	2.4	8.6E-15	
3868472	LOC112703	hypothetical protein BC004941		19q13.33	NM_138411	112703	2.1	5.5E-18	
2898499	ALDH5A1	aldehyde dehydrogenase 5 family member A1 (succinate-semialdehyde dehydrogenase)		6p22.2-p22.3	NM_170740	7915	2.0	1.1E-17	memory disturbance (Plomin, R. et al. 2004)
3918429	OLIG1	oligodendrocyte transcription factor 1		21q22.11	NM_138983	116448	2.3	1.2E-21	
2479746	C2orf34	chromosome 2 open reading frame 34		2p21	BC029359	79823	2.2	5.9E-33	
3348748	C11orf1	chromosome 11 open reading frame 1		11p15.5	NM_022761	64776	2.0	1.1E-16	
3214227	DIRAS2	DIRAS family GTP-binding RAS-like 2		9q22.2	NM_017594	54769	3.3	5.9E-15	
3778504	RAB31	RAB31 member RAS oncogene family		18p11.3	NM_006868	11031	3.0	9.5E-12	
3417703	HSD17B6	hydroxysteroid (17-beta) dehydrogenase 6 homolog (mouse)		12q13	NM_003725	8630	2.5	3.5E-26	
3694215	CDH8	cadherin 8 type 2		16q22.1	NM_001796	1006	5.6	3.3E-17	
2364381	RGS4	regulator of G-protein signalling 4		1q23.3	NM_005613	5999	3.5	5.3E-32	604906: SCHIZOPHRENIA 9, SCZD9; schizophrenia (Sobell, J. L. et al. 2005)
4022183	HS6ST2	heparan sulfate 6-O-sulfotransferase 2		Xq26.2	NM_001077188	90161	4.1	6.2E-27	
3014065	TAC1	tachykinin precursor 1		7q21-q22	NM_003182	6863	6.9	2.7E-31	
3456700	ZNF385	zinc finger protein 385		12q13.13	NM_015481	25946	2.2	2.4E-19	

3422855	GLIPR1	GLI pathogenesis-related 1 (glioma)		12q21.2	NM_006851	11010	3.4	4.1E-38	
3662696	CX3CL1	chemokine (C-X3-C motif) ligand 1		16q13	NM_002996	6376	3.7	2.9E-17	
2362089	KIRREL	kin of IRRE like (Drosophila)		1q23.1	NM_018240	55243	2.4	2.1E-09	
3227070	PTGES	prostaglandin E synthase		9q34.3	NM_004878	9536	2.5	4.8E-17	
3858907	SLC7A10	solute carrier family 7 (neutral amino acid transporter y+ system) member 10		19q13.1	NM_019849	56301	2.2	3.2E-16	
2977122	NMBR	neuromedin B receptor		6q21-qter	NM_002511	4829	3.5	1.1E-13	
3911217	TMEPAI	transmembrane prostate androgen induced RNA		20q13.31-q13.33	NM_199170	56937	2.6	1.7E-21	
2371139	LAMC2	laminin gamma 2		1q25-q31	NM_005562	3918	2.4	2.7E-31	
2924330	TPD52L1	tumor protein D52-like 1	qRT-PCR, ISH	6q22-q23	NM_001003395	7164	7.6	1.1E-31	
3603295	CRABP1	cellular retinoic acid binding protein 1		15q24	NM_004378	1381	25.2	3.6E-40	
3731543	RGS9	regulator of G-protein signalling 9		17q23-q24	NM_001081955	8787	2.9	2.3E-20	
3902560	DUSP15	dual specificity phosphatase 15		20q11.21	NM_177991	128853	2.0	7.0E-15	
2438458	CRABP2	cellular retinoic acid binding protein 2		1q21.3	NM_001878	1382	2.0	5.3E-24	
3401381	TSPAN9	tetraspanin 9	qRT-PCR	12p13.3	NM_006675	10867	3.8	4.4E-37	
3394264	MCAM	melanoma cell adhesion molecule		11q23.3	NM_006500	4162	2.3	1.5E-14	
3576441	CCDC88C	coiled-coil domain containing 88C		14q32.12	BC035914	440193	4.6	2.5E-25	
3982975	POU3F4	POU domain class 3 transcription factor 4		Xq21.1	NM_000307	5456	3.1	2.3E-10	

Cluster 4: THM

Exon Array Transcript Cluster ID	Official Gene Symbol	Gene Name	Confirmation	Cytoband	RefSeq Accession	Entrez GeneID	Maximum Fold Change	p-value (False Discovery Rate)	OMIM and Genetic Association Database annotations
2567647	CREG2	cellular repressor of E1A-stimulated genes 2		2q11.2	NM_153836	200407	5.0	2.1E-17	
2679406	CADPS	Ca2+-dependent secretion activator		3p14.2	NM_183394	8618	2.2	8.2E-10	
3223967	GGTA1	glycoprotein alpha-galactosyltransferase 1		9q34.11	NR_003191	2681	2.0	2.0E-19	
2686602	IMPG2	interphotoreceptor matrix proteoglycan 2		3q12.2-q12.3	NM_016247	50939	2.1	3.3E-29	
2646125	CHST2	carbohydrate (N-acetylglucosamine-6-O) sulfotransferase 2		3q24	NM_004267	9435	2.0	2.5E-09	
3218151	GRIN3A	glutamate receptor ionotropic N-methyl-D-aspartate 3A		9q31.1	NM_133445	116443	6.6	8.5E-19	
2379665	PROX1	prospero homeobox 1		1q32.2-q32.3	NM_002763	5629	8.0	4.6E-27	
2781138	LEF1	lymphoid enhancer-binding factor 1		4q23-q25	NM_016269	51176	6.8	1.3E-39	
3681674	NTAN1	N-terminal asparagine amidase		16p13.11	NM_173474	123803	2.1	1.9E-11	
2698996	PCOLCE2	procollagen C-endopeptidase enhancer 2		3q21-q24	NM_013363	26577	3.0	3.9E-25	
2649532	RSRC1	arginine/serine-rich coiled-coil 1		3q25.32	NM_016625	51319	2.0	2.0E-08	
2944025	TPMT	thiopurine S-methyltransferase		6p22.3	NM_000367	7172	2.0	1.8E-11	
2382970	EPHX1	epoxide hydrolase 1 microsomal (xenobiotic)		1q42.1	NM_000120	2052	2.5	1.0E-21	
2349863	NTNG1	netrin G1	qRT-PCR	1p13.3	NM_014917	22854	20.6	2.8E-35	schizophrenia (Fukasawa, M. et al. 2004)
2351294	KCNC4	potassium voltage-gated channel Shaw-related subfamily member 4		1p21	NM_004978	3749	2.2	4.7E-15	
2783596	PDE5A	phosphodiesterase 5A cGMP-specific	qRT-PCR, ISH	4q25-q27	NM_001083	8654	6.3	2.0E-41	
2863535	WDR41	WD repeat domain 41		5q14.1	NM_018268	55255	2.6	4.9E-12	
3726618	CACNA1G	calcium channel voltage-dependent T type alpha 1G subunit		17q22	NM_198376	8913	2.7	1.7E-06	
2717253	SORCS2	sortilin-related VPS10 domain containing receptor 2		4p16.1	NM_020777	57537	3.5	4.6E-30	
3868828	KLK10	kallikrein-related peptidase 10		19q13.3-q13.4	NM_001077500	5655	3.3	1.2E-24	
2353237	VANGL1	vang-like 1 (van gogh Drosophila)		1p13.1	NM_138959	81839	2.2	6.8E-17	
3444216	STYK1	serine/threonine/tyrosine kinase 1		12p13.2	NM_018423	55359	2.2	2.8E-23	
2931569	AKAP12	A kinase (PRKA) anchor protein (gravin) 12		6q24-q25	NM_005100	9590	4.9	1.3E-26	
2704733	TERC	telomerase RNA component		3q26.2	NR_001566	84517	2.1	1.3E-18	
2703462	C3orf57	chromosome 3 open reading frame 57	qRT-PCR	3q26.1	NM_001040100	165679	3.7	1.2E-28	
2787459	INPP4B	inositol polyphosphate-4-phosphatase type II 105kDa		4q31.21	NM_003866	8821	3.1	2.7E-31	
3615791	CHRFAM7A	CHRNA7 (cholinergic receptor nicotinic alpha 7 exons 5-10) and FAM7A (family with sequence similarity 7A exons A-E) fus		15q13.1	NM_139320	89832	2.9	2.2E-22	118511; 609756: Schizophrenia, neurophysiologic defect in
3264621	TCF7L2	transcription factor 7-like 2 (T-cell specific HMG-box)	qRT-PCR, ISH	10q25.3	NM_030756	6934	32.6	2.1E-54	
2536625	BOK	BCL2-related ovarian killer		2q37.3	NM_032515	666	2.0	8.4E-08	
3678462	PPL	periplakin		16p13.3	NM_002705	5493	2.2	5.7E-31	
3355860	KCNJ5	potassium inwardly-rectifying channel subfamily J member 5		11q24	NM_000890	3762	2.8	6.2E-21	
3758291	VAT1	vesicle amine transport protein 1 homolog (T. californica)		17q21	NM_006373	10493	3.0	1.7E-28	
2951221	C6orf106	chromosome 6 open reading frame 106		6p21.31	NM_024294	64771	2.0	5.7E-13	
3551432	CYP46A1	cytochrome P450 family 46 subfamily A polypeptide 1		14q32.1	NM_006668	10858	2.8	8.6E-23	Alzheimer's Disease (Johansson, A. et al. 2004)
3587226	CHRNA7	cholinergic receptor nicotinic alpha 7		15q13.1	NM_000746	1139	3.1	3.7E-23	118511; 609756: Schizophrenia, neurophysiologic defect in
3064462	VGF	VGF nerve growth factor inducible		7q22	NM_003378	7425	2.8	2.9E-18	
3933331	C21orf25	chromosome 21 open reading frame 25		21q22.3	NM_015500	25966	2.7	4.6E-22	
2794454	GLRA3	glycine receptor alpha 3		4q33-q34	NM_006529	8001	2.7	4.4E-14	
2546874	GALNT14	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 14 (GalNAc-T14)		2p23.1-p21	NM_024572	440854	3.0	4.0E-22	
3644340	SLC9A3R2	solute carrier family 9 (sodium/hydrogen exchanger) member 3 regulator 2		16p13.3	NM_004785	9351	2.4	3.9E-11	
3219885	PTPN3	protein tyrosine phosphatase non-receptor type 3		9q31	NM_002829	5774	10.3	2.3E-35	
4007126	SYN1	synapsin I		7p11.2	NM_133499	402509	2.1	2.0E-07	
3128271	NEFL	neurofilament light polypeptide 68kDa		8p21	NM_006158	4747	7.5	2.8E-07	
3432754	LOC196463	hypothetical protein LOC196463		12q24.13	NM_173542	196463	2.0	4.3E-12	
3758692	MPP2	membrane protein palmitoylated 2 (MAGUK p55 subfamily member 2)		17q12-q21	NM_005374	4355	2.4	1.5E-18	
3575241	KCNK10	potassium channel subfamily K member 10		14q31	NM_138317	54207	2.0	7.5E-12	
3721989	CNTNAP1	contactin associated protein 1	qRT-PCR	17q21	NM_003632	8506	3.5	5.9E-17	
3967689	STS	steroid sulfatase (microsomal) arylsulfatase C isozyme S		Xp22.32	NM_000351	412	2.4	8.3E-10	
2317434	FAM79A	family with sequence similarity 79 member A		1p36.32	NM_182752	127262	2.1	1.5E-08	
2442698	CREG1	cellular repressor of E1A-stimulated genes 1		1q24	NM_003851	8804	2.3	1.4E-14	
2373406	CFHR1	complement factor H-related 1		1q32	NM_002113	3075	2.3	8.5E-19	
3453513	WNT10B	wingless-type MMTV integration site family member 10B		12q13	NM_003394	7480	2.0	3.7E-09	
2696040	RAB6B	RAB6B member RAS oncogene family		3q22.1	NM_016577	51560	2.4	1.1E-08	
2411198	TAL1	T-cell acute lymphocytic leukemia 1		1p32	NM_003189	6886	2.8	8.1E-32	
3034987	CENTA1	centaurin alpha 1		7p22.3	NM_006869	11033	2.1	2.6E-13	
3193725	OLFM1	olfactomedin 1		9q34.3	NM_014279	10439	6.8	7.9E-29	
3378895	CABP2	calcium binding protein 2		11q13	NM_016366	9600	2.3	7.3E-10	
2830450	NPY6R	neuropeptide Y receptor Y6 (pseudogene)		5q31	NR_002713	4888	2.0	1.2E-10	
2394626	ACOT7	acyl-CoA thioesterase 7		1p36.31-p36.11	NM_007274	54626	2.1	2.4E-07	
3722700	NAGS	N-acetylglutamate synthase		17q21.31	NM_153006	162417	2.0	4.7E-07	237310; 608300: N-acetylglutamate synthase deficiency

2334847	DMBX1	diencephalon/mesencephalon homeobox 1		1p33	NM_172225	127343	4.3	4.8E-20	
2373693	LHX9	LIM homeobox 9	qRT-PCR, ISH	1q31-q32	NM_020204	56956	20.0	3.5E-43	
2702610	SHOX2	short stature homeobox 2		3q25-q26.1	NM_006884	6474	3.8	1.5E-41	
3597338	TPM1	tropomyosin 1 (alpha)		15q22.1	NM_001018020	7168	2.3	2.8E-06	115196; 191010; 192600: Cardiomyopathy, familial hypertrophic, 3
3676557	CASKIN1	CASK interacting protein 1		16p13.3	NM_020764	57524	2.0	1.3E-07	
3184408	AKAP2	A kinase (PRKA) anchor protein 2		9q31-q33	NM_001004065	445815	2.9	8.8E-12	
3228727	SLC2A6	solute carrier family 2 (facilitated glucose transporter) member 6		9q34	NM_017585	11182	2.2	2.8E-11	
3597125	TLN2	talin 2		15q15-q21	NM_015059	83660	2.2	2.0E-12	
3687277	SEZ6L2	seizure related 6 homolog (mouse)-like 2		16p11.2	NM_012410	26470	2.2	2.9E-07	
3644309	SYNGR3	synaptogyrin 3		16p13	NM_004209	9143	2.3	3.7E-07	
3868557	SYT3	synaptotagmin III		19q13.33	NM_032298	84258	2.1	1.1E-08	
3875179	CHGB	chromogranin B (secretogranin 1)		20pter-p12	NM_001819	1114	3.7	9.4E-20	schizophrenia (Iijima, Y. et al. 2004)
2333907	C1orf164	chromosome 1 open reading frame 164	qRT-PCR	1p34.1	NM_018150	55182	2.6	5.8E-42	
3740201	SKIP	skeletal muscle and kidney enriched inositol phosphatase		17p13.3	NM_130766	5306	2.0	9.2E-13	
3863435	POU2F2	POU domain class 2 transcription factor 2		19q13.2	NM_002698	5452	2.0	2.7E-21	
3557593	ZNF409	zinc finger protein 409		14q11.2	BC131533	22830	2.5	1.5E-10	
3016262	EMID2	EMI domain containing 2		7q22.1	NM_133457	136227	2.6	1.2E-11	
2585476	SCN7A	sodium channel voltage-gated type VII alpha		2q21-q23	NM_002976	6332	2.6	7.0E-34	
3510450	LHFP	lipoma HMGIC fusion partner		13q12	NM_005780	10186	3.6	2.5E-10	
3623655	HDC	histidine decarboxylase		15q21-q22	NM_002112	3067	2.4	4.8E-21	
3334446	KCNK4	potassium channel subfamily K member 4		11q13	NM_033310	50801	2.7	3.3E-15	
3611126	MEF2A	myocyte enhancer factor 2A		15q26	NM_005587	4205	2.5	3.5E-12	
3896976	TXNDC13	thioredoxin domain containing 13		20p12	NM_021156	56255	2.2	9.1E-08	
2766893	APBB2	amyloid beta (A4) precursor protein-binding family B member 2 (Fe65-like)		4p14-p13	NM_173075	323	2.1	2.9E-08	602710: Alzheimer disease, late-onset
3549092	CHGA	chromogranin A (parathyroid secretory protein 1)		14q32	NM_001275	1113	2.6	6.3E-14	schizophrenia (Takahashi, N. et al. 2006)
3868587	SHANK1	SH3 and multiple ankyrin repeat domains 1		19q13.3	NM_016148	50944	2.4	1.8E-09	
3568616	RAB15	RAB15 member RAS onocogene family		14q23.3	NM_198686	376267	2.3	4.1E-10	
3737242	SLC26A11	solute carrier family 26 member 11		17q25.3	NM_173626	284129	2.1	7.9E-09	
3210616	PRUNE2	prune homolog 2 (Drosophila)		9q21.13	NM_138818	158471	2.6	6.9E-26	
3234277	GATA3	GATA binding protein 3		10p14	NM_002051	2625	2.4	9.5E-20	131320; 146255: Hypoparathyroidism, sensorineural deafness, and renal dysplasia
3741547	TAX1BP3	Tax1 (human T-cell leukemia virus type I) binding protein 3		17p13.3	NM_014604	5026	2.4	9.8E-09	
3830205	FXYD7	FXYD domain containing ion transport regulator 7		19q13.12	NM_022006	53822	2.8	1.7E-14	
2569215	ST6GAL2	ST6 beta-galactosamide alpha-2 6-sialyltranferase 2		2q11.2-q12.1	NM_032528	84620	2.6	1.4E-08	
3451375	PRICKLE1	prickle homolog 1 (Drosophila)		12q12	NM_153026	144165	5.4	9.1E-28	
3169331	ALDH1B1	aldehyde dehydrogenase 1 family member B1		9p11.1	NM_000692	219	2.1	1.4E-08	
2876897	SPOCK1	sparc/osteonectin cwcv and kazal-like domains proteoglycan (testican) 1		8p21.2	NM_004598	440258	3.1	1.1E-08	
3533811	LRFN5	leucine rich repeat and fibronectin type III domain containing 5		14q21.2	NM_152447	145581	2.3	1.4E-06	
3090436	NEFM	neurofilament medium polypeptide 150kDa		8p21	NM_005382	4741	6.0	1.0E-08	psychoses schizophrenia (Strous, R. D. et al. 2006)
3634509	CIB2	calcium and integrin binding family member 2		15q24	NM_006383	10518	2.0	2.8E-09	
3636391	HOMER2	homer homolog 2 (Drosophila)		15q24.3	NM_199332	9455	4.3	1.8E-21	
2577482	TMEM163	transmembrane protein 163		2q21.3	NM_030923	81615	4.0	6.2E-13	
3323824	SLC17A6	solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter) member 6		11p14.3	NM_020346	57084	13.8	2.8E-21	
3554452	KIAA0284	KIAA0284		14q32.33	NM_015005	283638	2.5	6.6E-09	
3834257	CEACAM21	carcinoembryonic antigen-related cell adhesion molecule 21		19q13.2	NM_033543	90273	2.1	2.9E-23	
4052021	SLC2A6	solute carrier family 2 (facilitated glucose transporter) member 6		9q34	NM_017585	11182	2.0	3.2E-10	
3572929	ZDHHC22	zinc finger DHHC-type containing 22	qRT-PCR	14q24.3	NM_174976	283576	4.0	6.0E-13	
3859668	LGI4	leucine-rich repeat LGI family member 4		19q13.12	NM_139284	163175	3.7	4.6E-09	epilepsy (Gu, W. et al. 2003)
3570373	SLC8A3	solute carrier family 8 (sodium-calcium exchanger) member 3		14q24.1	NM_182932	6547	2.3	7.6E-08	
4020655	ODZ1	odz odd Oz/ten-m homolog 1(Drosophila)		Xq25	NM_014253	10178	3.6	1.4E-09	
3922664	SLC37A1	solute carrier family 37 (glycerol-3-phosphate transporter) member 1		21q22.3	NM_018964	54020	2.0	2.5E-13	
3772661	TIMP2	TIMP metallopeptidase inhibitor 2		17q25	NM_003255	7077	2.0	2.7E-06	
3376914	NRXN2	neurexin 2		11q13	NM_015080	9379	2.4	6.6E-09	
2394608	GPR153	G protein-coupled receptor 153		1p36.31	NM_207370	387509	3.2	3.1E-12	
3401086	CACNA1C	calcium channel voltage-dependent L type alpha 1C subunit		12p13.33	NM_000719	283439	2.0	4.6E-09	
2883440	ADAM19	ADAM metallopeptidase domain 19 (meltrin beta)		5q32-q33	NM_033274	8728	2.1	4.7E-12	
3947863	PARVB	parvin beta		22q13.2-q13.33	NM_013327	29780	2.1	2.1E-10	
3260586	SCD	stearoyl-CoA desaturase (delta-9-desaturase)		10q23-q24	NM_005063	6319	2.2	1.7E-07	
3554315	C14orf173	chromosome 14 open reading frame 173		14q32.33	NM_022489	64423	2.0	3.5E-06	
2418078	NEGR1	neuronal growth regulator 1		1p31.1	NM_173808	257194	3.7	2.2E-09	
3409127	ARNTL2	aryl hydrocarbon receptor nuclear translocator-like 2		12p12.2-p11.2	NM_020183	56938	2.8	8.0E-06	
3081862	PTPRN2	protein tyrosine phosphatase receptor type N polypeptide 2		7q36.3	NM_002847	393078	2.3	6.7E-07	
2429371	TSPAN2	tetraspanin 2	qRT-PCR	1p13.2	NM_005725	10100	3.9	9.4E-11	
2451870	ETNK2	ethanolamine kinase 2		1q32.1	NM_018208	55224	3.6	4.2E-18	
3805553	RIT2	Ras-like without CAAX 2		18q12.3	NM_002930	6014	4.8	3.7E-11	
3463727	LIN7A	lin-7 homolog A (C. elegans)		12q21	NM_004664	8825	2.2	2.6E-15	
2436826	KCNN3	potassium intermediate/small conductance calcium-activated channel subfamily N member 3		1q21.3	NM_170782	3782	2.0	4.8E-11	schizophrenia; bipolar disorder (Glatt, S. J. et al. 2003)
2329887	NCDN	neurochondrin		1p34.3	NM_001014839	23154	2.1	1.0E-07	
3818047	HSD11B1L	hydroxysteroid (11-beta) dehydrogenase 1-like		19p13.3	NM_198706	374875	2.1	1.0E-12	
2407314	EPHA10	EPH receptor A10	qRT-PCR	1p34.3	BC041360	284656	2.0	1.1E-11	
3191352	FREQ	frequenin homolog (Drosophila)		9q34	NM_014286	23413	2.4	1.5E-09	
3371225	CHST1	carbohydrate (keratan sulfate Gal-6) sulfotransferase 1		11p11.2-p11.1	NM_003654	8534	4.1	1.9E-16	
3381925	PGM2L1	phosphoglucomutase 2-like 1	qRT-PCR, ISH	11q13.4	NM_173582	283209	3.7	4.8E-11	
3204558	KIAA1539	KIAA1539		9p13.3	NM_025182	80256	2.3	1.3E-14	
3841076	MYADM	myeloid-associated differentiation marker		19q13.41	NM_001020819	91663	2.0	6.8E-07	
3667508	CALB2	calbindin 2 29kDa (calretinin)	IHC	16q22.2	NM_001740	794	16.7	1.4E-28	
3660213	CYLD	cylindromatosis (turban tumor syndrome)		16q12.1	NM_015247	1540	2.3	4.4E-11	132700; 605018: Cylindromatosis, familial
3232349	PFKP	phosphofructokinase platelet		10p15.3-p15.2	NM_002627	5214	2.3	8.6E-11	

Cluster 5: CBL

Exon Array Transcript Cluster ID	Official Gene Symbol	Gene Name	Confirmation	Cytoband	RefSeq Accession	Entrez GeneID	Maximum Fold Change	p-value (False Discovery Rate)	OMIM and Genetic Association Database annotations

2398706	MFAP2	microfibrillar-associated protein 2		1p36.1-p35	NM_002403	4237	3.7	1.5E-07	
3248289	CDC2	cell division cycle 2 G1 to S and G2 to M		10q21.1	NM_001786	983	2.5	5.0E-06	Alzheimer's disease; dementia (Johansson, A. et al. 2003)
2333136	CDC20	cell division cycle 20 homolog (S. cerevisiae)		1p34.1	NM_001255	991	2.2	5.6E-06	
2894573	GCNT2	glucosaminyl (N-acetyl) transferase 2 I-branching enzyme (I blood group)		8q24	NM_145649	10086	2.5	3.4E-16	
3061319	CDK6	cyclin-dependent kinase 6		7q21-q22	NM_001259	1021	3.0	2.7E-12	
3387010	GPR83	G protein-coupled receptor 83		11q21	NM_016540	10888	3.1	3.0E-30	
3815165	PTBP1	polypyrimidine tract binding protein 1		19p13.3	NM_031991	5725	2.3	1.0E-07	
3775842	TYMS	thymidylate synthetase		18p11.32	NM_001071	7298	3.3	5.2E-07	
2746693	ARHGAP10	Rho GTPase activating protein 10		4q31.23	NM_024605	79658	2.5	1.9E-28	
2593159	STK17B	serine/threonine kinase 17b		2q32.3	NM_004226	9262	2.2	2.2E-13	
3108146	SDC2	syndecan 2		8q22-q23	NM_002998	6383	3.5	2.0E-14	
2767710	KCTD8	potassium channel tetramerisation domain containing 8		4p13	NM_198353	386617	3.7	1.2E-22	
3634656	CHRNA3	cholinergic receptor nicotinic alpha 3		15q24	NM_000743	1136	2.6	2.1E-25	
2859667	ADAMTS6	ADAM metallopeptidase with thrombospondin type 1 motif 6		5q12.3	NM_197941	11174	2.2	2.3E-06	
3230141	NOTCH1	Notch homolog 1 translocation-associated (Drosophila)		9q34.3	NM_017617	4851	2.1	8.3E-07	
3378159	YIF1A	Yip1 interacting factor homolog A (S. cerevisiae)		11q13	NM_020470	10897	2.0	9.9E-12	
3663228	GINS3	GINS complex subunit 3 (Psf3 homolog)		16q21	NM_022770	64785	2.4	5.5E-19	
3904566	DSN1	DSN1 MIND kinetochore complex component homolog (S. cerevisiae)		20q11.23	NM_024918	79980	2.0	2.2E-09	
2351004	GSTM5	glutathione S-transferase M5		1p13.3	NM_000851	2949	2.0	3.8E-06	
2401347	TCEA3	transcription elongation factor A (SII) 3		1p36.12	NM_003196	6920	2.3	4.5E-22	
3065740	RELN	reelin	IHC	7q22	NM_173054	5649	7.9	4.4E-24	257320; 600514: Lissencephaly syndrome, Norman-Roberts type
3173673	PIP5K1B	phosphatidylinositol-4-phosphate 5-kinase type I beta		9q13	NM_003558	8395	2.9	2.1E-17	
2762944	KCNIP4	Kv channel interacting protein 4		4p15.31	NM_025221	80333	7.3	1.1E-20	
3221822	KIF12	kinesin family member 12		9q32	NM_138424	113220	2.4	7.2E-19	
2909948	TFAP2B	transcription factor AP-2 beta (activating enhancer binding protein 2 beta)		6p21-p12	NM_003221	7021	5.5	1.0E-12	169100; 601601: Char syndrome
3927392	CYYR1	cysteine/tyrosine-rich 1		21q21.2	NM_052954	116159	2.2	1.1E-09	
2451261	SYT2	synaptotagmin II		15q13.2	NM_177402	390558	3.9	6.2E-23	
3698866	LOC348174	secretory protein LOC348174		16q22.1	NM_182619	348174	3.3	9.7E-28	
3929291	C21orf59	chromosome 21 open reading frame 59		7q21.3	NM_021254	441269	2.1	2.2E-15	
3144033	CALB1	calbindin 1 28kDa	IHC	8q21.3-q22.1	NM_004929	793	15.0	6.7E-14	
2827299	MEGF10	multiple EGF-like-domains 10		5q33	NM_032446	84466	4.9	2.9E-15	
2855285	SEPP1	selenoprotein P plasma 1		5q31	NM_005410	6414	3.2	9.7E-19	
4015397	TSPAN6	tetraspanin 6		Xq22	NM_003270	7105	2.2	2.2E-06	
2728408	REST	RE1-silencing transcription factor		4q12	NM_005612	5978	2.2	3.4E-09	
2884578	CCNJL	cyclin J-like		5q33.3	NM_024565	79616	2.2	9.5E-21	
3197955	GLDC	glycine dehydrogenase (decarboxylating)		9p22	NM_000170	2731	2.5	6.3E-17	238300; 605899: Glycine encephalopathy
2745547	GAB1	GRB2-associated binding protein 1		4q31.21	NM_002039	2549	2.9	2.0E-07	
3887452	SLC2A10	solute carrier family 2 (facilitated glucose transporter) member 10		20q13.1	NM_030777	81031	2.1	1.3E-07	
3867796	TEAD2	TEA domain family member 2		19q13.33	NM_003598	8463	2.3	1.9E-06	
3257031	STAMBPL1	STAM binding protein-like 1		10q24.1	NM_020799	355	2.0	4.5E-07	
3417146	CDK2	cyclin-dependent kinase 2		12q13	NM_052827	1017	2.6	5.9E-08	
3927480	ADAMTS5	ADAM metallopeptidase with thrombospondin type 1 motif 5 (aggrecanase-2)		21q21.3	NM_007038	11096	2.1	5.5E-14	
2441940	LMX1A	LIM homeobox transcription factor 1 alpha	qRT-PCR	1q22-q23	NM_177398	4009	2.6	5.2E-12	
2590452	CERKL	ceramide kinase-like		2q31.3	NM_201548	375298	6.8	1.6E-43	608380; 608381: Retinitis pigmentosa-26
2339872	ROR1	receptor tyrosine kinase-like orphan receptor 1		1p32-p31	NM_005012	4919	2.7	7.1E-27	
2841964	MSX2	msh homeobox 2	qRT-PCR, ISH	5q34-q35	NM_002449	4488	5.2	1.1E-35	
2925237	LAMA2	laminin alpha 2 (merosin congenital muscular dystrophy)		8p21.2	NM_000426	440258	2.1	1.3E-16	
3390195	EXPH5	exophilin 5		11q22.3	NM_015065	23086	2.9	5.8E-22	
3199511	FREM1	FRAS1 related extracellular matrix 1		9p22.3	NM_144966	158326	2.4	2.6E-26	
2391465	MXRA8	matrix-remodelling associated 8		1p36.33	NM_032348	388763	2.4	2.7E-08	
3457101	ITGA7	integrin alpha 7		12q13	NM_002206	3679	2.0	6.9E-24	600536: Myopathy, congenital
3367788	DCDC5	doublecortin domain containing 5		11p14.1	NM_198462	196296	4.0	1.3E-39	
3571059	DPF3	D4 zinc and double PHD fingers family 3		14q24.3-q31.1	NM_012074	8110	3.8	1.2E-18	
3768627	ABCA8	ATP-binding cassette sub-family A (ABC1) member 8		17q24	NM_007168	10351	3.6	2.8E-32	
2358092	CA14	carbonic anhydrase XIV		1q21	NM_012113	23632	2.7	1.3E-18	
2559189	CYP26B1	cytochrome P450 family 26 subfamily B polypeptide 1		2p13.3	NM_019885	56603	9.6	2.4E-19	
3474372	PXN	paxillin		12q24.31	NM_002859	5829	2.0	1.0E-12	
2427469	SLC16A4	solute carrier family 16 member 4 (monocarboxylic acid transporter 5)		1p13.3	NM_004696	9122	2.8	2.5E-24	
3792656	CCDC102B	coiled-coil domain containing 102B		18q22.1	NM_024781	79839	2.0	3.7E-20	
3023149	FLNC	filamin C gamma (actin binding protein 280)		7q32-q35	NM_001458	2318	4.1	5.8E-31	
3225855	ANGPTL2	angiopoietin-like 2		9q34	NM_012098	23452	2.8	6.1E-13	
3529908	NFATC4	nuclear factor of activated T-cells cytoplasmic calcineurin-dependent 4		14q11.2	NM_004554	4776	2.6	1.2E-10	
3188514	CRB2	crumbs homolog 2 (Drosophila)		9q33.2	NM_173689	286204	2.1	3.4E-12	
3132016	FGFR1	fibroblast growth factor receptor 1 (fms-related tyrosine kinase 2 Pfeiffer syndrome)		8p11.21	NM_023111	2260	3.1	3.1E-11	
3292169	CTNNA3	catenin (cadherin-associated protein) alpha 3		10q22.2	NM_013266	29119	4.5	4.1E-30	Alzheimer's disease (Bertram, L. et al. 2007)
2924492	HEY2	hairy/enhancer-of-split related with YRPW motif 2		6q22.2-q22.33	NM_012259	23493	7.4	1.3E-31	
2704267	GOLPH4	golgi phosphoprotein 4		3q26.2	NM_014498	27333	2.0	5.6E-06	
4022447	GPC3	glypican 3		Xq26.1	NM_004484	2719	3.3	5.6E-24	300037; 312870: Simpson-Golabi-Behmel syndrome, type 1; Wilms tumor, somatic
3542275	SMOC1	SPARC related modular calcium binding 1		14q24.2	NM_022137	64093	4.8	2.5E-18	
3918104	C21orf63	chromosome 21 open reading frame 63		21q22.11	NM_058187	59271	2.1	5.3E-15	
2939469	C6orf145	chromosome 6 open reading frame 145		6p25.2	AJ420534	221749	2.4	6.5E-13	
3427352	NEDD1	neural precursor cell expressed developmentally down-regulated 1		12q22	NM_152905	121441	2.2	9.3E-06	
3837731	EMP3	epithelial membrane protein 3		19q13.3	NM_001425	2014	2.8	1.5E-18	
2337407	PCSK9	proprotein convertase subtilisin/kexin type 9		1p32.3	NM_174936	255738	3.2	1.0E-14	
3406880	PIK3C2G	phosphoinositide-3-kinase class 2 gamma polypeptide		12p12	NM_004570	5288	2.5	1.1E-20	
3417988	NXPH4	neurexophilin 4		12q13.3	NM_007224	11247	4.6	5.0E-11	
2324919	EPHB2	EPH receptor B2		1p36.1-p35	NM_004442	2048	2.1	1.4E-08	
3260700	PAX2	paired box gene 2		10q24	NM_003988	5076	5.9	1.9E-25	120330; 167409: Optic nerve coloboma with renal disease; Renal hypoplasia, isolated
2884727	ATP10B	ATPase Class V type 10B		5q34	AK025130	23120	2.5	2.4E-21	
3128411	EBF2	early B-cell factor 2		8p21.2	NM_022659	64641	2.8	8.3E-18	
3487095	DGKH	diacylglycerol kinase eta		13q14.11	NM_178009	160851	4.5	2.2E-20	bipolar disorder (Baum, A. E. et al. 2007)
3853036	SLC1A6	solute carrier family 1 (high affinity aspartate/glutamate transporter) member 6		19p13.12	NM_005071	6511	2.9	9.3E-16	
3622282	SHF	Src homology 2 domain containing F		15q21.1	NM_138356	90525	2.3	1.3E-09	

2733360	FGF5	fibroblast growth factor 5		4q21	NM_004464	2250	5.5	1.9E-26	
2647015	AGTR1	angiotensin II receptor type 1		3q21-q25	NM_031850	185	2.6	1.0E-30	
2784177	TRPC3	transient receptor potential cation channel subfamily C member 3		4q27	NM_003305	7222	5.2	2.3E-25	
2890660	GFPT2	glutamine-fructose-6-phosphate transaminase 2		5q34-q35	NM_005110	9945	2.2	4.6E-13	
2589017	PDE11A	phosphodiesterase 11A		2q31.2	NM_001077358	50940	3.0	1.1E-39	
3447022	ST8SIA1	ST8 alpha-N-acetyl-neuraminide alpha-2 8-sialyltransferase 1		12p12.1-p11.2	NM_003034	6489	2.2	3.2E-06	
2600881	PAX3	paired box gene 3 (Waardenburg syndrome 1)	qRT-PCR, ISH	2q35-q37	NM_181458	5077	6.5	3.2E-33	122880; 148820; 193500; 268220; 606597: Waardenburg syndrome
2941476	TFAP2A	transcription factor AP-2 alpha (activating enhancer binding protein 2 alpha)		6p24	NM_003220	7020	5.2	6.4E-47	
3810446	CPLX4	complexin 4	qRT-PCR	18q21.32	NM_181654	339302	5.1	4.7E-51	
2838399	GABRA6	gamma-aminobutyric acid (GABA) A receptor alpha 6		5q34	NM_000811	2559	3.0	5.5E-43	anxiety disorder; blood pressure, arterial; memory impairment (Uhart, M. et al. 2004)
3210737	GNA14	guanine nucleotide binding protein (G protein) alpha 14		9q21	NM_004297	9630	2.3	8.8E-34	
3323491	SLC6A5	solute carrier family 6 (neurotransmitter transporter glycine) member 5		11p15.2-p15.1	NM_004211	9152	3.7	6.2E-36	
3611625	ALDH1A3	aldehyde dehydrogenase 1 family member A3		15q26.3	NM_000693	220	4.3	5.1E-47	
3986087	NRK	Nik related kinase		Xq22.3	NM_198465	203447	4.9	2.1E-44	
3332465	MS4A8B	membrane-spanning 4-domains subfamily A member 8B		11q12.2	NM_031457	83661	2.9	3.2E-27	
3338293	TMEM16A	transmembrane protein 16A		11q13.3	NM_018043	55107	2.1	1.6E-23	
2612508	GALNTL2	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 2		3p24.3	NM_054110	117248	3.5	2.8E-28	
3057955	FGL2	fibrinogen-like 2		7q11.23	NM_006682	10875	4.3	7.2E-41	
3405748	EMP1	epithelial membrane protein 1		12p12.3	NM_001423	2012	3.2	1.7E-30	
2750753	TLL1	tolloid-like 1		4q32-q33	NM_012464	7092	6.5	5.0E-24	
3137120	CA8	carbonic anhydrase VIII		8q11-q12	NM_004056	767	13.8	2.8E-37	
3764399	RNF43	ring finger protein 43		17q22	NM_017763	54894	2.5	2.2E-31	
3445741	MGP	matrix Gla protein		12p13.1-p12.3	NM_000900	4256	3.7	8.6E-43	154870; 245150: Keutel syndrome
3666989	MGC34761	hypothetical protein MGC34761	qRT-PCR	16q22.3	NM_173619	441773	3.0	7.9E-34	
3696035	LCAT	lecithin-cholesterol acyltransferase		16q22.1	NM_000229	3931	9.6	3.1E-40	136120; 245900; 606967: Fish-eye disease; Norum disease
2646327	C3orf58	chromosome 3 open reading frame 58		3q24	NM_173552	205428	2.5	1.8E-06	
3368054	PAX6	paired box gene 6 (aniridia keratitis)		11p13	NM_001604	5080	7.7	5.9E-12	
3758510	ETV4	ets variant gene 4 (E1A enhancer binding protein E1AF)		17q21	NM_001986	2118	2.5	1.1E-17	
2742224	SPRY1	sprouty homolog 1 antagonist of FGF signaling (Drosophila)		4q28.1	NM_005841	10252	2.1	2.4E-07	
3725685	NGFR	nerve growth factor receptor (TNFR superfamily member 16)		17q21-q22	NM_002507	4804	5.0	1.2E-10	depressive disorder, major; suicide (Kunugi, H. et al. 2004)
3532511	INSM2	insulinoma-associated 2		14q13.2	NM_032594	84684	2.3	1.5E-13	
2809399	FST	follistatin		5q11.2	NM_013409	10468	3.3	4.1E-15	
3883941	TGIF2	TGFB-induced factor homeobox 2		20q11.2-q12	NM_021809	60436	2.7	1.0E-08	
3368940	ABTB2	ankyrin repeat and BTB (POZ) domain containing 2		11p13	NM_145804	25841	2.0	2.3E-12	
3418120	GLI1	glioma-associated oncogene homolog 1 (zinc finger protein)		12q13.2-q13.3	NM_005269	2735	2.1	1.7E-09	
2899152	HIST1H2AC	histone cluster 1 H2ac		6p21.3	NM_003512	8334	2.3	1.9E-06	
3145149	TP53INP1	tumor protein p53 inducible nuclear protein 1		8q22	NM_033285	94241	2.4	3.8E-06	
3393311	DSCAML1	Down syndrome cell adhesion molecule like 1			NM_020693	57453	2.4	7.2E-19	
3729528	PPM1D	protein phosphatase 1D magnesium-dependent delta isoform		17q23.2	NM_003620	8493	2.2	8.4E-08	
3135046	ST18	suppression of tumorigenicity 18 (breast carcinoma) (zinc finger protein)		8q11.23	NM_014682	9705	6.7	4.2E-11	
2597552	ERBB4	v-erb-a erythroblastic leukemia viral oncogene homolog 4 (avian)		1q21	NM_005235	6232	3.8	6.0E-06	schizophrenia (Benzel, I. et al. 2007)
3428268	GAS2L3	growth arrest-specific 2 like 3		Xp22.1	NM_174942	5277	6.7	7.5E-13	
2842255	CPLX2	complexin 2	qRT-PCR	5q35.2	NM_001008220	10814	4.8	7.8E-11	
3936167	CECR2	cat eye syndrome chromosome region candidate 2		22q11.2	AF336133	27443	2.9	1.2E-10	
3157596	EEF1D	eukaryotic translation elongation factor 1 delta (guanine nucleotide exchange protein)		8q24.3	NM_032378	1936	2.9	7.4E-07	
3595096	TCF12	transcription factor 12 (HTF4 helix-loop-helix transcription factors 4)		15q21	NM_207038	6938	2.7	6.4E-10	
3959388	APOL4	apolipoprotein L 4		22q11.2-q13.2	NM_030643	80832	3.9	9.6E-09	607254: Schizophrenia
3044597	PDE1C	phosphodiesterase 1C calmodulin-dependent 70kDa		7p15.1-p14.3	NM_005020	5137	4.4	9.5E-13	
3828278	ZNF536	zinc finger protein 536		19q12	NM_014717	388528	3.4	1.2E-15	
3925639	NRIP1	nuclear receptor interacting protein 1		21q11.2	NM_003489	8204	2.0	7.9E-06	
2973856	SAMD3	sterile alpha motif domain containing 3		6q23.1	NM_001017373	154075	2.3	5.3E-08	
3717870	TMEM98	transmembrane protein 98		17q11.2	NM_001033504	26022	2.8	8.3E-07	
2842194	CPLX2	complexin 2		5q35.2	NM_006650	10814	4.0	7.1E-10	
3830925	KIRREL2	kin of IRRE like 2 (Drosophila)		19q13.12	NM_199179	84063	2.1	7.4E-08	
3418007	SHMT2	serine hydroxymethyltransferase 2 (mitochondrial)		12q12-q14	NM_005412	6472	2.3	3.4E-07	
3928668	TIAM1	T-cell lymphoma invasion and metastasis 1		21q22.1	NM_003253	7074	3.0	4.3E-12	
3944147	MCM5	minichromosome maintenance complex component 5		22q13.1	NM_006739	4174	2.9	6.4E-07	

Table S7. Gene lists for intra-NCTX clusters illustrated in Figure 3a

Exon Array Transcript Cluster ID	Official Gene Symbol	Gene Name	Confirmation	Cytoband	RefSeq Accession	Entrez GeneID	Maximum Fold Change	corrected p-value (False Discovery Rate)	OMIM and Genetic Association Database annotations
									Numbered annotations refer to OMIM; references are retrieved from the NCBI GAD at geneticassociationdb.nih.gov
Cluster 1: PFC (MS)									
3450655	CPNE8	copine VIII	qRT-PCR	12q12	NM_153634	144402	3.4	1.1E-16	
3571059	DPF3	D4 zinc and double PHD fingers family 3		14q24.3-q31.1	NM_012074	8110	1.6	1.6E-08	
3141589	IL7	interleukin 7		8q12-q13	NM_000880	3574	1.8	1.8E-06	
2591643	COL5A2	collagen type V alpha 2		2q14-q32	NM_000393	1290	1.5	4.0E-10	
3528759	ABHD4	abhydrolase domain containing 4		14q11.2	NM_022060	63874	1.4	3.4E-06	
3051753	FKBP9	FK506 binding protein 9 63 kDa		7p11.1	NM_007270	360132	1.5	1.3E-06	
3218528	ABCA1	ATP-binding cassette sub-family A (ABC1) member 1	qRT-PCR	9q31.1	NM_005502	19	1.7	2.0E-12	Alzheimer's disease (Wang, F. et al. 2007)
3813604	ZADH2	zinc binding alcohol dehydrogenase domain containing 2		18q22.3	NM_175907	284273	1.4	5.2E-05	
3498837	PCCA	propionyl Coenzyme A carboxylase alpha polypeptide		13q32	NM_000282	5095	1.5	2.1E-03	
3884324	CTNNBL1	catenin beta like 1		20q11.23-q12	NM_030877	56259	1.5	2.7E-09	
2442008	RXRG	retinoid X receptor gamma		1q22-q23	NM_006917	6258	2.5	3.2E-07	
2671728	CDCP1	CUB domain containing protein 1		3p21.31	NM_022842	64866	1.3	5.1E-05	
2597867	IKZF2	IKAROS family zinc finger 2 (Helios)		2qter	NM_001079526	22807	1.2	1.1E-03	
2967276	POPDC3	popeye domain containing 3	qRT-PCR	6q21	NM_022361	64208	2.2	2.7E-14	
2330723	DNALI1	dynein axonemal light intermediate chain 1		1p35.1	NM_003462	7802	1.2	6.8E-03	
2955691	DSCR1L1	Down syndrome critical region gene 1-like 1		6p12.3	NM_005822	10231	3.4	1.4E-09	
2975867	MAP3K5	mitogen-activated protein kinase kinase kinase 5	qRT-PCR failed to confirm	6q22.33	NM_005923	4217	1.6	2.2E-07	
3467949	SLC5A8	solute carrier family 5 (iodide transporter) member 8	qRT-PCR	12q23.2	NM_145913	160728	1.6	4.0E-11	
2899413	BTN2A3	butyrophilin subfamily 2 member A3		6p21.3	NM_024018	10384	1.6	1.6E-04	
2382467	AKR1B1	aldo-keto reductase family 1 member B1 (aldose reductase)		1q42.12	NM_001628	440723	3.2	7.3E-14	
2469825	GREB1	GREB1 protein		2p25.1	NM_014668	9687	1.5	1.1E-11	
3884405	C20orf102	chromosome 20 open reading frame 102	qRT-PCR	20q11.23	NM_080607	128434	4.8	1.3E-19	
2371474	C1orf19	chromosome 1 open reading frame 19		1q25	NM_052965	116461	1.3	5.6E-03	
3007024	WBSCR17	Williams-Beuren syndrome chromosome region 17		7q11.23	NM_022479	64409	2.3	8.8E-10	
3992747	ZIC3	Zic family member 3 heterotaxy 1 (odd-paired homolog Drosophila)		Xq26.2	NM_003413	7547	1.5	2.7E-06	
2873897	MARCH3	membrane-associated ring finger (C3HC4) 3	qRT-PCR	5q23.2	NM_178450	115123	2.1	2.9E-08	
2697863	RBP1	retinol binding protein 1 cellular		3q23	NM_002899	5947	1.9	6.2E-04	
3466556	NTN4	netrin 4	qRT-PCR	12q22-q23	NM_021229	59277	2.2	7.4E-06	
3727510	STXBP4	syntaxin binding protein 4		17q22	NM_178509	252983	1.4	9.8E-03	
Cluster 2: PFC (TAS)									
3748432	FAM106A	family with sequence similarity 106 member A		17p11.2	XR_017880	440411	2.2	1.2E-05	
2348569	PALMD	palmdelphin	qRT-PCR	1p22-p21	NM_017734	54873	1.8	6.1E-05	
2617188	ITGA9	integrin alpha 9	qRT-PCR	3p21.3	NM_002207	3680	1.9	1.7E-14	
2643217	TF	transferrin		3q22.1	NM_001063	7018	1.4	9.7E-06	Alzheimer's Disease (Zambenedetti, P. et al. 2003)
3102372	SULF1	sulfatase 1	qRT-PCR	8q13.2-q13.3	NM_015170	23213	3.9	6.7E-14	
3748400	LOC162632	TL132 pseudogene		17p11.2	NR_003190	220594	2.0	4.3E-07	
3712197	USP6	ubiquitin specific peptidase 6 (Tre-2 oncogene)		17p11.2	NM_004505	220594	2.0	9.7E-08	
3707498	USP6	ubiquitin specific peptidase 6 (Tre-2 oncogene)		17p11.2	BC029495	220594	2.2	5.8E-05	
3973891	SYTL5	synaptotagmin-like 5		Xp21.1	NM_138780	94122	1.3	4.9E-03	
3814033	MBP	myelin basic protein		18q23	NM_002385	4155	1.6	5.6E-03	
3146455	RGS22	regulator of G-protein signalling 22		8q22.2	NM_015668	26166	1.5	2.7E-07	
3246888	PRKG1	protein kinase cGMP-dependent type I	qRT-PCR failed to confirm	10q11.2	NM_006258	5592	1.7	3.3E-06	
3652867	SCNN1G	sodium channel nonvoltage-gated 1 gamma		16p12	NM_001039	6340	1.5	1.8E-05	
3558418	STXBP6	syntaxin binding protein 6 (amisyn)	qRT-PCR	14q12	NM_014178	29091	2.0	2.3E-08	
2749484	RXFP1	relaxin/insulin-like family peptide receptor 1	qRT-PCR	4q32.1	NM_021634	59350	2.0	4.5E-06	
3428190	SLC17A8	solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter) member 8	qRT-PCR	12q23.1	NM_139319	246213	2.1	5.2E-05	
3699581	CFDP1	craniofacial development protein 1		16q23.1	NM_006324	124491	1.4	3.7E-04	
3319137	PPFIBP2	PTPRF interacting protein binding protein 2 (liprin beta 2)	qRT-PCR failed to confirm	11p15.4	NM_003621	8495	1.5	2.7E-09	
2689516	ZBTB20	zinc finger and BTB domain containing 20		3q13.2	NM_015642	26137	1.5	1.2E-03	
3795942	YES1	v-yes-1 Yamaguchi sarcoma viral oncogene homolog 1		18p11.31-p11.21	NM_005433	7525	2.0	9.7E-07	
3762519	SPAG9	sperm associated antigen 9		17q21.33	NM_003971	9043	1.4	2.1E-03	
3040897	CDCA7L	cell division cycle associated 7-like		7p15.3	NM_018719	55536	1.5	5.8E-03	
2944491	MBOAT1	membrane bound O-acyltransferase domain containing 1		6p22.3	NM_001080480	154141	1.3	6.0E-06	
3385951	NOX4	NADPH oxidase 4		11p11.12	NM_016931	283247	2.0	1.7E-06	
2426734	C1orf62	chromosome 1 open reading frame 62	qRT-PCR	1p13.3	NM_152763	254268	1.6	3.1E-04	
3618333	MEIS2	Meis homeobox 2		15q14	NM_172316	4212	2.7	5.3E-15	
2820622	ANKRD32	ankyrin repeat domain 32	qRT-PCR	5q15	NM_032290	84250	2.4	2.2E-03	
2649367	PTX3	pentraxin-related gene rapidly induced by IL-1 beta		3q25	NM_002852	5806	1.4	1.1E-03	
Cluster 3: TAU+TAS+OCC									
2993124	NPY	neuropeptide Y	qRT-PCR, ISH	7p15.1	NM_000905	4852	3.6	9.8E-13	
3928668	TIAM1	T-cell lymphoma invasion and metastasis 1		21q22.11	NM_003253	7074	1.6	3.1E-05	
3192353	NTNG2	netrin G2		9q34	NM_032536	84628	4.7	1.0E-12	
2479433	PLEKHH2	pleckstrin homology domain containing, family H (with MyTH4 domain) member 2		2p21	NM_172069	130271	1.6	3.2E-09	
3188656	LHX2	LIM homeobox 2		9q33-q34.1	NM_004789	9355	1.9	3.5E-08	
2586603	TLK1	tousled-like kinase 1		2q31.1	NM_012290	9874	1.8	2.6E-06	
3198346	PTPRD	protein tyrosine phosphatase, receptor type, D		9p23-p24.3	NM_001040712	5789	1.3	5.6E-03	
2820394	NR2F1	nuclear receptor subfamily 2, group F, member 1		5q14	NM_005654	7025	3.8	4.1E-13	
2405284	TMEM54	transmembrane protein 54		1p35-p34	NM_033504	113452	1.6	9.6E-06	
3723627	CRHR1	corticotropin releasing hormone receptor 1		17q12-q22	NM_004382	1394	1.4	4.3E-06	depression (Licinio et al., 2004; Liu et al., 2006); alcohol abuse (Treutlein et al., 2006)
3868963	NKG7	natural killer cell group 7 sequence		19q13.33	NM_005601	4818	1.8	4.8E-09	
3456006	CSAD	cysteine sulfinic acid decarboxylase		12q13.11-q14.3	NM_015989	51380	2.1	5.3E-09	
2766122	FLJ13197	hypothetical FLJ13197		4p14	NM_024614	79667	1.7	8.3E-05	
3188697	NEK6	NIMA (never in mitosis gene a)-related kinase 6		9q33.3-q34.11	NM_014397	10783	1.9	2.9E-08	
3540552	FUT8	fucosyltransferase 8 (alpha (1,6) fucosyltransferase)		14q24.3	NM_004480	2530	1.5	3.0E-04	

3637367	KLHL25	kelch-like 25		15q25.3	NM_022480	64410	1.2	7.0E-03	
Cluster 4: TAU+TAS									
3915936	NCAM2	neural cell adhesion molecule 2		21q21.1	NM_004540	4685	2.5	2.5E-07	
3301914	PIK3AP1	phosphoinositide-3-kinase adaptor protein 1		10q24.1	NM_152309	118788	1.4	2.5E-06	
3397003	KIRREL3	kin of IRRE like 3 (Drosophila)		11q24	NM_032531	84623	1.8	2.1E-05	
3995392	ZNF185	zinc finger protein 185 (LIM domain)		Xq28	BX537525	7739	1.5	4.5E-09	
3512948	C13orf18	chromosome 13 open reading frame 18		13q14.12	BC043488	80183	1.4	1.6E-04	
3597914	SNX22	sorting nexin 22		3p21.3	NM_024798	1238	1.8	2.1E-10	
3167511	GALT	galactose-1-phosphate uridylyltransferase		9p13	NM_000155	2592	1.4	7.4E-09	
2569215	ST6GAL2	ST6 beta-galactosamide alpha-2 6-sialyltranferase 2		2q11.2-q12.1	NM_032528	84620	1.9	6.9E-07	
2376548	MFSD4	major facilitator superfamily domain containing 4		1q32.1	NM_181644	148808	1.5	1.4E-03	
3590164	SPINT1	serine peptidase inhibitor Kunitz type 1		15q15.1	NM_001032367	6692	1.9	3.4E-12	
3175274	PCSK5	proprotein convertase subtilisin/kexin type 5		9q21.3	NM_006200	5125	1.6	2.2E-04	
3510450	LHFP	lipoma HMGIC fusion partner		13q12	NM_005780	10186	2.8	2.5E-14	
3913018	LAMA5	laminin alpha 5		20q13.2-q13.3	NM_005560	3911	1.3	3.4E-05	
3815399	CNN2	calponin 2		19p13.3	NM_004368	1265	1.9	6.0E-06	
3020343	MET	met proto-oncogene (hepatocyte growth factor receptor)		7q31	NM_000245	4233	4.6	5.2E-11	autism (Campbell, D. B. et al. 2006)
2696309	AMOTL2	angiomotin like 2		3q21-q22	NM_016201	51421	1.4	5.6E-03	
3752709	MYO1D	myosin ID		17q11-q12	NM_015194	4642	1.6	4.5E-03	
2694817	PLXND1	plexin D1		3q21.3	NM_015103	23129	2.1	2.6E-13	
4026624	PNCK	pregnancy upregulated non-ubiquitously expressed CaM kinase		Xq28	NM_001039582	139728	1.7	5.4E-08	
2608725	BHLHB2	basic helix-loop-helix domain containing class B 2		3p26	NM_003670	8553	3.6	1.5E-17	
3721010	IGFBP4	insulin-like growth factor binding protein 4		17q12-q21.1	NM_001552	3487	1.9	7.4E-07	
2349863	NTNG1	netrin G1		1p13.3	NM_014917	22854	2.5	1.4E-07	schizophrenia (Fukasawa, M. et al. 2004)
2851511	CDH9	cadherin 9 type 2 (T1-cadherin)		5p14	NM_016279	1007	2.2	4.1E-05	
3743701	PLSCR3	phospholipid scramblase 3		17p13.1	NM_020360	57048	1.3	9.3E-03	
3608466	MAN2A2	mannosidase alpha class 2A member 2		15q26.1	NM_006122	4122	1.2	9.5E-03	
Cluster 5: PFC+TAS									
2598828	IGFBP5	insulin-like growth factor binding protein 5	qRT-PCR	2q33-q36	NM_000599	3488	4.5	2.0E-13	
3153716	ADCY8	adenylate cyclase 8 (brain)	qRT-PCR	8q24	NM_001115	114	2.2	6.2E-10	
2450865	CSRP1	cysteine and glycine-rich protein 1		1q32	NM_004078	1465	1.5	4.7E-05	
3029900	CNTNAP2	contactin associated protein-like 2	qRT-PCR, ISH, IHC	7q35-q36	NM_014141	26047	3.0	3.0E-08	612100: AUTISM, SUSCEPTIBILITY TO, 15; AUTS15
2624639	CACNA2D3	calcium channel voltage-dependent alpha 2/delta 3 subunit		3p21.1	NM_018398	55799	1.6	1.4E-05	
3898355	FLRT3	fibronectin leucine rich transmembrane protein 3		20p11	NM_198391	23767	2.3	5.8E-03	
2898934	SCGN	secretagogin EF-hand calcium binding protein		6p22.3-p22.1	NM_006998	10590	1.5	2.6E-04	
3278305	C10orf30	chromosome 10 open reading frame 30		10p13	BC031618	222389	1.4	1.9E-03	
2683763	ROBO1	roundabout axon guidance receptor homolog 1 (Drosophila)	qRT-PCR	3p12	NM_002941	6091	2.4	1.4E-12	606896: DYSLEXIA, SUSCEPTIBILITY TO, 5; DYX5
2418078	NEGR1	neuronal growth regulator 1		1p31.1	NM_173808	257194	1.8	7.4E-03	
3125915	MTUS1	mitochondrial tumor suppressor 1		8p22	NM_001001931	57509	1.6	2.5E-07	
3669171	CNTNAP4	contactin associated protein-like 4		16q23.1	NM_033401	85445	1.8	3.2E-07	
3144033	CALB1	calbindin 1 28kDa	qRT-PCR, IHC	8q21.3-q22.1	NM_004929	793	2.8	1.2E-05	
2703836	SLITRK3	SLIT and NTRK-like family member 3		3q26.1	NM_014926	22865	1.9	1.3E-03	
3344142	NAALAD2	N-acetylated alpha-linked acidic dipeptidase 2		11q14.3-q21	NM_005467	10003	1.5	3.5E-03	
Cluster 6: OCC									
2736462	BMPR1B	bone morphogenetic protein receptor type IB		4q22-q24	NM_001203	658	2.6	1.1E-11	
3572517	TGFB3	transforming growth factor beta 3		14q24	NM_003239	7043	2.3	1.1E-06	
3219030	FLJ13385	hypothetical protein FLJ13385		9q32	NM_024853	79911	1.9	8.6E-06	
3106559	CP	ceruloplasmin (ferroxidase)		8q23	NM_000096	115111	2.3	9.3E-08	
3999395	MID1	midline 1 (Opitz/BBB syndrome)	qRT-PCR, ISH	Xp22	NM_033291	4281	2.2	4.0E-06	
2889241	NY-REN-7	NY-REN-7 antigen		5q35.2	AB018295	389347	1.5	6.6E-06	
3144346	RUNX1T1	runt-related transcription factor 1; translocated to 1 (cyclin D-related)		8q22	NM_175635	862	1.9	4.1E-05	
2600689	EPHA4	EPH receptor A4		2q36.1	NM_004438	2043	2.6	4.5E-08	
3671727	ATP2C2	ATPase Ca++ transporting type 2C member 2		16q24.1	NM_014861	9914	1.3	9.9E-04	
3564620	NID2	nidogen 2 (osteonidogen)		14q21-q22	NM_007361	22795	1.6	6.9E-10	
3862188	FCGBP	Fc fragment of IgG binding protein		19q13.1	NM_003890	8857	1.6	1.7E-03	

Table S8. Gene lists for PFC clusters illustrated in Figure 3b

Exon Array Transcript Cluster ID	Official Gene Symbol	Gene Name	Confirmation	Cytoband	RefSeq Accession	Entrez GeneID	Maximum Fold Change	corrected p-value (False Discovery Rate)	OMIM and Genetic Association Database annotations
Cluster 1: PFC > MS									Numbered annotations refer to OMIM; references are retrieved from the NCBI GAD at geneticassociationdb.nih.gov
3618333	MEIS2	Meis homeobox 2		15q14	NM_172316	4212	3.6	5.0E-05	
3882012	DNMT3B	DNA (cytosine-5-)-methyltransferase 3 beta		20q11.2	NM_175848	1789	1.3	5.1E-05	
2598828	IGFBP5	insulin-like growth factor binding protein 5	qRT-PCR	2q33-q36	NM_000599	3488	2.7	4.0E-05	
3884324	CTNNBL1	catenin beta like 1		20q11.23-q12	NM_030877	56259	1.8	1.9E-04	
3218528	ABCA1	ATP-binding cassette sub-family A (ABC1) member 1	qRT-PCR	9q31.1	NM_005502	19	1.6	4.6E-05	Alzheimer's disease (Wang, F. et al. 2007)
3102372	SULF1	sulfatase 1	qRT-PCR	8q13.2-q13.3	NM_015170	23213	2.7	4.0E-05	
3797295	L3MBTL4	l(3)mbt-like 4 (Drosophila)		18p11.31	NM_173464	91133	2.1	7.7E-07	
2617188	ITGA9	integrin alpha 9	qRT-PCR	3p21.3	NM_002207	3680	1.7	4.7E-04	
2967276	POPDC3	popeye domain containing 3	qRT-PCR	6q21	NM_022361	64208	2.3	1.3E-04	
3319137	PPFIBP2	PTPRF interacting protein binding protein 2 (liprin beta 2)	qRT-PCR failed to confirm	11p15.4	NM_003621	8495	1.8	1.9E-04	
Cluster 2: OPFC									
3023483	FAM40B	family with sequence similarity 40 member B		7q32.1	BC019064	57464	3.3	1.2E-14	
2883878	EBF1	early B-cell factor 1		5q34	NM_024007	1879	2.2	4.9E-05	
2442008	RXRG	retinoid X receptor gamma		1q22-q23	NM_006917	6258	4.2	1.1E-05	
3798778	FAM38B	family with sequence similarity 38 member B		18p11.22	NM_022068	63895	2.1	7.7E-07	
2614369	RARB	retinoic acid receptor beta		3p24	NM_000965	5915	2.9	2.4E-03	
Cluster 3: OPFC+DLPFC+VLPFC									
2343418	PTGFR	prostaglandin F receptor (FP)		1p31.1	NM_001039585	5737	1.5	5.7E-04	
3812864	CBLN2	cerebellin 2 precursor	qRT-PCR	18q22.2	NM_182511	147381	4.1	5.8E-03	
3153716	ADCY8	adenylate cyclase 8 (brain)	qRT-PCR	8q24	NM_001115	114	2.0	8.1E-05	
3197014	GLIS3	GLIS family zinc finger 3		9p24.2	NM_152629	169792	2.7	4.0E-05	
2426734	C1orf62	chromosome 1 open reading frame 62	qRT-PCR	1p13.3	NM_152763	254268	2.2	4.9E-05	
3558418	STXBP6	syntaxin binding protein 6 (amisyn)	qRT-PCR	14q12	NM_014178	29091	2.8	4.7E-05	
3898355	FLRT3	fibronectin leucine rich transmembrane protein 3		20p11	NM_198391	23767	4.3	8.1E-03	
2690715	IGSF11	immunoglobulin superfamily member 11		3q13.32	NM_152538	152404	1.8	1.9E-04	
2447192	RGS8	regulator of G-protein signalling 8	qRT-PCR failed to confirm	1q25	NM_033345	85397	2.5	2.0E-05	
3029900	CNTNAP2	contactin associated protein-like 2	qRT-PCR, ISH, IHC	7q35-q36	NM_014141	26047	5.1	6.4E-04	612100: AUTISM, SUSCEPTIBILITY TO, 15; AUTS15
3999568	ARHGAP6	Rho GTPase activating protein 6		Xp22.3	NM_013422	395	2.2	4.9E-05	
Cluster 4: MPFC									
2992814	GPNMB	glycoprotein (transmembrane) nmb		7p15	NM_001005340	10457	1.4	6.9E-04	
2944491	MBOAT1	membrane bound O-acyltransferase domain containing 1		6p22.3	NM_001080480	154141	1.6	4.6E-05	
3278305	C10orf30	chromosome 10 open reading frame 30		10p13	BC031618	222389	1.5	5.7E-04	
3571059	DPF3	D4 zinc and double PHD fingers family 3		14q24.3-q31.1	NM_012074	8110	1.7	4.7E-04	
3995254	GABRQ	gamma-aminobutyric acid (GABA) receptor theta		Xq28	NM_018558	55879	1.6	4.6E-05	
3067302	LAMB1	laminin beta 1		7q22	NM_002291	3912	1.5	5.7E-04	
3511031	ELF1	E74-like factor 1 (ets domain transcription factor)		13q13	NM_172373	1997	1.5	5.7E-04	
3642200	PCSK6	proprotein convertase subtilisin/kexin type 6		15q26.3	NM_138319	5046	1.6	4.6E-05	
3132940	ANK1	ankyrin 1 erythrocytic		8p11.1	NM_000037	286	1.5	5.7E-04	
3326635	CD44	CD44 molecule (Indian blood group)		11p13	NM_001001389	960	1.8	1.9E-04	
3430228	RFX4	regulatory factor X 4 (influences HLA class II expression)		12q24	NM_213594	5992	1.6	4.6E-05	
3491486	PCDH17	protocadherin 17		13q21.1	NM_001040429	27253	2.9	2.4E-03	
2899413	BTN2A3	butyrophilin subfamily 2 member A3		6p21.3	NM_024018	10384	1.3	5.1E-05	
Cluster 5: MPFC+MS									
2709631	MASP1	mannan-binding lectin serine peptidase 1 (C4/C2 activating component of Ra-reactive factor)	qRT-PCR	3q27-q28	NM_001879	5648	6.3	6.5E-06	
3169331	ALDH1B1	aldehyde dehydrogenase 1 family member B1		9p11.1	NM_000692	219	2.0	8.1E-05	
3958658	LARGE	like-glycosyltransferase		22q12.3	NM_004737	9215	1.6	4.6E-05	
3400586	WNT5B	wingless-type MMTV integration site family member 5B		12p13.3	NM_030775	81029	1.5	5.7E-04	
3750767	SPAG5	sperm associated antigen 5		17cen-q12	NM_006461	230	2.1	7.7E-07	
3733911	SSTR2	somatostatin receptor 2		17q24	NM_001050	6752	2.3	1.3E-04	
3352618	GRIK4	glutamate receptor ionotropic kainate 4		11q22.3	NM_014619	2900	1.7	4.7E-04	
3197955	GLDC	glycine dehydrogenase (decarboxylating)		9p22	NM_000170	2731	1.6	4.6E-05	
2783207	PRSS12	protease serine 12 (neurotrypsin motopsin)		4q28.1	NM_003619	8492	2.6	1.0E-03	
3181976	NR4A3	nuclear receptor subfamily 4 group A member 3		9q22	NM_173200	8013	1.7	4.7E-04	
2559189	CYP26B1	cytochrome P450 family 26 subfamily B polypeptide 1	qRT-PCR	2p13.3	NM_019885	56603	2.0	8.1E-05	
3333595	GNG3	guanine nucleotide binding protein (G protein) gamma 3		11p11	NM_012202	2785	1.5	5.7E-04	
2709132	ETV5	ets variant gene 5 (ets-related molecule)		3q28	NM_004454	2119	2.3	1.3E-04	
Cluster 6: VLPFC+MS									
3135340	OPRK1	opioid receptor kappa 1		8q11.2	NM_000912	4986	3.2	1.1E-03	
2378662	TRAF5	TNF receptor-associated factor 5		1q32	NM_001033910	7188	1.5	5.7E-04	
2778440	UNC5C	unc-5 homolog C (C. elegans)		4q21-q23	NM_003728	8633	2.0	8.1E-05	
2731636	DKFZP564O0823	DKFZP564O0823 protein		4q13.3-q21.3	NM_015393	25849	1.8	1.9E-04	
2805232	PDZD2	PDZ domain containing 2		5p13.3	NM_178140	23037	2.1	7.7E-07	
2503929	CNTNAP5	contactin associated protein-like 5		2q14.3	NM_130773	129684	1.7	4.7E-04	
3019793	FOXP2	forkhead box P2	qRT-PCR, IHC	7q31	NM_148899	93986	1.9	6.9E-06	60208: speech-language disorder 1
2603987	NGEF	neuronal guanine nucleotide exchange factor		2q37	NM_019850	25791	1.5	5.7E-04	
2908154	C6orf206	chromosome 6 open reading frame 206		6p21.1	NM_152732	221421	2.2	4.9E-05	
3148545	RSPO2	R-spondin 2 homolog (Xenopus laevis)		8q23.1	NM_178565	340419	2.1	7.7E-07	
2709778	BCL6	B-cell CLL/lymphoma 6 (zinc finger protein 51)	qRT-PCR	3q27	NM_138931	604	3.5	2.0E-05	

Table S9a. Additional regional DEX genes validated

Exon Array Transcript Cluster ID	Official Gene Symbol	Entrez GeneID	RefSeq Accession	Exon Array:qRT-PCR Correlation	Exon Array p-value	qRT-PCR ANOVA p-value	Additional Confirmation	Peak Expression
2386943	ACTN2	88	NM_001103	0.95	1.5E-19	0.054		NCTX
3391149	CRYAB	1410	NM_001885	0.87	7.3E-22	0.0010		HIP
2745899	HHIP	64399	NM_022475	0.93	2.1E-23	0.086		HIP
3545634	NRXN3	9369	NM_138970	0.68	3.4E-17	0.015	ISH	STR
3889419	TSHZ2 (C20orf17)	128553	NM_173485	0.80	9.5E-24	0.0020	ISH	STR
3942838	LIMK2	3985	NM_016733	0.99	3.1E-25	0.085		THM
3129026	CHRNA2	1135	NM_000742	0.98	1.4E-21	n.s.		THM
2732844	ANXA3	306	NM_005139	0.99	1.2E-42	0.00017		THM
2922972	DCBLD1	285761	NM_173674	0.61	8.6E-21	0.017		THM
3177111	NTRK2	4915	NM_001018066	n.s.	3.3E-03	0.067		CBL
2871241	MCC	4163	NM_001085377	0.96	7.5E-24	0.024	ISH	CBL
3790982	CDH20	28316	NM_031891	0.81	3.7E-17	0.016	ISH	CBL

n.s.= not significant (p>0.05)

Table S9b. Additional intra-NCTX DEX genes validated

Exon Array Transcript Cluster ID	Official Gene Symbol	Entrez GeneID	RefSeq Accession	Exon Array:qRT-PCR Correlation	Exon Array p-value	qRT-PCR ANOVA p-value	Additional Confirmation	Peak Expression
3579114	BCL11B	64919	NM_138576	ND	1.4E-02	ND	IHC	OPFC
3762753	CA10	56934	NM_020178	0.98	2.0E-06	0.0106		OPFC
2523540	CYP20A1	57404	NM_177538	0.96	1.4E-08	0.0006		OPFC
2515471	DLX1	1745	NM_178120	ND	3.1E-02	ND	IHC	OPFC
2586989	DLX2	1746	NM_004405	ND	6.2E-03	ND	IHC	OPFC
2448710	FAM5C	339479	NM_199051	0.80	4.9E-07	0.0007		OPFC
2474977	FOSL2	2355	NM_005253	0.97	1.2E-03	0.0492		OPFC
2794454	GLRA3	8001	NM_006529	0.85	7.6E-04	n.s.		OPFC
3987876	HTR2C	3358	NM_000868	0.87	2.9E-04	2.9E-05		OPFC
2782267	NEUROG2	63973	NM_024019	0.94	3.9E-06	2.8E-06		OPFC
2738378	NPNT	255743	NM_198278	0.93	1.0E-05	0.0156		OPFC
3236786	PTER	9317	NM_001001484	0.81	1.7E-04	n.s.		OPFC
3519624	SLITRK1	114798	NM_052910	ND	3.7E-02	ND	IHC	OPFC
2512752	TBR1	10716	NM_006593	ND	3.6E-03	ND	IHC	OPFC
2646818	ZIC1	7545	NM_003412	0.90	1.6E-06	n.s.		OPFC
3137120	CA8	767	NM_004056	0.96	6.3E-10	7.8E-05		DLPFC
2710599	CLDN1	9076	NM_021101	0.90	1.6E-08	0.0043		DLPFC
2941784	NEDD9	4739	NM_006403	0.91	6.9E-07	2.6E-05		DLPFC
2811145	PART1	25859	NM_016590	0.94	7.2E-15	1.9E-09		DLPFC
3318443	TRIM22	10346	NM_006074	0.38	7.3E-04	0.0064		DLPFC
3222534	ASTN2	23245	NM_198186	0.88	1.1E-11	1.3E-06		MPFC
2980516	CNKSR3	154043	NM_173515	0.98	2.2E-09	6.3E-05		MPFC
3258384	CYP26A1	1592	NM_000783	0.93	1.7E-08	0.0007		MPFC
2667597	GADL1	339896	NM_207359	0.94	2.2E-13	0.0004		MPFC
3587553	GREM1	26585	NM_013372	0.87	2.6E-08	0.0390		MPFC
2787459	INPP4B	8821	NM_003866	0.67	4.0E-05	n.s.		MPFC
3086809	KIAA1456	57604	NM_020844	0.81	6.7E-09	0.0004		MPFC
2962820	ME1	4199	NM_002395	0.37	5.6E-07	0.0025		MPFC
4006280	NDP	4693	NM_000266	0.93	1.2E-14	1.1E-05		MPFC
3473524	NOS1	4842	NM_000620	ND	1.8E-07	ND	IHC	MPFC
3300749	RBP4	5950	NM_006744	0.94	3.4E-06	0.0453		MPFC
3319073	SYT9	143425	NM_175733	0.94	3.7E-13	0.0008		MPFC
3487600	C13orf31	144811	NM_153218	0.61	1.8E-04	n.s.		VLPFC
3102204	C8orf34	116328	NM_052958	0.83	1.2E-07	0.0324		VLPFC
3690747	CBLN1	869	NM_004352	0.96	2.3E-13	1.4E-07	ISH	VLPFC
2805078	CDH6	1004	NM_004932	0.96	1.9E-11	0.0074		VLPFC
3464417	MGAT4C	25834	NM_013244	0.68	4.1E-04	n.s.		VLPFC
2966496	MCHR2	84539	NM_032503	0.97	2.0E-06	0.0168		VLPFC
2918982	GRIK2	2898	NM_175768	0.78	1.0E-05	n.s.		VLPFC
2911003	HCRTR2	3062	NM_001526	0.87	2.0E-05	0.0001		VLPFC
3448152	ITPR2	3709	NM_002223	0.86	3.2E-04	0.0163		VLPFC
3931495	KCNJ6	3763	NM_002240	0.85	2.2E-09	0.0002		VLPFC
2750198	NPY5R	4889	NM_006174	0.74	8.5E-03	n.s.		VLPFC
3389954	SLN	6588	NM_003063	0.93	7.0E-11	1.4E-05		VLPFC
2607757	CNTN6	27255	NM_014461	0.96	5.7E-09	0.0028		MS
3016380	CUTL1	1523	NM_001913	ND	7.4E-05	ND	IHC	MS
2497812	POU3F2	5455	NM_006236	ND	6.2E-05	ND	IHC	MS
2435383	S100A10	6281	NM_002966	0.93	7.9E-06	0.0058		MS
2590715	FRZB	2487	NM_001463	0.94	2.1E-06	0.0193		PAS
2977122	NMBR	4829	NM_002511	0.91	2.1E-03	0.0022		PAS
3181240	TMOD1	7111	NM_003275	ND	1.2E-10	ND	ISH	PAS
3429008	ASCL1	429	NM_004316	ND	6.1E-08	ND	IHC	TAS
3667508	CALB2	794	NM_007088	ND	7.0E-05	ND	IHC	TAS
2490351	CTNNA2	1496	NM_004389	0.69	5.9E-03	0.0045		TAS
3324162	LUZP2	338645	NM_001009909	0.57	1.0E-06	n.s.		TAS
3589458	THBS1	7057	NM_003246	0.92	1.4E-07	1.1E-05	ISH	TAU
3219621	CTNNAL1	8727	NM_003798	0.67	9.2E-03	0.0001		OCC
2632225	EPHA3	2042	NM_005233	0.94	2.5E-04	4.6E-05		OCC
2965206	EPHA7	2045	NM_004440	0.88	2.3E-02	0.0001		OCC
3799615	PTPN2	5771	NM_080423	0.90	4.4E-08	0.0195		OCC

ND= No data; n.s.= not significant (p>0.05)

Table S10. Perisylvian NCTX-enriched genes (FDR < 2.0E-4)

Exon Array Transcript Cluster ID	Official Gene Symbol	RefSeq Accession	p-value (FDR)	fold-change	has proximal haCNS? (Table S13)
2343823	LPHN2	NM_012302	2.41E-10	1.10	yes
2778440	UNC5C	NM_003728	4.10E-08	1.20	
3452478	AMIGO2	NM_181847	1.10E-07	1.23	
3896257	PROKR2	NM_144773	1.11E-07	1.27	
3135340	OPRK1	NM_000912	1.54E-07	1.25	
2603987	NGEF	NM_019850	3.38E-07	1.07	
3516639	PCDH9	NM_203487	5.06E-07	1.11	yes
2876793	TRPC7	NM_020389	5.06E-07	1.40	
3262715	SORCS3	NM_014978	5.38E-07	1.14	yes
3154398	ST3GAL1	NM_003033	8.42E-07	1.09	
3002873	LANCL2	NM_018697	9.36E-07	1.07	
3125342	SGCZ	NM_139167	9.36E-07	1.19	
3371114	SYT13	NM_020826	1.59E-06	1.07	
3796620	DLGAP1	NM_004746	1.61E-06	1.04	
3125116	DLC1	NM_182643	1.82E-06	1.09	yes
3238962	KIAA1217	NM_019590	1.86E-06	1.10	
3304073	KCNIP2	NM_014591	1.86E-06	1.06	
2593013	DNAH7	NM_018897	1.97E-06	1.19	
3913892	EEF1A2	NM_001958	1.97E-06	1.04	
3326826	FJX1	NM_014344	2.10E-06	1.06	yes
3653266	CACNG3	NM_006539	2.46E-06	1.09	yes
3324162	LUZP2	NM_001009909	3.73E-06	1.25	
2854445	DAB2	NM_001343	4.49E-06	1.21	yes
2362702	DUSP23	NM_017823	4.49E-06	1.06	
2501835	DPP10	NM_020868	4.49E-06	1.11	yes
3148545	RSPO2	NM_178565	4.49E-06	1.27	
2896888	CAP2	NM_006366	4.49E-06	1.05	
2582124	NR4A2	NM_006186	4.49E-06	1.19	
3510126	TRPC4	NM_016179	4.72E-06	1.30	
3908934	PTGIS	NM_000961	4.72E-06	1.07	
2862696	ENC1	NM_003633	4.72E-06	1.05	
3618736	RASGRP1	NM_005739	4.72E-06	1.16	
3184408	PALM2-AKAP2	NM_007203	4.88E-06	1.07	
3248661	ZNF365	NM_014951	5.13E-06	1.11	yes
2558612	TGFA	NM_003236	7.00E-06	1.13	
2380590	TGFB2	NM_003238	8.26E-06	1.18	
4001654	GPR64	NM_001079858	8.90E-06	1.26	
2733287	PRDM8	NM_020226	1.16E-05	1.06	
3567050	RTN1	NM_021136	1.16E-05	1.03	
2400177	CAMK2N1	NM_018584	1.16E-05	1.03	
2485636	SLC1A4	NM_003038	1.38E-05	1.05	
2400655	RAP1GAP	NM_002885	1.44E-05	1.08	
3058209	MAGI2	NM_012301	1.68E-05	1.04	
3877892	PCSK2	NM_002594	1.68E-05	1.14	
2805232	PDZD2	NM_178140	1.85E-05	1.08	
3898796	KIF16B	NM_024704	1.97E-05	1.10	
2997376	ANLN	NM_018685	2.00E-05	1.23	
3299945	HTR7	NM_019859	2.00E-05	1.22	
3051655	ECOP	NM_030796	2.10E-05	1.06	
3585272	GABRG3	NM_033223	2.14E-05	1.10	
2908154	C6orf206	BC029519	2.39E-05	1.07	

3458451	R3HDM2	NM_014925	2.64E-05	1.03	
3671202	CDH13	NM_001257	2.64E-05	1.14	yes
3634256	LINGO1	NM_032808	2.64E-05	1.05	yes
3811339	BCL2	NM_000633	2.64E-05	1.10	
2616804	STAC	NM_003149	2.68E-05	1.11	
3682445	XYLT1	NM_022166	2.68E-05	1.04	yes
3780334	MC5R	NM_005913	2.72E-05	1.16	
3090436	NEFM	NM_005382	2.73E-05	1.15	
2602368	DKFZp547H025	NM_020161	2.75E-05	1.29	
3139722	NCOA2	NM_006540	3.30E-05	1.05	
3464747	KITLG	NM_000899	3.40E-05	1.10	
2405576	CSMD2	NM_052896	3.41E-05	1.08	
2692319	ADCY5	NM_183357	3.53E-05	1.05	
2578790	LRP1B	NM_018557	4.16E-05	1.14	
3570373	SLC8A3	NM_033262	4.20E-05	1.07	
2842255	CPLX2	NM_006650	4.41E-05	1.06	
2387606	CHRM3	NM_000740	4.47E-05	1.18	
2379009	PPP2R5A	NM_006243	4.47E-05	1.12	
3512050	CCDC122	NM_144974	4.54E-05	1.09	
2513925	B3GALT1	NM_020981	4.77E-05	1.08	
3655687	PRRT2	NM_145239	4.94E-05	1.06	
2474019	DPYSL5	NM_020134	5.05E-05	1.04	
3019793	FOXP2	NM_148898	5.40E-05	1.11	yes
3011675	ZNF804B	NM_181646	5.40E-05	1.26	
3217242	GABBR2	NM_005458	5.40E-05	1.06	
2343025	AK5	NM_174858	5.90E-05	1.16	
3111561	PKHD1L1	NM_177531	6.28E-05	1.12	
2324097	PINK1	NM_032409	6.58E-05	1.04	
3506398	SHISA2	NM_001007538	6.76E-05	1.11	
2628482	FAM19A1	NM_213609	7.09E-05	1.16	yes
2975014	SGK1	NM_005627	7.22E-05	1.09	
3447348	SOX5	NM_152989	7.30E-05	1.04	yes
3148871	GOLSYN	NM_001099744	7.54E-05	1.07	
3915936	NCAM2	NM_004540	7.54E-05	1.10	yes
3371003	TP53I11	NM_001076787	7.67E-05	1.05	
3924041	ADARB1	NM_001033049	7.67E-05	1.04	
3587495	SCG5	NM_003020	7.82E-05	1.04	
3019158	LRRN3	NM_001099660	7.82E-05	1.09	
3257850	TNKS2	NM_025235	7.88E-05	1.05	
3751237	SEZ6	NM_178860	7.95E-05	1.04	
3484497	FRY	NM_023037	8.19E-05	1.07	
3553531	TNFAIP2	NM_006291	8.19E-05	1.09	
3687363	DOC2A	NM_003586	8.19E-05	1.06	
3128911	STMN4	NM_030795	8.42E-05	1.03	
4054204	APOD	NM_001647	8.43E-05	1.09	
3128271	NEFL	NM_006158	8.43E-05	1.15	
2973376	PTPRK	NM_002844	8.43E-05	1.11	yes
3646613	A2BP1	NM_145893	8.43E-05	1.03	yes
2825907	PRR16	NM_016644	8.45E-05	1.20	yes
3741547	P2RX5	NM_002561	8.83E-05	1.12	
3193725	OLFM1	NM_014279	9.58E-05	1.04	
3921599	PCP4	NM_006198	9.58E-05	1.09	
3074912	DGKI	NM_004717	9.58E-05	1.08	
2316245	PRKCZ	NM_001033582	9.69E-05	1.03	
3562910	MDGA2	NM_001113498	9.89E-05	1.10	yes
3726618	CACNA1G	NM_018896	1.01E-04	1.13	
4026624	PNCK	NM_001039582	1.01E-04	1.07	
2451958	PLEKHA6	NM_014935	1.02E-04	1.07	

2951567	FKBP5	NM_004117	1.09E-04	1.06	yes
3859668	LGI4	NM_139284	1.13E-04	1.13	
2445357	ASTN1	NM_004319	1.15E-04	1.04	yes
3947863	PARVB	NM_001003828	1.15E-04	1.07	
2452667	RAB7L1	NM_003929	1.15E-04	1.10	
3958475	SYN3	NM_003490	1.21E-04	1.06	
3217167	CORO2A	NM_003389	1.26E-04	1.05	
3278401	FRMD4A	NM_018027	1.30E-04	1.03	yes
3016380	CUX1	NM_181552	1.31E-04	1.07	
3897280	PAK7	NM_020341	1.34E-04	1.05	
3305801	SORCS1	NM_052918	1.35E-04	1.18	yes
3438482	MMP17	NM_016155	1.43E-04	1.09	
3421985	KCNMB4	NM_014505	1.43E-04	1.02	
3589458	THBS1	NM_003246	1.58E-04	1.16	
2394478	CHD5	NM_015557	1.66E-04	1.09	
2371346	RGL1	NM_015149	1.67E-04	1.04	
3190420	CERCAM	NM_016174	1.67E-04	1.06	
2626802	PTPRG	NM_002841	1.67E-04	1.06	yes
3871459	LOC284296	BC093900	1.67E-04	1.11	
3495968	SLITRK5	NM_015567	1.73E-04	1.07	yes
2869880	EFNA5	NM_001962	1.77E-04	1.10	yes
2881300	CAMK2A	NM_015981	1.79E-04	1.13	
3791341	ZCCHC2	NM_017742	1.79E-04	1.04	
2931036	ULBP1	NM_025218	1.87E-04	1.17	
3422458	TRHDE	NM_013381	1.91E-04	1.26	yes
3074039	SLC35B4	NM_032826	1.91E-04	1.04	
3267036	GRK5	NM_005308	1.91E-04	1.05	
3816883	BRUNOL5	NM_021938	1.97E-04	1.04	

Table S11. Comparison with published adult human brain microarray data

Adult human brain enrichment (Roth et al. 2006)	Consistent with late mid-fetal?	ProbeID	HuEx_BestMatch	Gene	EntrezGeneID	Accession	Description
Cortex	No	1557475_at	3437267		---	BC037880	CDNA clone IMAGE:5274197, partial cds
Cortex	Yes	224408_at	2966496	GPR145	84539	AF347063	G protein-coupled receptor 145
Cortex	Yes	220025_at	2512752	TBR1	10716	NM_006593	T-box, brain, 1
Cortex	No	1552715_a_at	2749484	RXFP1	59350	NM_021634	leucine-rich repeat-containing G protein-coupled receptor 7
Cortex	Yes	204589_at	3469597	ARK5	9891	NM_014840	AMP-activated protein kinase family member 5
Cortex	Yes	215972_at	2811145	PART1	---	AF070547	CDNA FLJ38449 fis, clone FEBRA2019389
Cortex	No	241365_at	2665196		6304	AA002140	CDNA FLJ42259 fis, clone TKIDN2011289
Cortex	Yes	203408_s_at	2665199	SATB1	6304	NM_002971	Special AT-rich sequence binding protein 1
Cortex	No	222590_s_at	3715368	NLK	51701	AF180819	nemo like kinase
Cortex	No	207366_at	3886758	KCNS1	3787	NM_002251	potassium voltage-gated channel, delayed-rectifier, subfamily S, member 1
Cortex	No	235147_at	2521865		440928	R56118	Hypothetical gene supported by AK096649
Cortex	No	1558972_s_at	2973340	C6orf190	387357	BC043608	chromosome 6 open reading frame 190
Cortex	No	212458_at	2556752	SPRED2	200734	H97931	sprouty-related, EVH1 domain containing 2
Cortex	ND*	242500_at	---		---	T87730	Transcribed locus
Cortex	Yes	215591_at	2594089	SATB2	23314	AK025127	
Cortex	Yes	225313_at	3891643	C20orf177	63939	AI627538	chromosome 20 open reading frame 177
Cortex	No	240503_at	2507380	R3HDM1	23518	AW274946	R3H domain (binds single-stranded nucleic acids) containing
Cortex	No	230137_at	2784074	FLJ30834	132332	BF673779	Hypothetical protein FLJ30834
Cortex	No	244130_at	3513211		---	AI379882	Transcribed locus
Cortex	No	1558293_at	2346689	KIAA1107	23285	BC037317	KIAA1107 protein
Amygdala&Hippocampus	Yes	215634_at	2836242	GRIA1	2890	AF007137	glutamate receptor, ionotropic, AMPA 1
Amygdala&Hippocampus	No	210408_s_at	3529467	CPNE6	9362	AB009288	copine VI (neuronal)
Amygdala&Hippocampus	No	229797_at	2420681	MCOLN3	55283	AI636080	mucolipin 3
Amygdala&Hippocampus	No	233793_at	2342904	SIAT7E	81849	AU145390	sialyltransferase 7 E
Amygdala&Hippocampus	No	237556_at	3655213		440352	AI914160	Similar to BTG3 associated nuclear protein isoform b
Amygdala&Hippocampus	No	207342_at	3693401	CNGB1	1258	NM_001297	cyclic nucleotide gated channel beta 1
Amygdala&Hippocampus	No	236782_at	2973856	SAMD3	154075	AI129628	sterile alpha motif domain containing 3
Amygdala&Hippocampus	No	64899_at	3821159	LPPR2	64748	AA209463	Lipid phosphate phosphatase-related protein type 2
Amygdala&Hippocampus	No	225355_at	2841120	DKFZP761M1511	54492	AK026748	Hypothetical protein DKFZP761M1511
Amygdala&Hippocampus	No	235183_at	2961345		---	AI479277	Homo sapiens, clone IMAGE:5312689, mRNA
Amygdala&Hippocampus	No	234279_at	3623948	FLJ41287	388121	AL117453	FLJ41287 protein
Amygdala&Hippocampus	No	236195_x_at	3841102	PRKCG	5582	AW027690	protein kinase C, gamma
Amygdala&Hippocampus	No	234994_at	2925590	KIAA1913	114801	AA088177	KIAA1913
Amygdala&Hippocampus	Yes	244323_at	3101153	BHLHB5	27319	AI968349	basic helix-loop-helix domain containing, class B, 5
Amygdala&Hippocampus	No	229552_at	3473373	LOC283454	283454	AI698128	Hypothetical protein LOC283454
Amygdala&Hippocampus	No	231392_at	3399672	LOC89944	89944	T66136	Hypothetical protein BC008326 [BLAST]
Amygdala&Hippocampus	No	215126_at	3635240		---	AL109716	CDNA FLJ42949 fis, clone BRSTN2006583
Amygdala&Hippocampus	No	1554474_a_at	2974413	MOXD1	26002	BC018756	monooxygenase, DBH-like 1
Amygdala&Hippocampus	No	1570515_a_at	2961347	FILIP1	27145	BC029425	filamin A interacting protein 1
Amygdala&Hippocampus	No	206864_s_at	3473378	HRK	8739	NM_003806	harakiri, BCL2 interacting protein (contains only BH3 domain)
Accumbens&Putamen	No	1554242_a_at	3531163	COCH	1690	BC007230	coagulation factor C homolog, cochlin (Limulus polyphemus)
Accumbens&Putamen	Yes	205013_s_at	3940099	ADORA2A	135	NM_000675	adenosine A2a receptor
Accumbens&Putamen	No	242054_s_at	2479943	SIX3	6496	AW473656	sine oculis homeobox homolog 3 (Drosophila)
Accumbens&Putamen	Yes	215343_at	3576441		440193	AF070587	Similar to 0610010D24Rik protein
Accumbens&Putamen	No	214655_at	2921022	GPR6	2830	U18549	G protein-coupled receptor 6
Accumbens&Putamen	Yes	1569648_at	2985497	DACT2	168002	AF318336	dapper homolog 2, antagonist of beta-catenin (xenopus)
Accumbens&Putamen	No	1552575_a_at	2909772	C6orf141	135398	NM_153344	chromosome 6 open reading frame 141
Accumbens&Putamen	No	230271_at	3789771		---	BG150301	Homo sapiens, clone IMAGE:4512785, mRNA
Accumbens&Putamen	No	239911_at	3789727	ONECUT2	9480	H49805	Full-length cDNA clone CS0DJ013YP06 of T cells (Jurkat cell line)
Accumbens&Putamen	Yes	243582_at	2833924	SH3RF2	153769	AW082633	SH3 domain containing ring finger 2
Accumbens&Putamen	No	233388_at	3628498	CA12	771	AK022350	carbonic anhydrase XII
Accumbens&Putamen	No	1557465_at	3514685	FLJ37307	283521	AK094626	Hypothetical protein FLJ37307
Accumbens&Putamen	Yes	227228_s_at	3576441	KIAA1509	440193	AB040942	KIAA1509
Accumbens&Putamen	Yes	229637_at	3430331	hSyn	55188	AA166891	Brain synembryn
Accumbens&Putamen	Yes	206518_s_at	3731543	RGS9	8787	NM_003835	regulator of G-protein signalling 9

Accumbens&Putamen	No	233446_at		3789766		---	AU145336	CDNA FLJ11655 fis, clone HEMBA1004554
Accumbens&Putamen	No	214608_s_at		3140037	EYA1	2138	AJ000098	eyes absent homolog 1 (Drosophila)
Accumbens&Putamen	No	218081_at		3895679	C20orf27	54976	NM_017874	chromosome 20 open reading frame 27
Accumbens&Putamen	Yes	1555292_at		3023483	FAM40B	57464	BC019064	family with sequence similarity 40, member B
Accumbens&Putamen	Yes	225165_at		3720322	PPP1R1B	84152	AK024593	protein phosphatase 1, regulatory (inhibitor) subunit 1B (DARPP-32)
Putamen	Yes	237492_at		2984275	PDE10A	10846	R37728	---
Thalamus	No	243154_at		3035988		---	AA215381	Transcribed locus
Thalamus	Yes	208443_x_at		2702610	SHOX2	6474	NM_006884	short stature homeobox 2
Thalamus	Yes	209325_s_at		2447148	RGS16	6004	U94829	regulator of G-protein signalling 16
Thalamus	No	225450_at		3345222	AMOTL1	154810	AI433831	angiomotin like 1
Thalamus	Yes	242348_at		2681044	FAM19A4	151647	AA757457	TAFA4 protein
Thalamus	No	237302_at		2980516		---	BF445031	Transcribed locus
Thalamus	Yes	203997_at		3219885	PTPN3	5774	NM_002829	protein tyrosine phosphatase, non-receptor type 3
Thalamus	Yes	236088_at		2349863	NTNG1	22854	AV723308	netrin G1
Thalamus	Yes	210609_s_at		2544201	TP53I3	9540	BC000474	tumor protein p53 inducible protein 3
Thalamus	No	226103_at		2343231	NEXN	91624	AF114264	nexilin (F actin binding protein)
Thalamus	No	219772_s_at		4002394	SMPX	23676	NM_014332	small muscle protein, X-linked
Thalamus	Yes	229103_at		3760490		7473	AA463626	Transcribed locus
Thalamus	Yes	212759_s_at		3264621	TCF7L2	6934	AI703074	Transcription factor 7-like 2 (T-cell specific, HMG-box)
Thalamus	No	230466_s_at		3460125		---	AI092770	Mesenchymal stem cell protein DSC96
Thalamus	Yes	219295_s_at		2698996	PCOLCE2	26577	NM_013363	procollagen C-endopeptidase enhancer 2
Thalamus	No	229779_at		2602110		1286	BF476080	CDNA clone IMAGE:30367357, partial cds
Thalamus	No	1568868_at		2574720	FLJ16008	339761	BC039307	FLJ16008 protein
Thalamus	No	222073_at		2530425	COL4A3	1285	AI694562	collagen, type IV, alpha 3 (Goodpasture antigen)
Thalamus	No	210221_at		3634656	CHRNA3	1136	BC000513	cholinergic receptor, nicotinic, alpha polypeptide 3
Thalamus	No	237974_at		3535307	C14orf29	145447	BE502594	chromosome 14 open reading frame 29
Cerebellum	No	206914_at		3353417	CRTAM	56253	NM_019604	Class-I MHC-restricted T cell associated molecule
Cerebellum	Yes	207182_at		2838399	GABRA6	2559	NM_000811	gamma-aminobutyric acid (GABA) A receptor, alpha 6
Cerebellum	No	236793_at		2665720		---	R43675	Transcribed locus
Cerebellum	No	203616_at		3096171	POLB	5423	NM_002690	polymerase (DNA directed), beta
Cerebellum	No	213929_at		3390193		---	AL050204	Homo sapiens, Similar to likely ortholog of yeast ARV1
Cerebellum	No	1559283_a_at		3081072	LOC285888	285888	AI147733	Hypothetical protein LOC285888
Cerebellum	No	235221_at		3558270		---	R52665	Clone DNA71180 cerebellin (UNQ755) mRNA, complete cds
Cerebellum	No	211343_s_at		3250486	COL13A1	1305	M33653	collagen, type XIII, alpha 1
Cerebellum	No	214705_at		2339139	INADL	10207	AJ001306	InaD-like protein
Cerebellum	No	1553911_at		3907889	ZNF663	284747	NM_173643	Hypothetical protein DKFZp547G0215
Cerebellum	No	233435_at		3401375		10867	AK024470	Similar to ribosomal protein L13a; 23 kD highly basic protein
Cerebellum	Yes	214734_at		3390195	SLAC2-B	23086	AB014524	SLAC2-B
Cerebellum	No	240448_at		3777991	KIAA0802	23255	R41450	KIAA0802
Cerebellum	Yes	243509_at		3465409	---	694	AI475680	Hypothetical protein LOC256021
Cerebellum	Yes	226652_at		3597603	USP3	9960	AA523542	ubiquitin specific protease 3
Cerebellum	Yes	227971_at		3986087	NRK	203447	AI653107	Nik related kinase
Cerebellum	No	205380_at		2356425	PDZK1	5174	NM_002614	PDZ domain containing 1
Cerebellum	Yes	231776_at		2667024	EOMES	8320	NM_005442	eomesodermin homolog (Xenopus laevis)
Cerebellum	ND	239344_at	---			---	H23542	
Cerebellum	No	231051_at		3290851		---	W69743	MRNA of muscle specific gene M1.
Cerebellum	Yes	1552439_s_at		3629948	MEGF11	84465	NM_032445	MEGF11 protein
Cerebellum	No	1552848_a_at		3971666	FLJ30296	139411	NM_173495	patched domain containing 1
Cerebellum	No	1552922_at		2913123	RIMS1	22999	NM_014989	regulating synaptic membrane exocytosis 1
Cerebellum	No	1553826_a_at		3642993	LOC146325	146325	NM_145270	similar to hypothetical protein FLJ13841
Cerebellum	No	1554250_s_at		3055763	MGC45477	375593	BC033812	Tripartite motif-containing 50B
Cerebellum	Yes	1554481_a_at		2327677	EPB41	2035	BC039079	erythrocyte membrane protein band 4.1
Cerebellum	Yes	1554593_s_at		3853036	SLC1A6	6511	BC028721	solute carrier family 1, member 6
Cerebellum	No	1554643_at		3675020	RGS11	8786	BC040504	regulator of G-protein signalling 11
Cerebellum	No	1556202_at		2431768	FNBP2	23380	AI263819	SLIT-ROBO Rho GTPase activating protein 2
Cerebellum	No	1556383_at		2360027		6232	N20130	Ribosomal protein S27 (metallopanstimulin 1)
Cerebellum	No	1556425_a_at		3778108	LOC284219	284219	BF509747	hypothetical protein LOC284219
Cerebellum	No	1556493_a_at		3161566		23081	AF085959	Jumonji domain containing 2C
Cerebellum	No	1556580_a_at		3085594		346702	BE044068	Similar to tryptophan/serine protease
Cerebellum	No	1556762_a_at		3085403		4482	AI057305	Methionine sulfoxide reductase A

Cerebellum	No	1557193_at		3799669		5771	AI085450	Protein tyrosine phosphatase, non-receptor type 2
Cerebellum	No	1557512_at		2527358		6249	BM664532	
Cerebellum	No	1557889_at		3326950		143458	BC006326	Hypothetical protein LOC143458
Cerebellum	No	1558041_a_at		3695450	LOC283849	283849	AL834156	hypothetical protein LOC283849
Cerebellum	No	1558118_at		3952406		25787	BU584635	
Cerebellum	ND	1560026_at	---			149401	BC037944	Hypothetical protein LOC149401
Cerebellum	No	1560476_at		3904663		140710	AF290476	KIAA0889 protein
Cerebellum	ND	1560512_at	---		---		BQ027635	CDNA FLJ30409 fis, clone BRACE2008615
Cerebellum	Yes	1560728_at		3163818		6456	AL833050	SH3-domain GRB2-like 2
Cerebellum	No	1561130_at		3472000	FLJ34154	283450	AF086006	Hypothetical protein FLJ34154
Cerebellum	No	1562684_at		2914640	---		AL049377	MRNA; cDNA DKFZp586H0718 (from clone DKFZp586H0718)
Cerebellum	No	1563104_at		3642875	C22orf1	9727	BC009036	RAB11 family interacting protein 3 (class II)
Cerebellum	ND	1563243_at	---		---		AL137408	MRNA; cDNA DKFZp434M242 (from clone DKFZp434M242)
Cerebellum	Yes	1566465_at		2385873	KCNK1	3775	AL833343	Potassium channel, subfamily K, member 1
Cerebellum	No	1569041_at		3291682		221037	BC035102	Similar to jumonji domain containing 1A; testis-specific protein A
Cerebellum	No	1569369_at		2757796	ZFYVE28	57732	BC035793	zinc finger, FYVE domain containing 28
Cerebellum	No	1569445_at		3954053		26220	BC033112	DiGeorge syndrome critical region gene 5 (non-coding)
Cerebellum	No	1569446_x_at		3954053		26220	BC033112	DiGeorge syndrome critical region gene 5 (non-coding)
Cerebellum	No	1570151_at		3016534		1523	BC013779	
Cerebellum	Yes	202761_s_at		3539724	SYNE2	23224	NM_015180	spectrin repeat containing, nuclear envelope 2
Cerebellum	No	203047_at		2887048	STK10	6793	NM_005990	Serine/threonine kinase 10
Cerebellum	Yes	203705_s_at		2523045	FZD7	8324	AI333651	frizzled homolog 7 (Drosophila)
Cerebellum	Yes	203910_at		2423829	PARG1	9411	NM_004815	PTPL1-associated RhoGAP 1
Cerebellum	No	204270_at		2316379	SKI	6497	AI568728	v-ski sarcoma viral oncogene homolog (avian)
Cerebellum	No	204431_at		3846076	TLE2	7089	NM_003260	transducin-like enhancer of split 2 (E(sp1) homolog, Drosophila)
Cerebellum	No	205466_s_at		2760869	HS3ST1	9957	NM_005114	heparan sulfate (glucosamine) 3-O-sulfotransferase 1
Cerebellum	No	205528_s_at		3144346	CBFA2T1	862	X79990	runt-related transcription factor 1; translocated to, 1 (cyclin D-related)
Cerebellum	No	205728_at		4020655	SH2D1A	10178	AL022718	CDNA clone IMAGE:4811759, partial cds
Cerebellum	Yes	205747_at		3690747	CBLN1	869	NM_004352	cerebellin 1 precursor
Cerebellum	No	206088_at		3767230	KIAA0563	9884	NM_014834	hypothetical LOC440457
Cerebellum	Yes	206163_at		3509411	MAB21L1	4081	NM_005584	mab-21-like 1 (C. elegans)
Cerebellum	Yes	206243_at		2663130	TIMP4	7079	NM_003256	tissue inhibitor of metalloproteinase 4
Cerebellum	No	206282_at		2590491	NEUROD1	4760	NM_002500	neurogenic differentiation 1
Cerebellum	No	206501_x_at		3039177	ETV1	2115	NM_004956	ets variant gene 1
Cerebellum	Yes	206502_s_at		3879112	INSM1	3642	NM_002196	insulinoma-associated 1
Cerebellum	No	207060_at		3033307	EN2	2020	NM_001427	engrailed homolog 2
Cerebellum	No	207110_at		3714779	KCNJ12	3768	NM_021012	potassium inwardly-rectifying channel, subfamily J, member 12
Cerebellum	No	207164_s_at		2388794	ZNF238	10472	NM_006352	zinc finger protein 238
Cerebellum	Yes	207182_at		2838399	GABRA6	2559	NM_000811	gamma-aminobutyric acid (GABA) A receptor, alpha 6
Cerebellum	Yes	207197_at		3992747	ZIC3	7547	NM_003413	Zic family member 3 heterotaxy 1 (odd-paired homolog, Drosophila)
Cerebellum	No	207637_at		3430620	KIAA0789	9671	NM_014653	
Cerebellum	Yes	207822_at		3132016	FGFR1	2260	NM_023107	fibroblast growth factor receptor 1
Cerebellum	No	207933_at		3684007	ZP2	7783	NM_003460	zona pellucida glycoprotein 2 (sperm receptor)
Cerebellum	Yes	208153_s_at		2882026	FAT2	2196	NM_001447	FAT tumor suppressor homolog 2 (Drosophila)
Cerebellum	No	209344_at		3823511	TPM4	7171	BC002827	tropomyosin 4
Cerebellum	No	210191_s_at		2428699	PHTF1	10745	BC002447	putative homeodomain transcription factor 1
Cerebellum	Yes	210341_at		3893973	MYT1	4661	AB020642	myelin transcription factor 1
Cerebellum	No	211419_s_at		2994835	CHN2	1124	L29126	chimerin (chimaerin) 2
Cerebellum	No	212311_at		2764192	KIAA0746	23231	AA522514	KIAA0746 protein
Cerebellum	No	212472_at		3320717	MICAL2	9645	BE965029	flavoprotein oxidoreductase MICAL2
Cerebellum	Yes	212825_at		3080843	PAXIP1L	22976	AI357401	PAX transcription activation domain interacting protein 1 like
Cerebellum	Yes	213552_at		3599709	GLCE	26035	W87398	glucuronyl C5-epimerase
Cerebellum	No	213929_at		3390193	---		AL050204	Homo sapiens, Similar to likely ortholog of yeast ARV1
Cerebellum	Yes	214734_at		3390195	SLAC2-B	23086	AB014524	SLAC2-B
Cerebellum	No	214936_at		3488602	CHDC1	23143	AW298219	Leucine-rich repeats and calponin homology (CH) domain containing 1
Cerebellum	No	215290_at		2866137	---		AI480014	Clone 24571 mRNA sequence
Cerebellum	No	215550_at		2662087	SRGAP2	9901	AL137457	SLIT-ROBO Rho GTPase activating protein 3
Cerebellum	No	218014_at		3734708	PCNT1	79902	NM_024844	pericentrin 1
Cerebellum	No	219179_at		3538087	DACT1	51339	NM_016651	dapper homolog 1, antagonist of beta-catenin (xenopus)
Cerebellum	Yes	219648_at		2598496	FLJ10116	55686	NM_018000	likely ortholog of mouse dilute suppressor

Cerebellum	No	219751_at		3663363	FLJ21148		79918	NM_024860	hypothetical protein FLJ21148
Cerebellum	Yes	219935_at		3927480	ADAMTS5		11096	NM_007038	a disintegrin-like and metalloprotease with thrombospondin type 1 motif
Cerebellum	No	220711_at		2844453		---		NM_024978	
Cerebellum	No	221910_at		3039177	LOC221810		2115	BF131965	hypothetical protein LOC221810
Cerebellum	Yes	222164_at		3132016			2260	AU145411	Fibroblast growth factor receptor 1
Cerebellum	No	222372_at		2680298			9223	AW971248	Hypothetical protein LOC151878
Cerebellum	No	222457_s_at		3454331	EPLIN		51474	BC001247	epithelial protein lost in neoplasm beta
Cerebellum	No	223551_at		2923868	PKIB		5570	AF225513	protein kinase (cAMP-dependent, catalytic) inhibitor beta
Cerebellum	No	225481_at		3535515	C14orf31		122786	AL040051	
Cerebellum	Yes	226652_at		3597603	USP3		9960	AA523542	Ubiquitin specific protease 3
Cerebellum	No	226677_at		3801943	ZNF521		25925	AF141339	zinc finger protein 521
Cerebellum	No	227134_at		2772968	SYTL1		285521	AI341537	synaptotagmin-like 1
Cerebellum	No	227329_at		3914114	BTBD4		140685	AU156821	BTB (POZ) domain containing 4
Cerebellum	Yes	227354_at		3142217	PAG		55824	BF589359	FLJ37858 protein
Cerebellum	No	227526_at		3396770			50937	AU151222	Full length insert cDNA clone ZD42A08
Cerebellum	No	228081_at		2732391	CCNG2		901	BF061444	Cyclin G2
Cerebellum	No	228751_at		2889698	CLK4		57396	AW975057	CDC-like kinase 4
Cerebellum	No	228776_at		3759335			10052	AA430014	Gap junction protein, alpha 7, 45kDa (connexin 45)
Cerebellum	Yes	228922_at		3622282	LOC90525		90525	AI760446	hypothetical protein BC007586
Cerebellum	No	229141_at		2575054	WDR33		55339	AW275379	WD repeat domain 33
Cerebellum	No	229193_at		3726772	LUC7A		51747	AA005430	Cisplatin resistance-associated overexpressed protein
Cerebellum	No	230270_at		2350287	FLJ10330		55119	N32872	sarcoma antigen NY-SAR-27
Cerebellum	No	230424_at		2870889	C5orf13		9315	AU144860	chromosome 5 open reading frame 13
Cerebellum	No	230928_at		2614620		---		H15173	Transcribed locus
Cerebellum	No	231399_at		3421762		---		BE671491	Transcribed locus
Cerebellum	Yes	231776_at		2667024	EOMES		8320	NM_005442	eomesodermin homolog (Xenopus laevis)
Cerebellum	No	231858_x_at		3377861	DKFZp761E198		91056	BC004895	hypothetical protein DKFZp761E198
Cerebellum	No	232286_at		2566848			3899	AA572675	Lymphoid nuclear protein related to AF4
Cerebellum	No	232565_at		3400413			23085	AK025052	RAB6 interacting protein 2
Cerebellum	No	232726_at		2786937			55534	AK024956	Homo sapiens, clone IMAGE:5194204, mRNA
Cerebellum	No	232935_at		3510450			10186	AA569225	Lipoma HMGIC fusion partner
Cerebellum	No	233167_at		3950668	SELO		83642	BC001099	selenoprotein O
Cerebellum	No	233249_at		2486360		---		AU155297	CDNA FLJ13313 fis, clone OVARC1001489
Cerebellum	No	233393_at		3085403			4482	AU146871	Methionine sulfoxide reductase A
Cerebellum	No	233435_at		3401375			10867	AK024470	Ribosomal protein S27 (metallopanstimulin 1)
Cerebellum	No	234012_at		2323172			84966	AB007966	Hypothetical protein MGC15730
Cerebellum	Yes	234563_at		3407453			5139	AK000795	Phosphodiesterase 3A, cGMP-inhibited
Cerebellum	No	235221_at		3558270		---		R52665	KIAA0323
Cerebellum	Yes	235795_at		3368054	PAX6		5080	AW088232	Paired box gene 6 (aniridia, keratitis)
Cerebellum	ND	236229_at	---				400721	AW014345	
Cerebellum	Yes	236379_at		2327677			2035	AW771958	Erythrocyte membrane protein band 4.1 (elliptocytosis 1, RH-linked)
Cerebellum	No	236660_at		2964226		---		N25555	Transcribed locus
Cerebellum	No	236750_at		3545634			9369	AL134451	Neurexin 3
Cerebellum	No	236793_at		2665720		---		R43675	Transcribed locus
Cerebellum	Yes	236896_at		2646818			7545	R37848	Transcribed locus
Cerebellum	No	236966_at		2644461	HSPC056		25852	BF942281	armadillo repeat containing 8
Cerebellum	No	237341_at		3085403			4482	H98180	Methionine sulfoxide reductase A
Cerebellum	No	237347_at		2913446	C6orf148		80759	AL039379	Chromosome 6 open reading frame 148
Cerebellum	ND	237665_at	---			---		AA020752	
Cerebellum	Yes	238532_at		3571059	DPF3		8110	AI125562	D4, zinc and double PHD fingers, family 3
Cerebellum	No	238593_at		3336486	C11orf80		79703	AW962511	hypothetical protein FLJ22531
Cerebellum	ND	238999_at	---			---		AI610347	Transcribed locus
Cerebellum	No	239173_at		2339139	INADL		10207	AI697184	InaD-like (Drosophila)
Cerebellum	No	239285_at		3161566			23081	AI341227	Jumonji domain containing 2C
Cerebellum	No	239577_at		4012757		---		AV699781	
Cerebellum	Yes	239597_at		3483159			255967	AA993566	PABP1-dependent poly A-specific ribonuclease subunit PAN3
Cerebellum	ND	239731_at	---			---		AI674685	Transcribed locus
Cerebellum	No	239832_at		3173797			116224	AI264135	Chromosome 9 open reading frame 42
Cerebellum	Yes	241383_at		3757538			201181	H05959	Similar to hypothetical protein A930006D11
Cerebellum	No	241391_at		3291682		---		AA654772	Transcribed locus

Cerebellum	No	242699_at		3110789		23414	AW384895	Zinc finger protein, multitype 2
Cerebellum	ND	242931_at	---		---		AI218358	Transcribed locus
Cerebellum	ND	243077_at	---		---		AW664702	CDNA FLJ16734 fis, clone BRACE2002589
Cerebellum	No	243398_at		3376914		9379	AL134012	
Cerebellum	Yes	243509_at		3465409	BTG1	694	AI475680	Hypothetical protein LOC256021
Cerebellum	No	244420_at		3144346		862	AI128130	Core-binding factor, runt domain, alpha subunit 2
Cerebellum	No	244467_at		3962112		440829	AW136354	LOC440829
Cerebellum	No	244751_at		3848480	PCP2	126006	BF222920	Purkinje cell protein 2
Cerebellum	Yes	36545_s_at		3942998	KIAA0542	9814	AB011114	Sfi1 homolog, spindle assembly associated (yeast)
Cerebellum	No	1553479_at		3834744	FLJ90805	284339	NM_173633	hypothetical protein FLJ90805
Cerebellum	Yes	1553990_at		3676610	C16orf79	283870	BC039154	hypothetical protein MGC21830
Cerebellum	No	1556096_s_at		3594608	UNC13C	440279	AL834407	unc-13 homolog C (C. elegans)
Cerebellum	No	1556629_a_at		3876245	SNAP25	6616	AI806346	Synaptosomal-associated protein, 25kDa
Cerebellum	No	1556761_at		3085403		4482	AI057305	Methionine sulfoxide reductase A
Cerebellum	No	1557089_at		2509900	KIF5C	3800	CA449408	kinesin family member 5C
Cerebellum	No	1560411_at		3646613		54715	BC041965	---
Cerebellum	ND	1560924_at	---		---		Z39232	CDNA FLJ33351 fis, clone BRACE2005063
Cerebellum	No	1561155_at		3621417		117155	W76548	Creatine kinase, mitochondrial 1 (ubiquitous)
Cerebellum	No	1566040_at		2889305	---		BM263698	Similar to ankyrin repeat domain 20A
Cerebellum	No	1568955_at		2431721		440608	BE877775	---
Cerebellum	Yes	200920_s_at		3465409	BTG1	694	AL535380	B-cell translocation gene 1, anti-proliferative
Cerebellum	Yes	202181_at		3542145	KIAA0247	9766	NM_014734	KIAA0247
Cerebellum	No	202392_s_at		3957938	PISD	23761	NM_014338	phosphatidylserine decarboxylase
Cerebellum	No	202743_at		2410470	PIK3R3	8503	BE622627	phosphoinositide-3-kinase, regulatory subunit 3 (p55, gamma)
Cerebellum	No	203140_at		2709778	BCL6	604	NM_001706	B-cell CLL/lymphoma 6 (zinc finger protein 51)
Cerebellum	Yes	203298_s_at		2896177	JARID2	3720	NM_004973	Jumonji, AT rich interactive domain 2
Cerebellum	No	203616_at		3096171	POLB	5423	NM_002690	polymerase (DNA directed), beta
Cerebellum	Yes	204428_s_at		3696035	LCAT	3931	NM_000229	lecithin-cholesterol acyltransferase
Cerebellum	No	204538_x_at		3684100	NPIP	440341	NM_006985	nuclear pore complex interacting protein
Cerebellum	Yes	204647_at		3855358	HOMER3	9454	NM_004838	homer homolog 3 (Drosophila)
Cerebellum	Yes	204679_at		2385873	KCNK1	3775	NM_002245	potassium channel, subfamily K, member 1
Cerebellum	No	205022_s_at		3575567	CHES1	1112	NM_005197	checkpoint suppressor 1
Cerebellum	No	205795_at		3545634	NRXN3	9369	NM_004796	neurexin 3
Cerebellum	Yes	205923_at		3065740	RELN	5649	NM_005045	reelin
Cerebellum	Yes	206373_at		2646818	ZIC1	7545	NM_003412	Zic family member 1 (odd-paired homolog, Drosophila)
Cerebellum	Yes	206409_at		3928668	TIAM1	7074	NM_003253	T-cell lymphoma invasion and metastasis 1
Cerebellum	No	207299_s_at		2929571	GRM1	2911	NM_000838	glutamate receptor, metabotropic 1
Cerebellum	Yes	207711_at		3904594	KIAA0889	25781	NM_015377	KIAA0889 protein
Cerebellum	Yes	208353_x_at		3132940	ANK1	286	NM_020480	ankyrin 1, erythrocytic
Cerebellum	No	208457_at		4054481	GABRD	2563	NM_000815	gamma-aminobutyric acid (GABA) A receptor, delta
Cerebellum	No	208798_x_at		3617458	GOLGIN-67	23015	AF204231	golgin-67
Cerebellum	Yes	209457_at		3263743	DUSP5	1847	U16996	dual specificity phosphatase 5
Cerebellum	No	209682_at		2687255	CBLB	868	U26710	Cas-Br-M (murine) ecotropic retroviral transforming sequence b
Cerebellum	No	210150_s_at		3913018	LAMA5	3911	BC003355	laminin, alpha 5
Cerebellum	No	210234_at		2950970	GRM4	2914	U92457	glutamate receptor, metabotropic 4
Cerebellum	No	210346_s_at		2889698	CLK1	57396	AF212224	CDC-like kinase 4
Cerebellum	Yes	210400_at		3770422	GRIN2C	2905	L76224	glutamate receptor, ionotropic, N-methyl D-aspartate 2C
Cerebellum	No	210461_s_at		3307939	ABLIM1	3983	BC002448	actin binding LIM protein 1
Cerebellum	No	211038_s_at		2398369	MGC12760	84809	BC006312	hypothetical protein MGC12760 /// hypothetical protein MGC12760
Cerebellum	No	211248_s_at		2655790	CHRD	8646	AF283325	chordin
Cerebellum	No	211841_s_at		2394699	TNFRSF25	8718	U94510	tumor necrosis factor receptor superfamily, member 25
Cerebellum	No	212179_at		2966253	C6orf111	25957	AW157501	chromosome 6 open reading frame 111
Cerebellum	No	212252_at		3474885	CAMKK2	10645	AA181179	calcium/calmodulin-dependent protein kinase kinase 2, beta
Cerebellum	No	212482_at		2492173	FLJ13910	64795	BF671894	hypothetical protein FLJ13910
Cerebellum	No	212552_at		7385611	HPCAL1	3241	BE617588	hippocalcin-like 1
Cerebellum	No	212935_at		3502259	MCF2L	23263	AB002360	MCF.2 cell line derived transforming sequence-like
Cerebellum	No	212956_at		2787096	KIAA0882	23158	AI348094	KIAA0882 protein
Cerebellum	No	213358_at		3777991	KIAA0802	23255	AB018345	KIAA0802
Cerebellum	No	214295_at		2339067	KIAA0485	57235	AW129056	KIAA0485 protein
Cerebellum	No	214682_at		3676421	PKD1	5310	AK023376	Hypothetical protein LOC339047

Cerebellum	No	214839_at		3123819	LOC157627	157627	AF052108	hypothetical protein LOC157627
Cerebellum	No	214933_at		3852133	CACNA1A	773	AA769818	calcium channel, voltage-dependent, P/Q type, alpha 1A subunit
Cerebellum	No	214951_at		3418394	SLC26A10	65012	AL050358	solute carrier family 26, member 10
Cerebellum	No	214978_s_at		2375523	PPFIA4	8497	AK023365	protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF)
Cerebellum	No	215137_at		2316379	KIAA0508	57244	H92070	KIAA0508 protein
Cerebellum	No	215255_at		3399456	KIAA1030	22997	AB028953	KIAA1030 protein
Cerebellum	No	217588_at		3621417	CATSPER2	117155	AW971983	cation channel, sperm associated 2
Cerebellum	Yes	218205_s_at		3845647	MKNK2	2872	NM_017572	MAP kinase interacting serine/threonine kinase 2
Cerebellum	No	218258_at		3482977	POLR1D	51082	NM_015972	polymerase (RNA) I polypeptide D, 16kDa
Cerebellum	Yes	219095_at		3590709	PLA2G4B	8681	NM_005090	phospholipase A2, group IVB (cytosolic)
Cerebellum	No	219327_s_at		3734355	GPRC5C	55890	NM_022036	G protein-coupled receptor, family C, group 5, member C
Cerebellum	No	219442_at		3657286	MGC3020	79014	NM_024048	hypothetical protein MGC3020
Cerebellum	Yes	219572_at		3070309	CADPS2	93664	NM_017954	Ca2+-dependent activator protein for secretion 2
Cerebellum	No	219778_at		3110789	ZFPM2	23414	NM_012082	zinc finger protein, multitype 2
Cerebellum	No	220954_s_at		3015442	PILRB	29990	NM_013440	paired immunoglobin-like type 2 receptor beta
Cerebellum	No	220968_s_at		3401381	PP1057	10867	NM_031285	Ribosomal protein S27 (metallopanstimulin 1)
Cerebellum	No	221221_s_at		2877028	KLHL3	26249	NM_017415	kelch-like 3 (Drosophila)
Cerebellum	No	221656_s_at		2322957	FLJ10521	55160	BC003073	hypothetical protein FLJ10521
Cerebellum	No	222494_at		2351369	C14orf116	1112	AW051527	checkpoint suppressor 1
Cerebellum	No	223350_x_at		3367183	LIN7C	55327	N63709	lin-7 homolog C (C. elegans)
Cerebellum	No	223529_at		3805614	SYT4	6860	AB037763	synaptotagmin IV
Cerebellum	No	223550_s_at		3762753	CA10	56934	AF288385	carbonic anhydrase X
Cerebellum	Yes	223642_at		3498780	ZIC2	7546	AF193855	Zic family member 2 (odd-paired homolog, Drosophila)
Cerebellum	No	224834_at		2887128	DC-UbP	92181	BF243404	Dendritic cell-derived ubiquitin-like protein
Cerebellum	Yes	225293_at		3185976	COL27A1	85301	AK021957	collagen, type XXVII, alpha 1
Cerebellum	Yes	225473_at		3904594	LOC149670	140710	BE044516	FLJ44670 protein
Cerebellum	No	225546_at		3652424	EEF2K	29904	W68180	eukaryotic elongation factor-2 kinase
Cerebellum	No	226123_at		3100250	KIAA1416	55636	AI870918	chromodomain helicase DNA binding protein 7
Cerebellum	No	226272_at		2325479	---		N25986	Full length insert cDNA clone ZD79H10
Cerebellum	No	226291_at		2595042	ALS2	57679	AB046783	amyotrophic lateral sclerosis 2 (juvenile)
Cerebellum	No	226572_at		3719748	SOCS7	30837	AL045666	Suppressor of cytokine signaling 7
Cerebellum	No	227290_at		3701287	---		AU157881	CDNA FLJ13598 fis, clone PLACE1009921
Cerebellum	No	227929_at		3463725	---		AU151342	Homo sapiens, clone IMAGE:5277945, mRNA
Cerebellum	No	228157_at		2595649	ZNF207	7756	AI125646	Zinc finger protein 207
Cerebellum	ND	228628_at	---			440608	AI478268	Similar to Formin binding protein 2 (srGAP2)
Cerebellum	No	228793_at		3291682	JMJD1C	221037	BF002296	jumonji domain containing 1C
Cerebellum	No	229067_at		2355117		440608	BF977829	---
Cerebellum	No	229111_at		2320048	MASP2	10747	AA033699	---
Cerebellum	No	229302_at		2478269	MGC33926	130733	AA058832	hypothetical protein MGC33926
Cerebellum	ND	229406_at	---		---		AI674243	similar to ataxin 2-binding protein 1 isoform 4
Cerebellum	No	229734_at		3399398		283174	BF507379	Hypothetical protein LOC283174
Cerebellum	No	230547_at		3322521	---		R52825	CDNA FLJ42249 fis, clone TKIDN2007667
Cerebellum	No	230902_at		2866137	---		AW006096	---
Cerebellum	No	232010_at		2791894	FSTL5	56884	AA129444	follistatin-like 5
Cerebellum	No	232095_at		2376708		23380	BG109134	SLIT-ROBO Rho GTPase activating protein 2
Cerebellum	No	232289_at		3714803	FLJ14167	92080	BF237871	hypothetical protein FLJ14167
Cerebellum	No	232670_at		2431814	LOC149401	149401	AL137339	Hypothetical protein LOC149401
Cerebellum	Yes	232796_at		3217361	---		AK021556	CDNA FLJ11494 fis, clone HEMBA1001942
Cerebellum	No	233139_at		3647106		54715	AF131795	PRbBP-39
Cerebellum	No	234314_at		3900091	KIAA1272	57186	AB033098	KIAA1272 protein
Cerebellum	No	235085_at		3123409	DKFZp761P0423	157285	BF739767	hypothetical protein DKFZp761P0423
Cerebellum	No	235094_at		2614798		7171	AI972661	Tropomyosin 4
Cerebellum	Yes	235205_at		3110999	OXR1	55074	BF109660	similar to solute carrier family 16, member 14
Cerebellum	No	235305_s_at		2413032	FLJ10948	55268	AI903313	Hypothetical protein FLJ10948
Cerebellum	No	235468_at		3772831	---		AA531287	similar to ataxin 2-binding protein 1 isoform 4
Cerebellum	No	235803_at		3716767		51379	AA843122	Cytokine receptor-like factor 3
Cerebellum	ND	236856_x_at	---		---		AI740460	CDNA FLJ34374 fis, clone FEBRA2017502
Cerebellum	ND	236949_at	---		---		AI079543	LOC440283
Cerebellum	No	237591_at		3433466	FLJ42957	400077	AI821565	FLJ42957 protein
Cerebellum	ND	238853_at	---		---		AI436813	Glioma amplified sequence 64

Cerebellum	No	238883_at		3473083		23389	AW975051	Thyroid hormone receptor associated protein 2
Cerebellum	ND	239297_at	---		---		BE932011	Transcribed locus, weakly similar to hypothetical protein MGC45438
Cerebellum	ND	239907_at	---		---		BF508839	---
Cerebellum	No	240690_at		3123409		157285	AI494291	Hypothetical protein DKFZp761P0423
Cerebellum	No	242052_at		3410445		636	AW979272	Bicaudal D homolog 1 (Drosophila)
Cerebellum	No	242191_at		2357217		55672	AI701905	hypothetical protein LOC200030 /// hypothetical LOC400781
Cerebellum	No	242471_at		2431814	---		AI916641	Transcribed locus
Cerebellum	No	242558_at		2618940		1499	AW362945	Catenin (cadherin-associated protein), beta 1, 88kDa

Table S12. Comparison with extant mouse cortex microarray data

E12.5 mouse cortex enrichment (Kudo et al., 2006)	GenBank Accession	Gene	UniGene	Mouse EntrezGeneID	MoExTCID	HuExTCID Best Match	Consistent with late mid-fetal human NCTX?
Anterior ctx	AA073913	Amn	Mm.197639	93835	6798197	3553389	No
Anterior ctx	W75669	Anapc2	Mm.291624	99152	6875703	3230894	No
Anterior ctx	AA120679	Arl4c	Mm.27968	320982	6760518	2604390	No
Anterior ctx	W96830	Brp16	Mm.133202	59053	6831654	3120140	No
Anterior ctx	W36837	Cacnb1	Mm.41252	12295	6791233	3755580	No
Anterior ctx	W65230	Cldn13	Mm.86652	57255	6942396	---	ND*
Anterior ctx	AA120697	Clec1b	Mm.30700	56760	6950147	3443936	No
Anterior ctx	AA108438	Cml4	Mm.154782	68396	6955165	---	ND
Anterior ctx	W63987	Cnp	Mm.462581	12799	6784205	3721548	No
Anterior ctx	AI594926	Dcpp2	Mm.436677	630537	---	---	ND
Anterior ctx	AA008734	Ddx27	Mm.295031	228889	6883273	3888217	No
Anterior ctx	W45825	Dyrk2	Mm.458174	69181	6777421	3420854	No, opposite gradient
Anterior ctx	AA008687	Ecgf1	Mm.287977	72962	---	---	ND
Anterior ctx	AA060723	Etfa	Mm.290853	110842	6995817	3633794	No
Anterior ctx	AI385754	Fabp7	Mm.3644	12140	6768075	2923928	No
Anterior ctx	AA031219	Fbxl17	Mm.329156	50758	6856511	2870113	No, opposite gradient
Anterior ctx	AA023645	Fhl2	Mm.6799	14200	6758261	2568687	No
Anterior ctx	AA002314	Flt3l	Mm.1658	14256	6966939	---	ND
Anterior ctx	AA060844	Fxyd6	Mm.208287	59095	6988722	3393479	No
Anterior ctx	AA175441	Ggta1	Mm.281124	14594	6886045	3223967	No
Anterior ctx	AA466087	H2afz	Mm.117541	51788	6901695	2779486	No
Anterior ctx	W10072	Igf1	Mm.268521	16000	6769596	3468345	No
Anterior ctx	AA175538	Il7r	Mm.389	16197	6833937	2806468	No
Anterior ctx	AA403846	Kitl	Mm.45124	17311	6770201	---	ND
Anterior ctx	W97446	Klf1	Mm.4847	16596	6977772	3851840	No
Anterior ctx	W66749	Letmd1	Mm.275272	68614	6833243	3414776	No
Anterior ctx	AA231293	Meox2	Mm.341398	17286	6794550	3039485	No
Anterior ctx	AA098361	Mfhas1	Mm.103246	52065	6975392	3123541	No
Anterior ctx	AA033466	Mpo	Mm.4668	17523	6783338	3764245	No
Anterior ctx	AA109944	Myo7b	Mm.440013	17922	6864370	2504645	No
Anterior ctx	AA473269	Ndrg1	Mm.30837	17988	6836358	3154317	No
Anterior ctx	W85646	Nek9	Mm.29071	217718	6802386	3572278	No
Anterior ctx	AI425728	Nupl1	Mm.258051	71844	6825137	2350145	No
Anterior ctx	AA119236	Nvl	Mm.263464	67459	6764657	2458017	No
Anterior ctx	W14332	Pcbd1	Mm.39473	13180	6768198	3293537	Yes
Anterior ctx	W98241	Pcsk5	Mm.3401	18552	6871879	3175274	No
Anterior ctx	AA062140	Pitx3	Mm.6255	18742	6873396	3304265	No
Anterior ctx	AA031057	Ppp2r2b	Mm.26134	72930	6865041	2880051	No
Anterior ctx	AI429829	Rab13	Mm.29355	68328	6899326	2436401	No
Anterior ctx	AA275118	Rap2c	Mm.43152	72065	7016797	4022032	No
Anterior ctx	CA748280	Rbp1	Mm.279741	19659	6991714	2697863	Yes
Anterior ctx	W80210	Rbpms	Mm.323997	19663	6981604	3092415	No
Anterior ctx	AA184614	Rhof	Mm.253876	23912	6941780	3475324	No
Anterior ctx	AA000347	Sec24c	Mm.173119	218811	6817365	---	ND
Anterior ctx	AA268953	Sfrp1	Mm.281691	20377	6974663	3132782	Yes
Anterior ctx	AA175259	Sh3kbp1	Mm.286495	58194	---	---	ND
Anterior ctx	AA413194	Slc25a13	Mm.24513	50799	6951440	3062193	Yes
Anterior ctx	AI467559	Slit3	Mm.202457	20564	6779995	2886174	Yes
Anterior ctx	AA000223	Smoc1	Mm.273295	64075	6796430	3542275	Yes
Anterior ctx	AA200737	Snapap	Mm.331182	20615	6823263	---	ND
Anterior ctx	W34018	Spnb1	Mm.32881	20741	6801902	---	ND
Anterior ctx	AA038788	Stc1	Mm.20911	20855	6820013	3128046	No, opposite gradient
Anterior ctx	AA270232	Tal1	Mm.439685	21349	6916487	2411198	No
Anterior ctx	AA547208	Tcl1	Mm.18154	21432	6803335	---	ND
Anterior ctx	W59265	Trio	Mm.211229	223435	6834566	2802398	No
Anterior ctx	AA522127	Uqcrc2	Mm.334206	67003	6963946	3652218	No
Anterior ctx	W49208	Usp29	Mm.40752	57775	6973353	3843027	No
Anterior ctx	AA061458	Usp52	Mm.244183	103135	6771643	---	ND
Anterior ctx	AA002636	Zfp560	Mm.379669	434377	6993691	---	ND
Anterior ctx	AA003367	Wdr33	Mm.277705	74320	6859781	2575054	No
Anterior ctx	AA163996	3110048L19Rik	Mm.311219	73233	6854152	---	ND
Anterior ctx	AA145137	1700099I09Rik	Mm.426384	76624	6809668	---	ND
Anterior ctx	AA144046	Ckap5	Mm.168478	75786	6879059	3371719	No
Anterior ctx	AI413838	OTTMUSG00000015915	Mm.330682	433492	---	---	ND
Anterior ctx	AA170335	C030010B13Rik	Mm.260590	77310	6893573	---	ND
Anterior ctx	AA204360	Plekha1	Mm.323554	101476	6964522	3268274	No
Anterior ctx	BX527908	Unc84b	Mm.202715	223697	6837127	3960827	No
Anterior ctx	AA002786	Gemin8	Mm.209490	237221	6816023	4000267	No
Anterior ctx	W59215	Myl6b	Mm.291688	216459	6771664	3417435	No
Anterior ctx	AK053778	Isg20l2	Mm.45744	229504	6899033	2438482	No
Anterior ctx	AA217113	EG668139	Mm.300542	668139	6970173	---	ND
Anterior ctx	AA050124	Apc2	Mm.57247	23805	6769209	3815888	No
Anterior ctx	W70958	Jhdm1d	Mm.391919	338523	6952930	3075984	No
Posterior ctx	AA245324	Aip	Mm.10433	11632	6870975	3337137	No
Posterior ctx	AA064247	Coro7	Mm.325512	78885	6843653	3678083	Yes
Posterior ctx	AA008001	Ctsb	Mm.236553	13030	6819694	3124537	No
Posterior ctx	AA073904	Dkk3	Mm.55143	50781	6970496	3363266	No
Posterior ctx	AA153223	Dusp11	Mm.24007	72102	6955175	2559649	No
Posterior ctx	AA544895	Farp1	Mm.223980	223254	6822201	3497881	No

Posterior ctx	AA047966	Fhl1	Mm.3126	14199	7011394	3992406	No
Posterior ctx	AA030294	Fzd1	Mm.246003	14362	6935966	3012213	No
Posterior ctx	AA255078	Galk1	Mm.2820	14635	6792485	3770923	No
Posterior ctx	AA048560	Gart	Mm.4505	14450	6843192	3929721	No
Posterior ctx	AA289992	Ifitm2	Mm.379266	80876	6972165	---	ND
Posterior ctx	AA261160	Mcam	Mm.275003	84004	6988609	3394264	No
Posterior ctx	W55827	Nfix	Mm.9394	18032	6983873	3822122	No
Posterior ctx	W98998	Notch1	Mm.290610	18128	6885488	3230141	No
Posterior ctx	BX513775	Pfas	Mm.340288	237823	6789242	3709540	No
Posterior ctx	AA253750	Rbm9	Mm.202774	93686	6836888	3959203	No
Posterior ctx	AA518455	Tcf4	Mm.4269	21413	---	3264621	No
Posterior ctx	W17647	Ttr	Mm.2108	22139	6859290	3783565	No
Posterior ctx	W37018	Zmym3	Mm.23458	56364	7018546	4011889	No
Posterior ctx	AA041916	E130016E03Rik	Mm.249437	623474	6911719	---	ND
Posterior ctx	AA051406	Mepce	Mm.61193	231803	6942575	3015553	No
Posterior ctx	BX522937	2900001G08Rik	Mm.102196	76950	6849764	---	ND
Posterior ctx	AA273386	Zdhhc20	Mm.29044	75965	6824978	3492958	No
Posterior ctx	AA270527	Nfic	Mm.426936	18029	6775465	3816919	No
Posterior ctx	AA231557	Asah3l	Mm.458684	230379	6915138	2596315	No

P0 mouse cortex enrichment (Leamey et al., 2007)	**Gene Symbol**	**Gene description**	**Confirmation**	**HuExTCID Best Match**	**Consistent with late mid-fetal human NCTX?**
visual ctx	Ten_m3	Teneurin 3 (Odz3)	PCR, Li et al. (2006)	2753440	No
visual ctx	Ten_m2	Teneurin 2 (Odz2)	PCR, Li et al. (2006)	2839227	Yes
visual ctx	Nrp1	Neuropilin 1	PCR	3284302	No
visual ctx	Crym	Mu-crystallin	PCR	3684039	No
visual ctx	Tshz3	T-shirt 3	PCR	3858285	Yes
visual ctx	Nr2f1	COUP-Tf1	Zhou et al. (2001)	2820394	Yes
visual ctx	NeuroD1	Neurogenic differentiation 1		2590491	No
visual ctx	Ten_m4	Teneurin 4 (Odz4)	Li et al. (2006)	3383394	Yes
visual ctx	Dkk3	Dickkopf 3	PCR	3363266	No
somatosensory ctx	Efna5	EphrinA5	Fukuchi-Shimogori and Grove (2001); Miller et al. (2006)	2869880	Yes
somatosensory ctx	Tbr1	T brain 1	Bulfone et al. (1995); Miyashita-Lin et al. (1999)	2512752	Yes
somatosensory ctx	RORb/Nr1f2	RAR orphan receptor beta	Miyashita-Lin et al. (1999); Fukuchi-Shimogori and Grove (2001)	3174967	No
visual ctx	Lmo4	Lim only domain 4	PCR, Bulchand et al. (2003)	2345286	Yes
visual ctx	Flrt3	Fibronectin leucine rich 3	PCR	3898355	No
visual ctx	Igsf4a (Cadm1)	Immunoglubulin superfamily 4/syncam	PCR	3392332	No
visual ctx	AI838057 (Met)	met proto-oncogene	PCR	3020343	Yes
somatosensory ctx	Bcl6	B-cell leukemia 6	PCR	2709778	Yes
somatosensory ctx	Dusp6	Dual specificity phosphatase 6	PCR	3464860	Yes
somatosensory ctx	TGFbR1	Transforming growth factor beta receptor 1	PCR	3181728	No
somatosensory ctx	PTPrO	Protein tyrosine phosphatase receptor O	PCR	3406329	Yes
somatosensory ctx	NPY	Neuropeptide Y	PCR	2993124	No
somatosensory ctx	Klhl29	Kelch repeat and BTB domain 9	PCR	2472651	Yes
somatosensory ctx	Luzp2	Leucine zipper protein 2	PCR	3324162	Yes
somatosensory ctx	Lmo3	Lim only domain 3	PCR, Bulchand et al. (2003)	3446137	Yes
somatosensory ctx	Usp6	Ubiquitin specific phosphatase 6	PCR	3707498	Yes

*ND: Equivalent probesets not present or not analyzed, due to contraindications such as discontinued gene records or lack of homology.

Table S13a. Intra-NCTX DEX genes with associated haCNSs

Exon Array Transcript Cluster ID	Official Gene Symbol	Entrez GeneID	RefSeq Accession	NCTX DEX p-value	haCNS	chr	start	stop	caCNS?
3497340	HS6ST3	266722	NM_153456	8.1E-20	haCNS164	chr13	96072144	96072321	Yes
2709778	BCL6	604	NM_001706	5.0E-17	haCNS526	chr3	189110780	189111074	No
3305801	SORCS1	114815	NM_001013031	2.7E-15	haCNS5	chr10	108799372	108799584	No
3618333	MEIS2	4212	NM_002399	7.5E-15	haCNS486	chr15	34964313	34964458	No
3251068	CDH23	64072	NM_052836	1.6E-13	haCNS224	chr10	73079027	73079150	No
3136888	TOX	9760	NM_014729	2.2E-13	haCNS272	chr8	60588695	60588989	Yes
2722823	PCDH7	5099	NM_032457	3.6E-13	haCNS256	chr4	30251108	30251384	Yes
3319073	SYT9	143425	NM_175733	3.7E-13	haCNS540	chr11	7392512	7392848	No
2645079	CLSTN2	64084	NM_022131	3.8E-13	haCNS489	chr3	141585826	141585979	Yes
2632778	EPHA6	285220	NM_001080448	6.9E-13	haCNS838	chr3	98795778	98796002	No
2820394	NR2F1	7025	NM_005654	6.9E-13	haCNS151	chr5	92242065	92242207	Yes
2970607	HS3ST5	222537	NM_153612	1.4E-12	haCNS832	chr6	115043272	115043392	No
2683763	ROBO1	6091	NM_002941	4.0E-12	haCNS112	chr3	80297644	80297883	Yes
3222534	ASTN2	23245	NM_198188	1.1E-11	haCNS242	chr9	118236797	118237001	Yes
2805078	CDH6	1004	NM_004932	1.9E-11	haCNS753	chr5	30891924	30892049	Yes
3029900	CNTNAP2	26047	NM_014141	3.0E-11	haCNS97	chr7	145618470	145618578	Yes
3262715	SORCS3	22986	NM_014978	3.1E-11	haCNS59	chr10	107090354	107090655	Yes
2825907	PRR16	51334	NM_016644	8.3E-11	haCNS302	chr5	119523634	119523860	No
3610110	NR2F2	7026	NM_021005	8.8E-11	haCNS32	chr15	94753758	94754013	Yes
3197014	GLIS3	169792	NM_001042413	1.6E-10	haCNS150	chr9	3877140	3877653	Yes
3163982	ADAMTSL1	92949	NM_052866	2.3E-10	haCNS128	chr9	18438142	18438380	No
2560881	LRRTM4	80059	NM_024993	4.8E-10	haCNS800	chr2	77682834	77683132	Yes
2424524	DPYD	1806	NM_000110	6.3E-10	haCNS537	chr1	98395817	98395988	No
3446137	LMO3	55885	NM_018640	1.4E-09	haCNS121	chr12	16596252	16596435	Yes
3884324	CTNNBL1	56259	NM_030877	1.6E-09	haCNS17	chr20	35912909	35913087	No
3326826	FJX1	24147	NM_014344	1.8E-09	haCNS503	chr11	35601290	35601570	No
3463056	CSRP2	1466	NM_001321	2.1E-09	haCNS111	chr12	75867499	75867642	No
2998192	POU6F2	11281	NM_007252	2.4E-09	haCNS226	chr7	38984675	38985187	No
4018080	CHRDL1	91851	NM_145234	3.0E-09	haCNS275	chrX	109707257	109707663	No
2607757	CNTN6	27255	NM_014461	5.7E-09	haCNS394	chr3	1686232	1686505	Yes
3623270	SHC4	399694	NM_203349	8.2E-09	haCNS696	chr15	46936039	46936204	No
3558418	STXBP6	29091	NM_014178	1.2E-08	haCNS225	chr14	25168881	25169062	No
3560403	EGLN3	112399	NM_022073	1.7E-08	haCNS780	chr14	33722506	33722733	No
2944491	MBOAT1	154141	NM_001080480	1.9E-08	haCNS549	chr6	20084408	20085329	No
3524570	EFNB2	1948	NM_004093	1.9E-08	haCNS763	chr13	105744999	105745127	Yes
3788560	DCC	1630	NM_005215	3.9E-08	haCNS218	chr18	47660078	47660381	Yes
2524301	NRP2	8828	NM_003872	4.9E-08	haCNS265	chr2	206245096	206245372	No
3928211	GRIK1	2897	NM_175611	5.5E-08	haCNS814	chr21	29852591	29852811	Yes
3515965	DIAPH3	81624	NM_001042517	6.2E-08	haCNS494	chr13	58982919	58983395	Yes
3653266	CACNG3	10368	NM_006539	9.7E-08	haCNS911	chr16	24352475	24352653	No
3464860	DUSP6	1848	NM_022652	1.3E-07	haCNS240	chr12	88267696	88268072	Yes
3516639	PCDH9	5101	NM_203487	1.5E-07	haCNS406	chr13	64945406	64945619	Yes
3159946	SMARCA2	6595	NM_139045	1.5E-07	haCNS521	chr9	2040744	2041141	Yes
3515109	PCDH8	5100	NM_002590	2.8E-07	haCNS239	chr13	52397999	52398335	No
3671202	CDH13	1012	NM_001257	3.1E-07	haCNS900	chr16	81400604	81401062	Yes
2343823	LPHN2	23266	NM_012302	3.4E-07	haCNS483	chr1	81056287	81056490	Yes
3682445	XYLT1	64131	NM_022166	3.6E-07	haCNS345	chr16	17760829	17761047	No
2854445	DAB2	1601	NM_001343	3.7E-07	haCNS247	chr5	39563011	39563189	No
3392332	CADM1	23705	NM_014333	4.0E-07	haCNS249	chr11	114591944	114592143	Yes
2736060	GRID2	2895	NM_001510	4.1E-07	haCNS447	chr4	94325526	94325665	Yes
3915936	NCAM2	4685	NM_004540	4.7E-07	haCNS440	chr21	20868551	20868769	Yes
2448710	FAM5C	339479	NM_199051	4.9E-07	haCNS608	chr1	186868826	186869039	Yes
2684187	GBE1	2632	NM_000158	5.8E-07	haCNS270	chr3	82925442	82925787	Yes
2607923	CNTN4	152330	NM_175607	6.6E-07	haCNS451	chr3	2112725	2113157	Yes
3907711	CDH22	64405	NM_021248	6.8E-07	haCNS962	chr20	44287216	44287525	No
2743800	PCDH10	57575	NM_032961	7.2E-07	haCNS565	chr4	134658662	134659043	Yes
3352618	GRIK4	2900	NM_014619	7.5E-07	haCNS74	chr11	120145971	120146354	No
3401325	TSPAN9	10867	NM_006675	7.6E-07	haCNS105	chr12	3117135	3117301	Yes
2873897	MARCH3	115123	NM_178450	7.9E-07	haCNS341	chr5	126266047	126266370	Yes
2554975	BCL11A	53335	NM_138559	7.9E-07	haCNS101	chr2	59740616	59740976	Yes
3093526	UNC5D	137970	NM_080872	8.8E-07	haCNS793	chr8	35643432	35643696	Yes
2600689	EPHA4	2043	NM_004438	1.0E-06	haCNS201	chr2	221757000	221757162	Yes
4051849	PTCH1	5727	NM_001083602	1.6E-06	haCNS232	chr9	97461843	97462028	No
2338719	NFIA	4774	NM_005595	1.7E-06	haCNS748	chr1	61483496	61483696	Yes
3762753	CA10	56934	NM_001082534	2.0E-06	haCNS299	chr17	47184433	47184693	Yes
2378019	CAMK1G	57172	NM_020439	2.3E-06	haCNS946	chr1	207801418	207801746	Yes

3019793	FOXP2	93986	NM_148899	2.4E-06	haCNS169	chr7	114199879	114200201	Yes
3889833	DOK5	55816	NM_018431	2.8E-06	haCNS695	chr20	52926808	52927102	Yes
3495968	SLITRK5	26050	NM_015567	2.8E-06	haCNS616	chr13	86603709	86603919	Yes
3399004	OPCML	4978	NM_001012393	3.1E-06	haCNS63	chr11	132314871	132315188	Yes
2503929	CNTNAP5	129684	NM_130773	3.7E-06	haCNS815	chr2	126009228	126009329	No
3125116	DLC1	10395	NM_006094	4.4E-06	haCNS701	chr8	13070339	13070464	No
3397003	KIRREL3	84623	NM_032531	5.6E-06	haCNS15	chr11	126518672	126518865	No
2869880	EFNA5	1946	NM_001962	6.1E-06	haCNS704	chr5	106842100	106842248	Yes
2387126	RYR2	6262	NM_001035	6.6E-06	haCNS383	chr1	235274374	235274542	No
2576988	LYPD1	116372	NM_001077427	7.0E-06	haCNS95	chr2	133063363	133063559	No
3155489	LOC51059	51059	NM_015912	8.1E-06	haCNS322	chr8	138620593	138620688	No
2628482	FAM19A1	407738	NM_213609	8.3E-06	haCNS404	chr3	68030843	68031386	Yes
2624639	CACNA2D3	55799	NM_018398	8.7E-06	haCNS516	chr3	54809508	54809792	Yes
2973376	PTPRK	5796	NM_002844	9.4E-06	haCNS600	chr6	128550930	128551035	No
2918982	GRIK2	2898	NM_021956	1.0E-05	haCNS584	chr6	101850869	101851143	No
2657831	IL1RAP	3556	NM_002182	1.1E-05	haCNS539	chr3	191745709	191746021	No
3797295	L3MBTL4	91133	NM_173464	1.3E-05	haCNS786	chr18	5954449	5954661	No
3907072	RIMS4	140730	NM_182970	1.6E-05	haCNS333	chr20	42893409	42893628	No
2626802	PTPRG	5793	NM_002841	1.9E-05	haCNS876	chr3	61420464	61420687	Yes
2601995	IRS1	3667	NM_005544	2.2E-05	haCNS856	chr2	227070286	227070455	No
2690715	IGSF11	152404	NM_152538	2.5E-05	haCNS722	chr3	118959977	118960358	Yes
2851511	CDH9	1007	NM_016279	2.7E-05	haCNS513	chr5	28348357	28348627	Yes
3356539	HNT	50863	NM_016522	2.7E-05	haCNS58	chr11	131357793	131357915	Yes
3733590	SOX9	6662	NM_000346	2.8E-05	haCNS346	chr17	67071580	67071793	Yes
2608469	ITPR1	3708	NM_001099952	2.9E-05	haCNS611	chr3	4765328	4765561	No
3397589	ETS1	2113	NM_005238	3.3E-05	haCNS335	chr11	127851834	127852167	No
3444958	DUSP16	80824	NM_030640	3.4E-05	haCNS20	chr12	12627193	12627506	No
3308241	GFRA1	2674	NM_145793	3.8E-05	haCNS558	chr10	117765211	117765317	No
3248661	ZNF365	22891	NM_199451	4.1E-05	haCNS154	chr10	63812581	63812727	Yes
2470165	TRIB2	28951	NM_021643	4.4E-05	haCNS468	chr2	12455705	12455889	No
3694215	CDH8	1006	NM_001796	5.0E-05	haCNS72	chr16	61919767	61919944	Yes
3518086	TBC1D4	9882	NM_014832	6.0E-05	haCNS437	chr13	74309835	74309973	No
2763550	PPARGC1A	10891	NM_013261	6.2E-05	haCNS68	chr4	23484769	23485247	Yes
2918388	POU3F2	5454	NM_005604	6.2E-05	haCNS145	chr6	99052913	99053392	Yes
3629948	MEGF11	84465	NM_032445	6.8E-05	haCNS847	chr15	64109344	64109537	No
3519309	SPRY2	10253	NM_005842	6.9E-05	haCNS313	chr13	81444472	81444787	Yes
3174816	ANXA1	301	NM_000700	6.9E-05	haCNS357	chr9	75045823	75046044	No
3394488	PVRL1	5818	NM_203286	8.0E-05	haCNS467	chr11	119052625	119052773	No
2920085	FLJ10159	55084	NM_018013	8.3E-05	haCNS140	chr6	108071093	108071302	No
2865390	EDIL3	10085	NM_005711	9.0E-05	haCNS138	chr5	84281024	84281226	Yes
3542275	SMOC1	64093	NM_022137	9.3E-05	haCNS461	chr14	69389036	69389264	No
3447348	SOX5	6660	NM_006940	9.5E-05	haCNS610	chr12	24060581	24060839	No
2689516	ZBTB20	26137	NM_015642	9.7E-05	haCNS765	chr3	115755628	115755992	Yes
4047493	PCDH18	54510	NM_019035	0.0001	haCNS691	chr4	138301944	138302103	Yes
2579572	ZEB2	9839	NM_014795	0.0001	haCNS631	chr2	144951143	144951614	Yes
2820622	ANKRD32	84250	NM_032290	0.0001	haCNS789	chr5	94052870	94053009	No
3540552	FUT8	2530	NM_178156	0.0001	haCNS207	chr14	65456342	65456934	Yes
3071063	GRM8	2918	NM_001127326	0.0002	haCNS825	chr7	126501581	126501777	Yes
3236786	PTER	9317	NM_030664	0.0002	haCNS987	chr10	16540296	16540559	No
3487600	C13orf31	144811	NM_001128303	0.0002	haCNS595	chr13	43517366	43517586	No
2765590	CENTD1	116984	NM_015230	0.0002	haCNS338	chr4	35484158	35484289	Yes
3201784	ELAVL2	1993	NM_004432	0.0002	haCNS387	chr9	23129978	23130373	Yes
3906390	PTPRT	11122	NM_133170	0.0002	haCNS98	chr20	40244572	40244761	Yes
2909912	TFAP2D	83741	NM_172238	0.0002	haCNS898	chr6	50512523	50512759	No
3144346	RUNX1T1	862	NM_175636	0.0002	haCNS126	chr8	92894316	92894877	Yes
3115008	TRIB1	10221	NM_025195	0.0003	haCNS210	chr8	126957973	126958145	No
2750753	TLL1	7092	NM_012464	0.0004	haCNS988	chr4	167184201	167184273	No
3278401	FRMD4A	55691	NM_018027	0.0004	haCNS25	chr10	14184818	14184985	No
3464417	MGAT4C	25834	NM_013244	0.0004	haCNS921	chr12	85250930	85251171	Yes
3691326	SALL1	6299	NM_002968	0.0004	haCNS754	chr16	49610673	49610912	No
3876645	BTBD3	22903	NM_181443	0.0004	haCNS939	chr20	12123528	12123668	No
3198974	MPDZ	8777	NM_003829	0.0005	haCNS792	chr9	13496848	13497044	Yes
3545634	NRXN3	9369	NM_001105250	0.0005	haCNS253	chr14	79112047	79112303	No
3807261	SMAD7	4092	NM_005904	0.0005	haCNS916	chr18	44720556	44720639	No
3804452	BRUNOL4	56853	NM_001025089	0.0005	haCNS39	chr18	33780432	33780735	Yes
2681753	FOXP1	27086	NM_032682	0.0005	haCNS279	chr3	70727339	70727713	Yes
3511817	ENOX1	55068	NM_017993	0.0006	haCNS336	chr13	42787753	42787979	Yes
3121751	CSMD1	64478	NM_033225	0.0006	haCNS940	chr8	4926377	4926593	Yes
2691112	GPR156	165829	NM_153002	0.0007	haCNS75	chr3	121466908	121467055	No
3422458	TRHDE	29953	NM_013381	0.0007	haCNS536	chr12	71252457	71252708	Yes
3646613	A2BP1	54715	NM_145892	0.0007	haCNS177	chr16	7224772	7225056	Yes
4020655	ODZ1	10178	NM_014253	0.0007	haCNS231	chrX	123425712	123426023	Yes
3149528	TRPS1	7227	NM_014112	0.0009	haCNS427	chr8	116786532	116786744	Yes

3189311	PBX3	5090	NM_006195	0.0010	haCNS229	chr9	127724955	127725133	No
2867443	MCTP1	79772	NM_024717	0.0010	haCNS725	chr5	94082953	94083151	No
2581726	RPRM	56475	NM_019845	0.0010	haCNS915	chr2	153690063	153690267	No
3558745	NOVA1	4857	NM_006489	0.0011	haCNS801	chr14	25712770	25713442	No
2515240	CYBRD1	79901	NM_024843	0.0012	haCNS454	chr2	172138565	172138903	No
2501835	DPP10	57628	NM_001004360	0.0012	haCNS77	chr2	116190851	116190981	Yes
3126739	LZTS1	11178	NM_021020	0.0013	haCNS464	chr8	20721098	20721314	Yes
2663551	NUP210	23225	NM_024923	0.0014	haCNS482	chr3	13251264	13251381	No
3298557	GRID1	2894	NM_017551	0.0015	haCNS843	chr10	87759049	87759258	No
2709235	DGKG	1608	NM_001080745	0.0016	haCNS622	chr3	187439790	187440040	No
3279575	RSU1	6251	NM_152724	0.0016	haCNS261	chr10	16745313	16745530	No
3698256	ATBF1	463	NM_006885	0.0021	haCNS405	chr16	71225181	71225521	No
3175274	PCSK5	5125	NM_006200	0.0021	haCNS142	chr9	77940531	77940723	No
3562910	MDGA2	161357	NM_001113498	0.0022	haCNS783	chr14	47912909	47913315	Yes
2486178	MEIS1	4211	NM_002398	0.0022	haCNS630	chr2	66767320	66767720	Yes
3501999	SOX1	6656	NM_005986	0.0025	haCNS396	chr13	111687313	111687480	Yes
2800026	ADAMTS16	170690	NM_139056	0.0026	haCNS679	chr5	4543158	4543379	No
3790982	CDH20	28316	NM_031891	0.0027	haCNS42	chr18	57447643	57447889	Yes
3575906	C14orf143	90141	NM_145231	0.0032	haCNS67	chr14	89285946	89286415	Yes
2512752	TBR1	10716	NM_006593	0.0036	haCNS106	chr2	162006961	162007146	No
2788926	NR3C2	4306	NM_000901	0.0038	haCNS929	chr4	149889169	149889415	No
3105271	RALYL	138046	NM_001100392	0.0039	haCNS422	chr8	85460840	85461038	Yes
2582562	ACVR1	90	NM_001111067	0.0039	haCNS238	chr2	158350161	158350328	No
3209060	TRPM3	80036	NM_001007471	0.0042	haCNS36	chr9	73051347	73051585	No
2597867	IKZF2	22807	NM_016260	0.0042	haCNS586	chr2	213642353	213642742	Yes
3989448	GRIA3	2892	NM_007325	0.0043	haCNS676	chrX	121624025	121624240	Yes
2790109	ANXA2	302	NM_001002858	0.0044	haCNS52	chr15	58454869	58455141	Yes
3198346	PTPRD	5789	NM_130393	0.0044	haCNS3	chr9	8150478	8150724	Yes
2690012	LSAMP	4045	NM_002338	0.0051	haCNS165	chr3	117387987	117388234	Yes
3329537	MGC4707	79096	NM_001003678	0.0053	haCNS245	chr11	46999772	46999996	No
2635641	PVRL3	25945	NM_015480	0.0055	haCNS189	chr3	112142557	112142694	No
2411642	AGBL4	84871	NM_032785	0.0055	haCNS236	chr1	49254538	49254702	Yes
3406493	DERA	51071	NM_015954	0.0056	haCNS79	chr12	16128227	16128340	Yes
3472468	RBM19	9904	NM_016196	0.0056	haCNS673	chr12	112952379	112952584	Yes
2490351	CTNNA2	1496	NM_004389	0.0059	haCNS92	chr2	80656208	80656388	Yes
3767465	AXIN2	8313	NM_004655	0.0061	haCNS772	chr17	60865562	60865946	No
2445357	ASTN1	460	NM_207108	0.0061	haCNS243	chr1	175275857	175276091	Yes
3498837	PCCA	5095	NM_000282	0.0062	haCNS254	chr13	99924009	99924525	No
2778856	TSPAN5	10098	NM_005723	0.0068	haCNS665	chr4	99861408	99861712	No
2444899	TNR	7143	NM_003285	0.0080	haCNS87	chr1	173971307	173971531	Yes
3367673	MPPED2	744	NM_001584	0.0082	haCNS144	chr11	30675089	30675240	Yes
2743370	C4orf33	132321	NM_001099783	0.0087	haCNS62	chr4	130422202	130422395	Yes

Table S13b. Regional DEX genes with associated haCNSs

Exon Array Transcript Cluster ID	Official Gene Symbol	Entrez GeneID	RefSeq Accession	Regional DEX p-value	haCNS	chr	start	stop	caCNS?
3698256	ATBF1	463	NM_006885	2.3E-58	haCNS405	chr16	71225181	71225521	No
2512752	TBR1	10716	NM_006593	5.9E-57	haCNS106	chr2	162006961	162007146	No
3530655	FOXG1	2290	NM_005249	4.1E-52	haCNS167	chr14	27669435	27670228	Yes
3132616	ZMAT4	79698	NM_024645	5.9E-46	haCNS709	chr8	40877703	40877901	Yes
3517251	DACH1	1602	NM_004392	3.3E-44	haCNS60	chr13	70621753	70622354	Yes
2546409	ALK	238	NM_004304	1.2E-43	haCNS250	chr2	29941244	29941439	Yes
2702610	SHOX2	6474	NM_003030	1.5E-41	haCNS655	chr3	159094527	159094780	Yes
3019793	FOXP2	93986	NM_148900	2.0E-41	haCNS169	chr7	114199879	114200201	Yes
3808854	TCF4	6925	NM_003199	6.5E-41	haCNS13	chr18	51877439	51877698	Yes
2782822	NDST4	64579	NM_022569	7.2E-40	haCNS251	chr4	116748095	116748200	Yes
3189311	PBX3	5090	NM_006195	2.4E-39	haCNS229	chr9	127724955	127725133	No
3889833	DOK5	55816	NM_177959	1.9E-38	haCNS695	chr20	52926808	52927102	Yes
2808931	ISL1	3670	NM_002202	4.3E-38	haCNS365	chr5	51097380	51097670	No
3252690	C10orf11	83938	NM_032024	6.1E-38	haCNS617	chr10	77108172	77108614	Yes
3272205	INPP5A	3632	NM_005539	7.6E-37	haCNS475	chr10	134321340	134322047	No
3876645	BTBD3	22903	NM_181443	1.0E-35	haCNS939	chr20	12123528	12123668	No
2945129	PRL	5617	NM_000948	2.0E-35	haCNS659	chr6	22225960	22226220	No
2486178	MEIS1	4211	NM_002398	5.4E-35	haCNS630	chr2	66767320	66767720	Yes
2579572	ZEB2	9839	NM_014795	3.6E-34	haCNS631	chr2	144951143	144951614	Yes
3401325	TSPAN9	10867	NM_006675	6.0E-34	haCNS105	chr12	3117135	3117301	Yes
3517051	KLHL1	57626	NM_020866	1.0E-33	haCNS104	chr13	68201696	68201994	No
3627422	RORA	6095	NM_134260	1.9E-33	haCNS799	chr15	59604053	59604352	No
2600881	PAX3	5077	NM_181457	3.2E-33	haCNS697	chr2	222499342	222499556	Yes

2875685	FSTL4	23105	NM_015082	4.9E-33	haCNS110	chr5	132704326	132704467	Yes
2479746	C2orf34	79823	NM_024766	5.9E-33	haCNS171	chr2	44560609	44560780	No
3792273	CDH7	1005	NM_004361	1.2E-32	haCNS161	chr18	61323894	61323995	No
3284596	PARD3	56288	NM_019619	1.2E-32	haCNS148	chr10	34257615	34257789	No
3345940	CNTN5	53942	NM_014361	8.0E-32	haCNS775	chr11	99952585	99952870	Yes
3447348	SOX5	6660	NM_178010	2.1E-31	haCNS610	chr12	24060581	24060839	No
2566848	AFF3	3899	NM_001025108	5.7E-31	haCNS433	chr2	100024443	100024634	No
3524570	EFNB2	1948	NM_004093	1.3E-30	haCNS763	chr13	105744999	105745127	Yes
3071063	GRM8	2918	NM_000845	1.8E-30	haCNS825	chr7	126501581	126501777	Yes
3042610	SKAP2	8935	NM_003930	2.4E-30	haCNS347	chr7	26731146	26731314	Yes
3928211	GRIK1	2897	NM_175611	2.6E-30	haCNS814	chr21	29852591	29852811	Yes
3292169	CTNNA3	29119	NM_013266	4.1E-30	haCNS942	chr10	68886082	68886308	Yes
2624639	CACNA2D3	55799	NM_018398	1.7E-29	haCNS516	chr3	54809508	54809792	Yes
2689516	ZBTB20	26137	NM_015642	2.4E-29	haCNS765	chr3	115755628	115755992	Yes
3361672	LMO1	4004	NM_002315	2.6E-29	haCNS364	chr11	8294097	8294376	No
3496409	GPC5	2262	NM_004466	2.7E-29	haCNS472	chr13	92257717	92257914	Yes
3546924	FLRT2	23768	NM_013231	2.8E-29	haCNS462	chr14	84194020	84194222	Yes
2833286	ARHGAP26	23092	NM_015071	6.4E-29	haCNS343	chr5	142528037	142528287	No
3446137	LMO3	55885	NM_018640	1.4E-28	haCNS121	chr12	16596252	16596435	Yes
3494137	LMO7	4008	NM_005358	2.8E-28	haCNS645	chr13	75637527	75637738	Yes
3300597	FER1L3	26509	NM_133337	4.5E-28	haCNS953	chr10	95092729	95092949	No
2379665	PROX1	5629	NM_002763	4.6E-27	haCNS878	chr1	212169333	212169505	No
4022183	HS6ST2	90161	NM_147174	6.2E-27	haCNS524	chrX	131840365	131840756	Yes
2339872	ROR1	4919	NM_005012	7.1E-27	haCNS354	chr1	64363286	64363784	No
3646613	A2BP1	54715	NM_145891	2.8E-26	haCNS177	chr16	7224772	7225056	Yes
2872047	SEMA6A	57556	NM_020796	1.3E-25	haCNS316	chr5	115812653	115813025	Yes
3150844	SNTB1	6641	NM_021021	1.4E-25	haCNS667	chr8	121710864	121711040	Yes
2918388	POU3F2	5454	NM_005604	4.9E-25	haCNS145	chr6	99052913	99053392	Yes
2992243	DNAH11	8701	NM_003777	5.0E-25	haCNS812	chr7	21833084	21833547	No
2681044	FAM19A4	151647	NM_001005527	6.5E-25	haCNS191	chr3	69054419	69054602	No
3176209	TLE4	7091	NM_007005	1.4E-24	haCNS551	chr9	81881072	81881552	Yes
2750753	TLL1	7092	NM_012464	5.0E-24	haCNS988	chr4	167184201	167184273	No
4022447	GPC3	2719	NM_004484	5.6E-24	haCNS288	chrX	132922619	132923153	No
3149528	TRPS1	7227	NM_014112	7.2E-24	haCNS427	chr8	116786532	116786744	Yes
2788926	NR3C2	4306	NM_000901	1.2E-23	haCNS929	chr4	149889169	149889415	No
3323052	NAV2	89797	NM_145117	1.3E-23	haCNS684	chr11	19763499	19763781	No
3126739	LZTS1	11178	NM_021020	3.3E-23	haCNS464	chr8	20721098	20721314	Yes
3516228	PCDH20	64881	NM_022843	5.6E-23	haCNS430	chr13	63119243	63119376	Yes
3361811	STK33	65975	NM_030906	1.4E-22	haCNS147	chr11	8340293	8340769	No
2581726	RPRM	56475	NM_019845	3.3E-22	haCNS915	chr2	153690063	153690267	No
3199207	NFIB	4781	NM_005596	6.0E-22	haCNS349	chr9	14315359	14315644	No
2345286	LMO4	8543	NM_006769	2.0E-21	haCNS51	chr1	87848467	87848709	Yes
2884727	ATP10B	23120	AB018258	2.4E-21	haCNS416	chr5	159910690	159910937	No
4051849	PTCH1	5727	NM_000264	2.6E-21	haCNS232	chr9	97461843	97462028	No
2778856	TSPAN5	10098	NM_005723	2.7E-21	haCNS665	chr4	99861408	99861712	No
2524016	PARD3B	117583	NM_152526	3.3E-21	haCNS460	chr2	205999868	206000078	Yes
2800026	ADAMTS16	170690	NM_139056	4.3E-21	haCNS679	chr5	4543158	4543379	No
2851511	CDH9	1007	NM_016279	6.1E-21	haCNS513	chr5	28348357	28348627	Yes
2340078	VWCD1	57685	NM_020925	7.6E-21	haCNS737	chr1	64788442	64788738	No
3631214	TLE3	7090	NM_005078	9.5E-21	haCNS155	chr15	67927785	67927896	No
2920085	FLJ10159	55084	NM_018013	2.6E-20	haCNS140	chr6	108071093	108071302	No
2515240	CYBRD1	79901	NM_024843	2.7E-20	haCNS454	chr2	172138565	172138903	No
3175274	PCSK5	5125	NM_006200	3.3E-20	haCNS142	chr9	77940531	77940723	No
3989448	GRIA3	2892	NM_181894	4.2E-20	haCNS676	chrX	121624025	121624240	Yes
3234277	GATA3	2625	NM_001002295	9.5E-20	haCNS199	chr10	9281853	9282602	No
2470838	MYCN	4613	NM_005378	1.3E-19	haCNS133	chr2	16142328	16142508	No
3463056	CSRP2	1466	NM_001321	1.7E-19	haCNS111	chr12	75867499	75867642	No
2341387	LRRC7	57554	NM_020794	4.4E-19	haCNS143	chr1	69852865	69852998	No
3393311	DSCAML1	57453	NM_020693	7.2E-19	haCNS459	chr11	116838424	116838793	Yes
3218151	GRIN3A	116443	NM_133445	8.5E-19	haCNS424	chr9	103669473	103669856	Yes
2576988	LYPD1	116372	NM_144586	1.0E-18	haCNS95	chr2	133063363	133063559	No
2762088	LDB2	9079	NM_001290	1.2E-18	haCNS432	chr4	16679857	16680021	No
2503929	CNTNAP5	129684	NM_138996	1.2E-18	haCNS815	chr2	126009228	126009329	No
2827057	GRAMD3	65983	NM_023927	1.3E-18	haCNS223	chr5	125262531	125263211	Yes
2380440	LOC128153	128153	NM_138796	1.6E-18	haCNS194	chr1	216010735	216011313	No
3144346	RUNX1T1	862	NM_175634	1.6E-18	haCNS126	chr8	92894316	92894877	Yes
2973376	PTPRK	5796	NM_002844	1.9E-18	haCNS600	chr6	128550930	128551035	No
3542275	SMOC1	64093	NM_022137	2.5E-18	haCNS461	chr14	69389036	69389264	No
2703902	BCHE	590	NM_000055	3.0E-18	haCNS755	chr3	167665520	167665813	Yes
3308241	GFRA1	2674	NM_145793	3.1E-18	haCNS558	chr10	117765211	117765317	No
2515627	ITGA6	3655	NM_000210	5.4E-18	haCNS747	chr2	172959698	172959941	No
3627248	ANXA2	302	NM_001002857	6.6E-18	haCNS52	chr15	58454869	58455141	Yes
3174816	ANXA1	301	NM_000700	7.3E-18	haCNS357	chr9	75045823	75046044	No

3319073	SYT9	143425	NM_175733	1.2E-17	haCNS540	chr11	7392512	7392848	No
2736060	GRID2	2895	NM_001510	1.2E-17	haCNS447	chr4	94325526	94325665	Yes
3897505	JAG1	182	NM_000214	1.7E-17	haCNS808	chr20	11057526	11057672	Yes
3694215	CDH8	1006	NM_001796	3.3E-17	haCNS72	chr16	61919767	61919944	Yes
3545634	NRXN3	9369	NM_138970	3.4E-17	haCNS253	chr14	79112047	79112303	No
3790982	CDH20	28316	NM_031891	3.7E-17	haCNS42	chr18	57447643	57447889	Yes
2837029	SGCD	6444	NM_172244	3.7E-17	haCNS358	chr5	155610296	155610585	Yes
3367673	MPPED2	744	NM_001584	4.6E-17	haCNS144	chr11	30675089	30675240	Yes
2608469	ITPR1	3708	NM_002222	6.5E-17	haCNS611	chr3	4765328	4765561	No
2607757	CNTN6	27255	NM_014461	7.6E-17	haCNS394	chr3	1686232	1686505	Yes
3148463	ANGPT1	284	NM_001146	1.6E-16	haCNS54	chr8	108285726	108286111	No
3575906	C14orf143	90141	NM_145231	1.8E-16	haCNS67	chr14	89285946	89286415	Yes
3519624	SLITRK1	114798	NM_052910	1.9E-16	haCNS55	chr13	83764795	83765037	No
2613293	KCNH8	131096	NM_144633	2.0E-16	haCNS706	chr3	18982904	18983063	No
3356539	HNT	50863	NM_016522	2.9E-16	haCNS58	chr11	131357793	131357915	Yes
2680819	SUCLG2	8801	NM_003848	3.8E-16	haCNS392	chr3	67832929	67833044	Yes
3757840	STAT3	6774	NM_003150	7.6E-16	haCNS918	chr17	37784188	37784336	No
2771342	EPHA5	2044	NM_004439	8.0E-16	haCNS967	chr4	66160039	66160138	Yes
3618333	MEIS2	4212	NM_170674	1.3E-15	haCNS486	chr15	34964313	34964458	No
3496637	GPC6	10082	NM_005708	2.2E-15	haCNS329	chr13	93159803	93159950	No
3972657	IL1RAPL1	11141	NM_014271	2.4E-15	haCNS894	chrX	29345332	29345661	Yes
3727449	TOM1L1	10040	NM_005486	2.9E-15	haCNS834	chr17	49860330	49860522	Yes
7385641	CLSTN2	64084	NM_022131	3.8E-15	haCNS489	chr3	141585826	141585979	Yes
3653266	CACNG3	10368	NM_006539	4.0E-15	haCNS911	chr16	24352475	24352653	No
2809399	FST	10468	NM_006350	4.1E-15	haCNS518	chr5	52691897	52692234	Yes
3029900	CNTNAP2	26047	NM_014141	5.1E-15	haCNS97	chr7	145618470	145618578	Yes
2470165	TRIB2	28951	NM_021643	8.5E-15	haCNS468	chr2	12455705	12455889	No
3464860	DUSP6	1848	NM_001946	8.6E-15	haCNS240	chr12	88267696	88268072	Yes
3788560	DCC	1630	NM_005215	1.1E-14	haCNS218	chr18	47660078	47660381	Yes
3518086	TBC1D4	9882	NM_014832	1.1E-14	haCNS437	chr13	74309835	74309973	No
3384704	DLG2	1740	NM_001364	2.2E-14	haCNS746	chr11	83100042	83100234	Yes
3117384	KHDRBS3	10656	NM_006558	2.3E-14	haCNS816	chr8	136697839	136698088	Yes
3093526	UNC5D	137970	NM_080872	2.8E-14	haCNS793	chr8	35643432	35643696	Yes
3653786	HS3ST4	9951	NM_006040	3.0E-14	haCNS211	chr16	25438002	25438158	Yes
2424524	DPYD	1806	NM_000110	4.3E-14	haCNS537	chr1	98395817	98395988	No
3159946	SMARCA2	6595	NM_003070	4.4E-14	haCNS521	chr9	2040744	2041141	Yes
2370433	CACNA1E	777	NM_000721	5.5E-14	haCNS568	chr1	180044534	180044778	No
2763550	PPARGC1A	10891	NM_013261	1.0E-13	haCNS68	chr4	23484769	23485247	Yes
2387126	RYR2	6262	NM_001035	1.5E-13	haCNS383	chr1	235274374	235274542	No
3495968	SLITRK5	26050	NM_015567	1.8E-13	haCNS616	chr13	86603709	86603919	Yes
2681753	FOXP1	27086	NM_032682	2.1E-13	haCNS279	chr3	70727339	70727713	Yes
3970642	CDKL5	6792	NM_003159	2.4E-13	haCNS809	chrX	18355388	18355665	No
2970607	HS3ST5	222537	NM_153612	2.8E-13	haCNS832	chr6	115043272	115043392	No
2867443	MCTP1	79772	NM_024717	3.5E-13	haCNS725	chr5	94082953	94083151	No
2686023	DCBLD2	131566	NM_080927	5.5E-13	haCNS30	chr3	100258326	100258437	No
2628482	FAM19A1	407738	NM_213609	6.6E-13	haCNS404	chr3	68030843	68031386	Yes
2996753	GPR154	387129	NM_207172	9.8E-13	haCNS767	chr7	34857682	34857853	No
2909948	TFAP2B	7021	NM_003221	1.0E-12	haCNS620	chr6	51031996	51032335	No
2805078	CDH6	1004	NM_004932	1.1E-12	haCNS753	chr5	30891924	30892049	Yes
3266408	EMX2	2018	NM_004098	2.0E-12	haCNS278	chr10	119497592	119497757	No
2453370	PLXNA2	5362	NM_025179	2.5E-12	haCNS887	chr1	206674809	206675260	Yes
3420854	DYRK2	8445	NM_006482	2.7E-12	haCNS129	chr12	66573162	66573339	No
3347939	LOC399947	399947	NM_207645	2.7E-12	haCNS759	chr11	108909085	108909365	No
3091699	PNOC	5368	NM_006228	3.4E-12	haCNS599	chr8	28221733	28221885	No
2514969	GAD1	2571	NM_013445	5.8E-12	haCNS57	chr2	171387763	171387967	No
3762753	CA10	56934	NM_020178	5.8E-12	haCNS299	chr17	47184433	47184693	Yes
3368814	LMO2	4005	NM_005574	7.5E-12	haCNS860	chr11	33884825	33885317	No
3735679	MGAT5B	146664	NM_144677	1.1E-11	haCNS828	chr17	72550489	72550735	No
2425652	OLFM3	118427	NM_058170	1.5E-11	haCNS663	chr1	101905911	101906137	Yes
3610110	NR2F2	7026	NM_021005	2.0E-11	haCNS32	chr15	94753758	94754013	Yes
2935475	QKI	9444	NM_206855	2.7E-11	haCNS952	chr6	164340502	164340877	No
2600689	EPHA4	2043	NM_004438	3.1E-11	haCNS201	chr2	221757000	221757162	Yes
2522094	DNAPTP6	26010	NM_015535	3.2E-11	haCNS686	chr2	200746296	200746745	No
2743800	PCDH10	57575	NM_032961	3.7E-11	haCNS565	chr4	134658662	134659043	Yes
3707812	KIAA0523	23302	NM_015253	4.9E-11	haCNS613	chr17	5898788	5898921	No
2976768	CITED2	10370	NM_006079	8.1E-11	haCNS182	chr6	140440650	140441005	No
2554975	BCL11A	53335	NM_018014	8.6E-11	haCNS101	chr2	59740616	59740976	Yes
2971801	MAN1A1	4121	NM_005907	9.6E-11	haCNS623	chr6	120083887	120084154	Yes
3725685	NGFR	4804	NM_002507	1.2E-10	haCNS693	chr17	44909962	44910419	No
3562910	MDGA2	161357	NM_182830	1.4E-10	haCNS783	chr14	47912909	47913315	Yes
3804452	BRUNOL4	56853	NM_020180	1.6E-10	haCNS39	chr18	33780432	33780735	Yes
2444899	TNR	7143	NM_003285	1.8E-10	haCNS87	chr1	173971307	173971531	Yes
2601995	IRS1	3667	NM_005544	1.9E-10	haCNS856	chr2	227070286	227070455	No

3519309	SPRY2	10253	NM_005842	3.9E-10	haCNS313	chr13	81444472	81444787	Yes
3531736	NPAS3	64067	NM_173159	5.4E-10	haCNS96	chr14	32888896	32889211	Yes
2607923	CNTN4	152330	NM_175607	7.2E-10	haCNS451	chr3	2112725	2113157	Yes
2869880	EFNA5	1946	NM_001962	1.2E-09	haCNS704	chr5	106842100	106842248	Yes
4020655	ODZ1	10178	NM_014253	1.4E-09	haCNS231	chrX	123425712	123426023	Yes
2338719	NFIA	4774	NM_005595	1.4E-09	haCNS748	chr1	61483496	61483696	Yes
3411810	PDZRN4	29951	NM_013377	1.7E-09	haCNS629	chr12	40506042	40506255	Yes
2490351	CTNNA2	1496	NM_004389	2.2E-09	haCNS92	chr2	80656208	80656388	Yes
2524301	NRP2	8828	NM_018534	3.3E-09	haCNS265	chr2	206245096	206245372	No
3209060	TRPM3	80036	NM_206947	3.5E-09	haCNS36	chr9	73051347	73051585	No
3971666	PTCHD1	139411	NM_173495	4.1E-09	haCNS822	chrX	23228766	23229166	No
2378019	CAMK1G	57172	NM_020439	6.4E-09	haCNS946	chr1	207801418	207801746	Yes
3511817	ENOX1	55068	NM_017993	7.0E-09	haCNS336	chr13	42787753	42787979	Yes
3326826	FJX1	24147	NM_014344	1.1E-08	haCNS503	chr11	35601290	35601570	No
3136888	TOX	9760	NM_014729	1.2E-08	haCNS272	chr8	60588695	60588989	Yes
3497340	HS6ST3	266722	NM_153456	5.7E-08	haCNS164	chr13	96072144	96072321	Yes
3732230	PITPNC1	26207	NM_181671	8.9E-08	haCNS206	chr17	62854197	62854398	No
2652801	NLGN1	22871	NM_014932	2.8E-07	haCNS64	chr3	175163210	175163607	Yes
3521083	SOX21	11166	NM_007084	3.1E-07	haCNS510	chr13	94278587	94278803	No
3394488	PVRL1	5818	NM_002855	5.2E-07	haCNS467	chr11	119052625	119052773	No
2667024	EOMES	8320	NM_005442	8.6E-07	haCNS598	chr3	27926924	27927073	No
3305801	SORCS1	114815	NM_001013031	8.9E-07	haCNS5	chr10	108799372	108799584	No
4018080	CHRDL1	91851	NM_145234	9.6E-07	haCNS275	chrX	109707257	109707663	No
3501999	SOX1	6656	NM_005986	1.4E-06	haCNS396	chr13	111687313	111687480	Yes
3797295	L3MBTL4	91133	NM_173464	2.1E-06	haCNS786	chr18	5954449	5954661	No
3163982	ADAMTSL1	92949	NM_052866	2.4E-06	haCNS128	chr9	18438142	18438380	No
2854092	LIFR	3977	NM_002310	2.7E-06	haCNS511	chr5	38676918	38677173	No
3262715	SORCS3	22986	NM_014978	3.3E-06	haCNS59	chr10	107090354	107090655	Yes
3125116	DLC1	10395	NM_024767	4.7E-06	haCNS701	chr8	13070339	13070464	No
2873897	MARCH3	115123	NM_178450	7.4E-06	haCNS341	chr5	126266047	126266370	Yes
2709778	BCL6	604	NM_138931	7.6E-06	haCNS526	chr3	189110780	189111074	No
3733590	SOX9	6662	NM_000346	8.0E-06	haCNS346	chr17	67071580	67071793	Yes
3427352	NEDD1	121441	NM_152905	9.3E-06	haCNS973	chr12	95887688	95887884	Yes
2455699	USH2A	7399	NM_206933	5.1E-03	haCNS425	chr1	213913026	213913214	No

Table S14. Gene ontology functional annotation clustering

Enriched biological functions (source of representative annotations)	Geometric mean EASE score	Number of genes annotated	Percentage of gene list annotated	Genes annotated (representative sample for lists > 30)
NCTX+HIP (109 genes)				
transcription factor activity (GO BP)	0.029	14	12.8%	RORB, TBR1, HIVEP2, SATB1, SATB2, SOX5, NEUROD2, TSHZ3, NR4A2, POU3F2, MEF2C, ZNF238, NFIX, BACH2
axon guidance (KEGG)	0.046	7	6.4%	SEMA3C, SEMA3E, PTPRK, EPHB6, ADAMTSL3, SEMA3A, UNC5D
nervous system development & cell differentiation (GO BP)	0.049	21	19.3%	TBR1, SEMA3C, SEMA3E, DACT1, FZD4, NPR3, OSTN, SEMA3A, UNC5D, AFF3, SCUBE1, CAP2, NEUROD2, NEUROG2, TSHZ3, COL12A1, HDAC9, MEF2C, CSRP2, THBS1
sequence-specific DNA binding (homeobox) (GO MF)	0.094	8	7.3%	RORB, NR4A2, TSHZ3, POU3F2, SATB1, SATB2, MEF2C, BACH2
transcription (GO BP/GO MF/SwissProt)	0.100	86	78.9%	AKAP7, BACH2, BCL2, CAP2, CPVL, DACT1, DNAH10, EXOC4, FZD4, FAT4, HDAC9, HIVEP2, KLHL1, MEF2C, NELL2, NEUROD2, OSTN, POU3F2, RNF182, RPRM, SATB1, SATB2, SEMA3A, SLA, SOX5, TBR1, THBS1, TMOD1, TSHZ3, ZNF238
laminin G, thrombospondin-type; EGF (InterPro)	0.113	11	10.1%	RSPO3, MCTP1, RKHD3, SCUBE1, CAP2, PPEF1, FAT4, COL12A1, NELL2, THBS1, SSX2IP
HIP (109 genes)				
axoneme; cell projection (GO CC)	**2.07E-03**	9	8.3%	DNAH9, MAK, DNAH11, ADC, RIBC1, DNALI1, CLIC5, CRHBP, SPAG6
leucine-rich repeat (InterPro)	**2.27E-03**	7	6.4%	LRRC50, LRRIQ1, LRRC48, FLJ46156, LRRC46, SLIT3, TSHR
phospholipid binding; calcium binding (SwissProt)	0.019	8	7.3%	HPCA, PRKCA, HAPLN1, NR3C2, ITGA4, ANXA11, ANXA1, RASAL1
axonemal dynein complex; cell localization (GO CC/BP)	0.019	25	22.9%	NRP2, LOC440258, LATS2, DNALI1, ITGA4, STON2, ANXA1, TEKT1, DNAH11, SLC35A1, DAAM2, AK7, CLIC5, SLC7A14, CTGF, SPAG6, PCGF5, IL5RA, FLJ31196, CYB5R2, DNAH9, MAOB, GABRG2, KCNAB1, RIBC1
axoneme; microtubule cytoskeleton (GO CC)	0.025	9	8.3%	DNAH9, TEKT1, DNAH11, DAAM2, EPB41L3, LATS2, DNALI1, AK7, SPAG6
cytoskeleton; armadillo domain (SwissProt/InterPro)	0.025	8	7.3%	DAAM2, EPB41L3, ARMC3, PKP2, WDR16, ITGA4, SPAG6, PDLIM1
cytoskeleton (GO CC)	0.045	28	25.7%	IQGAP2, FLJ32921, LATS2, DNALI1, ITGA4, PDLIM1, ARMC3, STON2, PKP2, NR3C2, ANXA1, ZBTB20, DNAH11, TEKT1, SLC35A1, CTSH, EPB41L3, CHST6, WDR16, CLIC5, SPAG6, PCGF5, CAMK1G, DNAH9, TEB1, MAOB, KCNAB1, ANXA11
STR (105 genes)				
signal transduction (GO BP)	**6.79E-07**	51	48.6%	CDH8, CNTNAP5, CPNE5, CRABP1, CX3CL1, DIRAS2, DRD1, DTNBP1, DUSP6, EGR3, FOXP1, GNG7, GPR88, GRM3, GUCY1A3, ISL1, KCNA5, LGR8, LHX8, LRRC56, NMBR, PDE7B, PDYN, POU3F4, RAB31, RARB, RGS4, RGS9, TITF1, WNT7A
synaptic transmission of nerve impulse (GO BP)	**4.75E-04**	17	16.2%	DTNBP1, GRM3, ADRA1B, POU3F4, ALDH5A1, WNT7A, DRD2, SLC5A7, MME, PDE7B, PROK2, PDYN, DRD3, RGS9, DRD1, ADORA2A, TAC1
neurotransmitter (DA) receptor activity (GO MF)	**1.21E-03**	7	6.7%	BRS3, ADRA1B, DRD3, DRD1, DRD2, NMBR, TACR1
G-protein coupled receptor protein signaling pathway (GO BP/KEGG)	**6.08E-03**	44	41.9%	ALDH5A1, CX3CL1, DIRAS2, DRD1, GPR88, GUCY1A3, KCNA5, LGR8, PDE7B, PDYN, RARB, RGS9, SLC40A1, TAC1, TSPAN9, WNT7A
neuropeptide signaling pathway (GO BP/SwissProt)	0.011	4	3.8%	PDYN, PROK2, TAC1, TAC3
regulation of MAPK activity/protein kinase cascade (GO BP)	0.022	12	11.4%	RGS4, DIRAS3, STAT4, GRM3, ADRA1B, PROK2, TPD52L1, SECTM1, RGS2, LOH11CR2A, ADORA2A, DUSP6
regulation of signal transduction/GPCR signaling (GO BP)	0.023	12	11.4%	RGS4, GRM3, WFDC2, PROK2, TPD52L1, GNG7, SECTM1, RGS2, RGS14, LOH11CR2A, RGS9, DUSP6
cyclic nucleotide biosynthesis (GO BP)	0.024	15	14.3%	BRS3, PPARGC1A, DRD2, PDE10A, BCKDHA, GUCY1B3, LOC129607, SLC5A7, PDE7B, HSD17B6, DRD1, ADORA2A, ADCY5, GCNT3, GUCY1A3
plasma membrane (GO CC)	0.028	48	45.7%	ADRA1B, CACNG5, CDH8, DIRAS2, DRD3, GCNT3, GNG7, GRM3, KCNJ2, LAMC2, MCAM, PTGES, SCAP2, SLC40A1, SMOC2, TMEPAI
regulation of enzyme activity (GO BP)	0.046	11	10.5%	RGS4, DIRAS3, GRM3, PROK2, TPD52L1, RGS2, RGS14, LOH11CR2A, RGS9, ADORA2A, DUSP6
THM (137 genes)				
nervous system development (GO BP)	0.016	22	16.1%	KCNN3, LOC440258, OLFM1, PROX1, TAL1, VAT1, PPL, MEF2A, APBB2, ST6GAL2, AKAP2, ODZ1, DMBX1, CREG1, STS, CYP46A1, NTNG1, SHOX2, WNT10B, PITPNM1, VANGL1, GATA3
membrane (GO CC)	0.017	58	42.3%	AKAP2, CADPS, CENTA1, CHRFAM7A, CHST1, EPHX1, GPR153, IMPG2, KCNK10, LRFN5, MYADM, NPY6R, NTNG1, PRICKLE1, RAB15, SCN7A, SEZ6L2, SLC37A1, TLN2, SYT3, SYNGR3, VAT1, VANGL1
ion channel/transporter activity/localization (SwissProt/GO MF)	0.018	45	32.8%	APBB2, CENTA1, CNTNAP1, CYP46A1, KCNJ5, LIN7A, NTNG1, RAB15, RIT2, SLC17A6, SLC37A1, STS, SYT3, TSPAN2, TXNDC13, TLN2, APBB2, EPHA10, GLRA3, SORCS2
synapse (GO CC)	0.060	12	8.8%	TLN2, SYT3, CADPS, NPY6R, GRIN3A, OLFM1, GLRA3, EPHA10, APBB2, CHRFAM7A, GPR153, SORCS2
EGF-like (InterPro)	0.076	7	5.1%	CNTNAP1, ADAM19, NTNG1, EPHA10, ODZ1, IMPG2, NRXN2
wnt signaling pathway (KEGG)	0.10	5	3.6%	LEF1, WNT10B, TCF7L2, PRICKLE1, VANGL1
neurotransmitter binding/receptor activity (GO MF)	0.123	8	5.8%	NPY6R, OLFM1, GRIN3A, GLRA3, EPHA10, CHRFAM7A, GPR153, SORCS2
CBL (140 genes)				
extracellular matrix (GO CC)	0.016	16	11.4%	FGL2, FST, MGP, NXPH4, MFAP2, FGF5, GPC3, LCAT, RELN, ADAMTS5, ADAMTS6, APOL4, ANGPTL2, SMOC1, SEPP1, FREM1
cellular morphogenesis (GO BP)	0.059	17	12.1%	EMP1, HIST1H2AC, FGFR1, CECR2, ABTB2, LOC440258, GPC3, DSCAML1, EXPH5, EMP3, PAX3, KIF12, HEY2, PAX2, ITGA7, PAX6, ARHGAP10
pattern specification; embryonic development (GO BP)	0.107	4	2.9%	PAX3, HEY2, PAX6, DSCAML1
transcription factor activity; homeobox (GO MF/InterPro)	0.110	15	10.7%	ST18, LMX1A, TEAD2, TFAP2B, TGIF2, PAX3, GLI1, TCF12, MSX2, TCEA3, ETV4, NFATC4, HEY2, PAX6, TFAP2A
cellular (neuronal) morphogenesis (GO BP)	0.128	12	8.6%	EMP1, FGFR1, EMP3, MGP, ABTB2, NGFR, LOC440258, NOTCH1, PAX2, ITGA7, PAX6, DSCAML1
EGF-like (InterPro)	0.130	6	4.3%	RELN, MEGF10, CRB2, NOTCH1, TLL1, EPHB2
paired box; sensory perception of light stimulus (SwissProt/GO BP)	0.145	19	13.6%	AGTR1, MGP, TRPC3, SLC6A5, PPM1D, PAX3, FAS, TCF12, TCEA3, TYMS, CRB2, ETV4, NFATC4, NOTCH1, SEPP1, PAX2, CERKL, PAX6, SLC1A6
Fig. 3 NCTX clusters, combined (169 genes)				
cell adhesion (GO BP)	**1.07E-04**	21	12.4%	PCDH17, LAMB1, LAMA5, NCAM2, ITGA9, FCGBP, KITLG, ROBO1, CDH9, CNTNAP2, CNTNAP5, FLRT3, PDZD2, NEGR1, GPNMB, CNTNAP4, BCL6, BMPR1B, L3MBTL4, CD44, NID2
membrane (GO CC)	**2.00E-03**	95	56.2%	CCBP2, PCDH17, GOLSYN, SULF1, BTN3A3, ANK1, TGFA, PTGFR, ROBO1, SSTR2, NAALAD2, CBLN2, PLXND1, POPDC3, PDZD2, NTNG1, NEGR1, IGFBP5, PRSS12, PTX3, CNTNAP2, SLITRK3, MBP, SLC26A7, SGCZ, NID2, CDH9, LAMB1, MASP1
system development/morphogenesis (GO BP)	**2.02E-03**	57	33.7%	BHLHB2, CCBP2, SULF1, ANK1, TGFA, MID1, ROBO1, NAALAD2, SSTR2, IGFBP5, MBP, TRAF5, LAMB1, MASP1, NCAM2, SLITRK3, SCNN1G, ST6GAL2, CNTNAP2, CTNNBL1, IL7, NR4A3, COL5A2, FOXP2, L3MBTL4, NTNG1, IGFBP4, NTN4
ECM: Laminin domain (InterPro)	0.013	29	17.2%	SULF1, TGFA, NTN4, PCSK5, FLRT3, PDZD2, PCSK6, TGFB3, IGFBP5, PRSS12, SPINT1, KIRREL3, PTX3, RSPO2, SGCZ, NID2, LAMB1, LAMA5, MASP1, FCGBP, KITLG, CNTNAP2, CNTNAP4, IL7, WNT5B, COL5A2, NTNG1, IGFBP4, TF
Concanavalin A-like lectin/glucanase, subgroup; Laminin G (InterPro)	0.025	13	7.7%	LAMA5, MASP1, TGFA, KITLG, CNTNAP2, CNTNAP5, TGFB3, GPNMB, CNTNAP4, IL7, PTX3, NTNG1, NID2
ECM-receptor interaction (KEGG)	0.055	9	5.3%	LAMB1, LAMA5, ITGA9, COL5A2, NTN4, MET, CD44, SGCZ, NID2
axon guidance (KEGG)	0.065	32	18.9%	SULF1, CYP26B1, NTN4, ANK1, UNC5C, ROBO1, EBF1, TGFB3, IGFBP5, MAP3K5, BCL6, MBP, NGEF, MET, TRAF5, LAMB1, PRKG1, LAMA5, NCAM2, SLITRK3, RCAN2, EPHA4, CTNNBL1, IL7, WNT5B, BMPR1B, FOXP2, PALMD, NTNG1, IGFBP4, TF
plasma membrane; signal transduction (GO CC/BP)	0.067	69	40.8%	CCBP2, C13ORF18, ANK1, PTGFR, TGFA, ROBO1, RGS22, SSTR2, CNTNAP5, PDZD2, NEGR1, IGFBP5, PRSS12, STXBP4, MBP, RGS8, CNTNAP4, SHANK2, EPHA4, WNT5B, CDH9, RXRG, SGCZ, RARB, BCL6, TRAF5, CDCP1, LAMB1, YES1, NCAM2
Intra-NCTX DEX genes near haCNSs (181 genes)				
cell adhesion; cadherins (GO BP/InterPro)	**8.03E-12**	50	27.6%	BCL6, CADM1, CDH13, CDH20, CDH22, CDH23, CDH6, CDH8, CDH9, CNTN4, CNTN6, CNTNAP2, CNTNAP5, CTNNA2, NCAM2, NRP2, NRXN3, OPCML, PCDH10, PCDH18, PCDH7, PCDH8, PCDH9, PVRL1, PVRL3, ROBO1, SOX9, TNR, ZEB2
membrane (GO CC)	**1.99E-07**	106	58.6%	ACVR1, ADAMTSL1, CDH13, CDH22, CNTN4, CLSTN2, CNTNAP2, DCC, EPHA4, GRID1, GRIK1, KIRREL3, LPHN2, LRRTM4, MDGA2, NUP210, PCDH10, PCDH9, PTPRG, PTPRK, PTPRS, SLITRK5, SMOC1, SORCS1, UNC5D
immunoglobulin domain (InterPro)	**6.52E-07**	20	11.0%	HNT, PTPRS, NCAM2, PVRL1, LSAMP, IGSF11, CADM1, MDGA2, CNTN6, ROBO1, GBE1, PVRL3, UNC5D, CNTN4, KIRREL3, IL1RAP, PTPRK, OPCML, DCC, PTPRT
nervous system development (GO BP)	**5.54E-05**	67	37.0%	TBR1, NRP2, CA10, MDGA2, CNTN6, ROBO1, EFNB2, ODZ1, CNTN4, GRIK1, POU6F2, CHRD1, DCC, EFNA5, NCAM2, LSAMP, NRXN3, TNR, ZEB2, PBX3, FOXP2, POU3F2, NR2F1, SLITRK5, NR2F2, GFRA1, PCDH18, MPPED2
lipid binding (GO MF)	**7.92E-05**	20	11.0%	HNT, MCTP1, LSAMP, MDGA2, CNTN6, ANXA2, CENTD1, GRIA3, LYPD1, CNTN4, CAMK1G, CDH13, NR2F2, GFRA1, NR3C2, DGKG, OPCML, LZTS1, ANXA1, EFNA5
cell development; axon guidance (GO BP)	0.002	45	24.9%	NRP2, MDGA2, CADM1, ACVR1, ROBO1, UNC5D, CNTN4, CDH13, BRUNOL4, ASTN1, BCL6, POU6F2, CSRP2, ANXA1, DCC, EFNA5, Nrxn3, SOX9, TNR, CTNNBL1, ZEB2, POU3F2, NR2F1, SLITRK5, NR2F2, EGLN3, GRIK2
plasma membrane; signal transduction (GO CC/BP)	0.004	78	43.1%	PVRL1, CNTN6, EFNB2, CNTNAP5, CDH13, PTPRK, DGKG, MCTP1, SORCS1, LPHN2, UNC5D, BCL6, CENTD1, CNTNAP2, tnr, IL1RAP, DLC1, NR3C2, AXIN2, DUSP6, GRIK1, NRP2, DCC, TBC1D4, ACVR1, PCSK5, PTPRG, NOVA1
synaptic transmission (GO CC/MF)	0.007	41	22.7%	TRPM3, GRID1, TSPAN5, RYR2, GRIK4, CACNG3, GRIA3, GPR156, CACNA2D3, ITPR1, GRIK1, MPDZ, CLSTN2, GRID2, SYT9, GRM8, LZTS1, RIMS4, GRIK2
Regional DEX genes near haCNSs (203 genes)				
system development/neurogenesis (GO BP)	**9.71E-09**	94	46.3%	TLE3, MDGA2, CNTN6, ODZ1, EMX2, TRPS1, ALK, SOX5, FOXP2, BCL11A, LMO2, MPPED2, NRP2, TBR1, CA10, NLGN1, USH2A, ANGPT1, EFNB2, SGCD, CNTN4, BCL6, SEMA6A, EFNA5, DCC, TLL1, ZEB2, SLITRK1, POU3F2
cell adhesion; cadherins (GO BP/InterPro)	**3.60E-06**	35	17.2%	HNT, NRP2, PVRL1, NLGN1, CNTN6, USH2A, CNTN5, CNTNAP5, CDH20, CNTN4, PCDH20, BCL6, FLRT2, CDH7, CNTNAP2, ZEB2, CTNNA3, PCDH10, DLC1, L3MBTL4, CLSTN2, LMO4, CDH8, CTNNA2, ITGA6, CDH6, NRXN3, CDH9, DSCAML1, SOX9
cell development; axon guidance (GO BP)	**6.74E-06**	58	28.6%	DYRK2, NRP2, ISL1, NLGN1, UNC5D, ORL, BRUNOL4, BCL6, NGFR, EMX2, CSRP2, SEMA6A, DCC, ANXA1, ZEB2, SOX9, PAX3, SLITRK5, POU3F2, NR2F2, JAG1, PARD3, TNR, MDGA2, CNTN4, EFNA5, GRIN3A, NRXN3, SLITRK1, DSCAML1
lipid binding (GO MF)	**1.02E-04**	22	10.8%	HNT, MCTP1, GPC5, GPC6, MDGA2, CNTN6, ANXA2, GPC3, PITPNC1, CNTN5, LYPD1, CNTN4, GFRA1, NR3C2, ANXA1, EFNA5
membrane (GO CC)	**2.31E-04**	112	55.2%	PVRL1, DCBLD2, MDGA2, CNTN6, SKAP2, PARD3B, SYT9, ENOX1, TSPAN9, ALK, GPC5, GPC6, GRIN3A, NRXN3, PCDH10, L3MBTL4, CTNNA2, SNTB1, FER1L3, HNT, NPSR1, NLGN1, CLSTN2, ANXA2, PTPRK, CDH9, TNR, CTNNA3, ROR1, CDH8
fibronectin type III domain (InterPro)	0.001	13	6.4%	CNTN4, PTPRK, EPHA5, CNTN6, USH2A, EPHA4, FLRT2, LIFR, TNR, DSCAML1, CNTN5, DCC
immunoglobulin domain (InterPro)	0.001	21	10.3%	HNT, PVRL1, FSTL4, MDGA2, IL1RAPL1, CNTN6, CNTN5, DSCAML1, UNC5D, CNTN4, PTPRK, ROR1, DCC
homeobox domain (InterPro)	0.002	134	66.0%	ISL1, TRPS1, FOXP1, MEIS1, FOXG1, ZEB2, TFAP2B, PBX3, PAX3, BCL6, MEIS2, FOXP2, POU3F2
transcription factor activity; gene expression (GO MF/BP)	0.006	42	20.7%	TLE3, NR3C2, RUNX1T1, KCNH8, POU3F2, MYCN, KHDRBS3, EMX2, NPAS3, TLE4, SOX1, ZFHX3, TFAP2B, TRPS1, SOX21, SOX5, NFIB, TBR1, Cited2, SHOX2, BRUNOL4, BCL6, ZBTB20, EOMES, LMO4, ZEB2, PAX3, MEIS2, BCL11A, TOX

Table S15. M32 (deepskyblue1): NCTX module

								5-region ANOVA		
Transcript ID	Symbol	Accession	kTotal	kWithin-Connectivity	eigencorr	eigenpval	meanExpr	DEX	FoldChng	DAS
3498780	ZIC2	NM_007129	38.06034	1.00000025	-0.78733893	3.51E-20	7.4883608	4.0E-49	15.7	4.3E-50
2699844	ZIC4	NM_032153	35.4719	0.94039377	-0.76279657	2.40E-18	5.6991177	3.9E-55	8.8	7.4E-241
2341387	LRRC7	NM_020794	59.11094	0.877992849	0.9045616	0	9.714238	1.6E-21	4.3	1.3E-21
3780981	KIAA1772	NM_024935	31.56723	0.871723995	-0.84668587	7.69E-26	4.7493727	1.4E-56	10.6	5.1E-297
2977265	HIVEP2	NM_006734	41.61134	0.847567476	0.93693355	0	9.6524963	7.4E-14	3.0	6.0E-03
3522398	LOC441401	XM_499136	63.99661	0.820578758	0.90348742	0	9.232575	1.4E-22	2.6	4.9E-61
2929870	STXBP5	NM_139244	51.25816	0.820004384	0.91449206	0	8.8312409	1.1E-07	1.8	3.4E-13
2839543	KIBRA	NM_015238	30.11246	0.810272013	0.83620385	0	7.5878762	1.0E-16	2.9	3.8E-79
3810542	CCBE1	NM_133459	26.68761	0.715070525	0.81892171	0	8.1695771	1.7E-19	7.3	2.1E-08
3876645	BTBD3	NM_181443	40.08798	0.703078635	-0.75292745	1.14E-17	7.6459617	1.1E-35	10.6	6.3E-90
3509411	MAB21L1	NM_005584	17.69564	0.701851182	-0.69481544	3.05E-14	5.4554768	2.5E-63	22.3	7.8E-03
3992747	ZIC3	NM_003413	35.15088	0.701315376	-0.82973121	5.28E-24	5.7572514	1.0E-40	8.6	2.0E-96
3517251	DACH1	NM_004392	28.92245	0.696723606	-0.85363064	1.17E-26	6.3349398	5.9E-47	9.4	5.6E-197
2927604	KIAA1244	NM_020340	25.21469	0.696132671	0.77239182	0	8.3535973	6.3E-11	2.5	1.1E-08
3058991	CACNA2D1	NM_000722	31.41785	0.695812596	0.80331298	0	9.3542428	4.9E-13	2.9	1.5E-05
2379974	KCNK2	NM_014217	64.73971	0.690769832	0.84167759	0	8.0872076	9.3E-27	3.8	2.3E-31
3530655	FOXG1B	NM_005249	33.3378	0.664904642	0.69863189	1.91E-14	9.764077	5.8E-53	33.8	1.3E-39
2646818	ZIC1	NM_003412	62.62878	0.629360451	-0.77150782	5.69E-19	6.737008	8.7E-46	41.3	1.4E-41
3968122	TBL1X	NM_005647	23.88123	0.62145967	-0.82488666	1.62E-23	6.1669808	1.5E-21	2.1	1.8E-72
2628482	FAM19A1	NM_213609	27.57875	0.596172151	0.82971698	0	7.9151787	6.0E-13	3.5	4.5E-26
3154398	ST3GAL1	NM_173344	45.28521	0.59022786	0.85098691	0	7.6219492	3.4E-21	2.6	1.2E-15
3323052	NAV2	NM_145117	42.64399	0.589117286	0.85036983	0	8.7114286	2.1E-23	2.9	2.6E-248
3362191	SCUBE2	NM_020974	22.30924	0.584706367	-0.81961196	5.31E-23	6.323986	1.0E-36	3.1	1.8E-45
3154317	NDRG1	NM_006096	47.03058	0.581883656	0.80523176	0	9.7795375	5.6E-43	6.2	2.0E-13
2517588	OSBPL6	NM_032523	37.69737	0.58014619	0.86269511	0	7.435529	2.4E-08	1.8	7.5E-24
2397025	DHRS3	NM_004753	34.72497	0.565184962	-0.90714761	7.75E-35	6.312553	1.3E-33	2.9	2.0E-08
3603932	FAH	NM_000137	40.17296	0.564587766	-0.86578438	3.39E-28	5.885812	2.2E-31	2.6	9.2E-20
3684039	CRYM	NM_001014444	32.41284	0.562405993	0.71025125	4.44E-15	8.3231344	9.1E-32	7.5	8.9E-21
3437780	FZD10	NM_007197	18.20184	0.556512058	-0.70319587	1.10E-14	6.3174866	9.3E-35	4.3	2.9E-39
3010439	GNAI1	NM_002069	27.58903	0.545042066	0.78237343	0	8.7325945	6.9E-10	2.5	1.4E-17
2913277	KCNQ5	NM_019842	64.57083	0.539872833	0.8489355	0	7.4759411	2.4E-23	3.9	1.8E-51
2429613	NHLH2	NM_005599	19.25814	0.527820802	-0.71080124	4.22E-15	5.5325792	9.5E-39	3.0	2.2E-05
3140920	JPH1	NM_020647	36.18301	0.518074834	0.72355701	8.88E-16	7.4218053	5.0E-25	2.5	1.7E-12
2849469	ANKH	NM_054027	26.02333	0.513497842	0.83743708	0	8.9396323	5.6E-15	2.3	4.3E-32
3692280	IRX3	NM_024336	19.71833	0.498814891	-0.78031795	1.24E-19	6.327098	6.9E-28	2.0	4.6E-76
2386867	LGALS8	NM_201543	29.99432	0.468806539	0.80535037	0	8.2198927	3.1E-07	1.8	1.7E-01
2945598	KIAA0319	NM_014809	18.68543	0.46667035	0.83337821	0	8.3784417	1.1E-13	3.7	5.0E-17
2371547	C1orf21	NM_030806	17.78389	0.46571325	0.75513967	0	8.9336644	1.9E-11	1.8	9.7E-16
2595388	ALS2CR15	NM_138468	29.82671	0.45484148	0.82715801	0	7.9066095	4.8E-06	1.6	1.7E-03
3162529	C9orf150	NM_203403	17.10034	0.45351095	-0.73746965	1.14E-16	5.52629	2.1E-30	3.7	1.6E-39
3485292	NBEA	NM_015678	25.14257	0.453290244	0.79245337	0	10.053034	1.4E-14	2.1	1.9E-44
2911903	PTP4A1	NM_003463	33.82432	0.437019601	0.82988387	0	9.834393	9.2E-06	1.8	1.3E-02
3106479	EFCBP1	NM_022351	22.65738	0.434930415	0.87727252	0	8.499467	4.1E-17	7.1	6.5E-02
2449391	KCNT2	NM_198503	23.3299	0.43108495	0.79823945	0	7.4540954	7.6E-06	1.9	1.8E-13
2371694	RNF2	NM_007212	28.86644	0.428941716	0.75042111	0	8.3196943	1.3E-04	1.8	1.5E-11
2639734	KALRN	NM_001024660	18.34529	0.428630072	0.81869945	0	8.4542296	4.1E-12	2.0	1.4E-23
3176209	TLE4	NM_007005	19.40939	0.422301152	0.6189485	7.92E-11	9.3450983	1.8E-24	3.6	6.9E-06
3605348	SH3GL3	NM_003027	55.22215	0.422212008	0.8568142	0	7.6298868	1.3E-17	2.6	1.9E-34
3719329	LHX1	NM_005568	12.68945	0.414818929	-0.73862426	9.66E-17	6.2568155	6.9E-37	4.9	3.8E-55
3181193	TDRD7	NM_014290	21.79404	0.409839455	0.81018715	0	7.6986386	2.9E-08	1.8	3.0E-16
2615808	GPD1L	NM_015141	22.86397	0.399582004	0.84849693	0	8.3333709	1.1E-11	2.4	4.4E-04
3594986	TEX9	NM_198524	31.09744	0.39798996	-0.72375322	7.70E-16	5.6643581	2.2E-16	2.8	5.9E-22
2480168	PRKCE	NM_005400	22.80852	0.388260377	0.85001188	0	9.0891762	1.5E-08	2.1	6.9E-18
2428119	KCND3	NM_004980	42.31862	0.385840507	-0.70232099	1.22E-14	7.1267469	1.3E-19	2.2	5.2E-14
2912777	KIAA1411	NM_020819	23.08773	0.38324795	0.79126084	0	8.3789246	1.1E-04	1.5	6.7E-03
3991109	MASK	NM_016542	12.75815	0.379381671	-0.70935012	5.08E-15	4.7407018	2.7E-07	1.3	1.0E-13
2846522	IRX2	NM_033267	22.0572	0.378030113	-0.72516659	6.36E-16	6.790704	5.9E-37	2.1	3.6E-41
3308489	KIAA1598	NM_018330	24.4298	0.376198819	0.87542883	0	9.3561661	7.6E-14	2.3	2.5E-50
3291151	RHOBTB1	NM_198225	14.57737	0.375473784	0.67699462	2.38E-13	7.2056955	1.3E-08	1.7	1.7E-07
2875685	FSTL4	NM_015082	11.3149	0.374987343	-0.67280343	3.79E-13	5.9852455	1.6E-34	3.7	1.6E-67
2639552	KALRN	NM_001024660	20.08022	0.372499487	0.78246691	0	8.3742567	3.0E-13	1.8	6.5E-10
2345286	LMO4	NM_006769	26.88963	0.369215977	0.69045149	5.11E-14	9.4464252	3.3E-21	4.3	2.0E-20
3032446	ACTR3B	NM_020445	23.44579	0.368345411	0.80148557	0	9.5555615	2.2E-16	1.8	3.3E-12
2739714	FLJ39370	NM_152400	22.62583	0.36735648	0.7937429	0	6.8336572	--	--	--
2867873	ELL2	NM_012081	46.9506	0.365424624	0.81270252	0	6.6688661	1.1E-17	2.6	2.6E-03
3522914	ZIC5	NM_033132	17.65858	0.358510246	-0.7130907	3.15E-15	6.7259232	6.0E-36	17.9	2.1E-79
2616596	ARPP-21	NM_001025068	20.16968	0.357098023	0.68007807	1.69E-13	8.8387735	2.4E-21	9.2	0.0E+00
3481543	SPATA13	NM_153023	33.07618	0.356788611	-0.76355976	2.12E-18	6.3256887	2.4E-23	2.2	1.5E-08
3148871	FLJ20366	NM_017786	35.19513	0.35632455	0.77938444	0	9.0423641	9.6E-10	2.7	1.0E+00
2895159	HIVEP1	NM_002114	11.86517	0.348605369	0.67071468	4.75E-13	7.9398905	3.6E-11	1.9	6.6E-11
2621583	ZNF589	NM_016089	33.80252	0.344058212	0.8216822	0	7.0874415	1.3E-07	1.5	6.2E-12
3087501	ZDHHC2	NM_016353	17.01718	0.342408901	0.74494848	0	8.530342	1.2E-08	2.4	4.8E-02
3970642	CDKL5	NM_003159	16.53096	0.336427508	0.84174557	0	8.3846549	1.1E-13	3.0	3.0E-23
3189617	RALGPS1	NM_014636	20.25309	0.333909911	0.74164223	0	8.5151919	4.0E-07	1.5	2.2E-05

2920085	FLJ10159	NM_018013	34.30177	0.332267149	0.79920862	0	9.1257922	5.0E-19	2.8	1.0E+00
3102204	C8orf34	NM_052958	17.00157	0.328519645	0.7132462	3.11E-15	7.1442662	5.6E-13	3.4	2.7E-41
2933331	SNX9	NM_016224	15.53029	0.328161585	0.74320445	0	6.6935258	--	--	--
3874438	CDC25B	NM_004358	16.50665	0.323367084	-0.7824942	8.43E-20	6.7863268	1.5E-14	1.7	2.6E-21
2326561	RPS6KA1	NM_001006665	14.42126	0.321373706	-0.73789909	1.07E-16	6.0751099	1.9E-25	1.4	3.4E-13
3844470	PPAP2C	NM_177526	20.81958	0.317923863	-0.75812776	5.07E-18	7.1266747	5.5E-29	1.5	3.7E-54
3928211	GRIK1	NM_175611	28.68129	0.317465568	-0.59850017	4.66E-10	5.9394535	2.1E-30	8.1	1.1E-165
3048363	PGAM2	NM_000290	18.3938	0.316865402	-0.66557007	8.27E-13	6.1792847	3.9E-32	1.9	1.1E-04
3661559	IRX5	NM_005853	16.63676	0.315319729	-0.64307738	8.24E-12	6.1905705	1.0E-20	2.2	1.2E-46
2350489	KIAA1324	NM_020775	27.98841	0.313076526	0.70400302	9.99E-15	7.3609142	1.5E-18	2.5	5.3E-75
2710895	FGF12	NM_004113	23.36692	0.308701521	0.77715559	0	8.3172518	3.8E-09	2.4	4.4E-07
3159483	ANKRD15	NM_153186	27.24684	0.307895957	-0.82615805	1.21E-23	5.9830698	3.4E-26	1.8	3.4E-46
2807195	FLJ39155	NM_152403	13.89932	0.305349558	-0.66446462	9.30E-13	4.898441	3.9E-26	1.9	7.3E-39
3751002	RAB34	NM_031934	19.44246	0.302205816	-0.77872419	1.64E-19	6.1114777	4.5E-22	2.0	7.4E-04
3757538	LOC201181	NM_001013624	7.852589	0.302001679	-0.59617368	5.66E-10	5.4589689	6.2E-31	2.2	1.0E+00
3952360	LOC440792	XM_496493	27.11049	0.297955884	-0.72072689	1.16E-15	6.0057308	1.3E-29	3.3	7.7E-60
2674845	CAMKV	NM_024046	11.33481	0.293742814	0.75887428	0	9.9252973	2.7E-20	4.9	3.9E-08
3278401	FRMD4A	NM_018027	20.88278	0.293441821	0.71351336	3.11E-15	8.6908774	4.1E-15	1.5	9.3E-127
3884266	NNAT	NM_005386	11.28807	0.283782442	-0.74313799	5.00E-17	11.861079	2.3E-12	1.6	4.3E-19
3406589	MGST1	NM_145791	28.54396	0.282291597	-0.69078508	4.91E-14	3.9888958	8.5E-29	2.1	2.6E-35
2945129	PRL	NM_000948	7.213509	0.276493336	-0.68010512	1.68E-13	4.5180969	4.0E-40	4.5	6.2E-14
2328936	ZBTB8	NM_144621	17.31765	0.276145421	0.73423479	2.22E-16	7.9764137	5.0E-05	1.4	5.5E-37
2364677	PBX1	NM_002585	12.03308	0.274354068	0.6202186	7.07E-11	10.438594	2.1E-14	2.3	6.6E-06
3634656	CHRNA3	NM_000743	12.61082	0.268590464	-0.84688808	7.29E-26	6.148791	3.2E-26	2.8	1.9E-15
2378180	C1orf107	NM_014388	35.63969	0.267898783	0.69894318	1.87E-14	7.880923	2.3E-08	1.4	1.2E-06
3302177	ARHGAP19	NM_032900	18.13869	0.267744294	-0.75315174	1.10E-17	5.5492813	--	--	--
3059667	SEMA3D	NM_152754	11.57066	0.259753555	-0.67592293	2.68E-13	4.8516783	--	--	--
2906872	MDFI	NM_005586	12.0294	0.256074404	-0.7860325	4.45E-20	6.8905671	8.7E-22	2.8	1.8E-21
2882026	FAT2	NM_001447	8.313979	0.255457508	-0.78278446	8.01E-20	5.2330654	4.6E-54	3.2	1.1E-289
2520138	FLJ20160	NM_017694	8.969199	0.253433518	0.77135369	0	8.4540231	6.1E-09	1.9	2.4E-03
2959039	KHDRBS2	NM_152688	15.29528	0.253324866	0.77397866	0	8.5519469	1.0E-13	3.1	7.0E-21
2648378	RAP2B	NM_002886	18.28664	0.248738701	0.79420318	0	8.2979316	2.9E-06	1.4	7.0E-09
2595042	ALS2CR4	NM_152388	16.4109	0.247940363	0.70952534	4.88E-15	7.3900722	2.6E-02	1.3	9.0E-04
2634058	FAM55C	AY358207	13.14533	0.237770388	0.79743007	0	7.8484527	1.3E-05	1.4	9.7E-04
3940631	ADRBK2	NM_005160	11.45932	0.234165067	0.78216992	0	8.5363842	1.0E-10	2.4	9.0E-15
2877597	LRRTM2	NM_015564	14.78886	0.229511133	0.80662764	0	8.9868469	--	--	--
2378369	HHAT	NM_018194	9.417575	0.225137534	-0.73199442	2.48E-16	5.646579	1.0E-27	1.6	1.1E-11
3944084	TOM1	NM_005488	37.21629	0.223196431	-0.66419736	9.57E-13	7.1335807	9.8E-21	1.7	1.0E-11
2812359	NLN	NM_020726	6.98295	0.220198217	0.60448275	2.81E-10	7.6789338	6.2E-11	2.2	2.4E-08
2424524	DPYD	NM_000110	18.42096	0.21644726	0.76788206	0	7.5169142	--	--	--
3519624	SLITRK1	NM_052910	13.68865	0.214540189	0.69015676	5.28E-14	9.3395527	2.4E-16	2.9	3.2E-03
2672190	LRRC2	NM_024512	16.92978	0.212252914	0.73832601	0	4.8602801	2.9E-08	1.4	1.0E+00
2677723	ARHGEF3	NM_019555	8.620474	0.210396705	0.71893922	1.33E-15	7.3064691	5.0E-11	2.4	3.9E-30
3556888	RBM23	NM_018107	13.68423	0.207749365	-0.76765911	1.08E-18	8.5222094	5.5E-11	1.6	1.6E-04
3450861	ABCD2	NM_005164	9.451056	0.207021519	0.68122486	1.48E-13	7.0699975	3.7E-05	1.8	1.5E-08
2802696	FLJ11127	NM_019018	9.812265	0.200852888	0.68070604	1.57E-13	7.2932319	2.6E-07	2.0	3.8E-03
2705266	TNIK	NM_015028	8.293796	0.198874602	0.71065335	4.44E-15	9.1599724	1.1E-06	1.7	5.3E-09
2451261	DNM1DN3-4	XM_372559	10.97476	0.196963585	-0.786405	4.16E-20	6.2916623	1.8E-26	3.0	2.0E-11
2767710	KCTD8	NM_198353	10.76733	0.191980425	-0.80557764	1.04E-21	6.7804552	1.9E-24	2.9	5.6E-02
2983030	AGPAT4	NM_020133	13.54857	0.189604942	0.78156394	0	8.4724516	1.4E-04	1.5	5.1E-02
2484841	B3GNT1	NM_033252	8.393819	0.187324556	0.68122024	1.48E-13	7.6736976	5.6E-09	3.3	2.9E-06
3918779	ITSN1	NM_001001132	9.909122	0.184658247	0.74229887	0	8.860341	1.8E-08	1.5	2.3E-16
3473436	TSC	NM_017899	12.14572	0.184510153	-0.70101938	1.44E-14	5.6833862	4.1E-19	1.8	1.7E-04
2871617	TRIM36	NM_001017397	16.91661	0.183811049	0.62153221	6.28E-11	8.800348	1.5E-04	1.6	1.7E-08
3887479	EYA2	NM_172113	8.548467	0.1804495	-0.7830219	7.67E-20	5.1808493	1.1E-29	1.4	1.6E-43
2942578	LOC441130	XM_499027	10.79031	0.177830665	0.71027874	4.44E-15	7.9966055	7.3E-07	2.0	7.4E-27
2859565	ADAMTS6	NM_197941	6.191553	0.177661199	-0.66187066	1.22E-12	5.3879115	1.2E-26	1.4	3.9E-55
2385873	KCNK1	NM_002245	5.299571	0.176454867	-0.58794632	1.11E-09	6.2324624	3.9E-32	3.7	9.1E-20
2783886	FLJ23191	NM_024574	6.721827	0.175642922	-0.58290514	1.66E-09	5.6006203	6.3E-26	6.5	9.2E-12
2849056	DNAH5	NM_001369	7.832369	0.175186956	0.7483084	0	4.8544574	1.8E-10	1.6	2.6E-06
3601051	NEO1	NM_002499	15.37812	0.172281112	0.62614912	4.12E-11	9.7839234	2.5E-15	2.4	3.2E-39
3850457	AP1M2	NM_005498	8.125885	0.17059922	-0.75557238	7.58E-18	5.2578742	4.9E-14	1.6	4.3E-19
3356115	APLP2	NM_001642	19.40664	0.167362592	-0.64408562	7.46E-12	9.9677139	4.5E-10	2.1	2.6E-14
3182310	LOC392374	XM_498337	6.391648	0.165231109	0.6691288	5.64E-13	8.996396	1.7E-12	2.7	3.3E-06
3994231	AFF2	NM_002025	7.341759	0.164031738	0.51167153	2.55E-07	8.7016192	1.3E-15	2.5	1.6E-16
2850272	FLJ34047	NM_173669	9.970742	0.163526811	0.77691832	0	7.7012695	4.4E-09	1.6	8.2E-02
3130757	FUT10	NM_032664	12.58926	0.163451914	-0.74791004	2.46E-17	5.9635808	3.3E-17	1.9	3.8E-26
2799758	IRX1	NM_024337	17.13284	0.16115229	-0.64225862	8.92E-12	6.3458058	6.5E-27	4.0	2.4E-09
2888385	KIAA1893	NM_052899	18.52759	0.159018769	0.63107779	2.60E-11	8.6645383	1.9E-11	1.9	1.9E-10
2452667	RAB7L1	NM_003929	7.041188	0.155985991	0.7307952	4.44E-16	6.5505778	6.1E-09	1.8	1.3E-06
3371003	TP53I11	NM_006034	35.19213	0.155167332	0.73093441	4.44E-16	8.3724163	4.9E-14	2.1	3.5E-17
2623308	GRM2	NM_000839	11.333	0.153625353	0.70567419	7.99E-15	7.6977349	1.9E-10	1.8	5.8E-01
3790982	CDH20	NM_031891	6.310092	0.149745589	-0.64246596	8.75E-12	6.8099833	5.0E-17	3.9	6.8E-21
3775808	CLUL1	NM_014410	9.192165	0.149544154	-0.59486586	6.31E-10	4.9848386	1.0E-21	2.6	1.5E-37
2931090	FLJ39616	NM_016534	5.042212	0.14909125	0.58425459	1.49E-09	7.8556414	1.6E-08	2.9	1.4E-07
3512948	C13orf18	NM_025113	5.584081	0.149058559	-0.51723573	1.79E-07	5.1106616	3.8E-21	2.2	1.8E-24
2958172	BMP5	NM_021073	11.46032	0.144391073	-0.67189201	4.18E-13	4.1529952	2.9E-21	2.1	7.8E-05
3279698	CUBN	NM_001081	8.813481	0.143104325	-0.70007221	1.61E-14	4.9435054	4.2E-24	2.3	0.0E+00
2602653	FLJ20701	NM_017933	8.751161	0.142907389	0.67712672	2.35E-13	6.8627995	4.0E-07	1.7	4.2E-04

2375144	LGR6	NM_021636	10.62413	0.142641837	-0.61315188	1.33E-10	5.2348495	8.3E-19	1.6	3.4E-02
3274361	KLF6	NM_001300	5.947878	0.141156124	0.61153668	1.53E-10	8.2042432	7.1E-16	3.4	5.8E-26
3173508	LOC389753	XM_372112	6.028921	0.140993198	-0.6385763	1.28E-11	4.4683193	8.1E-29	2.4	5.6E-22
2378662	TRAF5	NM_004619	5.378718	0.13732319	0.60430116	2.86E-10	5.7607089	1.1E-04	1.5	3.1E-02
3239584	MYO3A	NM_017433	19.44872	0.136282085	-0.60409877	2.91E-10	4.1552164	3.8E-10	1.6	1.5E-20
2712906	RNF168	NM_152617	21.64438	0.135829582	0.69841421	1.98E-14	7.8998145	--	--	--
2694001	MGLL	NM_001003794	7.90813	0.134001734	0.72703647	4.44E-16	8.0456676	2.8E-08	2.1	1.5E-13
4021633	COVA1	NM_006375	4.973571	0.129793061	-0.62559688	4.33E-11	5.8287006	1.6E-18	1.7	1.8E-15
2486178	MEIS1	NM_002398	4.537565	0.125389002	-0.66787419	6.46E-13	6.9693271	4.2E-36	10.9	1.1E-93
2787005	CLGN	NM_004362	12.05248	0.124901032	-0.61156868	1.52E-10	4.4172695	3.3E-10	1.5	6.8E-10
2731636	DKFZP564O0823	NM_015393	4.024801	0.123073069	-0.57946874	2.18E-09	6.6310987	1.9E-24	5.0	3.1E-12
3941848	EMID1	NM_133455	12.9141	0.11925071	0.68473291	9.93E-14	7.6724027	8.4E-15	1.6	4.4E-10
2340961	IL12RB2	NM_001559	4.032672	0.117260831	0.64185113	9.29E-12	5.6238126	3.4E-09	3.4	6.1E-04
3293998	CBARA1	NM_006077	6.556557	0.11406699	0.66357172	1.02E-12	8.3372	5.9E-09	1.6	5.1E-06
2775965	COQ2	NM_015697	5.228801	0.113679622	-0.5014283	4.80E-07	7.7403022	2.4E-11	1.9	1.6E-02
2995076	LOC400949	XM_376048	7.991087	0.11330266	0.65075064	3.84E-12	7.969161	1.1E-04	1.8	8.9E-03
2775735	SCD5	NM_024906	7.846788	0.111905362	0.69905681	1.82E-14	9.0710962	5.8E-07	1.4	7.1E-05
3005684	KCTD7	NM_153033	6.449313	0.107630722	0.68604855	8.53E-14	8.5321141	--	--	--
3644191	FAHD1	NM_001018104	3.874379	0.106275017	0.58857828	1.05E-09	7.3429728	4.8E-05	1.7	2.1E-02
3863547	ERF	NM_006494	7.339447	0.103432885	-0.60984127	1.77E-10	6.6236953	1.5E-18	2.5	2.3E-11
2365958	MPZL1	NM_024569	6.666266	0.102855571	0.67851168	2.01E-13	8.025481	1.0E-01	1.3	7.1E-10
3740770	RTN4RL1	NM_178568	6.004279	0.101996657	0.60460161	2.78E-10	7.1551473	--	--	--
3304853	SH3MD1	NM_014631	4.137953	0.101190754	0.62050934	6.88E-11	7.253049	2.3E-08	1.6	4.4E-07
3610110	NR2F2	NM_021005	6.958229	0.100620595	-0.49563184	6.80E-07	8.3622525	1.4E-12	4.3	2.5E-03
3410056		---	6.243037	0.097091392	-0.64537101	6.57E-12	7.904347	--	--	--
2709414	FLJ10560	NM_018138	9.766375	0.095714266	0.67260058	3.87E-13	7.5340436	4.0E-05	1.5	1.1E-02
3104489	STMN2	NM_007029	4.255397	0.092904919	0.63654005	1.55E-11	13.160423	--	--	--
3782088	CABYR	NM_153769	5.462203	0.091075362	0.62754603	3.62E-11	6.6764658	1.2E-10	1.8	3.9E-09
3935243	LSS	NM_001001438	2.762378	0.09104055	0.53508162	5.53E-08	8.6664747	6.8E-12	1.6	1.1E-15
3181600	GALNT12	NM_024642	2.650028	0.08681959	-0.59031516	9.16E-10	5.0617152	7.7E-19	1.5	5.4E-02
3858659	ANKRD27	NM_032139	4.481146	0.086046147	0.66825163	6.21E-13	7.7385935	1.9E-04	1.4	1.0E+00
3482572	LOC402677	XM_380021	6.498202	0.084038014	-0.59816426	4.80E-10	7.6872148	2.9E-12	2.0	1.0E-11
2542795	SDC1	NM_002997	3.779288	0.081864894	-0.47410308	2.36E-06	6.8062337	7.3E-21	2.1	3.3E-06
2602770	DNER	NM_139072	8.692056	0.078407529	-0.48583132	1.21E-06	10.177621	1.1E-07	2.0	6.4E-04
3286792	C10orf25	XM_499566	2.857478	0.075357029	-0.49956262	5.37E-07	5.9404514	1.7E-15	1.8	2.4E-02
2405250	FNDC5	NM_153756	5.832797	0.068384333	-0.45123053	8.06E-06	6.2953137	7.2E-17	1.7	4.9E-19
2413907	DHCR24	NM_014762	3.322157	0.061389211	0.61964256	7.44E-11	9.1957985	4.2E-07	1.5	1.1E-03
2828146	LOC389300	XM_374124	3.175368	0.059768065	0.59506761	6.20E-10	9.8273196	--	--	--
2823551	MAN2A1	NM_002372	2.461897	0.05285523	0.42489326	2.99E-05	7.4481787	1.7E-04	2.2	2.1E-10
2598496	DSU	NM_018000	1.528113	0.048498637	-0.58421285	1.50E-09	5.8097732	1.2E-22	2.0	7.0E-17
2783207	PRSS12	NM_003619	1.077517	0.047796056	0.52688934	9.57E-08	8.3670005	4.1E-19	6.9	1.8E-84
3401994	KCNA1	NM_000217	1.421325	0.047176877	-0.52414226	1.15E-07	6.6249779	--	--	--
3777770	FLJ11996	AK022058	2.082896	0.045665449	-0.66941307	5.48E-13	3.5668406	--	--	--
2908154	C6orf206	NM_152732	1.627278	0.043680063	0.5593522	1.00E-08	6.9847928	3.3E-11	2.5	3.1E-01
3216276	SLC35D2	NM_007001	8.424273	0.041673182	-0.52442198	1.13E-07	4.4615185	1.5E-08	1.4	1.0E+00
3959862	PVALB	NM_002854	1.066777	0.034595229	-0.51008204	2.82E-07	3.4921684	6.7E-17	2.1	1.0E+00

Table S16. M31 (blue): THM module

Transcript ID	Symbol	Accession	kTotal	kWithin-Connectivity	eigencorr	eigenpval	meanExpr	5-region ANOVA DEX	FoldChng	DAS	Wnt pathway annotation (GO BP & KEGG)
2412624	RAB3B	NM_002867	64.85134	1	0.949528159	0	7.2130083	1.8E-28	6.6	3.5E-03	
3551432	CYP46A1	NM_006668	55.33464	0.978693187	0.950406279	0	6.8601692	8.2E-27	3.1	6.4E-34	
3887241	SLC12A5	NM_020708	53.36313	0.925832658	0.931945701	0	7.0608292	1.8E-22	2.6	5.6E-18	
2609824	LOC151835	NM_153635	37.56104	0.855165212	0.851306144	0	5.3777843	4.2E-50	4.7	2.8E-182	
3758291	VAT1	NM_006373	40.85845	0.829435495	0.891667688	0	9.5365392	2.6E-28	3.1	5.8E-01	
3264621	TCF7L2	NM_030756	42.69779	0.780099218	0.873298808	0	6.4276869	1.5E-57	45.6	3.7E-198	Y (both)
3441542	LOC401089	XM_376269	58.78571	0.761200783	0.929514364	0	5.6353099	2.6E-40	3.7	2.5E-138	
2783596	PDE5A	NM_001083	41.22991	0.745912693	0.898980324	0	5.568582	2.4E-42	6.3	9.4E-231	
2717253	SORCS2	NM_020777	36.44985	0.731938344	0.876604308	0	7.1646148	1.2E-32	3.1	2.2E-91	
3193725	OLFM1	NM_006334	30.01394	0.72844336	0.871278685	0	8.3574831	3.6E-29	6.7	2.5E-71	
3661718	FLJ20481	NM_017839	78.11342	0.717103483	0.903174295	0	5.0436745	5.6E-36	5.2	1.8E-77	
3815045	LOC388097	XM_370845	40.19309	0.710389819	0.923557819	0	6.8869503	1.1E-23	3.3	2.9E-09	
3219788	EPB41L4B	NM_019114	43.98602	0.708494766	0.897870152	0	5.9582434	3.5E-42	6.2	6.3E-222	
2732844	ANXA3	NM_005139	47.51286	0.697130699	0.867954974	0	4.0686528	1.2E-42	6.3	3.0E-62	
3363266	DKK3	NM_015881	40.5792	0.694751077	0.899142181	0	9.7361851	1.1E-26	2.3	1.5E-24	Y (GO BP)
2615060	RBMS3	NM_001003792	47.16364	0.686394665	0.87525001	0	5.7255645	2.5E-36	5.0	2.5E-78	
3064361	ACHE	NM_000665	34.21606	0.655944992	0.893683791	0	6.9921884	1.5E-24	2.6	6.0E-61	
2404209	SDC3	NM_014654	36.09036	0.653412398	0.878944778	0	9.2429866	9.0E-15	2.8	1.8E-05	
3302572	CRTAC1	NM_018058	25.97271	0.651137737	0.80451594	0	6.9369106	2.5E-40	8.1	1.4E-187	
2703462	ADMP	NM_145035	28.00957	0.630372085	0.884256022	0	6.0636153	2.0E-28	2.5	9.1E-38	
3766153	CYB561	NM_001915	34.1599	0.625194027	0.896712263	0	7.2875198	1.0E-18	2.5	4.0E-02	
3961068	PDGFB	NM_002608	38.87129	0.610521226	0.865195545	0	6.0351573	5.1E-32	2.2	2.6E-33	
2787459	INPP4B	NM_003866	52.52216	0.604795762	0.888571369	0	5.1773794	3.8E-31	3.6	3.2E-110	
2810805	RAB3C	NM_138453	35.40429	0.602788731	0.871622388	0	9.3209858	2.1E-22	4.6	1.3E-04	
2655845	EPHB3	NM_004443	44.37533	0.59881207	0.865236011	0	6.2368003	1.2E-35	2.1	2.8E-41	
3901191	NAPB	NM_022080	34.94867	0.586759417	0.851009289	0	9.1055549	1.9E-11	2.4	1.5E-03	
2585476	SCN7A	NM_002976	26.51115	0.584774678	0.865189469	0	3.8129908	4.8E-34	2.8	1.3E-152	
3468345	IGF1	NM_000618	32.04182	0.584044939	0.862991063	0	7.3169857	7.4E-17	2.6	5.1E-11	
2567647	CREG2	NM_153836	26.97016	0.577648687	0.848592293	0	6.8911393	5.1E-22	4.4	1.3E-04	
2475911	EHD3	NM_014600	37.72395	0.573522249	0.879130213	0	7.4658592	1.0E-18	1.9	2.1E-06	
2584520	FIGN	NM_018086	33.73207	0.573103625	0.839443977	0	5.7210713	--	--	--	
3721989	CNTNAP1	NM_003632	28.6406	0.55956079	0.836965205	0	6.4478523	1.6E-19	3.1	2.3E-80	
3023483	FAM40B	NM_020704	33.43771	0.555678879	0.567975763	5.27E-09	5.4923108	6.8E-52	22.3	5.7E-241	
3302990	GOT1	NM_002079	56.58422	0.554680825	0.887202639	0	8.6037036	1.0E-24	2.7	4.3E-06	
3601486	KIAA1465	NM_020851	29.39298	0.553324595	-0.839467204	4.94E-25	9.6847888	2.3E-34	8.2	8.6E-74	
3456353	CALCOCO1	NM_020898	33.71585	0.55197694	-0.884845203	6.15E-31	8.0824198	5.5E-14	1.6	1.1E-02	Y (GO BP)
3396003	CSE-C	NM_170601	42.03589	0.55121315	0.868841311	0	6.1826866	6.2E-18	2.5	4.0E-44	
3021009	KCND2	NM_012281	40.90059	0.541400131	0.852814517	0	8.4256291	1.5E-19	3.5	1.1E-02	
3403015	ENO2	NM_001975	29.62428	0.540994332	0.837196723	0	10.48028	1.3E-14	1.9	3.0E-01	
2349863	NTNG1	NM_014917	21.75976	0.539351149	0.840948081	0	7.1738229	3.9E-33	18.5	8.3E-77	
3351975	ABCG4	NM_022169	28.83291	0.538370341	0.877215072	0	6.9320251	7.2E-22	2.3	1.1E-16	
3132616	ZMAT4	NM_024645	34.16719	0.530083891	0.80568205	0	6.4702964	3.6E-47	8.4	2.9E-72	
3933331	C21orf25	NM_199050	31.44043	0.529285747	0.87255202	0	6.5530801	1.3E-23	2.6	1.8E-34	
3660075	NKD1	NM_033119	59.17877	0.528946749	0.83868613	0	6.4747469	7.6E-40	2.6	4.0E-46	Y (both)
3605739	ZSCAN2	NM_017894	42.66904	0.52668908	-0.865237035	4.01E-28	6.6663485	1.9E-17	2.0	2.0E-16	
3029030	CASP2	NM_032984	31.77742	0.524829538	-0.890746261	6.93E-32	7.98036	5.4E-11	1.7	5.8E-08	
3131881	PPAPDC1B	NM_032483	45.95118	0.52288556	-0.870835857	7.03E-29	8.0287295	3.3E-22	2.4	1.5E-14	
3934669	SUMO3	NM_006936	25.2626	0.522218037	0.849184868	0	9.2311127	1.8E-10	1.8	7.5E-04	
3566176	OTX2	NM_021728	47.47685	0.517029748	0.830757475	0	5.5702483	5.1E-50	12.8	2.8E-68	
3788976	RAB27B	NM_004163	26.30356	0.513754218	0.824777055	0	7.1334399	2.2E-15	4.1	1.4E-17	
4002081	FLJ14503	NM_152780	30.62564	0.506126104	0.852786579	0	7.4050736	4.5E-16	1.9	5.4E-06	
2644619	FAM62C	NM_031913	29.35545	0.505895404	0.867563443	0	5.3232759	5.3E-33	1.7	2.6E-25	
3071063	GRM8	NM_000845	39.76122	0.502288302	0.856969546	0	5.9594864	2.3E-31	3.2	9.1E-42	
2379665	PROX1	NM_002763	24.92466	0.500241433	0.845890182	0	6.4874188	3.9E-27	8.2	1.9E-16	
3667508	CALB2	NM_007088	21.9332	0.498391619	0.859957448	0	8.3161759	1.7E-29	13.5	1.7E-01	
3543481	PSEN1	NM_000021	29.43334	0.498111865	-0.88133087	2.13E-30	8.8925355	7.5E-07	1.4	2.9E-05	Y (KEGG)
2333907	C1orf164	NM_018150	18.67823	0.491657359	0.758146752	0	8.0738352	7.9E-43	2.9	0.0E+00	
3591459	MAP1A	NM_002373	30.03271	0.491429865	0.821508615	0	8.0664559	4.4E-10	2.8	7.2E-13	
3375396	SYT7	NM_004200	20.7675	0.489411992	0.76438148	0	7.7665857	9.2E-29	3.4	2.2E-09	
3375862	MTA2	NM_004739	21.01068	0.489095485	-0.831584846	3.40E-24	8.7680631	5.3E-09	1.7	2.0E-06	
3724197	NSF	NM_006178	33.39382	0.488607229	0.864332884	0	8.8740379	1.3E-15	2.5	4.3E-01	
2373693	LHX9	NM_001014434	18.14622	0.48564921	0.764066157	0	5.9285038	3.5E-51	14.7	6.2E-53	
3796428	MYOM1	NM_003803	29.41262	0.484141189	0.828694398	0	5.0496629	3.3E-25	3.0	1.2E-51	
3063685	MCM7	NM_182776	25.15691	0.470319042	-0.842034588	2.58E-25	8.2920259	2.5E-11	2.3	7.4E-24	
2937144	SMOC2	NM_022138	17.99994	0.465144308	0.441776282	1.31E-05	5.0147822	1.1E-36	5.2	1.0E-59	
2447148	RGS16	NM_002928	29.68469	0.459185973	0.78578117	0	6.4837455	1.6E-34	4.1	5.5E-38	
3063646	ZNF3	NM_032924	23.50771	0.456798291	-0.861708077	1.16E-27	7.8092057	5.7E-06	1.4	4.7E-05	
3663287	NDRG4	NM_020465	26.05487	0.456109521	0.844653095	0	8.89882	8.6E-13	2.3	1.5E-12	
2781138	LEF1	NM_016269	24.48163	0.455635624	0.809624775	0	5.990788	1.5E-37	6.3	1.0E-79	Y (both)
2675628	VprBP	NM_014703	51.53707	0.453575183	-0.855008914	7.96E-27	7.9937802	3.9E-08	1.4	4.2E-12	
3098935	NCOA6IP	NM_024831	51.48942	0.450341085	-0.832807139	2.54E-24	7.4193474	1.1E-05	1.5	1.3E-01	
2931569	AKAP12	NM_005100	22.54262	0.450097792	0.800105891	0	7.4610019	3.5E-29	4.6	2.7E-106	
2624291	PRKCD	NM_006254	30.48101	0.447836557	0.879701976	0	6.4969615	2.4E-24	2.4	1.6E-42	
3862167	FBL	NM_001436	23.27072	0.446956312	-0.771795502	5.42E-19	9.4685898	4.9E-10	2.3	7.1E-04	
2401849	LOC90529	NM_178122	23.99885	0.444741178	0.828536931	0	5.8454725	8.3E-23	3.7	1.2E-57	
3218151	GRIN3A	NM_133445	21.19771	0.443519696	0.82675195	0	6.6660504	9.0E-21	6.1	1.5E-06	
3620276	EHD4	NM_139265	24.60561	0.442361104	0.784498743	0	6.0506299	2.3E-31	1.7	3.1E-16	
3063035	DKFZp761L1417	NM_152913	29.15066	0.441183867	0.844358413	0	7.9698112	2.1E-12	2.0	1.0E-02	
2327603	GMEB1	NM_006582	40.25292	0.43902622	-0.856549993	5.15E-27	7.7220641	1.1E-09	1.6	6.4E-06	
3847225	PLAC2	NM_153375	19.64483	0.438379022	0.779352085	0	6.159068	--	--	--	

3740304	PITPNA	NM_006224	29.30431	0.435742886	0.820777547	0	9.3832237	1.4E-07	1.7	6.5E-01
2348962	GPR88	NM_022049	15.33203	0.433085292	0.421199862	3.56E-05	6.9725544	7.6E-43	14.8	7.2E-86
3304215	LDB1	NM_003893	18.11174	0.431954972	-0.757182208	5.89E-18	9.9844313	1.7E-13	1.7	7.1E-06
2923868	PKIB	NM_181795	19.05392	0.430704859	0.826643424	0	4.5843876	4.3E-31	1.1	6.7E-74
2696764	RNF184	NM_018133	21.48977	0.428505386	-0.823306601	2.32E-23	10.204642	5.1E-09	1.6	1.0E+00
3844238	TRIM28	NM_005762	19.91042	0.427055903	-0.75198922	1.32E-17	9.7838092	2.0E-11	1.7	3.0E-05
3678462	PPL	NM_002705	21.16893	0.42252087	0.765926789	0	5.5842742	9.7E-29	1.5	2.2E-53
3347939	LOC399947	NM_207645	22.38953	0.422286717	0.840530283	0	8.7869311	1.5E-12	4.0	1.1E-02
2542816	PUM2	NM_015317	49.83554	0.42126476	-0.813197188	2.13E-22	10.007214	7.2E-08	1.6	6.6E-04
3192653	GTF3C5	NM_012087	20.43723	0.419225587	-0.808287628	5.95E-22	7.7439915	1.7E-05	1.2	4.8E-01
3315181	DRD1IP	NM_015722	26.36492	0.41742752	0.850176451	0	7.8351176	--	--	--
2382970	EPHX1	NM_000120	20.5061	0.41593191	0.806926756	0	6.6321084	2.5E-22	2.5	1.4E-22
4007899	SYP	NM_003179	23.54654	0.413058505	0.841062298	0	9.8130252	--	--	--
2353337	SLC22A15	NM_018420	27.51051	0.412533025	0.799768444	0	6.393181	5.8E-15	2.0	6.0E-09
2983142	LOC440144	XM_498565	23.29342	0.412416893	0.872357147	0	6.6870545	7.7E-23	1.9	3.0E-10
3836841	CALM3	NM_005184	23.9385	0.410626678	0.803659695	0	11.686408	1.1E-06	1.6	2.4E-07
3887165	C20orf67	NM_022104	29.30632	0.409603306	-0.784125935	6.29E-20	7.7422813	2.2E-08	1.3	3.1E-03
2835386	SLC6A7	NM_014228	31.55682	0.407234513	0.857515473	0	6.630912	1.7E-30	2.9	3.1E-42
3867400	FUT1	NM_000148	21.06346	0.405486625	0.791571341	0	5.9411941	1.1E-33	3.3	3.8E-09
2698996	PCOLCE2	NM_013363	20.01871	0.397582228	0.84528737	0	5.5044214	4.9E-25	3.8	2.6E-61
2334847	DMBX1	NM_172225	14.88031	0.393097055	0.721446798	8.88E-16	6.0694701	1.4E-34	3.4	1.3E-05
2930243	SASH1	NM_015278	18.55868	0.393085681	0.816301709	0	6.399197	1.9E-19	2.1	4.8E-15
2451309	JARID1B	NM_006618	28.90315	0.392519547	-0.822833969	2.59E-23	9.4448409	2.2E-06	1.5	1.0E-14
3914050	STMN3	NM_015894	29.68406	0.392352444	0.833598133	0	8.9560284	4.0E-15	2.3	6.8E-04
3437500	FLJ31978	NM_144669	21.23327	0.390809876	0.83859321	0	7.7622523	5.4E-15	2.1	3.4E-03
3603295	CRABP1	NM_004378	34.35201	0.389461421	0.613787795	1.25E-10	6.4096487	1.7E-41	18.3	1.0E-81
3875179	CHGB	NM_001819	17.32515	0.387201645	0.768164239	0	8.0070183	2.2E-20	3.0	1.1E-05
3444216	STYK1	NM_018423	18.17198	0.386808161	0.822147283	0	5.206374	3.4E-23	2.9	1.8E-42
3450362	SYT10	NM_198992	18.91922	0.382882545	0.431450139	2.18E-05	5.1283792	1.3E-39	5.6	1.4E-64
3665501	HSD11B2	NM_000196	24.63872	0.381470035	0.725584021	4.44E-16	6.0942838	5.5E-46	2.7	1.0E+00
3141857	TPD52	NM_001025253	18.15661	0.380114132	0.837249944	0	6.4104289	3.3E-22	3.5	1.2E-36
3678000	TFAP4	NM_003223	31.23271	0.378399292	-0.800123117	3.09E-21	7.0741353	6.2E-11	1.4	2.7E-12
3784208	DTNA	NM_032979	35.25791	0.37823119	0.780041694	0	7.2985892	1.4E-14	2.3	2.2E-115
2442008	RXRG	NM_006917	17.25476	0.378156153	0.448350254	9.35E-06	6.2153012	4.2E-38	36.4	7.6E-145
2324416	ALPL	NM_000478	21.50159	0.378150989	0.516848323	1.84E-07	6.1840212	1.5E-40	3.6	4.3E-36
4004819	TCTE1L	NM_006520	27.23673	0.377167757	0.754195885	0	7.687749	1.0E-12	2.7	4.3E-12
3758692	MPP2	NM_005374	17.8781	0.375830859	0.749575438	0	7.0944501	3.4E-20	2.1	2.5E-05
2808931	ISL1	NM_002202	16.14403	0.373945959	0.486620927	1.16E-06	4.8002867	3.5E-41	6.7	3.9E-65
2356115	TXNIP	NM_006472	18.6895	0.371764529	-0.82343303	2.26E-23	10.086421	1.3E-16	2.8	5.3E-04
3464747	KITLG	NM_003994	22.5879	0.371653462	0.794385799	0	8.8649621	7.4E-30	7.6	1.4E-10
2681044	FAM19A4	NM_001005527	20.35683	0.369552764	0.830299419	0	4.6872713	7.3E-25	2.2	1.0E+00
2704733	ARPM1	NM_032487	19.80963	0.368275182	0.84465816	0	5.9948799	1.2E-18	2.0	1.5E-01
3136229	RDHE2	NM_138969	26.87874	0.365011845	0.747324427	0	4.2372108	1.0E-38	1.8	3.1E-25
3510858	FOXO1A	NM_002015	20.48042	0.362614153	0.566301492	5.98E-09	7.9110364	--	--	--
3665603	CTCF	NM_006565	16.78136	0.361781389	-0.794830462	8.62E-21	8.6063431	4.8E-10	1.5	1.3E-06
2696040	RAB6B	NM_016577	19.95432	0.356168211	0.765213371	0	9.3079665	2.4E-10	2.1	2.5E-01
3744217	VAMP2	NM_014232	21.87491	0.354578609	0.767037735	0	9.8443746	4.4E-09	2.0	1.5E-02
3960930	CBX6	NM_014292	21.73322	0.352449462	0.798406614	0	8.3627624	2.8E-11	2.1	6.5E-11
3845944	GNG7	NM_052847	25.83204	0.350308946	0.587212833	1.18E-09	7.7486619	8.9E-33	6.0	1.6E-51
2915571	C6orf117	NM_138409	21.55303	0.349389879	0.798215879	0	6.691891	1.2E-27	3.4	3.5E-20
3876084	C20orf103	NM_012261	36.67256	0.347832225	0.546793177	2.47E-08	5.491761	1.7E-39	4.2	1.3E-63
3313690	TCERG1L	NM_174937	26.32131	0.345631943	0.789394142	0	6.9041583	6.0E-27	3.7	1.0E-22
3329983	PTPRJ	NM_002843	33.06624	0.343499197	0.802051715	0	7.6279779	9.6E-16	1.6	2.4E-10
3473586	KSR2	NM_173598	36.85921	0.342634492	0.826777882	0	6.2548896	1.4E-25	1.7	3.7E-36
3956226	MN1	NM_002430	35.79828	0.341566218	-0.765750815	1.49E-18	8.8435442	1.7E-38	5.7	7.9E-88
3391653	DRD2	NM_016574	22.08399	0.340987785	0.587823565	1.12E-09	6.7637557	2.6E-38	6.1	1.2E-60
2815043	TNPO1	NM_002270	54.27955	0.340539881	-0.800607716	2.81E-21	9.9760876	1.8E-10	1.7	8.8E-03
3587226	CHRNA7	NM_000746	18.73589	0.338634777	0.799092052	0	6.6336025	2.9E-24	2.8	2.9E-09
2610544	SLC6A11	NM_014229	29.40273	0.338115835	0.825602694	0	8.3492179	3.3E-17	2.4	2.3E-14
2926969	PDE7B	NM_018945	16.0682	0.336739245	0.497242797	6.18E-07	5.1813012	4.7E-32	5.9	2.0E-78
3415744	IGFBP6	NM_002178	16.4442	0.336444001	0.782678714	0	7.0774473	2.4E-18	1.6	6.7E-19
2663244	RAF1	NM_002880	30.53818	0.335139384	-0.823870319	2.05E-23	9.4871281	3.3E-07	1.4	7.3E-06
2641901	TRH	NM_007117	27.20198	0.334588866	0.795579898	0	7.2406132	2.6E-28	4.2	6.6E-14
2913123	RIMS1	NM_014989	17.43501	0.333277002	0.731017651	4.44E-16	7.9931162	4.4E-12	1.4	3.6E-86
2648305	P2RY1	NM_002563	32.75168	0.332346308	0.470653543	2.85E-06	6.457257	3.9E-41	10.9	3.0E-27
2479943	LOC440860	XM_498899	12.83564	0.331611928	0.432462093	2.07E-05	6.1443917	--	--	--
3549517	OTUB2	NM_023112	18.18311	0.329448917	0.802520468	0	6.7768728	2.6E-18	1.8	4.6E-04
2708922	IMP-2	NM_006548	23.83285	0.326949021	-0.846861473	7.34E-26	7.2444693	3.1E-13	2.1	1.4E-29
3868828	KLK10	NM_002776	19.06777	0.322487387	0.719472336	1.33E-15	6.3906294	8.7E-29	2.4	2.4E-07
3833443	PLD3	NM_012268	23.18493	0.322304614	0.762793744	0	9.5193148	4.4E-13	1.9	3.3E-10
2793401	MFAP3L	NM_001009554	17.3055	0.321877478	0.768599313	0	5.781996	4.3E-13	1.6	1.2E-20
2969467	LOC442243	XM_498127	32.46097	0.320902255	-0.754622991	8.79E-18	9.0631236	5.1E-14	2.0	3.5E-41
3792273	CDH7	NM_004361	24.03342	0.318994448	0.775550724	0	4.9227658	1.4E-34	5.8	2.3E-64
2686602	IMPG2	NM_016247	12.00821	0.317498888	0.781611376	0	5.6618112	1.8E-30	2.2	1.8E-18
3743763	ZBTB4	NM_020899	18.62495	0.315485669	0.770563701	0	7.3596292	3.3E-09	1.5	1.8E-03
2997907	EPDR1	NM_017549	23.23323	0.313777174	0.831065632	0	6.6323332	1.2E-14	1.8	1.0E+00
3967689	STS	NM_000351	16.86275	0.311923626	0.744358309	0	7.0711274	4.0E-10	2.3	3.8E-14
3205659	SHB	NM_003028	17.12051	0.308949035	-0.708386374	5.74E-15	7.9272085	1.1E-13	2.2	2.0E-24
2827772	ADAMTS19	NM_133638	12.0117	0.307106096	0.750479262	0	5.0400045	3.4E-35	1.8	4.7E-87
2702610	SHOX2	NM_003030	13.8533	0.30605007	0.690088099	5.33E-14	5.7269416	1.4E-52	2.6	3.5E-44
3446137	LMO3	NM_018640	22.11238	0.304735834	-0.719062124	1.44E-15	10.987203	1.6E-28	6.0	3.2E-56
3361672	LMO1	NM_002315	28.13504	0.304206108	0.824876727	0	6.1763022	4.2E-30	5.0	1.7E-39
3627422	RORA	NM_134260	28.83605	0.303390959	0.7988503	0	6.2584933	4.8E-34	9.4	2.5E-233
3334325	VEGFB	NM_003377	20.58038	0.303165945	0.809645964	0	8.5274453	1.2E-17	1.8	4.5E-06
3393652	SCN2B	NM_004588	16.5617	0.302160146	0.823921244	0	7.0313755	3.6E-18	2.1	3.9E-08

3894906	PDYN	NM_024411	12.88596	0.301974314	0.42922305	2.43E-05	5.7292081	5.3E-39	11.3	5.1E-90	
3528944	FLJ38964	NM_173527	41.89629	0.300586635	0.69822105	2.02E-14	5.9493356	1.1E-31	1.8	1.8E-21	
3218113	C9orf125	NM_032342	17.26982	0.300239262	0.773146159	0	8.4200869	--	--	--	
2827645	SLC27A6	NM_001017372	11.98623	0.298890162	0.783338569	0	4.3177735	--	--	--	
3414390	SMARCD1	NM_139071	16.73071	0.298871932	-0.680035917	1.69E-13	8.5834887	1.6E-07	1.5	2.7E-09	
3523318	VGCNL1	NM_052867	17.0638	0.29602488	0.746599928	0	7.0677858	1.3E-09	2.3	7.8E-41	
4007550	PCSK1N	NM_013271	22.4505	0.294862053	0.791545911	0	9.3176793	--	--	--	
3219885	PTPN3	NM_002829	10.72717	0.293453485	0.703286855	1.09E-14	5.6969112	1.4E-35	9.3	0.0E+00	
2827388	LOC133619	NM_130809	52.54351	0.293030385	-0.757932577	5.23E-18	8.8477846	2.6E-07	1.5	2.7E-03	
2689378	DRD3	NM_033663	9.04609	0.292050912	0.207149288	0.0501098	4.7193888	--	--	--	
4007765	PRAF2	NM_007213	19.22687	0.291569346	0.763291656	0	8.1271014	--	--	--	
3129026	CHRNA2	NM_000742	9.953557	0.288949738	0.713437736	3.11E-15	6.2154265	3.0E-22	7.6	7.5E-66	
3159061	ZNF250	NM_021061	24.52449	0.288686341	-0.800322064	2.97E-21	8.3479041	1.0E-12	1.5	7.5E-08	
3874900	CDS2	NM_003818	17.00259	0.288408653	0.770994929	0	9.3464866	3.6E-07	1.5	3.4E-03	
3252690	C10orf11	NM_032024	9.322616	0.287927372	0.245682818	0.0195922	4.7340142	1.0E-40	2.5	4.5E-13	
3985866	CXorf39	NM_207318	15.70337	0.285424126	0.776972863	0	8.5608643	9.8E-05	1.6	1.3E-01	
3686278	MGC18079	NM_144675	14.40264	0.284318896	0.743684715	0	7.1509773	9.7E-22	2.9	7.3E-56	
3307851	KIAA1914	NM_001001936	17.54412	0.284202493	0.764002214	0	5.961755	1.1E-15	1.7	2.4E-12	
2643901	PPP2R3A	NM_181897	31.22257	0.283917403	-0.770530779	6.71E-19	7.3816327	6.1E-05	1.5	3.1E-05	
3557017	C14orf93	NM_021944	15.60513	0.281378542	-0.765863024	1.46E-18	6.1378713	3.4E-08	1.5	4.8E-05	
3987029	RP13-360B22.2	NM_032227	14.61041	0.278981291	0.786425351	0	6.9807347	9.4E-19	1.9	2.1E-08	
3496366	C13orf25	NM_213724	39.20566	0.278859316	-0.798105705	4.58E-21	5.3781759	2.2E-11	1.7	5.7E-05	
3743852	FXR2	NM_004860	12.74068	0.2787078	-0.755896812	7.21E-18	8.6122044	1.0E-05	1.4	2.2E-03	
2915828	NT5E	NM_002526	26.89036	0.278388223	0.786085794	0	4.7995285	2.9E-22	2.0	4.3E-27	
3874751	PRNP	NM_183079	23.95187	0.277803926	0.748203624	0	10.424083	7.1E-10	1.6	1.5E-03	
2434139	SV2A	NM_014849	19.69613	0.27733312	0.764306135	0	9.0273275	4.7E-10	2.1	2.0E-15	
3644340	SLC9A3R2	---	16.20806	0.276933629	0.735789029	0	7.8655087	1.5E-12	1.8	1.6E-05	
3747199	PRR6	NM_181716	14.02168	0.276913502	-0.718875054	1.48E-15	8.6063323	7.3E-09	2.2	1.2E-05	
3184408	PALM2-AKAP2	NM_147150	16.73624	0.276752858	0.710262137	4.44E-15	7.8333637	1.5E-14	2.4	3.5E-43	
2442698	CREG1	NM_003851	21.21387	0.275615671	0.790878185	0	8.0048917	7.0E-14	2.2	5.3E-01	
2921022	GPR6	NM_005284	9.469844	0.275425928	0.327687632	0.0016171	7.1816546	4.9E-24	3.8	2.6E-03	
2924330	TPD52L1	NM_001003397	21.94511	0.274411735	0.555231989	1.35E-08	5.8506086	2.0E-32	11.5	2.9E-113	
3644887	ATP6V0C	NM_001694	26.83215	0.274387326	0.741978719	0	9.011464	3.0E-12	2.2	1.2E-17	
2912980	OGFRL1	NM_024576	34.48803	0.271985803	0.698180878	2.04E-14	7.1120303	1.9E-18	2.3	2.0E-21	
2644333	SOX14	NM_004189	10.86608	0.27161184	0.720077212	1.33E-15	5.9320727	--	--	--	
2842707	TSPAN17	NM_001006616	10.59655	0.271221507	0.706103483	7.55E-15	8.1427574	3.1E-23	2.0	2.0E-03	
2781387	AGXT2L1	NM_031279	17.32518	0.270991388	0.831528734	0	3.8214533	8.9E-24	2.1	5.5E-09	
3921068	ETS2	NM_005239	15.44115	0.268639532	0.80228587	0	6.8341479	3.5E-13	1.9	6.0E-11	
3179975	PHF2	NM_005392	24.60548	0.266382576	-0.705563049	8.19E-15	7.9392213	3.6E-09	1.4	7.3E-06	
2378325	SERTAD4	NM_019605	12.47975	0.264424307	0.375825515	0.0002619	5.2349675	4.4E-38	10.9	1.4E-52	
2376849	RASSF5	NM_031437	15.77213	0.263505591	0.777028625	0	5.6298989	5.2E-25	1.8	1.6E-13	
3129465	RC74	NM_018250	11.07318	0.262981943	-0.767598218	1.10E-18	7.6887517	1.2E-04	1.4	1.4E-02	
3451814	NELL2	NM_006159	54.42036	0.262655794	-0.648210967	4.96E-12	11.312332	3.4E-26	2.9	6.0E-25	
2609870	BRPF1	NM_001003694	17.94652	0.262020714	-0.778938353	1.58E-19	7.0516238	8.8E-05	1.2	5.9E-03	
3401381	TSPAN9	NM_006675	23.28119	0.261338382	0.476629146	2.05E-06	6.4686753	4.4E-37	2.6	8.3E-33	
2947889	GABBR1	NM_021905	17.73906	0.260957977	0.749686384	0	9.4140607	1.8E-08	1.5	4.0E-10	
3899954	CRNKL1	NM_016652	19.56936	0.260938676	-0.776392264	2.47E-19	7.50926	3.4E-06	1.5	5.6E-10	
2935311	PACRG	NM_152410	47.64503	0.260393062	0.782217674	0	6.1680471	2.6E-36	2.5	1.9E-101	
2984275	PDE10A	NM_006661	8.537364	0.259703866	0.29925917	0.004166	7.8394287	2.9E-39	7.5	1.1E-105	
2845973	FLJ12443	NM_024830	21.75033	0.257338874	0.762097694	0	8.1326542	5.4E-16	2.0	2.5E-02	
3340913	C11orf30	NM_020193	15.07718	0.255513255	-0.748773988	2.16E-17	8.4014969	6.3E-10	1.6	5.4E-09	
3553017	WDR20	NM_181302	19.9266	0.255043221	-0.801383909	2.41E-21	7.1212215	1.7E-07	1.5	3.9E-04	
2881300	CAMK2A	NM_015981	18.37173	0.254415481	0.738756145	0	7.2482756	2.5E-24	4.3	5.8E-27	Y (KEGG)
2371139	LAMC2	NM_005562	17.78766	0.253781724	0.516803458	1.84E-07	4.9359051	2.3E-34	2.1	3.7E-66	
2932219	OPRM1	NM_001008504	13.36844	0.253679843	0.773329092	0	5.0599727	1.3E-36	2.1	5.1E-96	
3996381	ATP6AP1	NM_001183	21.05957	0.251260797	0.708766752	5.33E-15	9.586064	4.1E-10	1.7	1.3E-12	
3992512	BRS3	NM_001727	8.069886	0.250441065	0.210148095	0.0468082	3.9646508	1.9E-35	4.1	1.4E-14	
3762753	CA10	NM_020178	13.86303	0.249893589	0.778306144	0	6.8602369	8.1E-13	4.3	5.0E-57	
2922972	DCBLD1	NM_173674	11.00052	0.249474079	0.770455184	0	6.1605191	2.6E-21	5.2	2.2E-20	
3355860	KCNJ5	NM_000890	9.939386	0.249467309	0.744267191	0	5.4135198	4.2E-26	2.3	2.2E-37	
3376235	WDR74	NM_018093	13.09849	0.249212752	-0.727676732	4.51E-16	8.126677	4.5E-07	1.5	9.3E-02	
2435044	POGZ	NM_015100	17.47291	0.248832352	-0.751733447	1.37E-17	9.1866431	2.4E-08	1.3	1.4E-04	
3623655	HDC	NM_002112	10.88807	0.247622392	0.708955203	5.33E-15	4.8438384	6.2E-20	2.1	1.0E-36	
3876990	SPTLC2L	AK075271	15.96029	0.24715906	0.772009159	0	3.9984508	--	--	--	
4001556	PHKA2	NM_000292	16.61346	0.24673362	-0.763808511	2.04E-18	7.5700456	3.1E-09	1.4	5.0E-08	
3662696	CX3CL1	NM_002996	21.10429	0.246377281	0.699507529	1.73E-14	6.9100086	2.6E-21	2.5	7.0E-18	
2342475	LHX8	NM_001001933	7.758861	0.243486557	0.270110822	0.010032	4.4644475	1.8E-31	4.6	7.9E-17	
3442176	ING4	NM_016162	14.15107	0.243307804	-0.777562821	2.01E-19	8.512162	4.5E-11	1.4	9.6E-04	
2586038	LRP2	NM_004525	29.09823	0.242336707	0.716388328	2.00E-15	4.7901266	2.3E-39	3.7	0.0E+00	
3975987	RBM10	NM_152856	16.50721	0.240565804	-0.604898079	2.71E-10	8.0223118	1.1E-04	1.3	1.5E-05	
3820663	ILF3	NM_012218	17.03706	0.240276736	-0.759924529	3.81E-18	9.5494631	1.1E-11	1.5	3.0E-02	
3701297	CDYL2	NM_152342	15.95518	0.239908172	0.775553285	0	6.916154	2.1E-12	1.3	7.9E-07	
2351294	KCNC4	NM_153763	14.63498	0.237678612	0.755721717	0	7.4911489	9.1E-19	1.7	3.2E-11	
2951221	C6orf106	NM_024294	10.99385	0.235954324	0.746480839	0	7.4730819	1.8E-15	2.0	6.5E-07	
3843463	ZNF551	NM_138347	34.50996	0.234509978	-0.778577816	1.69E-19	7.3494885	6.7E-03	1.2	5.4E-16	
3394412	THY1	NM_006288	14.96433	0.234378129	0.763254349	0	9.3071326	1.9E-12	2.1	1.5E-02	
3643752	BAIAP3	NM_003933	32.71961	0.233755424	0.784319165	0	7.0299784	1.1E-25	2.8	4.3E-167	
3799461	SPIRE1	NM_020148	38.17316	0.233602822	-0.656810427	2.07E-12	9.8379737	2.8E-28	3.1	1.9E-03	
2428405	PPM1J	NM_005167	20.62625	0.23245328	0.77260048	0	7.9363208	4.0E-20	2.2	5.1E-15	
3001479	ZNFN1A1	NM_006060	10.08592	0.230689903	0.345792108	0.0008432	5.331753	3.3E-22	2.2	2.0E-17	
3715512	TNFAIP1	NM_021137	25.96881	0.228664382	0.75212821	0	8.43806	1.5E-11	1.4	4.0E-01	
3894047	LOC441123	XM_496791	12.37941	0.227904624	-0.749168011	2.03E-17	8.7822265	6.5E-07	1.7	2.9E-24	
3401325	TSPAN9	NM_006675	23.47127	0.226751197	0.496659995	6.40E-07	6.7638996	1.7E-34	4.7	3.0E-95	
2836856	CNOT8	NM_004779	28.36696	0.226529238	-0.749498061	1.93E-17	8.9974841	5.0E-05	1.3	2.0E-02	
3980758	MED12	NM_005120	15.22968	0.225183259	-0.656221318	2.20E-12	7.7316355	1.7E-05	1.5	2.4E-15	

2771342	EPHA5	NM_004439	14.99365	0.224025248	-0.721203695	1.08E-15	9.674527	1.0E-15	6.4	4.4E-09	
3361072	DCHS1	NM_003737	22.40047	0.224012775	-0.699184077	1.80E-14	8.406361	3.0E-10	1.6	3.5E-05	
3066436	FLJ20485	NM_019042	39.5508	0.223942102	-0.712719453	3.30E-15	6.415078	4.7E-08	1.5	3.6E-09	
2377229	LOC388297	XM_370991	20.3563	0.220648921	0.765160489	0	5.6606362	1.2E-22	3.2	1.3E-41	
2620114	ZNF167	NM_025169	22.27013	0.217795556	-0.755432178	7.75E-18	6.4449773	1.7E-03	1.2	2.0E-01	
3829687	GPI	NM_000175	13.2133	0.216849185	0.683300687	1.17E-13	9.9227968	5.0E-06	1.5	2.2E-06	
2348569	PALMD	NM_017734	15.79446	0.216520054	-0.724243988	7.21E-16	6.9616148	5.7E-15	3.2	2.6E-52	
3358393	BM88	NM_016564	27.38937	0.214599651	0.716363843	2.22E-15	7.7031793	8.5E-13	1.6	6.4E-03	
3848437	XAB2	NM_020196	21.75402	0.214488495	-0.5936914	6.95E-10	7.9932567	4.5E-06	1.5	3.3E-07	
3334847	C11orf2	NM_013265	18.62704	0.21368593	-0.795043537	8.27E-21	9.4786816	2.8E-15	1.8	4.7E-08	
4015763	GLA	NM_000169	10.26727	0.213620493	-0.781951161	9.29E-20	6.6325598	1.7E-11	1.7	5.6E-01	
3013894	DLX6	XM_379892	6.498663	0.213220867	0.184656521	0.0814498	6.84544	--	--	--	
2655168	YEATS2	NM_018023	35.73366	0.213094233	-0.705892079	7.86E-15	8.5659374	3.5E-06	1.3	6.0E-03	
2916825	ANKRD6	NM_014942	12.68156	0.212866091	0.699758684	1.69E-14	7.0773445	2.1E-12	1.9	1.1E-06	
3830189	FXYD1	NM_005031	23.37609	0.212418881	0.795338836	0	6.4920403	6.1E-21	2.1	6.2E-04	
2614369	RARB	NM_000965	10.96286	0.211770271	0.537533214	4.69E-08	5.9673652	4.2E-30	8.6	2.4E-154	
2523354	ALS2CR13	NM_173511	23.87525	0.211643716	-0.739864211	8.07E-17	9.0188732	6.0E-10	1.6	3.5E-02	
3985260	GPRASP1	NM_014710	12.81086	0.210382893	0.771223136	0	8.1146153	4.2E-10	1.9	1.0E-04	
3695699	ATP6V0D1	NM_004691	22.10095	0.210209181	0.738833071	0	9.1215439	5.8E-14	1.5	4.6E-08	
3768791	ABCA6	NM_172346	10.33841	0.209767077	0.759768191	0	3.9015797	5.1E-12	1.4	8.8E-35	
2465551	ZNF124	NM_003431	22.93138	0.209487693	-0.777084135	2.19E-19	7.5513061	3.2E-06	1.8	5.6E-03	
2316746	LOC440555	XM_498732	16.57956	0.209398054	0.758793913	0	8.2914052	4.6E-13	1.5	6.5E-09	
3924254	LOC441968	XM_497787	19.67741	0.208602211	0.702530163	1.20E-14	6.0826854	4.2E-38	3.0	4.3E-57	
3088983	XPO7	NM_015024	33.23521	0.208518809	-0.70575041	8.00E-15	8.7137436	6.4E-05	1.3	4.9E-03	
3576441	KIAA1509	XM_029353	12.9185	0.207809033	0.298262348	0.0042995	7.4109271	8.0E-27	4.7	6.4E-23	Y (GO BP)
3878619	SLC24A3	NM_020689	12.06566	0.207316268	0.709264769	5.11E-15	7.9027763	1.6E-11	2.3	2.8E-09	
3479015	GALNT9	NM_021808	13.81053	0.207175787	0.706838152	7.11E-15	6.4215086	1.6E-22	3.1	2.5E-28	
2759654	ABLIM2	NM_032432	16.90166	0.20697063	0.760437674	0	7.5893925	2.8E-18	2.0	3.2E-08	
3358262	DEAF1	NM_021008	15.76934	0.206474741	0.711617682	3.77E-15	8.6898539	4.3E-13	1.8	8.1E-02	
4022183	HS6ST2	NM_147174	40.47945	0.204712835	0.685700257	8.88E-14	5.8643302	1.2E-27	4.1	1.1E-23	
2892277	NQO2	NM_000904	13.02127	0.203701057	0.770506276	0	6.7418501	1.4E-17	1.7	4.8E-02	
3262165	TAF5	NM_006951	23.2654	0.201533423	-0.767735491	1.07E-18	6.7732428	1.1E-05	1.3	1.0E-02	
3709838	NTN1	NM_004822	9.723699	0.199998669	0.305431844	0.0034184	6.9694429	--	--	--	
2882253	GLRA1	NM_000171	8.495088	0.199698063	0.689595714	5.64E-14	4.1142903	--	--	--	
2673902	FLJ20259	NM_198880	12.23203	0.199646737	-0.705752717	7.99E-15	8.3857047	9.1E-05	1.2	2.6E-01	
3729172	CLTC	NM_004859	15.56712	0.199122505	0.68604761	8.53E-14	9.8306955	3.5E-06	1.5	9.4E-12	
2394588	ICMT	NM_012405	15.38062	0.199004279	0.765533653	0	6.9033014	5.7E-14	1.6	7.1E-04	
2890413	RNF130	NM_018434	17.64797	0.19762039	-0.766833823	1.24E-18	8.8767561	3.1E-06	1.5	7.6E-03	
2668351	UBP1	NM_014517	33.51047	0.197336181	-0.711072886	4.08E-15	8.3138451	--	--	--	
2520429	MYO1B	NM_012223	25.04444	0.19445856	0.740389882	0	7.4948999	1.3E-17	3.2	1.4E-16	
3670725	GAN	NM_022041	11.73834	0.193929187	0.669149276	5.63E-13	8.1805005	2.2E-06	1.6	1.9E-01	
2439554	AIM2	NM_004833	16.47991	0.191454407	-0.636715382	1.53E-11	5.3703481	1.4E-10	1.9	2.5E-01	
2372858	RGS2	NM_002923	7.097202	0.191003818	0.376550525	0.0002542	7.7026577	2.8E-32	5.9	1.4E-04	
3579546	WARS	NM_004184	11.89886	0.189341732	0.746721857	0	7.3007465	3.7E-09	1.6	5.5E-06	
3984702	DRP2	NM_001939	13.41941	0.189097615	0.598810883	4.54E-10	6.7595705	4.4E-22	1.9	1.7E-19	
3599495	CORO2B	NM_006091	7.924932	0.188848927	-0.662315405	1.17E-12	8.8484658	1.5E-12	2.5	1.6E-01	
2770427	C4orf14	NM_032313	21.48981	0.188282651	-0.720240566	1.23E-15	7.6994956	6.8E-04	1.5	6.0E-06	
2949524	EHMT2	NM_006709	11.80751	0.185952137	-0.681629007	1.41E-13	8.2861723	2.0E-05	1.3	2.7E-15	
3210616	C9orf65	NM_138818	6.638355	0.18381212	0.681045151	1.51E-13	3.8156478	3.3E-26	2.5	1.0E+00	
3190939	PPP2R4	NM_178000	16.54765	0.18340934	0.71749087	1.78E-15	8.8882495	6.7E-10	1.4	1.0E-09	
3288337	ARHGAP22	NM_021226	14.8211	0.182656366	0.753965774	0	5.5362002	--	--	--	
3289948	PCDH15	NM_033056	30.3582	0.182341225	0.712550856	3.33E-15	5.0729273	7.6E-17	2.4	6.1E-78	
3808745	SE57-1	NM_025214	7.233417	0.180982257	0.680628118	1.59E-13	3.351289	--	--	--	
3818047	SCDR10	NM_198707	10.47001	0.180606082	0.720101637	1.33E-15	7.4093342	1.0E-13	1.8	2.0E-16	
3706700	CTNS	NM_004937	10.47521	0.180598494	0.696013427	2.64E-14	6.0385408	3.2E-18	1.6	6.6E-04	
2723997	KLF3	NM_016531	18.90261	0.179990927	-0.76638916	1.34E-18	8.1156376	1.2E-04	1.4	8.2E-01	
2827709	ISOC1	NM_016048	19.39796	0.179919856	0.7262199	4.44E-16	7.4143349	3.3E-18	2.5	1.3E-10	
3226844	CRAT	NM_004003	17.46399	0.179204401	0.635382904	1.73E-11	7.7393124	3.0E-08	1.4	1.1E-09	
2877990	LOC340061	NM_198282	22.82061	0.17834638	0.767439639	0	6.4504641	2.3E-15	1.9	1.6E-17	
2605735	HES6	NM_018645	10.72737	0.176945558	-0.722914471	8.62E-16	7.889413	2.0E-08	2.1	3.4E-05	
2947283	ZNF96	NM_014724	17.90638	0.176437705	-0.725205383	6.33E-16	6.4282564	4.9E-03	1.2	8.3E-04	
3865998	FLJ10781	NM_018215	12.0319	0.175611632	0.699206869	1.78E-14	7.8815213	1.8E-09	1.3	2.0E-02	
3133135	MYST3	NM_006766	8.662727	0.175605471	-0.720970642	1.12E-15	8.7664996	3.1E-05	1.4	1.4E-05	
2533227	TRPM8	NM_024080	11.96567	0.175529373	0.697684418	2.15E-14	4.2476232	7.5E-27	2.0	9.4E-52	
2587790	GPR155	NM_152529	28.23304	0.175203726	0.602837238	3.24E-10	7.0363568	3.6E-15	2.0	1.5E-27	
3113180	LOC440258	NM_001013702	12.94217	0.175159078	0.726626213	4.44E-16	9.0390929	3.3E-17	3.7	1.2E-01	
3656855	MYST1	NM_032188	7.480537	0.174322954	-0.677930246	2.15E-13	7.8695472	1.8E-06	1.2	2.0E-04	
3160175	VLDLR	NM_001018056	24.67016	0.172875141	-0.72700351	4.95E-16	8.7624859	7.2E-13	1.9	7.5E-23	
3122489	ANGPT2	NM_001147	7.824683	0.171201554	0.359156272	0.0005082	5.7011994	2.1E-28	3.8	3.6E-35	
3656800	ZNF646	NM_014699	26.83574	0.170971538	-0.688639323	6.32E-14	6.7015019	8.3E-11	1.4	1.7E-02	
2620194	ZNF35	NM_003420	23.96696	0.170566357	-0.716160319	2.11E-15	6.9435712	2.0E-07	1.3	2.1E-04	
2673594	CELSR3	NM_001407	23.7666	0.170450178	-0.669206444	5.60E-13	8.1570318	2.0E-09	1.4	3.3E-05	
3598613	MGC4562	NM_133375	22.2657	0.169570624	0.626676214	3.92E-11	7.9181321	2.3E-05	1.4	4.2E-02	
3384321	RAB30	NM_014488	13.36731	0.169103738	0.703917778	9.99E-15	7.8192985	4.2E-07	1.5	1.8E-01	
2685776	MINA	NM_032778	17.3502	0.169018674	0.674770931	3.05E-13	6.2157352	1.3E-14	2.1	2.1E-32	
2995765	LOC223075	NM_194300	16.84934	0.168597852	-0.725325973	6.22E-16	4.7342563	--	--	--	
3475324	RHOF	NM_019034	10.87975	0.168189764	0.73949124	0	6.2412503	6.5E-13	1.9	4.1E-03	
3033397	PRR8	NM_053043	22.59457	0.168066964	-0.724686191	6.79E-16	7.0297596	9.3E-09	1.4	2.1E-05	
3983105	CXorf33	NM_198450	16.61525	0.167595781	0.686607693	7.99E-14	7.367332	5.3E-08	1.7	2.5E-05	
3226160	ST6GALNAC6	NM_013443	13.53889	0.167040897	0.742798614	0	8.5618397	3.7E-13	1.6	1.5E-03	
3447348	SOX5	NM_178010	54.72702	0.166827804	-0.66248768	1.15E-12	9.2805102	1.7E-31	5.0	2.6E-166	
3260937	PEO1	NM_021830	10.05284	0.166177447	-0.662250607	1.18E-12	6.4642557	--	--	--	
3863060	EXOSC5	NM_020158	14.04135	0.165736187	-0.601241313	3.70E-10	7.2783282	6.7E-07	1.5	5.2E-02	
2711225	ATP13A4	NM_032279	18.93153	0.16568703	0.681576027	1.42E-13	5.2319017	4.1E-17	1.7	2.5E-40	
3980170	EFNB1	NM_004429	8.681606	0.165525782	-0.684139881	1.06E-13	7.6511152	5.8E-06	1.7	2.0E-16	

3577360	PRIMA1	NM_178004	8.187237	0.165417227	0.708410615	5.77E-15	5.1461358	--		--	--	
3411721	CNTN1	NM_175038	9.88995	0.164780953	0.626179083	4.10E-11	10.269956	1.0E-04	1.9	5.7E-05		
3768703	ABCA9	NM_172386	18.96986	0.164437309	0.721109235	1.11E-15	4.1238693	4.0E-23	1.4	3.5E-37		
3302886	HPSE2	NM_021828	6.059331	0.164305036	0.662663714	1.13E-12	4.3259839	6.5E-22	2.2	1.2E-42		
3615579	TJP1	NM_003257	23.74096	0.164113602	0.62025131	7.05E-11	7.7420177	5.2E-07	1.8	1.6E-18		
3764527	4-Sep	NM_080416	6.694997	0.163669849	0.637686797	1.39E-11	7.1442875	2.3E-23	3.4	2.6E-72		
3056044	BAZ1B	NM_023005	12.69355	0.163419083	-0.716989845	1.89E-15	8.2662875	4.7E-04	1.4	1.7E-03		
3768880	ABCA10	NM_080282	8.936482	0.163039655	0.722769992	8.88E-16	3.7197768	6.4E-10	1.5	7.8E-14		
3740264	MYO1C	NM_033375	13.48188	0.162776385	-0.680336006	1.64E-13	7.5291189	2.8E-05	1.2	5.1E-02		
2505957	PLEKHB2	NM_017958	9.490481	0.16164052	0.716617002	2.00E-15	8.4013402	5.1E-08	2.2	6.1E-48		
3841102	PRKCG	NM_002739	14.33527	0.158785362	0.725660757	4.44E-16	6.6665069	2.7E-24	2.1	5.1E-79	Y (KEGG)	
3191724	ABL1	NM_007313	7.617227	0.156130044	-0.623636148	5.18E-11	8.6648618	1.0E-05	1.6	4.9E-02		
3110395	RPS6	NM_001010	12.80577	0.155873937	0.710612949	4.44E-15	7.677233	2.4E-20	2.6	1.2E-26		
2888010	DRD1	NM_000794	4.775274	0.155293638	0.086780245	0.4160475	5.8155801	4.4E-32	3.7	5.9E-17		
2428760	RSBN1	NM_018364	16.04322	0.154806421	-0.708448961	5.69E-15	8.3571694	1.5E-04	1.4	1.4E-06		
3832992	PLEKHG2	NM_022835	22.44864	0.153350247	-0.625854207	4.23E-11	7.3842081	2.7E-09	1.4	3.3E-10		
3648391	LOC441749	XM_497487	4.547778	0.15300144	0.186662506	0.0781368	2.993692	--		--	--	
3380901	NUMA1	NM_006185	7.306009	0.152797675	-0.574413087	3.23E-09	8.3957037	9.5E-10	1.7	5.3E-07		
3746845	CDRT1	NM_006382	9.4423	0.152504084	0.747016381	0	7.3176999	2.0E-12	1.6	9.3E-29		
3940099	ADORA2A	NM_000675	6.265492	0.15213379	0.270639508	0.0098811	6.6774931	1.6E-22	2.4	1.4E-14		
3050367	FIGNL1	NM_022116	34.8319	0.151933499	-0.664607228	9.16E-13	6.8166148	--		--	--	
3990927	FLJ30058	NM_144967	6.938835	0.151468655	0.327990813	0.0016001	4.5240822	3.6E-25	2.5	1.1E-64		
3484497	13CDNA73	NM_023037	10.15023	0.150636494	0.675343747	2.86E-13	8.8123775	1.5E-05	1.8	4.2E-04		
2427566	KCNA2	NM_004974	15.62736	0.150371817	0.738923252	0	6.4985212	3.1E-18	1.7	1.5E-27		
2436985	LOC440232	XM_496036	11.24088	0.149312565	0.667677541	6.60E-13	6.7574969	1.5E-25	2.0	1.1E-59		
2619405	ZNF651	NM_145166	9.499884	0.149139332	0.658493769	1.74E-12	7.4094055	8.3E-06	1.4	7.9E-01		
3356539	HNT	NM_016522	7.278308	0.149098764	0.711534718	4.00E-15	8.462682	1.7E-15	2.2	2.3E-24		
3442205	ZNF384	NM_133476	7.31071	0.148988432	-0.627251994	3.72E-11	8.1283545	3.3E-05	1.3	3.9E-02		
3721956	TUBG2	NM_016437	10.20198	0.147108391	0.718348363	1.55E-15	8.242078	2.5E-09	1.4	8.1E-10		
3860208	MGC15677	NM_198867	9.919909	0.14662751	0.744339182	0	6.8990601	1.5E-12	1.6	1.6E-05		
2437801	ARHGEF2	NM_004723	11.34524	0.14511026	-0.692345997	4.09E-14	8.0113917	2.4E-07	1.3	5.9E-03		
3944210	RASD2	NM_014310	8.273253	0.144855953	0.576753094	2.69E-09	6.5870695	--		--	--	
2454140	KCNH1	NM_172362	7.68537	0.144751428	0.333006673	0.0013409	6.0829656	1.0E-25	2.9	1.2E-34		
3577246	MOAP1	NM_022151	8.98065	0.143588103	0.747580971	0	8.7822871	2.5E-11	1.9	1.7E-02		
3896976	DJ971N18.2	NM_021156	6.986884	0.14321616	0.731564652	2.22E-16	9.1534047	3.1E-08	2.0	9.2E-02		
2682271	PROK2	NM_021935	8.260519	0.143175498	0.593530788	7.04E-10	6.783246	6.8E-22	2.2	1.3E-36		
3885537	PLCG1	NM_002660	9.826641	0.142574022	-0.571019133	4.18E-09	8.5649877	8.5E-04	1.3	3.2E-03		
2663396	IQSEC1	NM_014869	13.157	0.141313832	0.695812305	2.71E-14	7.5627083	2.0E-12	1.7	5.7E-07		
3469597	NUAK1	NM_014840	16.04039	0.141222105	-0.7136521	2.93E-15	8.3141394	2.0E-17	1.9	3.7E-26		
2685354	DHFRL1	NM_176815	13.88191	0.140760487	-0.736253013	1.36E-16	6.0366521	2.4E-02	1.3	1.7E-21		
3893849	C20orf14	NM_012469	7.865397	0.140354718	-0.597600611	5.03E-10	8.3845349	8.7E-03	1.3	2.1E-09		
2774971	ANTXR2	NM_058172	13.02459	0.140152316	-0.749367959	1.97E-17	6.7417707	2.8E-09	2.1	8.7E-37		
3764066	ZNF161	NM_007146	8.0708	0.140045999	-0.708167296	5.90E-15	9.1102601	1.1E-05	1.5	6.0E-04		
2906607	NFYA	NM_002505	5.38227	0.139365558	-0.618731653	8.08E-11	8.5433601	3.3E-17	2.6	6.3E-36		
3512719	LOC283514	NM_198849	7.842722	0.138528584	-0.705070553	8.70E-15	8.039671	--		--	--	
3896621	C20orf42	NM_017671	5.148213	0.137921201	0.412935632	5.24E-05	4.3670643	8.6E-25	1.5	8.1E-13		
3362159	NRIP3	NM_020645	10.59488	0.137905936	0.652967195	3.07E-12	7.0420478	1.0E-19	4.5	6.8E-50		
3924041	ADARB1	NM_001112	5.973935	0.137851449	0.629128245	3.12E-11	7.6557952	1.2E-17	2.1	8.8E-19		
3295376	ZNF503	NM_032772	5.391328	0.137135334	0.336487266	0.0011841	6.1370396	1.7E-21	1.8	7.4E-31		
3329404	KIAA0652	NM_014741	8.308785	0.136327568	-0.714736039	2.54E-15	8.7968422	9.6E-06	1.3	5.2E-04		
3249369	LRRTM3	NM_178011	9.721388	0.136259092	0.722420876	8.88E-16	9.0531787	9.6E-10	2.1	5.4E-04		
2927967	C6orf115	XM_371848	40.42797	0.135901622	-0.674712552	3.07E-13	6.8540151	--		--	--	
3447694	BCAT1	NM_005504	9.236125	0.135798606	0.674966537	2.98E-13	7.8753352	2.6E-08	2.1	5.0E-20		
3695157	CKLFSF4	NM_181521	8.533587	0.135084308	0.68448344	1.02E-13	8.057909	1.3E-05	1.4	3.2E-01		
2900372	ZNF193	NM_006299	14.94825	0.134551626	-0.685200347	9.41E-14	6.8689098	1.8E-06	1.4	1.0E-01		
2562529	ST3GAL5	NM_003896	35.76006	0.134421506	0.692350171	4.09E-14	8.1121228	1.5E-19	2.5	9.2E-06		
2666807	NEK10	NM_152534	10.16741	0.133277427	0.534017326	5.95E-08	5.5603582	5.7E-19	1.9	1.3E-33		
3378411	RBM30	NM_031492	13.63272	0.132976298	-0.721852322	9.95E-16	9.9751309	--		--	--	
2350818	GPR61	NM_031936	8.168598	0.132353681	0.761959409	0	6.3856346	1.1E-12	1.6	6.3E-05		
2993206	MPP6	NM_016447	29.20135	0.132164278	-0.670238533	5.01E-13	9.5671887	2.7E-06	1.7	3.7E-06		
2623154	RBM15B	NM_013286	8.078469	0.131813437	-0.649023139	4.57E-12	8.0547893	9.6E-04	1.5	1.4E-04		
2438458	CRABP2	NM_001878	13.66487	0.131188925	0.61127895	1.56E-10	5.4303839	--		--	--	
3911217	TMEPAI	NM_020182	6.864983	0.131075209	0.425392555	2.92E-05	7.4491294	1.4E-22	2.6	9.0E-26		
2843091	RGS14	NM_006480	8.161373	0.130790918	0.413917237	5.01E-05	7.2114946	1.2E-29	2.0	1.1E-18		
3394264	MCAM	NM_006500	5.743912	0.130773531	0.36544542	0.0003974	6.0531715	2.3E-16	2.2	3.5E-14		
3846238	C19orf28	NM_174983	20.54916	0.130259346	0.615141979	1.11E-10	7.106177	3.2E-10	1.5	9.1E-04		
2545681	GTF3C2	NM_001521	6.016467	0.130116318	-0.685377365	9.22E-14	7.8225018	--		--	--	
3371537	CHRM4	NM_000741	7.943294	0.129889385	0.507732462	3.26E-07	6.0561413	--		--	--	
3435902	DDX55	NM_020936	17.89516	0.129738586	-0.709320334	5.10E-15	6.9643937	8.6E-05	1.3	1.6E-01		
3665116	CBFB	NM_001755	8.499302	0.129513019	-0.639764176	1.14E-11	8.5669308	5.1E-07	1.9	3.3E-01		
3851514	ZNF490	NM_020714	13.72749	0.129029518	-0.700682209	1.50E-14	7.4160973	1.6E-05	1.3	8.9E-02		
2330234	TEKT2	NM_014466	13.73348	0.128990884	-0.665630677	8.22E-13	6.6994183	7.3E-15	1.6	3.6E-03		
2762500	MLR1	NM_153686	18.64543	0.128278115	-0.707952394	6.06E-15	7.7429261	6.7E-07	1.6	2.7E-08		
2468105	FLJ30594	AL713643	13.04388	0.127691389	0.670628318	4.80E-13	7.8707486	9.8E-18	2.2	7.3E-01		
2408855	FOXJ3	NM_014947	21.88579	0.127288391	-0.597014567	5.28E-10	8.7369703	3.9E-06	1.4	3.6E-03		
3383081	LOC441243	XM_376622	10.97018	0.126888009	-0.757179644	5.89E-18	6.8208604	9.4E-04	1.3	2.6E-03		
3760137	LOC440442	XM_498671	13.47381	0.125952041	-0.609870676	1.77E-10	8.7981373	3.8E-06	1.3	3.3E-06		
3085403	MSRA	NM_012331	8.725864	0.125900987	-0.731098152	2.81E-16	8.9393492	1.8E-13	2.4	1.6E-04		
2563654	EIF2AK3	NM_004836	22.25833	0.125302347	-0.664235889	9.53E-13	6.8734937	2.9E-03	1.2	1.7E-03		
2764004	LGI2	NM_018176	7.707663	0.124789151	0.712701171	3.33E-15	6.6043471	1.5E-13	3.4	1.7E-23		
3894322	SRXN1	NM_080725	8.072664	0.12352669	0.715489869	2.22E-15	7.4785293	1.8E-09	1.7	2.0E-02		
2908100	POLH	NM_006502	18.51317	0.122464946	-0.669912265	5.19E-13	7.1412689	3.5E-01	1.1	7.7E-06		
3558012	TINF2	NM_012461	6.404942	0.122462851	-0.669614221	5.36E-13	7.8393367	3.1E-05	1.4	3.9E-04		
3933923	CBS	NM_000071	4.45087	0.121687594	-0.158061407	0.1367741	8.6726374	3.0E-20	3.6	3.8E-51		
3030489	KIAA0543	XM_376720	11.25737	0.121006203	-0.622305459	5.85E-11	7.3237185	--		--	--	

3982975	POU3F4	NM_000307	4.834573	0.120890728	0.176792068	0.0955323	6.4458565	1.1E-17	2.8	3.4E-14	
3742727	DHX33	NM_020162	9.1636	0.120695784	-0.659724603	1.53E-12	7.2384742	--	--	--	
2711205	ATP13A4	NM_032279	10.01574	0.120379153	0.629917409	2.90E-11	4.8376479	6.6E-16	1.8	2.5E-03	
2992197	SP4	NM_003112	7.753044	0.119725094	-0.651012898	3.74E-12	8.7619751	3.8E-06	1.6	6.7E-02	
3376023	LOC51035	NM_015853	5.994285	0.119102275	-0.626062366	4.15E-11	6.9358111	9.9E-05	1.3	8.8E-05	
2329266	FLJ25476	NM_152493	9.238909	0.118515339	-0.650832839	3.81E-12	9.2171546	3.0E-08	2.0	1.1E-08	
2531908	B3GNT7	NM_145236	5.060424	0.117109551	0.613837412	1.25E-10	6.0988236	--	--	--	
3892067	LOC128629	XM_066069	5.272761	0.117004993	-0.664106474	9.66E-13	8.1582247	2.9E-09	2.2	3.4E-10	
3078774	ZNF467	NM_207336	6.121738	0.116493577	0.404579977	7.65E-05	6.5589448	7.5E-21	1.7	2.3E-24	
2648677	MME	NM_007289	3.904568	0.116407179	0.323268895	0.0018847	4.4153236	3.8E-24	4.4	6.3E-129	
3381607	RAB6C	NM_032144	5.170905	0.116207697	0.63708442	1.47E-11	9.4707682	2.7E-06	1.9	5.7E-09	
3557106	ACIN1	NM_014977	4.914292	0.115320882	-0.600724577	3.87E-10	7.8053867	4.3E-04	1.3	1.9E-08	
3962494	POLDIP3	NM_032311	5.15276	0.115241931	-0.594933736	6.27E-10	9.2659332	1.5E-06	1.6	4.1E-03	
3616216	LOC440261	XM_496059	24.4022	0.114666977	0.671611161	4.31E-13	6.7576315	7.0E-20	1.8	1.7E-09	
3893458	C20orf149	NM_024299	10.03705	0.114629119	0.614211464	1.21E-10	9.03846	6.6E-11	2.0	4.2E-02	
2830465	TTID	NM_006790	3.763329	0.113837373	0.574875991	3.11E-09	4.0009415	2.2E-25	1.7	2.1E-17	
3774906	SECTM1	NM_003004	7.072262	0.113082652	0.187231251	0.0772174	6.1327003	2.6E-22	2.2	8.0E-10	
3880467	C20orf39	NM_024893	6.427704	0.112726606	-0.671986396	4.14E-13	7.123208	6.5E-10	2.4	4.2E-02	
3133434	CHRNA6	NM_004198	6.499999	0.111336531	0.65856715	1.73E-12	4.0060649	--	--	--	
3624003	CYP19A1	NM_031226	5.252568	0.110689993	0.695347322	2.84E-14	4.0124747	--	--	--	
2343025	AK5	NM_174858	10.30344	0.110642228	0.616091527	1.02E-10	7.3228985	1.6E-18	4.1	1.6E-13	
3016768	LOC402578	XM_380135	6.740203	0.110322781	0.680384529	1.63E-13	7.402223	6.9E-09	1.6	4.1E-02	
2616804	STAC	NM_003149	4.510117	0.109657059	0.61935579	7.64E-11	5.7326155	1.1E-16	2.6	2.0E-24	
3378210	BRMS1	NM_001024958	6.181799	0.109425075	-0.626318099	4.05E-11	6.6259122	4.4E-02	1.4	2.8E-04	
3957589	MORC2	NM_014941	6.181456	0.10939883	-0.595005839	6.23E-10	7.977083	1.6E-03	1.2	1.4E-03	
3402039	KCNA5	NM_002234	5.53646	0.109203052	0.443812436	1.18E-05	6.4836001	4.1E-17	1.5	1.8E-11	
3636391	HOMER2	NM_199331	5.856344	0.109019475	0.564958936	6.61E-09	7.5437938	1.4E-21	4.3	8.1E-14	
3242353	CREM	NM_183012	5.641718	0.108688247	0.375113926	0.0002696	4.7265685	2.6E-21	2.0	5.1E-26	
3157311	LY6H	NM_002347	8.39218	0.108342097	0.653233032	2.99E-12	8.334988	--	--	--	
2666884	NEK10	NM_152534	7.232986	0.108128933	0.494636255	7.22E-07	6.4384119	7.9E-17	2.0	1.6E-33	
3432394	RPH3A	NM_014954	8.145208	0.108039059	0.673469051	3.52E-13	6.3403014	2.8E-11	1.8	2.8E-18	
3531553	AKAP6	NM_004274	5.30384	0.107977378	0.739141859	0	7.5890887	--	--	--	
3988638	RNF127	NM_024778	12.19034	0.107820679	0.671632206	4.30E-13	5.1975667	2.6E-20	2.2	7.4E-14	
3412345	DKFZp434K2435	NM_032256	9.785258	0.107513485	0.578205479	2.40E-09	6.816024	8.1E-07	1.4	1.0E+00	
3076076	SLC37A3	NM_207113	15.01934	0.106873983	-0.677214318	2.32E-13	8.9791004	2.3E-07	1.5	1.3E-03	
3381540	KIAA0280	XM_370635	7.531116	0.106451125	0.645980229	6.19E-12	9.2203151	3.2E-10	1.7	2.3E-02	
3334884	TM7SF2	NM_003273	12.15318	0.106380152	0.596906856	5.33E-10	8.193151	3.6E-10	1.6	2.5E-06	
2982319	SOD2	NM_000636	7.043006	0.10568409	0.702883641	1.15E-14	7.5711622	4.9E-10	2.1	2.7E-14	
3561381	TITF1	NM_003317	3.700817	0.104600972	0.151424986	0.1542461	5.0546395	4.5E-27	3.2	6.5E-69	
3613338	NIPA1	NM_144599	6.042327	0.103456284	0.66414456	9.62E-13	8.7282245	3.8E-05	1.5	2.4E-12	
3451375	PRICKLE1	NM_153026	3.523626	0.103131557	0.500991827	4.93E-07	7.5674579	4.3E-29	3.5	1.2E-22	Y (KEGG)
3834257	CEACAM21	NM_033543	4.546418	0.102287631	0.646897565	5.65E-12	5.1461383	4.0E-24	1.7	3.7E-50	
2318086	KCNAB2	NM_003636	7.282628	0.102269777	0.624646892	4.72E-11	7.4879991	3.1E-10	1.6	2.4E-04	
2363444	USP21	NM_001014443	9.412907	0.102236194	-0.693341384	3.63E-14	8.1206901	7.6E-03	1.4	2.7E-08	
3961981	POLR3H	NM_001018052	10.41212	0.10212846	0.628631127	3.27E-11	8.1615071	1.4E-08	1.4	3.4E-05	
2544164	FLJ21945	NM_025203	8.567708	0.101890707	-0.67795438	2.14E-13	7.2359232	--	--	--	
3971219	CNKSR2	NM_014927	8.405802	0.100828341	-0.657207603	1.99E-12	8.5184136	9.7E-13	2.5	2.2E-36	
3415812	LOC283337	NM_001004304	5.735634	0.100434298	-0.706009583	7.74E-15	7.7326042	2.0E-05	1.3	4.2E-01	
2546874	CAPN14	XM_496548	3.603438	0.099142193	0.571968849	3.89E-09	6.8452986	2.3E-23	3.5	8.4E-18	
2868131	ARTS-1	NM_016442	20.57853	0.09841164	0.578908486	2.28E-09	6.5321352	2.3E-13	1.5	2.9E-06	
3733275	KCNJ2	NM_000891	3.225053	0.09839551	0.236031048	0.0251148	5.574626	5.2E-31	3.4	1.1E-20	
3328600	TSPAN18	NM_130783	3.757945	0.09826317	-0.320536829	0.0020695	8.8275608	1.8E-22	5.4	3.8E-17	
3980329	TMEM28	NM_015686	3.487858	0.097726012	0.153942203	0.1474325	7.3167648	5.8E-20	1.6	1.9E-19	
3294816	NDST2	NM_003635	10.24952	0.097360885	-0.608481018	1.99E-10	7.6617415	4.4E-04	1.2	2.6E-01	
3588658	TPM3	NM_153649	3.404648	0.097173411	0.096576828	0.3651899	7.5129692	4.0E-18	2.1	2.0E-02	
3376155	NXF1	NM_006362	3.846137	0.097019044	-0.588253851	1.08E-09	8.950348	8.3E-05	1.5	2.8E-05	
2623180	SRISNF2L	NM_015106	9.325583	0.096593971	-0.64586639	6.26E-12	7.9310319	5.1E-05	1.3	8.0E-04	
3661940	GNAO1	NM_020988	7.468947	0.096192609	0.624785181	4.66E-11	10.339326	8.3E-06	1.7	1.2E-09	
2857488	LOC389347	XM_371783	10.95572	0.09617284	0.537301558	4.76E-08	4.4340851	--	--	--	
2695295	HT001	NM_014065	13.82701	0.095407159	-0.690515548	5.07E-14	5.9607204	--	--	--	
3375340	FLJ12529	NM_024811	4.049111	0.094637115	-0.444130992	1.16E-05	8.1136311	2.5E-03	1.3	1.6E-05	
2763550	PPARGC1A	NM_013261	10.26716	0.093909722	0.646046423	6.15E-12	5.9789466	2.0E-14	2.1	1.2E-38	
2384401	RHOU	NM_021205	16.11589	0.093737046	-0.524721	1.10E-07	8.4438094	3.9E-13	2.2	2.0E-02	
2954678	XPO5	NM_020750	8.286531	0.093626756	-0.621134119	6.51E-11	8.0182301	4.0E-01	1.2	1.5E-04	
3701433	C16orf46	NM_152337	4.976936	0.093195488	0.707936987	6.22E-15	5.779431	3.9E-10	1.7	1.7E-07	
2948425	PPP1R10	NM_002714	4.928105	0.091221597	-0.622618085	5.69E-11	8.4009542	1.2E-03	1.3	6.7E-04	
2901660	PRR3	NM_025263	3.773252	0.089463027	-0.657715465	1.89E-12	8.1369502	--	--	--	
2947572	RFP	NM_030950	9.079949	0.088780799	-0.619176608	7.76E-11	8.0407715	4.2E-03	1.1	1.3E-13	
2621705	TREX1	NM_033628	14.7756	0.088291712	-0.591707449	8.18E-10	6.4445609	2.2E-03	1.2	4.3E-15	
3751184	PHF12	NM_020889	10.44832	0.088186592	-0.531958779	6.83E-08	8.0420334	2.3E-07	1.4	3.7E-10	
3180957	LOC442497	XM_499501	4.961913	0.087852969	0.634830808	1.83E-11	7.8661872	2.2E-06	1.4	3.7E-01	
2883423	MGC27121	NM_001001343	4.088003	0.08785061	0.477912806	1.90E-06	6.3060278	--	--	--	
2325251	TCEB3	NM_003198	12.59195	0.086196409	-0.58525409	1.38E-09	8.1154121	--	--	--	
3442024	NOL1	NM_006170	3.930591	0.0860667	-0.618978126	7.90E-11	7.4003856	--	--	--	
3948640	FBLN1	NM_006486	3.909337	0.085436258	-0.650292621	4.02E-12	7.88171	8.9E-04	1.5	2.8E-10	
3875908	PLCB4	NM_000933	12.06465	0.084913347	0.582982435	1.65E-09	6.1725121	2.4E-21	3.3	1.1E-73	Y (KEGG)
3334783	ARL2	NM_001667	5.924257	0.084751398	0.509360494	2.94E-07	8.1080827	2.5E-07	1.8	4.7E-40	
3722554	DHX8	NM_004941	4.190049	0.084597798	-0.520108561	1.49E-07	7.9810484	2.9E-01	1.2	9.7E-04	
2836242	GRIA1	NM_000827	3.839452	0.084279995	-0.536474511	5.04E-08	9.9357016	2.7E-13	3.5	2.1E-37	
2358221	TARSL1	NM_025150	5.826992	0.083850503	-0.538134263	4.50E-08	8.4338507	--	--	--	
3971451	PHEX	NM_000444	6.708026	0.08309787	-0.679121933	1.88E-13	5.1882697	3.2E-04	1.3	6.0E-07	
3834089	HNRPUL1	NM_144732	3.469161	0.082877704	-0.454840395	6.68E-06	9.2319542	--	--	--	
2800503	POLS	NM_006999	8.607892	0.082690177	-0.606066647	2.46E-10	7.9806732	--	--	--	
3758967	UBTF	NM_014233	4.073647	0.082684492	-0.522245016	1.30E-07	8.7585548	1.0E-03	1.3	2.2E-01	
2604998	IQCA	NM_024726	10.05487	0.081911175	0.557521247	1.14E-08	5.1263581	1.9E-24	1.9	6.1E-08	

2596386	MDH1B	NM_206892	10.5356	0.081847841	0.459693001	5.17E-06	4.4913255	2.5E-12	1.7	1.1E-02	
3484393	LGR8	NM_130806	2.61907	0.081785259	0.225884026	0.0322966	2.9376043	2.3E-15	1.6	4.5E-12	
3721926	TUBG2	NM_016437	4.93288	0.08118785	0.59016475	9.27E-10	8.0320496	5.3E-14	1.9	7.6E-10	
2858134	PDE4D	NM_006203	24.3406	0.08112224	-0.581622746	1.84E-09	7.8208364	5.2E-10	1.7	6.2E-113	
2324743	ZBTB40	NM_014870	6.976772	0.080553085	-0.620034838	7.19E-11	6.8740531	8.4E-02	1.3	1.3E-05	
3811000	RNF152	NM_173557	6.793849	0.080421574	0.611765034	1.50E-10	8.7398136	8.4E-13	4.1	2.4E-02	
3978579	TRO	NM_177555	5.14822	0.079796582	0.671138216	4.54E-13	7.9825847	6.1E-09	1.6	2.4E-05	
3687405	FAM57B	NM_031478	4.441413	0.079794262	0.599876808	4.15E-10	8.4895643	1.5E-08	2.3	3.5E-01	
3017354	LHFPL3	NM_199000	11.05182	0.079478926	0.650628816	3.89E-12	7.0833561	--	--	--	
2406139	KIAA0319L	NM_024874	4.79951	0.078219002	0.596152911	5.67E-10	7.4842004	8.1E-12	1.7	1.1E-11	
3794056	SDCCAG33	NM_005786	7.475851	0.077922235	0.400980615	8.98E-05	6.8165807	3.1E-19	3.1	3.8E-34	
3373724	SSRP1	NM_003146	4.96551	0.077913916	-0.606164466	2.44E-10	9.4416697	--	--	--	
3667281	SF3B3	NM_012426	3.185431	0.077437359	-0.551233428	1.80E-08	9.7299378	5.9E-04	1.3	5.6E-05	
2465519	LOC342970	XM_292810	8.079537	0.07663985	-0.65239931	3.25E-12	7.1456037	--	--	--	
3414969	SCN8A	NM_014191	4.450626	0.076326905	0.58947596	9.80E-10	7.7790689	3.2E-04	1.3	2.2E-13	
2942306	TBC1D7	NM_016495	15.92512	0.07569196	-0.611239508	1.57E-10	7.0010614	--	--	--	
2333429	JMJD2A	NM_014663	5.312583	0.075647017	-0.614675144	1.16E-10	8.1683428	1.4E-02	1.2	2.0E-03	
3938244	PPIL2	NM_148175	4.69364	0.075494382	-0.568248929	5.16E-09	7.3157129	5.2E-02	1.1	1.7E-04	
2491168	LOC200383	NM_145299	7.507502	0.075307922	0.519631099	1.54E-07	5.1069265	1.4E-18	1.9	3.0E-13	
3648306	SNN	NM_003498	3.627764	0.073836617	0.689580088	5.66E-14	10.205589	3.5E-07	1.9	8.0E-07	
3014411	TRRAP	NM_003496	3.321873	0.073577186	-0.636810925	1.51E-11	8.2557125	--	--	--	
3082963	KIAA0711	NM_014867	16.78103	0.072782457	-0.559364325	1.00E-08	7.8258724	1.4E-07	1.2	3.3E-01	
3957445	PES1	NM_014303	2.837011	0.072393529	-0.536351272	5.08E-08	7.6830594	2.9E-04	1.3	2.4E-04	
3833238	LGALS14	NM_020129	2.453941	0.07198103	0.572732166	3.67E-09	4.4016628	--	--	--	
3907111	TOMM34	NM_006809	8.718049	0.071288698	0.635013969	1.79E-11	6.9403231	1.6E-10	1.5	1.7E-07	
2851511	CDH9	NM_016279	4.336009	0.071154133	0.46848003	3.21E-06	6.1782559	2.4E-21	5.6	2.7E-66	
3377091	MAP4K2	NM_004579	8.741928	0.070908822	0.565676085	6.26E-09	6.3781912	4.0E-09	1.3	4.9E-04	
2603987	NGEF	NM_019850	2.191573	0.070303359	0.140573507	0.1863252	7.4760664	5.2E-20	4.6	4.8E-36	
3741528	TAX1BP3	NM_014604	4.764043	0.069822072	-0.652404154	3.25E-12	7.7286273	3.5E-05	1.3	2.2E-04	Y (GO BP)
2491089	LOC440870	XM_496554	8.796016	0.069612907	0.489626196	9.70E-07	5.5711538	2.0E-19	2.3	4.3E-31	
3978424	RP1-112K5.2	NM_058163	5.350828	0.069300997	0.641680133	9.44E-12	7.3084601	1.1E-07	1.3	3.6E-02	
3032647	DPP6	NM_130797	4.948942	0.069242184	0.596089102	5.70E-10	8.3257492	1.1E-05	1.8	2.0E-20	
2682436	RYBP	NM_012234	4.929277	0.068896297	0.43945128	1.47E-05	7.774856	2.8E-16	2.4	1.1E-02	
2711818	FLJ11301	NM_018385	15.78561	0.067700152	-0.567056448	5.65E-09	6.8179265	--	--	--	
2477073	CRIM1	NM_016441	3.840454	0.067587975	-0.543773406	3.05E-08	8.4030682	1.2E-09	2.2	4.4E-08	
3302805	HPS1	NM_000195	14.32799	0.067485016	0.569869404	4.57E-09	6.7798902	8.6E-15	1.4	9.8E-13	
4024420	LDOC1	NM_012317	4.079559	0.06694247	0.557486225	1.15E-08	9.3401024	2.9E-06	1.6	1.0E-05	
3304073	KCNIP2	NM_173191	4.151099	0.066649094	0.614020866	1.23E-10	7.1744935	5.3E-17	2.1	1.4E-71	
3773426	NPTX1	NM_002522	7.940435	0.066485312	-0.610036367	1.74E-10	7.3024057	3.6E-16	2.9	1.0E+00	
3100497	MGC34646	NM_173519	11.23577	0.066404333	-0.602920258	3.21E-10	9.1782377	4.6E-07	1.5	3.5E-05	
3136271	PENK	NM_006211	2.214824	0.065339473	0.125225588	0.2395854	7.4482995	--	--	--	
3219030		---	8.675109	0.065105074	-0.643921222	7.58E-12	7.6112838	4.1E-07	1.7	4.9E-06	
3888055	ARFGEF2	NM_006420	4.665522	0.064137859	0.550407702	1.91E-08	7.5746787	2.4E-04	1.2	7.9E-05	
3955875	TFIP11	NM_012143	2.902964	0.063222791	-0.549637925	2.02E-08	7.2543944	--	--	--	
3209060	TRPM3	NM_206947	2.879081	0.062422294	-0.300807826	0.0039659	7.4116733	4.9E-09	2.5	2.0E-34	
2358171	PRPF3	NM_004698	10.00273	0.061288661	-0.625972917	4.18E-11	8.0639288	5.6E-04	1.4	2.0E-04	
3466499	USP44	NM_032147	3.172614	0.06097971	-0.569130461	4.83E-09	4.5343614	6.5E-05	1.3	1.0E+00	
3957003	ASCC2	NM_032204	3.679348	0.060877241	-0.568176927	5.19E-09	7.4582218	--	--	--	
3839142	ZNF473	NM_015428	4.335564	0.059867588	-0.65199766	3.39E-12	6.6937729	2.3E-02	1.3	6.0E-04	
2560524	TACR1	NM_001058	1.922455	0.059588591	0.159763682	0.1325442	5.1702357	2.5E-24	2.3	9.6E-04	
2384705	KIAA0133	NM_014777	4.296594	0.059493421	-0.665063364	8.73E-13	6.6263607	--	--	--	
3905073	KIAA0406	NM_014657	2.671073	0.058645765	-0.565565941	6.32E-09	7.5328989	--	--	--	
3609592	MCTP2	NM_018349	4.368247	0.057510238	0.368580153	0.0003509	3.5038459	--	--	--	
3947036	MGC40042	BC035720	2.140467	0.057280215	0.548781879	2.14E-08	4.5073846	--	--	--	
2710599	CLDN1	NM_021101	5.48059	0.056990571	-0.375712944	0.0002631	5.6009504	5.4E-06	1.9	1.0E+00	
2829864	LOC153328	NM_145282	5.464961	0.056984319	0.672871971	3.76E-13	6.6692266	1.3E-21	1.6	1.6E-12	
2796995	ARGBP2	NM_021069	5.289678	0.056721128	-0.592160241	7.88E-10	8.2230419	1.6E-03	1.4	1.4E-05	
3760490	WNT3	NM_030753	2.983789	0.055356568	0.522241864	1.30E-07	6.4818683	1.0E-24	1.8	2.0E-02	Y (both)
2923928	FABP7	NM_001446	12.17831	0.055071602	-0.559252851	1.01E-08	13.053782	5.6E-07	1.4	3.3E-22	
3958658	LARGE	NM_004737	2.037582	0.054738723	-0.547162837	2.40E-08	8.5267384	7.1E-11	2.3	3.3E-04	
3336378	RBM14	NM_006328	2.166507	0.053947189	-0.549746001	2.00E-08	8.5242956	6.2E-04	1.4	4.9E-03	
3191900	NUP214	NM_005085	2.171015	0.053930524	-0.432261838	2.10E-05	7.7739134	4.0E-01	1.2	9.2E-04	
2653673	KCNMB2	NM_181361	2.620948	0.053499995	0.564676366	6.75E-09	5.5777887	5.7E-12	1.6	1.3E-17	
2545549	SLC5A6	NM_021095	3.125474	0.05308693	0.603975739	2.94E-10	7.4853038	3.1E-10	1.5	2.3E-01	
3882984	MAP1LC3A	NM_032514	3.265306	0.052509023	0.644899592	6.89E-12	7.1208016	1.2E-07	2.1	3.6E-13	
3381063	SKD3	NM_030813	4.437883	0.052279868	0.551947142	1.71E-08	8.1852006	2.1E-05	1.3	6.0E-03	
2900299	ZNF192	NM_006298	3.522967	0.051730419	-0.612979907	1.35E-10	8.4385589	--	--	--	
3263624	MXI1	NM_005962	3.531072	0.051068708	-0.49513308	7.01E-07	7.6154989	1.5E-06	1.7	2.6E-04	
3653042	MGC3248	NM_032486	3.775015	0.05053611	0.505490878	3.74E-07	10.103967	--	--	--	
2558612	TGFA	NM_003236	2.566619	0.05053202	0.369295316	0.000341	6.0381443	2.1E-19	2.2	1.2E-31	
2661992	OXTR	NM_000916	2.435139	0.050337196	0.370549928	0.0003243	5.6622121	--	--	--	
2811145	PART1	NM_016590	4.397955	0.050221918	-0.476860242	2.02E-06	4.1376974	4.4E-04	1.7	1.0E+00	
3346548	BIRC3	NM_182962	4.237705	0.049828507	0.644422224	7.22E-12	3.3846938	6.4E-14	1.3	1.0E+00	
3507003	LNX2	NM_153371	4.495223	0.049118314	0.584357046	1.48E-09	7.473827	5.1E-15	1.7	2.0E-11	
3854756	RAB3A	NM_002866	3.725822	0.048807305	0.483427961	1.39E-06	9.6982383	1.1E-06	1.7	9.3E-01	
3570218	C14orf162	NM_020181	5.750345	0.047638026	-0.633190811	2.13E-11	7.9026804	--	--	--	
2636695	ZDHHC23	NM_173570	4.30423	0.047255996	0.402594653	8.36E-05	6.7814308	2.8E-23	4.0	3.9E-01	
2654091	USP13	NM_003940	9.458654	0.0470752	-0.497195297	6.20E-07	7.4205436	7.1E-02	1.2	4.1E-06	
2382467	LOC440723	XM_498832	5.83427	0.046215611	-0.464234676	4.05E-06	7.1386262	1.2E-08	2.6	1.3E-05	
2901913	LOC387922	XM_370723	7.57526	0.0460074	-0.532421022	6.62E-08	11.704229	7.5E-05	1.2	1.8E-04	
3970166	CXorf15	NM_018360	4.35771	0.044235527	-0.623225282	5.38E-11	6.8522447	--	--	--	
2708817	TMEM41A	NM_080652	3.399313	0.044192508	0.599539221	4.27E-10	7.3650108	1.3E-11	1.6	3.1E-02	
3838238	LIN7B	NM_022165	2.862141	0.044041116	0.599922537	4.14E-10	6.9780238	4.9E-10	1.6	9.6E-01	
3251848	FUT11	NM_173540	1.592351	0.043321179	-0.441352142	1.34E-05	8.1662053	--	--	--	
3643297	STUB1	NM_005861	4.391946	0.042656109	0.480668764	1.63E-06	8.2152251	1.3E-06	1.4	2.3E-01	

2669888	GORASP1	NM_031899	2.7938	0.042433768	0.555811903	1.30E-08	7.2639888	3.5E-05	1.3	2.7E-02	
3475838	FLJ12750	NM_024667	2.383307	0.041922267	-0.509539821	2.91E-07	8.069613	1.2E-04	1.6	5.9E-03	
2325274	C1orf128	NM_020362	4.364242	0.041706127	0.601223677	3.71E-10	8.3814178	1.1E-06	1.7	3.5E-01	
3120699	LRRC14	NM_014665	3.876783	0.041064634	-0.583250314	1.62E-09	7.0252201	1.7E-02	1.2	1.2E-03	
3205488	ZBTB5	NM_014872	4.969448	0.039783086	-0.62170325	6.18E-11	7.066369	--	--	--	
3377789	RELA	NM_021975	2.190516	0.039229612	-0.446066401	1.05E-05	7.8631038	--	--	--	
2716713	STK32B	NM_018401	3.894955	0.038495643	-0.517686688	1.74E-07	7.9766679	1.0E-06	2.0	4.3E-17	
3457455	SMARCC2	NM_139067	2.667779	0.038339777	-0.253931141	0.0157328	9.517666	1.0E-02	1.3	2.0E-48	
2565246	FLJ20507	NM_017849	2.585157	0.03773014	0.528950059	8.35E-08	8.880937	5.9E-05	1.5	1.5E-09	
3759356	EFTUD2	NM_004247	1.272098	0.037200637	-0.449748615	8.70E-06	8.8145464	1.4E-01	1.2	8.3E-15	
2769346	LNX	NM_032622	16.0241	0.035716383	-0.430549112	2.28E-05	7.7347362	2.7E-13	2.0	2.4E-25	
2403446	PTAFR	NM_000952	3.272438	0.034855053	0.516618134	1.86E-07	5.6807048	--	--	--	
3229449	C9orf116	NM_144654	4.618822	0.034638382	0.602451673	3.34E-10	6.2611016	7.2E-18	1.7	5.4E-14	
3128817	ADRA1A	NM_033302	2.029176	0.034275383	0.242752235	0.0211466	4.907498	2.4E-24	1.5	4.2E-34	
3418303	PIP5K2C	NM_024779	1.681336	0.034257545	0.510080234	2.82E-07	7.2884782	1.4E-09	1.6	4.9E-01	
4007734	LOC441797	XM_497552	5.234293	0.033684934	0.511875415	2.52E-07	6.9742444	1.8E-06	1.3	8.7E-05	
2599500	ZNF142	NM_005081	3.63521	0.033184242	-0.445686398	1.07E-05	7.1721862	--	--	--	
3189714	GARNL3	NM_032293	1.415517	0.03234006	-0.133316794	0.210324	8.6925529	4.7E-13	2.1	4.8E-12	
3587553	GREM1	NM_013372	3.938511	0.031583615	-0.433901335	1.93E-05	6.0405611	--	--	--	
2919399	FLJ16517	NM_001004317	1.31472	0.031500599	0.605940549	2.48E-10	3.8961498	5.5E-15	1.7	1.0E+00	
3597521	APH1B	NM_031301	1.948531	0.030876034	-0.438466119	1.54E-05	6.7745582	1.9E-05	1.4	5.8E-01	
2943236	DTNBP1	NM_183041	2.161302	0.029664317	0.39935977	9.65E-05	6.3803251	6.5E-16	2.2	2.8E-22	
3790529	GRP	NM_001012512	10.13242	0.029500973	-0.476211306	2.09E-06	7.1486887	--	--	--	
3762355	PRO1855	NM_018509	1.730021	0.029251336	0.519086292	1.59E-07	8.3294326	3.0E-05	1.2	3.1E-05	
2319832	APITD1	NM_199294	0.905522	0.028715206	0.149964331	0.1583061	5.6779126	1.4E-19	1.3	2.3E-100	
3868963	ETFB	NM_001985	7.017737	0.028332301	0.421316276	3.54E-05	7.6601434	1.2E-13	2.0	2.3E-18	
2640379	FLJ40083	NM_182628	1.319966	0.026843393	-0.436839018	1.67E-05	5.3601812	2.8E-09	1.4	2.2E-08	
2864584	DP58	NM_001004441	0.810435	0.026813007	0.213769764	0.0430628	3.2320197	--	--	--	
3701779	HSPC105	NM_145168	1.159503	0.025537069	0.169713554	0.1097846	4.1702189	3.7E-20	1.7	1.0E+00	
3708991	EFNB3	NM_001406	1.990305	0.025469872	0.498628689	5.68E-07	7.8710518	9.4E-05	1.5	5.1E-03	
2761941	FLJ90013	NM_153365	12.91684	0.025072153	-0.321087081	0.002031	7.9479394	7.6E-04	1.5	5.2E-04	
3211579	TLE1	NM_005077	1.807131	0.024949204	0.344927196	0.0008706	8.0308244	6.9E-05	1.7	5.2E-67	Y (GO BP)
2412690	KTI12	NM_138417	3.054769	0.023656073	-0.53849523	4.39E-08	7.2604185	--	--	--	
3687494	MAPK3	NM_002746	1.07954	0.021668606	0.393662387	0.0001237	8.8862269	3.0E-04	1.4	1.0E+00	
3091797	EXTL3	NM_001440	2.055852	0.021642032	-0.31986221	0.0021176	8.9698963	2.1E-03	1.6	1.7E-06	
2538480	TSSC1	NM_003310	0.735579	0.020421064	0.066720652	0.5320914	7.7764835	7.4E-12	2.4	3.5E-41	
3319613	MGC10850	AK125453	0.567792	0.01860044	0.132481147	0.2132226	6.542527	--	--	--	
3765059	ABC1	NM_022070	0.929551	0.017433125	-0.433514018	1.97E-05	7.2482088	--	--	--	
3435980	FLJ12975	NM_024809	1.096243	0.016933483	-0.2609211	0.0129952	7.0355465	3.3E-01	1.2	2.3E-05	
2948564	MDC1	NM_014641	0.814943	0.014516524	-0.497008839	6.27E-07	6.6299506	--	--	--	
3141589	IL7	NM_000880	0.607858	0.010292688	-0.267581467	0.0107818	4.1202269	--	--	--	

Table S17. M15 (cyan): PFC module

								NCTX ANOVA		
Transcript ID	**Symbol**	**Accession**	**kTotal**	**kWithin-Connectivity**	**eigencorr**	**eigenpval**	**meanExpr**	**DEX**	**FoldChng**	**DAS**
3450655	CPNE8	NM_153634	31.629026	1	0.9323786	0	5.3409086	7.1E-15	4.9	3.8E-158
3812864	CBLN2	NM_182511	26.114141	0.888555054	0.9407788	0	8.1661686	9.9E-18	17.1	3.3E-232
3884405	VSTM2L	NM_080607	25.120495	0.875465531	0.9032152	0	8.68374	1.5E-18	6.0	3.5E-24
2955691	RCAN2	NM_005822	25.096987	0.827926833	0.9357529	0	7.3323198	2.2E-08	3.9	5.6E-13
3102372	SULF1	NM_015170	23.065766	0.808788916	0.9182029	0	5.5107349	1.2E-12	4.3	0.0E+00
3931495	KCNJ6	NM_002240	26.440631	0.808281976	0.9299536	0	6.5502813	2.2E-09	2.6	3.5E-10
3523318	NALCN	NM_052867	59.103033	0.766505882	0.863459	0	5.8595914	1.0E-04	2.2	0.0E+00
2952323	MDGA1	NM_153487	27.432387	0.662810179	0.886458	0	6.7957665	5.4E-07	2.3	1.7E-09
2447540	GLT25D2	NM_015101	46.318887	0.662097055	0.8386823	0	5.6755567	3.6E-05	2.2	8.8E-02
2811145	PART1	AK094518	20.255001	0.660670103	0.8531728	0	3.6862359	7.2E-15	3.3	3.8E-50
2987843	SDK1	NM_152744	18.404005	0.657567489	0.8719924	0	6.8850286	8.3E-18	3.8	5.9E-252
3046739	AMPH	NM_001635	26.76277	0.656222853	0.8741912	0	6.9617813	6.0E-09	2.2	2.2E-01
2790486	DCHS2	NM_017639	16.40466	0.651143634	0.8818201	0	3.714911	6.9E-13	1.9	1.6E-08
2800711	ADCY2	NM_020546	21.225172	0.640191007	0.8673819	0	7.1306335	3.5E-09	1.9	1.4E-04
3029900	CNTNAP2	NM_014141	17.548182	0.629219533	0.8434207	0	6.8726006	3.0E-11	7.3	0.0E+00
3626826	MYO1E	NM_004998	15.832933	0.603723564	-0.8854155	5.78E-22	5.9535073	2.4E-09	2.2	4.0E-01
3614774	OCA2	NM_000275	23.481986	0.596671745	-0.8008773	3.28E-15	5.752366	3.6E-17	3.1	2.0E-256
2975867	MAP3K5	NM_005923	18.026347	0.595382557	0.8793109	0	4.65655	2.3E-07	2.3	1.2E-177
2868904	ST8SIA4	ENST00000231461	45.821609	0.584134951	0.8597972	0	7.3832595	2.7E-04	2.4	8.4E-02
3007024	WBSCR17	NM_022479	16.05508	0.581526347	0.8650182	0	6.8361261	9.4E-10	2.7	8.5E-06
2444899	TNR	NM_003285	71.036241	0.574776663	0.7863448	2.22E-14	8.1624227	8.0E-03	2.5	1.0E+00
2382467	CNIH3	NM_152495	18.233602	0.567328637	0.840565	0	6.9656091	8.4E-14	3.7	1.0E+00
2447192	RGS8	NM_001102450	14.128658	0.56117801	0.8363934	0	5.0128362	4.0E-09	3.4	8.5E-85
3210497	PRUNE2	AB050197	18.428111	0.551589732	0.8611479	0	5.1833555	1.0E-06	1.9	2.0E-02
2939034	SERPINB9	NM_004155	15.652594	0.550047284	0.8605696	0	4.2400753	3.3E-09	1.9	1.0E+00
3153716	ADCY8	NM_001115	14.9863	0.549923506	0.8411121	0	5.4569703	1.4E-10	2.8	5.2E-85
3462567	KCNC2	NM_139136	40.458837	0.549358856	0.7997565	3.77E-15	6.8779373	2.3E-03	3.6	2.5E-03
3121751	CSMD1	NM_033225	34.92081	0.530774416	0.8140762	4.44E-16	7.0612586	6.3E-04	1.9	2.6E-02
2624385	CACNA1D	NM_000720	41.915978	0.526812697	0.8113028	8.88E-16	5.9363589	7.8E-04	1.6	0.0E+00
3305801	SORCS1	NM_052918	17.800292	0.523738753	-0.8185426	2.54E-16	7.0214072	2.7E-15	3.7	0.0E+00
2749484	RXFP1	NM_021634	16.993989	0.522599024	0.8194347	2.22E-16	3.7238075	5.3E-07	4.3	6.8E-139
3789680	ST8SIA3	AF004668	48.569661	0.52199682	0.7529283	1.10E-12	5.4160886	4.4E-04	4.3	2.0E-01
3731543	RGS9	NM_003835	17.083222	0.518451734	0.7844061	2.84E-14	4.978969	3.3E-16	1.7	3.2E-210
2617188	ITGA9	NM_002207	14.086469	0.517872664	0.8226569	0	5.3419262	8.3E-14	2.0	3.8E-171
2808748	PARP8	NM_024615	83.359543	0.503416294	0.8163127	4.44E-16	6.9629463	9.1E-03	1.8	6.3E-03
3343452	PRSS23	NM_007173	15.54977	0.500357285	0.8411721	0	5.3181413	1.2E-10	2.2	4.2E-01
2724853	NSUN7	NM_024677	15.745026	0.491341379	0.7991726	4.00E-15	4.1465024	2.2E-13	1.8	1.0E+00
2643217	TF	NM_001063	13.421211	0.490457832	0.8443168	0	5.1781878	4.9E-05	1.5	1.1E-01
3491486	PCDH17	NM_001040429	12.472342	0.481197813	0.8209953	2.22E-16	7.8139586	7.1E-15	4.9	3.4E-32
2962820	ME1	NM_002395	19.559892	0.47799241	0.8457075	0	3.7570314	5.6E-07	1.8	8.5E-147
3497340	HS6ST3	NM_153456	18.026003	0.471532867	0.7739724	1.02E-13	6.7568853	8.1E-20	5.3	2.0E-10
3485740	LOC400120	NM_203451	15.78979	0.468653807	0.8275517	0	5.9986399	---	---	---
2750198	NPY5R	NM_006174	69.80096	0.464610827	0.8170021	4.44E-16	6.174393	8.5E-03	1.7	3.8E-05
2967276	POPDC3	NM_022361	16.298461	0.463212335	0.8088228	1.11E-15	3.5377587	2.6E-15	2.7	1.7E-36
3435980	TCTN2	NM_024809	16.200534	0.459400251	0.8332764	0	6.4425047	2.3E-10	2.1	2.6E-03
2523635	CYP20A1	NM_177538	31.665976	0.458155517	0.7644168	3.10E-13	5.4032205	1.4E-08	1.6	1.0E+00
2483451	VRK2	AY228370	12.505498	0.452277955	-0.821954	1.50E-16	4.4486486	1.3E-06	1.8	1.3E-16
3762753	CA10	NM_001082533	15.20593	0.451218889	0.838813	0	5.5280763	2.0E-06	2.9	1.7E-31
3487600	C13orf31	BC035749	19.93755	0.449751615	0.842944	0	4.3152664	1.8E-04	1.8	7.0E-01
3959631	EIF3D	NM_003753	68.704203	0.449268497	-0.7404325	4.05E-12	7.9925016	---	---	---
3192353	NTNG2	AY358165	24.395786	0.444040875	-0.7365086	6.00E-12	6.6539691	1.1E-17	4.5	2.3E-81
3508898	STARD13	NM_178006	13.050946	0.443745623	-0.8246906	9.78E-17	4.9943068	2.3E-08	1.7	4.5E-102
2601230	SCG2	NM_003469	47.217019	0.442997822	0.7476651	1.92E-12	6.382212	---	---	---
2918037	KLHL32	NM_052904	13.578157	0.429543856	-0.7927038	9.83E-15	7.1117784	1.9E-13	3.8	6.6E-25
4053903	WNT7B	NM_058238	15.934958	0.426829723	-0.8079088	1.22E-15	5.129233	---	---	---
3977299	CLCN5	NM_000084	13.050949	0.42543902	0.7767615	7.31E-14	3.8897567	3.8E-13	1.7	1.0E+00
3144033	CALB1	NM_004929	16.322287	0.423185042	0.7648662	2.94E-13	6.2858544	3.0E-06	5.6	1.4E-51
2794454	GLRA3	NM_006529	22.289886	0.415707602	0.8271891	0	3.7132876	7.6E-04	1.7	7.8E-01
2381309	MOSC1	NM_022746	18.810203	0.415003786	0.8204122	2.22E-16	6.2983494	6.6E-06	1.5	2.8E-02
3449068	TMTC1	NM_175861	15.290562	0.410569434	-0.7625043	3.84E-13	6.5344641	2.4E-17	4.0	8.2E-54
2384788	GALNT2	BC041120	10.668284	0.398159299	0.8217218	0	7.7873784	4.5E-08	2.7	8.3E-01
3110395	RIMS2	NM_001100117	61.74109	0.397781654	0.7933466	8.88E-15	6.7727535	1.4E-02	1.8	1.0E+00
2766893	APBB2	NM_173075	32.071964	0.395804916	0.7717331	1.33E-13	8.565253	4.2E-02	1.5	1.0E+00
3467949	SLC5A8	NM_145913	13.956999	0.393655386	0.7760251	7.99E-14	4.4127051	4.4E-11	1.8	3.8E-199
3278198	PHYH	NM_006214	16.425515	0.393402943	0.8057753	1.78E-15	5.1976573	4.7E-08	2.2	1.4E-93
2624639	CACNA2D3	NM_018398	15.019566	0.390952522	0.7970521	5.55E-15	6.3789799	8.7E-06	2.2	9.8E-01
3802980	DSC2	NM_004949	19.074113	0.39072305	0.7898089	1.42E-14	4.4866182	4.8E-03	1.5	8.4E-43
2883440	ADAM19	NM_033274	27.621399	0.38762511	0.7726506	1.19E-13	6.0036016	1.1E-07	1.5	0.0E+00
3446137	LMO3	NM_018640	17.23233	0.386871486	0.7987318	4.44E-15	11.419605	1.4E-09	2.1	4.8E-11
2317686	AJAP1	NM_018836	45.669211	0.384873533	0.740862	3.88E-12	6.4403332	5.7E-04	2.2	1.5E-49

2858134	PDE4D	NM_001104631	26.116156	0.384473707	0.7796334	5.15E-14	7.5351839	2.0E-04	1.4	4.0E-51
3892974	COL9A3	NM_001853	62.70485	0.382356893	-0.8090734	1.03E-15	6.7851034	4.0E-09	2.3	6.2E-160
3062193	SLC25A13	NM_014251	26.315581	0.379819606	0.7263313	1.61E-11	5.213279	1.9E-05	1.7	3.8E-01
3968512	CLCN4	NM_001830	24.26337	0.377450078	0.8045161	2.00E-15	8.7164819	2.4E-04	1.8	4.7E-01
2918982	GRIK2	NM_175768	30.072044	0.370033266	0.7738072	1.04E-13	8.1219886	1.0E-05	2.8	1.4E-01
3672368	KIAA0182	NM_014615	51.985664	0.366541016	-0.7941513	8.12E-15	7.7020157	1.1E-04	1.7	2.4E-10
3188697	NEK6	BC000101	17.379309	0.364824133	-0.7458235	2.33E-12	7.2154289	5.9E-11	2.5	1.8E-12
3129731	DUSP4	NM_057158	11.304633	0.363988983	0.7700871	1.61E-13	5.948183	1.4E-11	2.7	2.6E-02
3308397	HSPA12A	NM_025015	18.84005	0.36050691	0.672797	1.54E-09	8.0841813	1.1E-17	2.6	1.7E-03
3329983	PTPRJ	NM_002843	33.141856	0.359935026	0.741769	3.53E-12	6.7953484	2.9E-03	1.5	1.0E+00
2685776	MINA	NM_001042533	23.287252	0.353980791	0.7595953	5.32E-13	4.9096684	5.9E-03	2.1	3.0E-01
2644565	MRAS	NM_012219	36.968013	0.353884174	0.7527752	1.12E-12	8.3273696	1.4E-03	1.8	1.0E+00
3086774	C8orf79	BC035082	15.464864	0.349567553	0.6851178	5.89E-10	7.161224	1.1E-09	2.4	1.8E-01
3091797	EXTL3	NM_001440	15.953844	0.347945981	0.7588545	5.77E-13	8.8837303	1.9E-04	1.8	1.0E+00
3803290	FAM59A	NM_022751	10.517825	0.343680344	0.7738158	1.04E-13	8.9213541	8.3E-08	1.8	1.0E+00
3385509	FZD4	NM_012193	12.008993	0.342673214	0.756545	7.44E-13	6.4402126	7.4E-13	2.2	8.0E-04
3464417	MGAT4C	NM_013244	50.909217	0.337644843	0.7663719	2.48E-13	8.1801037	4.1E-04	2.8	4.3E-06
3779207	GNAL	NM_182978	10.970255	0.336023169	0.8105354	8.88E-16	8.8331101	8.2E-06	2.2	7.2E-03
2343418	PTGFR	NM_001039585	8.4145995	0.334941058	0.7522476	1.18E-12	4.0682846	9.9E-09	1.7	1.0E+00
2939298	C6orf85	NM_021945	36.717076	0.333469762	-0.7307268	1.06E-11	7.7896444	---	---	---
3319073	SYT9	NM_175733	12.198931	0.329927303	0.7250929	1.82E-11	5.1555535	3.7E-13	2.7	3.5E-140
3016262	EMID2	NM_133457	15.867455	0.326229553	0.7669621	2.32E-13	7.2819665	3.6E-07	1.9	4.9E-11
3999395	MID1	NM_000381	19.456269	0.320332636	-0.7661319	2.55E-13	7.024477	5.6E-08	2.7	1.0E+00
2323899	UBXD3	NM_152376	10.067352	0.319753995	0.7981843	4.88E-15	4.6059133	2.6E-10	1.9	4.1E-09
3155489	FAM135B	NM_015912	21.984374	0.316711674	0.7688911	1.86E-13	5.9652622	8.1E-06	1.5	1.7E-04
2956217	C6orf138	NM_001013732	12.999219	0.311906173	0.7836233	3.15E-14	5.4631001	---	---	---
2448710	FAM5C	NM_199051	9.5739173	0.311111862	0.7719863	1.29E-13	6.313566	4.9E-07	4.4	1.5E-02
3908358	SULF2	NM_018837	8.6018818	0.308308131	0.7565393	7.44E-13	7.255511	2.9E-11	2.8	2.0E-164
3086809	C8orf79	NM_001099677	17.870345	0.304614375	0.6909056	3.68E-10	6.1636005	6.7E-09	2.6	2.8E-03
2608309	LRRN1	NM_020873	33.132141	0.303681288	0.7686269	1.91E-13	8.9011855	9.1E-03	1.9	1.0E+00
3211579	TLE1	NM_005077	12.548693	0.302977043	-0.7490081	1.67E-12	7.3045608	8.1E-11	2.5	9.3E-07
2703836	SLITRK3	NM_014926	22.905093	0.301046682	0.6725228	1.58E-09	6.3544889	1.9E-03	2.6	1.4E-70
2748061	TRIM2	NM_015271	78.303502	0.299277238	0.728533	1.31E-11	10.18351	---	---	---
2368590	PAPPA2	NM_020318	9.3333121	0.298991356	-0.7668373	2.35E-13	5.7065597	4.4E-07	2.1	1.1E-81
3013178	CASD1	NM_022900	81.106799	0.298433566	0.750482	1.43E-12	8.5879173	---	---	---
3959643		---	20.111833	0.298309212	-0.745553	2.40E-12	9.4860489	---	---	---
2479433	PLEKHH2	NM_172069	9.5322797	0.294129338	-0.7385236	4.91E-12	4.1618154	2.3E-08	2.1	0.0E+00
2876897	SPOCK1	NM_004598	57.423101	0.292680791	0.6486055	9.02E-09	8.3874492	6.4E-03	2.3	1.0E+00
2667597	GADL1	NM_207359	10.476583	0.291343994	0.7224516	2.33E-11	3.6808349	2.2E-13	1.8	4.3E-34
3362159	NRIP3	NM_020645	14.876384	0.287684794	0.6986626	1.93E-10	5.5965065	3.0E-03	2.1	9.9E-02
2966496	MCHR2	NM_001040179	35.290986	0.286407252	0.7170773	3.82E-11	5.0334778	2.0E-06	3.6	2.4E-63
3517793	KLF12	NM_007249	20.64113	0.285092815	0.7139042	5.10E-11	8.1718869	7.8E-04	1.9	1.0E+00
2838416	GABRA1	NM_000806	37.74359	0.281611599	0.6998656	1.74E-10	6.4541967	4.2E-04	2.8	1.3E-23
3690747	CBLN1	NM_004352	9.8268577	0.280866511	0.733162	8.35E-12	5.8996468	2.3E-13	3.0	1.8E-17
3649052	MKL2	NM_014048	56.590456	0.27896585	0.6511205	7.56E-09	7.3550379	4.9E-02	1.7	3.0E-04
2743800	PCDH10	NM_032961	7.61782	0.278568221	0.7437368	2.89E-12	9.4320744	7.2E-07	3.0	3.2E-02
2993124	NPY	NM_000905	16.116046	0.276188507	-0.6597142	4.09E-09	7.1936094	3.4E-12	4.1	5.5E-40
2488596	EMX1	NM_004097	56.983904	0.27487346	-0.6977572	2.08E-10	6.9719927	---	---	---
2683763	ROBO1	NM_133631	9.7120316	0.27059528	0.7435094	2.96E-12	10.052699	4.0E-12	3.2	3.2E-67
3018605	SLC26A4	NM_000441	13.618041	0.270316711	-0.6808637	8.26E-10	6.0629237	6.2E-08	2.6	8.5E-08
2426734	C1orf62	NM_152763	9.8303466	0.269873667	0.6948073	2.67E-10	3.8236654	7.3E-07	2.2	1.9E-01
3807595	MYO5B	NM_001080467	10.002242	0.269823692	-0.6830143	6.96E-10	6.4423151	7.7E-08	3.3	2.0E-142
3589458	THBS1	NM_003246	8.5696225	0.269030574	-0.7148291	4.69E-11	9.120353	1.4E-07	4.8	1.4E-10
2895792	RNF182	NM_152737	9.7741331	0.26590154	-0.7265259	1.58E-11	8.9625552	7.3E-07	3.3	1.0E+00
2841802	HMP19	NM_015980	10.627005	0.264365638	0.7337561	7.88E-12	11.249933	2.9E-04	1.9	1.0E+00
3079576	SMARCD3	NM_001003802	40.957055	0.262928803	-0.6836825	6.60E-10	8.9442992	1.4E-03	1.8	1.0E+00
2779897	MANBA	NM_005908	38.34156	0.262513007	0.6481971	9.28E-09	5.1768448	1.4E-03	1.5	1.0E+00
3389976	SLC35F2	NM_017515	12.612466	0.257289208	0.6537081	6.30E-09	7.6268773	1.4E-09	2.3	3.7E-02
3067478	NRCAM	NM_001037132	59.20004	0.257055095	0.7068851	9.51E-11	8.5906294	5.7E-03	1.8	1.0E+00
3748449	CCDC144A	NM_014695	16.449275	0.25585757	0.7215746	2.53E-11	7.9256026	3.5E-01	3.9	2.3E-94
2736060	GRID2	NM_001510	16.536406	0.254810823	0.7444108	2.70E-12	6.9091575	4.1E-07	2.6	8.2E-04
3962678	PACSIN2	NM_007229	8.961848	0.253966341	0.7249893	1.83E-11	6.4157541	6.1E-08	1.6	5.2E-01
2417362	DIRAS3	NM_004675	14.585278	0.25394385	0.7434612	2.97E-12	5.3396551	1.3E-03	2.1	1.0E+00
2404418	FABP3	NM_004102	70.413959	0.253486706	0.6246916	4.46E-08	9.4770811	3.0E-04	2.4	1.0E+00
2461935	GNG4	NM_001098722	8.2422369	0.251172555	0.7511626	1.33E-12	8.4684157	3.7E-07	2.9	8.3E-05
3737242	SLC26A11	NM_173626	11.357149	0.249250463	0.7026837	1.37E-10	6.204207	3.5E-12	1.8	1.0E+00
2567167	LONRF2	NM_198461	57.051632	0.248638389	0.6714025	1.72E-09	9.2345048	---	---	---
3442854	SLC2A3	NM_006931	28.62189	0.248511279	0.7049443	1.13E-10	7.3834219	2.8E-02	1.6	1.5E-02
3188656	LHX2	NM_004789	11.350206	0.248308448	-0.7454492	2.42E-12	9.5631942	7.0E-09	3.0	4.4E-02
3930235	RCAN1	NM_004414	11.27173	0.247695573	0.6408133	1.54E-08	7.5775489	3.0E-10	2.2	1.0E-09
2463173	GREM2	NM_022469	8.4419218	0.247008843	0.736715	5.88E-12	7.4655811	2.5E-06	3.4	1.0E+00
2727587	KIT	NM_000222	23.802609	0.244725793	0.7043245	1.19E-10	8.4015658	1.0E-04	1.9	4.4E-01
3449008	OVCH1	NM_183378	10.957641	0.242461027	-0.6875706	4.83E-10	3.6294098	7.9E-11	1.5	1.0E+00
3497586	MBNL2	NM_144778	92.13708	0.241654546	0.6207854	5.71E-08	7.8265111	---	---	---
2742109	FGF2	NM_002006	15.16648	0.241576284	0.7462787	2.22E-12	5.1089954	1.0E-03	1.9	4.0E-01

2791894	FSTL5	NM_020116	18.848353	0.238175495	0.7043249	1.19E-10	6.1466303	---	---	---
3959644		---	24.389753	0.237532081	-0.6702409	1.87E-09	10.14614	---	---	---
2598828	IGFBP5	NM_000599	7.0492568	0.236065289	0.7045199	1.17E-10	6.0918306	5.4E-12	4.8	2.4E-161
3906390	PTPRT	NM_133170	41.504655	0.23415867	0.6032742	1.67E-07	7.2462705	2.3E-04	3.1	2.3E-05
3797032	EPB41L3	NM_012307	17.152189	0.23047288	-0.7342121	7.53E-12	7.1416903	---	---	---
3246888	PRKG1	NM_001098512	18.510093	0.229205356	0.692257	3.30E-10	4.6361889	1.8E-05	1.8	4.2E-01
2368840	FAM5B	NM_021165	7.2539975	0.226819958	0.7282619	1.34E-11	6.7238111	6.6E-07	2.2	5.5E-02
3959638		---	26.654766	0.2252478	-0.6375047	1.93E-08	9.0077923	---	---	---
3947952	PNPLA3	NM_025225	28.892999	0.225028416	0.6939775	2.86E-10	6.8691047	1.8E-04	1.9	8.5E-01
7385641	CLSTN2	NM_022131	9.204743	0.222026277	0.6389488	1.75E-08	7.2283406	3.8E-13	2.4	2.0E-05
2738378	NPNT	NM_001033047	31.183941	0.219659295	0.6640068	2.99E-09	6.8882166	1.0E-05	5.3	3.1E-184
2389247	KIF26B	NM_018012	10.663121	0.218947172	-0.7208771	2.70E-11	5.2678718	---	---	---
3070873	GPR37	NM_005302	14.100845	0.218944449	0.7270321	1.51E-11	7.1962975	8.6E-05	2.1	1.0E+00
2793137	SH3RF1	BC053671	6.196155	0.21151081	0.710902	6.67E-11	6.4467373	8.6E-04	1.7	9.6E-01
3385834	GRM5	NM_000842	54.381572	0.210527653	0.6009167	1.92E-07	8.8004197	4.1E-01	1.8	1.3E-02
3625539	NEDD4	NM_006154	19.767008	0.210396939	-0.696373	2.34E-10	3.4803366	1.5E-03	1.2	2.3E-01
2740896	NDST3	NM_004784	6.9638567	0.208925857	0.7005039	1.65E-10	5.6766692	8.3E-05	2.4	7.2E-129
2342904	ST6GALNAC5	NM_030965	6.5116965	0.20382354	0.7473836	1.98E-12	7.3955524	2.2E-06	2.3	1.0E+00
2604390	ARL4C	NM_005737	14.327486	0.20202233	0.7204481	2.80E-11	8.8319548	---	---	---
2898371	NRSN1	NM_080723	10.463393	0.200828948	0.7326319	8.79E-12	8.4141405	5.4E-03	2.0	1.0E+00
2930418	UST	NM_005715	41.932981	0.193460965	0.6618715	3.50E-09	7.5115906	---	---	---
2820394	NR2F1	NM_005654	24.468628	0.193400207	-0.5467222	3.56E-06	8.9082706	6.9E-13	4.8	5.5E-02
3367231	BDNF	EF689020	5.4698567	0.193109674	0.7422428	3.37E-12	3.6589046	3.5E-08	2.1	1.0E+00
3809826	ATP8B1	NM_005603	9.2972679	0.192250059	0.7110272	6.60E-11	3.8368894	6.9E-06	1.7	1.0E+00
3240452	BAMBI	NM_012342	7.9530307	0.191967955	0.7112273	6.48E-11	4.9232405	2.7E-05	1.5	6.3E-01
3748432		---	6.0402739	0.191106128	0.6493194	8.58E-09	6.0860305	4.7E-07	3.0	1.5E-01
2984655	RPS6KA2	NM_021135	11.063413	0.188633489	0.6743309	1.37E-09	7.7327392	5.9E-08	2.0	1.0E+00
2899372	BTN3A1	NM_007048	9.1255433	0.186340698	0.6433556	1.30E-08	6.491274	6.0E-10	2.2	1.1E-05
3876245	SNAP25	NM_003081	5.9491654	0.18633595	0.7376124	5.38E-12	8.7364108	1.2E-05	2.0	1.0E+00
2728189	PAICS	NM_001079525	29.509859	0.182263609	-0.6738052	1.43E-09	6.5704963	---	---	---
2574646	BIN1	NM_139343	27.623218	0.181430643	0.5991984	2.12E-07	8.19218	1.5E-02	1.7	1.0E+00
2967249	BVES	NM_147147	5.185272	0.178598076	0.7106905	6.80E-11	3.7084278	---	---	---
2827525	SLC12A2	NM_001046	66.912135	0.178524673	0.6403715	1.59E-08	7.2289281	---	---	---
3868963	ETFB	NM_001985	15.561632	0.176548093	-0.7083407	8.37E-11	6.7059237	3.0E-09	2.1	1.0E+00
2748723	NPY2R	NM_000910	4.8888763	0.175676673	0.6652705	2.72E-09	3.4556371	---	---	---
2877597	LRRTM2	NM_015564	8.8993722	0.175619836	0.7126675	5.70E-11	8.8381497	---	---	---
2766122	FLJ13197	AK023259	8.2608706	0.171070272	-0.6252521	4.30E-08	6.1823011	7.0E-05	1.9	5.4E-04
2863885	LHFPL2	NM_005779	5.6908837	0.170398233	0.7063781	9.95E-11	6.5227716	1.6E-08	2.4	1.0E+00
3213847	SHC3	NM_016848	7.4294604	0.167422704	0.6062338	1.40E-07	8.3300345	1.8E-13	3.0	8.8E-28
2805078	CDH6	NM_004932	12.26129	0.167019578	0.6555013	5.54E-09	7.5472641	1.9E-11	3.5	1.0E-19
3163982	ADAMTSL1	NM_001040272	6.7277259	0.163597154	0.5756019	8.01E-07	4.8988672	2.3E-10	2.1	7.5E-56
3959656		---	22.490448	0.162389186	-0.6390148	1.74E-08	8.3800402	---	---	---
2418078	NEGR1	NM_173808	13.294091	0.158316921	0.6389232	1.75E-08	8.4605743	8.6E-04	2.7	8.5E-02
2788366	LOC152485	NM_178835	6.2074095	0.156079117	0.6293709	3.30E-08	7.3672279	7.0E-09	1.9	3.8E-109
3406179	H2AFJ	NM_177925	16.873597	0.151409297	-0.6552167	5.66E-09	4.8813411	---	---	---
2632778	EPHA6	NM_001080448	5.3712751	0.149892117	-0.5704952	1.05E-06	9.0702655	6.9E-13	5.5	2.5E-05
3164086	ADAMTSL1	NM_001040272	4.9041385	0.14668965	0.6015942	1.84E-07	5.3510318	3.0E-10	2.1	5.6E-11
3210616	PRUNE2	NM_138818	4.66249	0.145644672	0.6828973	7.03E-10	2.8097879	---	---	---
3200762	SLC24A2	NM_020344	4.6765306	0.144449354	-0.6469522	1.01E-08	7.2572189	2.1E-04	1.6	2.0E-01
3219030		---	9.5260296	0.143576087	-0.6683817	2.16E-09	7.2913452	6.0E-05	2.0	1.0E+00
3966929	GYG2	NM_003918	4.9726666	0.140833496	0.6191575	6.33E-08	4.9868389	2.8E-08	1.8	4.8E-57
2762088	LDB2	AF064493	13.191991	0.139735614	0.6405554	1.57E-08	9.012946	1.6E-02	1.9	5.2E-01
2452571	ELK4	NM_001973	5.0098776	0.136870235	-0.6579488	4.65E-09	6.8649797	3.3E-02	1.6	1.0E+00
3020302	CAV1	NM_001753	3.5836743	0.132071145	0.6917005	3.45E-10	5.22295	3.4E-04	1.6	7.3E-01
4001556	PHKA2	BC014036	4.2145891	0.129565459	-0.6375651	1.92E-08	7.0845906	1.0E-02	1.3	3.0E-02
3339971	PLEKHB1	AF100612	4.3257461	0.125521071	0.6312261	2.92E-08	5.3054338	1.9E-05	1.6	1.0E+00
3512719	LOC283514	NM_198849	7.447665	0.123532824	0.6712144	1.74E-09	7.9855197	---	---	---
3183348	TAL2	NM_005421	7.623987	0.122041617	0.7004431	1.66E-10	4.6797014	---	---	---
3873824	TMC2	NM_080751	4.8806671	0.120782827	0.6917315	3.44E-10	4.6592776	4.2E-07	1.8	1.0E+00
2320392	C1orf187	BC111064	24.217801	0.112234309	0.5421155	4.45E-06	8.89387	---	---	---
2632832	EPHA6	NM_001080448	5.9307678	0.112161853	-0.4811541	6.56E-05	6.3110471	6.0E-13	4.0	8.1E-02
3536396	CGRRF1	NM_006568	7.7223936	0.109550628	0.6670653	2.38E-09	3.9112824	6.5E-03	1.6	3.8E-01
2442008	RXRG	NM_006917	4.8475314	0.108707028	0.6182839	6.68E-08	4.1781218	3.5E-14	4.6	1.0E+00
2915571	C6orf117	NM_138409	4.1450728	0.104748433	-0.6293814	3.29E-08	5.3217257	3.0E-05	1.5	1.0E+00
3486728	SLC25A15	NM_014252	17.581538	0.10308979	0.6473779	9.83E-09	6.595586	4.1E-03	1.6	7.8E-01
2924330	TPD52L1	NM_001003395	3.2041262	0.096353309	0.6366945	2.03E-08	4.2582482	---	---	---
3803418	KLHL14	NM_020805	6.2536448	0.095422338	0.6237821	4.72E-08	7.1058263	---	---	---
3016380	CUX1	NM_181552	8.6866954	0.094528198	-0.5268543	9.17E-06	7.1844481	7.4E-05	2.0	7.2E-06
3040465	TMEM196	BC030104	5.4248078	0.094315867	0.6433256	1.30E-08	7.3626314	---	---	---
3748400	LOC220594	NR_003554	5.2474406	0.093922457	0.5708291	1.03E-06	7.2161143	2.1E-07	2.5	2.2E-04
3018484	GPR22	NM_005295	4.8517351	0.09071059	-0.5374721	5.57E-06	9.9655286	---	---	---
2619120	TRAK1	NM_001042646	5.1185073	0.08716633	-0.534106	6.54E-06	7.1905521	2.2E-04	1.7	7.3E-01
3507003	LNX2	NM_153371	2.6989184	0.081800955	0.5950759	2.70E-07	6.6718832	4.9E-02	1.6	5.0E-02
2831436	PSD2	NM_032289	4.8694801	0.078119786	0.608209	1.24E-07	7.7055273	---	---	---
2711751	TMEM44	NM_138399	12.321413	0.072531475	0.5424108	4.39E-06	6.5987946	9.9E-03	1.4	1.0E+00

3459722	AVPR1A	NM_000706	3.5099632	0.071943648	0.506743	2.26E-05	5.3234636	3.6E-04	1.8	1.0E+00
2448382	PTGS2	NM_000963	3.1365841	0.06330677	0.5737072	8.87E-07	3.4164375	---	---	---
2961647	HTR1B	NM_000863	1.5824172	0.051492422	0.5427916	4.31E-06	6.0164865	---	---	---
2435347	THEM4	NM_053055	1.5446266	0.044265202	0.6060294	1.42E-07	4.4981059	2.0E-04	1.6	5.7E-70
3821392	ZNF491	NM_152356	4.736513	0.038541611	-0.4996409	3.06E-05	5.1905571	---	---	---
3111485	TRHR	NM_003301	5.0227169	0.026029291	0.4364811	0.0003486	4.36871	---	---	---

Table S18. M24 (orange): Non-PFC module

								NCTX ANOVA		
Transcript ID	Symbol	Accession	kTotal	kWithin-Connectivity	eigencorr	eigenpval	meanExpr	DEX	FoldChng	DAS
3917938	HUNK	NM_014586	59.880339	1	-0.9553078	5.51E-34	6.2546989	9.5E-10	2.8	3.5E-11
2973376	PTPRK	NM_002844	76.404163	0.996999879	0.94621964	0	8.7030895	9.4E-06	2.6	2.7E-01
3132016	FGFR1	NM_023110	95.197024	0.804124723	-0.9034292	4.11E-24	5.3406151	5.5E-06	2.3	1.0E+00
2657967	OSTN	NM_198184	33.032876	0.78042043	0.92095784	0	5.758096	2.2E-11	3.9	2.2E-19
2590017	ZNF385B	NM_152520	49.40285	0.763065452	0.9102994	0	5.3191998	8.1E-07	2.1	0.0E+00
3385951	NOX4	NM_016931	77.691563	0.755895009	-0.9128379	2.07E-25	4.8926687	1.4E-05	2.1	3.2E-12
3690842	ZNF423	NM_015069	37.852935	0.744762108	-0.8805349	1.92E-21	6.4118107	2.9E-08	3.0	3.7E-03
3726618	CACNA1G	NM_018896	65.933958	0.732587471	0.90665438	0	6.2583913	6.4E-09	2.7	5.9E-48
3102096	DEPDC2	NM_024870	74.017919	0.72655152	-0.8802258	2.06E-21	5.293643	4.8E-04	2.0	7.9E-01
2628482	FAM19A1	NM_213609	77.455796	0.712828249	0.89170343	0	7.9467976	8.3E-06	3.1	2.6E-01
2980516	CNKSR3	NM_173515	34.489054	0.703888551	-0.8513655	9.62E-19	5.245798	2.2E-09	2.9	4.5E-203
4006280	NDP	NM_000266	30.558017	0.685335554	-0.8995698	1.28E-23	4.8453592	1.2E-14	3.2	1.0E-43
3218528	ABCA1	NM_005502	30.514837	0.665335689	-0.9031545	4.46E-24	5.4882921	9.8E-12	1.9	0.0E+00
3746574	PMP22	NM_000304	60.009135	0.663847506	-0.8901609	1.71E-22	5.7553392	2.0E-06	2.6	1.5E-05
3510126	TRPC4	NM_016179	39.030768	0.637723364	0.86446997	0	6.2958811	7.4E-13	3.0	1.4E-10
3019158	LRRN3	NM_001099660	69.270871	0.637334641	0.86530885	0	10.11321	4.0E-07	3.3	1.0E+00
3907072	RIMS4	NM_182970	81.711989	0.637011143	0.89400242	0	7.967105	1.6E-05	2.1	1.0E+00
3884324	CTNNBL1	NM_030877	28.69767	0.634787526	-0.9003011	1.04E-23	6.9528451	1.6E-09	1.9	7.3E-23
3137120	CA8	NM_004056	27.732484	0.634429369	-0.9047955	2.72E-24	3.578754	6.3E-10	1.9	7.9E-01
2723752	TBC1D1	NM_015173	93.556999	0.634140035	-0.8705417	1.91E-20	6.2589047	1.0E-02	1.8	1.5E-02
3618333	MEIS2	NM_172316	28.910605	0.63149996	-0.8869767	3.89E-22	8.9268844	7.5E-15	3.7	2.7E-11
3444958	DUSP16	NM_030640	104.89077	0.62627759	-0.8696387	2.33E-20	5.7490586	3.4E-05	2.1	1.6E-134
2831350	CXXC5	NM_016463	38.525745	0.620964638	-0.8476578	1.93E-18	8.0048362	3.8E-06	2.0	4.1E-01
3136888	TOX	NM_014729	29.071472	0.620565185	-0.8778605	3.61E-21	8.0566187	2.2E-13	3.1	2.0E-01
3560403	EGLN3	NM_022073	29.507758	0.607384874	-0.8880508	2.96E-22	5.1833457	1.7E-08	2.3	2.1E-17
2387126	RYR2	NM_001035	61.642232	0.605742826	0.85261994	0	6.8441676	6.6E-06	2.2	3.0E-04
3391029	PPP2R1B	NM_002716	55.874485	0.598262646	-0.8772219	4.20E-21	6.5192616	5.7E-04	1.6	1.0E-04
2855963	HCN1	NM_021072	72.171978	0.596819016	0.83571298	0	7.696767	6.7E-05	1.9	1.5E-01
3090436	NEFM	NM_005382	42.631327	0.591939028	0.8438845	0	8.8325232	1.0E-07	2.8	7.7E-01
2778440	UNC5C	NM_003728	65.853532	0.590186139	0.86858864	0	6.4568827	4.9E-09	2.4	1.8E-11
3128271	NEFL	NM_006158	29.758013	0.582908009	0.85670582	0	9.9271187	2.3E-13	7.7	7.6E-218
3877892	PCSK2	NM_002594	34.362527	0.579769714	0.87518565	0	8.3226092	2.2E-10	4.7	2.3E-11
3074912	DGKI	NM_004717	50.211702	0.563746742	0.85062525	0	7.6299564	1.6E-04	2.1	8.7E-02
2747961	FHDC1	NM_033393	53.09856	0.558418998	-0.8648877	6.45E-20	5.2624195	2.6E-03	1.8	1.4E-01
3200648	ADFP	NM_001122	54.849736	0.557806579	-0.8290716	4.84E-17	5.6821741	3.6E-03	1.8	8.7E-02
4018080	CHRDL1	NM_145234	29.242559	0.556005555	-0.8283447	5.45E-17	7.415718	3.0E-09	4.7	1.5E-119
3528759	ABHD4	NM_022060	40.11529	0.552192567	-0.8624761	1.07E-19	5.814864	1.2E-06	1.9	8.3E-02
2825907	PRR16	BC092474	24.886733	0.551566	0.87210417	0	4.5928749	8.3E-11	3.0	7.5E-76
2876793	TRPC7	NM_020389	27.439443	0.543571601	0.87243114	0	4.5225629	3.3E-13	3.1	1.2E-126
2945598	KIAA0319	NM_014809	77.531975	0.542362314	0.84363269	0	8.3141354	1.7E-03	1.8	1.0E+00
3889833	DOK5	NM_018431	32.240427	0.529350909	0.85730313	0	11.259514	2.8E-06	2.2	1.6E-06
2975014	SGK1	NM_005627	28.109464	0.528858322	0.84272449	0	7.2178495	2.1E-07	1.9	1.3E-01
2405576	CSMD2	NM_052896	60.35685	0.514545609	0.85802083	0	7.8034519	5.2E-05	2.0	1.2E-03
3962219	NAGA	NM_000262	37.504849	0.507738765	-0.8628222	9.92E-20	5.9206968	1.8E-04	1.7	4.7E-03
3222534	ASTN2	ENST00000313400	22.387376	0.504789082	-0.8571303	3.14E-19	6.2030825	1.1E-11	2.1	4.8E-19
3148871	GOLSYN	NM_001099744	126.51469	0.50215284	0.83439008	0	9.0552649	8.3E-04	2.3	1.0E+00
2368180	GPR52	NM_005684	30.331789	0.50137081	0.80045729	3.55E-15	7.2324213	---	---	---
3371114	SYT13	NM_020826	112.37389	0.498587782	0.84898151	0	9.6504982	1.7E-04	1.9	1.0E+00
2722823	PCDH7	NM_032456	20.658075	0.49508784	0.83615317	0	6.6679901	3.6E-13	3.6	3.5E-33
3345222	AMOTL1	NM_130847	65.372384	0.490114947	-0.8465675	2.35E-18	6.9188178	8.2E-03	1.6	1.0E+00
2576988	LYPD1	NM_144586	37.520147	0.482483568	-0.8353112	1.71E-17	6.9105935	7.0E-06	2.2	1.0E+00
3044597	PDE1C	NM_005020	40.446253	0.478284906	-0.847169	2.11E-18	5.6572775	3.3E-04	1.9	9.4E-01
3897280	PAK7	NM_020341	24.404314	0.466868799	0.85925443	0	9.1496954	6.2E-08	2.1	2.5E-02
3303165	DNMBP	NM_015221	58.267861	0.463048482	-0.8284567	5.35E-17	4.153446	1.3E-04	1.5	7.8E-115
2849469	ANKH	NM_054027	25.656862	0.45964852	0.73881491	4.76E-12	8.9650994	6.2E-08	2.2	4.7E-01
2864449	SERINC5	BC101281	44.364643	0.456752212	0.84806308	0	8.7490385	5.6E-03	1.6	8.2E-03
3896257	PROKR2	NM_144773	28.078595	0.449841493	0.84023174	0	6.6027687	---	---	---
2338719	NFIA	NM_005595	31.860229	0.449002839	-0.7712254	1.41E-13	8.7302442	1.7E-06	2.5	1.0E+00
3324162	LUZP2	NM_001009909	44.365877	0.448908135	0.84050096	0	6.3721618	1.0E-06	3.6	1.5E-06
3164914	MTAP	NM_002451	22.608436	0.446155353	-0.8444034	3.49E-18	4.9372767	6.3E-08	1.6	6.2E-05
3212008	FRMD3	NM_174938	30.425694	0.445014416	0.84376056	0	7.1786835	3.0E-04	1.6	1.0E+00
2517588	OSBPL6	NM_032523	64.978763	0.430573542	0.80740925	1.33E-15	7.0964747	1.2E-02	1.5	1.0E+00
2672190	LRRC2	NM_024512	35.411091	0.4251057	0.8214343	0	3.9765206	3.1E-06	1.8	1.2E-60
3047581	INHBA	NM_002192	22.009132	0.421357779	0.75295497	1.10E-12	5.9915054	2.3E-07	2.2	1.1E-106
3476097	CDK2AP1	NM_004642	29.96509	0.420724013	-0.7850163	2.64E-14	9.005507	1.9E-09	2.8	1.3E-01
2865390	EDIL3	NM_005711	21.582662	0.412519198	0.8180241	2.22E-16	8.9245691	9.0E-05	2.2	1.0E+00
2415084	JUN	NM_002228	21.779521	0.41058536	-0.8022151	2.73E-15	6.9419616	3.0E-04	1.8	1.0E+00
2558612	TGFA	NM_003236	35.709551	0.409086654	0.83989037	0	4.6970033	2.8E-09	1.9	1.1E-10
3258713	LGI1	NM_005097	56.795649	0.408638797	0.82136562	0	6.8179876	1.6E-03	2.6	4.8E-02
2400655	RAP1GAP	NM_002885	26.996562	0.404203911	0.80614666	1.55E-15	7.0713271	3.7E-07	2.0	1.7E-03
2371346	RGL1	NM_015149	23.152981	0.402164519	0.82982102	0	8.5979078	2.6E-03	1.5	5.4E-01
3596109	FAM81A	NM_152450	78.077861	0.400551961	0.80373815	2.22E-15	8.2180687	1.6E-03	2.2	1.0E+00

3652867	SCNN1G	NM_001039	17.957388	0.397878325	-0.8245814	9.95E-17	4.5556792	2.2E-04	1.6	4.3E-01
2925590	TMEM200A	BC044246	54.312015	0.396418553	0.80414007	2.22E-15	5.1569562	---	---	---
3154398	ST3GAL1	NM_003033	67.913562	0.386972314	0.81708223	4.44E-16	7.5280375	4.9E-07	1.6	7.8E-01
2782267	NEUROG2	NM_024019	27.598048	0.376149655	-0.8136375	5.31E-16	6.2936024	3.9E-06	3.4	4.7E-02
3038065	ICA1	NM_004968	27.424283	0.37418182	0.81098129	8.88E-16	5.6505673	2.1E-03	1.5	1.0E+00
3882012	DNMT3B	NM_006892	16.457571	0.372897548	-0.7459785	2.29E-12	5.4569517	2.2E-06	1.4	1.7E-01
2827865	CHSY-2	NM_175856	37.226352	0.372143265	0.80453808	2.00E-15	6.9332597	---	---	---
3399004	OPCML	NM_001012393	26.050891	0.364872355	0.75323384	1.06E-12	8.9843876	3.1E-06	2.5	9.8E-19
3674199	CPNE7	NM_014427	61.45023	0.362185634	0.76312037	3.59E-13	5.9286902	1.5E-05	2.4	4.4E-72
2590491	NEUROD1	NM_002500	17.489361	0.360928096	-0.8328485	2.60E-17	7.9056984	---	---	---
3970714	PPEF1	NM_006240	40.698711	0.36077405	0.76260633	3.80E-13	6.1019805	2.6E-06	3.0	9.8E-170
3495968	SLITRK5	NM_015567	37.7781	0.359284625	0.78470455	2.75E-14	7.5813557	2.8E-06	2.4	1.0E+00
3647956	NUBP1	NM_002484	30.885853	0.356844389	-0.7938323	8.47E-15	6.9584162	1.0E-02	1.5	1.0E+00
3020343	MET	NM_000245	17.428315	0.356799482	0.73883174	4.76E-12	4.8191643	3.5E-09	4.6	0.0E+00
2490351	CTNNA2	NM_004389	27.959369	0.35447846	0.79859596	4.44E-15	8.4515476	5.9E-03	1.6	1.9E-07
2346625	ABHD7	NM_173567	16.549022	0.353079526	0.81229603	6.66E-16	5.0535619	2.0E-05	2.0	1.2E-01
3510450	LHFP	NM_005780	17.569367	0.352560883	0.77793425	6.35E-14	7.0412192	7.1E-15	2.4	6.3E-05
2697863	RBP1	NM_002899	27.161601	0.347012498	-0.8031185	2.40E-15	6.5128925	2.8E-03	2.3	8.5E-01
3456006	CSAD	NM_015989	24.672518	0.34349418	0.74221024	3.38E-12	7.9056943	1.7E-07	2.2	1.0E-08
2926802	MYB	NM_005375	53.428386	0.341433137	-0.7964514	5.98E-15	4.6318932	---	---	---
3305017	OBFC1	NM_024928	29.316009	0.340034651	-0.8078929	1.23E-15	4.1431357	8.0E-06	1.7	1.0E+00
2591643	COL5A2	NM_000393	16.579377	0.337799818	-0.8176216	2.93E-16	4.7123454	1.0E-10	1.7	1.0E+00
2941784	NEDD9	NM_006403	18.876175	0.337567288	-0.761867	4.13E-13	6.4014773	6.9E-07	2.2	1.7E-08
3250863	SGPL1	NM_003901	20.297866	0.332088083	-0.7659586	2.60E-13	8.3329478	2.4E-05	1.6	4.1E-01
2873785	ALDH7A1	NM_001182	22.471295	0.331952805	-0.8023788	2.66E-15	7.2234139	2.2E-03	2.0	9.9E-01
2618499	MYRIP	NM_015460	23.541391	0.329535211	0.78756497	1.91E-14	4.6974665	2.5E-06	1.9	2.7E-01
3262715	SORCS3	NM_014978	26.69351	0.328447604	0.78915435	1.55E-14	6.4718667	3.1E-11	2.1	5.4E-122
3130757	FUT10	NM_032664	26.704221	0.327475703	-0.80225	2.71E-15	4.6140711	1.8E-06	1.4	9.0E-01
3538087	DACT1	NM_016651	23.909463	0.327087361	0.80758692	1.33E-15	10.113989	1.1E-04	2.0	5.9E-04
2873897	3-Mar	NM_178450	21.8991	0.325192416	-0.7836142	3.15E-14	6.7839495	7.9E-07	2.2	9.3E-01
2973856	SAMD3	NM_001017373	16.313413	0.321347064	0.73632401	6.11E-12	3.452329	---	---	---
3757770	STAT5B	NM_012448	15.145879	0.32004388	-0.7783506	6.03E-14	6.1974726	1.5E-03	1.4	1.0E+00
2444415	ANKRD45	NM_198493	24.763481	0.317123412	0.78281602	3.46E-14	5.9148744	3.2E-04	1.6	6.6E-01
2560881	LRRTM4	NM_024993	12.944173	0.315690172	0.76583711	2.64E-13	8.8899386	4.8E-10	2.8	2.4E-05
3051655	ECOP	NM_030796	25.59872	0.312759384	0.75076531	1.39E-12	8.7931644	7.2E-08	2.0	9.6E-01
3093526	UNC5D	AY358147	20.202491	0.31128247	-0.7312533	1.01E-11	8.1031732	8.8E-07	2.1	2.1E-08
3439178	PXMP2	NM_018663	36.960129	0.310991939	-0.7836231	3.15E-14	7.7687575	1.5E-06	2.2	2.5E-01
3837707	ZNF114	NM_153608	14.608879	0.309288874	-0.7852882	2.55E-14	4.2330413	1.2E-10	1.6	1.7E-54
2350952	GSTM2	NM_000848	23.568261	0.300441243	-0.6883053	4.55E-10	7.4350197	3.1E-06	2.5	7.8E-104
3250602	H2AFY2	NM_018649	22.549213	0.288029916	-0.7667429	2.38E-13	8.9909431	2.9E-04	1.5	1.0E+00
2602368	DKFZp547H025	NM_020161	13.022794	0.286661762	0.78711083	2.02E-14	3.691794	1.1E-11	3.3	2.7E-62
2908423	SLC29A1	NM_001078177	18.716554	0.283402401	0.78744083	1.95E-14	6.8201446	9.3E-04	1.6	1.2E-01
3373845	SLC43A3	NM_014096	19.022914	0.28300467	-0.7553502	8.47E-13	5.7581003	5.0E-07	1.8	0.0E+00
3928668	TIAM1	NM_003253	26.194717	0.282920829	0.74224823	3.37E-12	7.2060145	3.3E-05	1.7	2.2E-03
2805232	PDZD2	NM_178140	39.680079	0.282845142	0.6941088	2.83E-10	7.4729317	9.2E-07	2.1	4.1E-04
2980449	PIP3-E	NM_015553	13.808818	0.282827274	0.75533518	8.49E-13	6.2974622	---	---	---
3294854	CAMK2G	NM_172171	20.073214	0.282223244	0.73955491	4.42E-12	8.7074097	2.4E-05	1.7	1.0E+00
2674845	CAMKV	NM_024046	19.420149	0.280418526	0.68118831	8.05E-10	10.067354	1.9E-07	2.1	1.0E+00
2922972	DCBLD1	NM_173674	13.297622	0.279838235	0.73515884	6.86E-12	4.7104583	3.0E-06	2.2	6.7E-134
2646327	C3orf58	NM_173552	14.02821	0.268391763	0.69494791	2.64E-10	7.9259112	2.0E-06	2.0	7.7E-03
2910680	LRRC1	NM_018214	60.87852	0.266136693	-0.7381372	5.10E-12	4.76432	---	---	---
2848265	CMBL	NM_138809	12.297998	0.265059569	0.76611239	2.55E-13	5.9309131	8.9E-07	1.9	2.0E-01
3788560	DCC	NM_005215	17.474588	0.263020834	-0.7021333	1.44E-10	7.666803	3.9E-08	2.1	5.7E-04
3111561	PKHD1L1	NM_177531	10.84048	0.261853219	0.73389083	7.77E-12	3.123844	6.9E-13	2.3	1.0E+00
2452667	RAB7L1	NM_003929	14.403534	0.253473521	0.75998371	5.09E-13	5.6129141	1.3E-04	1.8	1.7E-36
3395464	ASAM	NM_024769	12.221471	0.253447245	-0.7740456	1.01E-13	8.5701894	8.9E-13	2.1	3.6E-03
2879312	NR3C1	NM_000176	12.140228	0.247518653	0.77366324	1.06E-13	5.4658853	3.2E-04	1.8	4.1E-30
3553531	TNFAIP2	NM_006291	37.514957	0.246161855	0.71054195	6.89E-11	5.4531048	2.8E-11	1.8	3.2E-117
2626802	PTPRG	NM_002841	14.651937	0.245582141	0.7351651	6.86E-12	6.9212318	1.9E-05	1.9	2.5E-15
2816681	PDE8B	NM_003719	14.647632	0.240120353	-0.7503795	1.44E-12	5.3435204	2.7E-05	1.8	1.0E+00
3216356	CDC14B	AF064105	17.888497	0.240059168	-0.7323595	9.03E-12	4.4063516	6.9E-03	1.7	5.8E-01
2438411	NES	NM_006617	14.247783	0.237257043	-0.7735822	1.07E-13	6.9744772	1.2E-06	2.3	2.7E-07
3094778	TACC1	NM_006283	14.364493	0.234039776	-0.7558636	8.01E-13	5.8697969	6.8E-05	1.5	6.5E-01
2440476	F11R	NM_144503	14.852234	0.231822461	0.7699045	1.65E-13	5.8894415	2.0E-06	1.6	2.1E-198
2396461	SRM	NM_003132	14.43511	0.231590742	-0.7250828	1.82E-11	10.065314	5.4E-08	2.3	1.0E+00
3019793	FOXP2	NM_148898	17.725659	0.226320951	0.71823392	3.44E-11	5.3886244	2.4E-06	1.7	3.1E-130
3258384	CYP26A1	NM_000783	13.910253	0.220412618	-0.7131799	5.44E-11	5.0937994	1.7E-08	2.1	3.9E-01
3074039	SLC35B4	NM_032826	21.222538	0.2193074	0.75341073	1.04E-12	7.3269402	---	---	---
2991233	AHR	NM_001621	10.746712	0.211267627	0.72485936	1.86E-11	4.9150822	4.1E-03	1.5	3.3E-51
2911003	HCRTR2	NM_001526	19.540691	0.206381418	-0.6974662	2.14E-10	6.6510087	2.0E-05	3.1	3.2E-01
2769095	---	---	9.3094363	0.206069034	0.64265631	1.36E-08	3.9596346	3.9E-11	2.0	1.0E+00
2586603	TLK1	NM_012290	11.552187	0.205989958	0.74239474	3.32E-12	6.6045749	3.2E-06	2.1	1.2E-16
2464129	---	---	13.824519	0.204148083	0.70961527	7.48E-11	5.3077013	---	---	---
3941793	KREMEN1	NM_001039570	12.509264	0.202962348	0.60599006	1.42E-07	6.1410551	9.2E-08	1.9	1.3E-02
2496382	NPAS2	NM_002518	8.0844568	0.197619511	0.62911668	3.35E-08	6.7821063	1.4E-09	1.9	0.0E+00
3230811	DPP7	NM_013379	12.158033	0.196627173	-0.6688411	2.08E-09	7.2496854	5.7E-10	2.3	1.5E-07
4045643	S100A16	NM_080388	14.124712	0.188159238	-0.7171461	3.80E-11	5.0188618	6.4E-07	2.0	1.0E+00

2623568	PPM1M	NM_144641	10.373478	0.187447706	0.73537978	6.71E-12	5.6812924	3.3E-03	1.3	3.9E-02
3956768	RASL10A	NM_001007279	14.064987	0.186725227	0.61920625	6.31E-08	6.4455818	2.3E-13	5.0	8.4E-22
2911226	C6orf65	NM_152731	10.428579	0.185424237	0.65911341	4.27E-09	5.0668168	4.9E-05	1.7	1.0E-135
3756928	KRT31	NM_002277	10.276392	0.183208027	-0.6527154	6.76E-09	7.0584281	---	---	---
2503929	CNTNAP5	NM_130773	10.15024	0.181076101	0.64447729	1.20E-08	6.8538978	3.7E-06	1.7	0.0E+00
3264621	TCF7L2	NM_030756	17.698888	0.180458589	-0.7320636	9.30E-12	4.4947513	5.7E-03	1.6	4.2E-02
3428190	SLC17A8	NM_139319	10.731735	0.178265987	-0.7275856	1.43E-11	4.0384343	1.3E-04	3.4	5.3E-115
2340961	IL12RB2	NM_001559	15.246734	0.176398215	0.72458547	1.90E-11	4.6930651	1.1E-04	2.0	2.5E-71
2835848	SLC36A1	NM_078483	9.8482527	0.174304131	0.7254976	1.75E-11	7.2160533	4.3E-04	1.9	1.0E+00
3070309	CADPS2	NM_017954	10.695829	0.173396395	0.69689168	2.24E-10	3.9667224	4.1E-05	1.9	1.0E+00
2922521	NT5DC1	NM_152729	11.293624	0.168956032	-0.6819574	7.57E-10	3.9442887	8.6E-05	1.5	3.7E-01
3672059	KIAA0513	NM_014732	46.596579	0.167182875	0.59623236	2.52E-07	7.7294835	2.6E-04	1.9	4.6E-03
2957227	TRAM2	NM_012288	9.3928135	0.16495394	-0.7312058	1.01E-11	4.6031027	1.4E-06	1.5	1.0E+00
2694001	MGLL	NM_007283	10.320752	0.163077006	0.53077503	7.65E-06	7.7520558	9.0E-07	1.7	5.6E-178
2965653	GPR63	NM_030784	8.8888545	0.162702785	0.71701746	3.85E-11	7.4464218	---	---	---
2608725	BHLHB2	NM_003670	6.382592	0.160845745	0.55590351	2.25E-06	4.7607145	4.5E-17	3.6	2.4E-133
3466499	USP44	NM_032147	15.279761	0.159087288	-0.7436054	2.93E-12	3.304093	---	---	---
3002873	LANCL2	NM_018697	14.340457	0.15849468	0.69497008	2.63E-10	8.6805261	3.3E-07	1.9	1.0E+00
3444252	CSDA	NM_003651	7.1045792	0.156303182	-0.643177	1.31E-08	6.3719474	1.0E-09	3.1	2.4E-14
3442427	MBOAT5	NM_005768	12.769169	0.15397687	-0.6706963	1.81E-09	7.1076275	2.4E-03	1.4	1.7E-01
3319137	PPFIBP2	NM_003621	8.2367681	0.152268559	-0.6729344	1.53E-09	5.0887048	1.2E-10	1.8	0.0E+00
2836518	GALNT10	NM_198321	7.5152962	0.146055208	0.55349609	2.54E-06	6.3576352	2.2E-08	2.0	1.7E-59
3073267	PLXNA4	NM_020911	8.7630902	0.129400778	0.70178253	1.48E-10	7.4107616	6.8E-06	1.8	1.1E-01
2569215	ST6GAL2	NM_032528	5.7427246	0.128531426	0.59104354	3.40E-07	9.0054789	2.0E-06	2.1	1.0E+00
2977122	NMBR	NM_002511	5.7757614	0.126041769	0.67329013	1.49E-09	4.9713068	2.1E-03	1.9	1.0E+00
2694817	PLXND1	NM_015103	11.892039	0.124369137	0.5304604	7.76E-06	6.0317653	2.2E-13	2.7	1.0E+00
2613293	KCNH8	NM_144633	18.788765	0.114179393	-0.5565401	2.18E-06	6.2887762	---	---	---
2350922	GSTM4	NM_000850	7.467699	0.107988512	-0.6698005	1.94E-09	4.1268573	2.9E-02	1.5	1.0E+00
3779950	C18orf1	NM_181481	14.121125	0.105409628	0.54190235	4.50E-06	7.8238522	8.1E-05	2.4	1.9E-07
3219885	PTPN3	NM_002829	10.771988	0.101498598	0.45999354	0.0001489	4.2018389	1.5E-06	1.9	0.0E+00
2489172	MTHFD2	NM_001040409	7.0413726	0.097994393	0.68091019	8.23E-10	6.9227229	---	---	---
3780334	MC5R	NM_005913	7.544227	0.093749229	0.66820048	2.19E-09	4.2393997	---	---	---
2401193	LUZP1	NM_033631	4.7097679	0.090679869	-0.6200237	5.99E-08	5.2411555	1.4E-05	1.3	1.0E+00
2546874	GALNT14	NM_024572	6.2859753	0.089291556	-0.6016398	1.84E-07	5.7426122	4.7E-04	1.4	1.0E+00
2872848	LOX	NM_002317	5.5738747	0.081703896	0.51325	1.70E-05	4.6999613	3.9E-09	1.9	1.6E-41
2734270	CDS1	NM_001263	5.3053807	0.074651671	0.63183597	2.81E-08	5.6898937	---	---	---
3463056	CSRP2	NM_001321	3.7133488	0.072184064	-0.544323	4.00E-06	8.5379257	2.1E-09	3.0	5.9E-01
2529421	SGPP2	NM_152386	4.3559564	0.071151586	0.43381715	0.0003824	4.5478608	---	---	---
2731636	DKFZP564O0823	NM_015393	6.4573378	0.068005966	0.50459064	2.48E-05	5.2285811	2.2E-06	1.7	9.0E-01
3773241	TBC1D16	AL512709	6.3386397	0.066686693	0.43817788	0.0003285	8.3322134	---	---	---
3773244	TBC1D16	NM_019020	23.802612	0.064990973	0.43108058	0.0004202	6.8484206	1.3E-03	1.5	1.0E+00
3958253	C22orf28	NM_014306	3.3505301	0.063830054	-0.5534554	2.54E-06	7.090373	1.9E-03	1.3	1.0E+00
3845944	GNG7	NM_052847	6.2768889	0.063507807	-0.5536221	2.52E-06	6.7053889	3.7E-05	1.8	1.0E+00
3181240	TMOD1	NM_003275	3.3229709	0.056977372	0.36547114	0.0032257	9.283136	1.2E-10	3.0	7.0E-01
3414776	LETMD1	NM_015416	4.2421225	0.056917996	0.60282684	1.71E-07	7.4303105	---	---	---
3518418	KCTD12	NM_138444	6.6341148	0.054317692	0.40502876	0.000992	9.1930608	3.2E-06	2.1	2.1E-02
3977067	PLP2	NM_002668	4.4227165	0.047086505	0.4314051	0.0004155	6.3147617	8.5E-03	1.6	3.0E-02
3389647	GUCY1A2	NM_000855	3.2079156	0.034303444	0.32787323	0.0087096	9.2730347	1.1E-04	1.8	1.0E+00
3108782	KCNS2	NM_020697	1.9259138	0.033824396	-0.5608524	1.75E-06	5.7622111	---	---	---
3148703	TMEM74	BC030710	2.0493562	0.028954604	0.45999614	0.0001489	7.5881819	6.5E-04	1.7	1.0E+00

Table S19. M39 (gold3): Alternative splicing module

Transcript ID	Symbol	Accession	kTotal	kWithin-Connectivity	eigencorr	eigenpval	5-region ANOVA DEX	FoldChng	DAS	Annotated w/ GO BP RNA processing and splicing terms?
2552153	FBXO11	NM_012167	99.258062	0.999999952	0.9593231	0	--	--	--	
2753994	FLJ12716	NM_199053	89.73523	0.945511898	0.9478261	0	--	--	--	
2989493	FLJ20323	NM_019005	100.18449	0.941170474	0.9462285	0	--	--	--	
2771718	FLJ10808	NM_018227	91.603228	0.924432378	0.9252632	0	3.9E-01	1.2	2.1E-04	
3061046	KRIT1	NM_194455	96.557359	0.910709031	0.9391943	0	--	--	--	
2510485	RIF1	NM_018151	90.421019	0.910616116	0.9255702	0	1.2E-01	1.3	4.0E-04	
2651671	MYNN	NM_018657	84.606465	0.889023303	0.9323442	0	8.5E-01	1.2	4.9E-04	
2556215	VPS54	NM_016516	93.251335	0.887663236	0.9463693	0	--	--	--	
2585236	TTC21B	NM_024753	92.883505	0.881909611	0.9407416	0	9.7E-01	1.2	1.3E-05	
2867693	KIAA0372	NM_014639	79.443338	0.855856268	0.9141782	0	3.2E-01	1.2	6.1E-04	
3010030	RSBN1L	NM_198467	87.069095	0.84812977	0.9274878	0	6.7E-03	1.4	6.5E-04	
2744597	NARG1	NM_057175	82.251198	0.836593903	0.9244026	0	--	--	--	
2488114	ZNF638	NM_001014972	83.322408	0.834235467	0.92407	0	2.7E-01	1.2	5.7E-05	Yes
2857131	DHX29	NM_019030	77.35847	0.831150419	0.9271537	0	--	--	--	
2831124	MATR3	NM_199189	83.74298	0.83011067	0.9307141	0	--	--	--	
2461786	ARID4B	NM_016374	81.834745	0.805773248	0.9184076	0	--	--	--	
2419113	USP33	NM_201624	90.505818	0.792532111	0.9175493	0	--	--	--	
2928392	C6orf55	NM_016485	77.329614	0.79073862	0.9248058	0	--	--	--	
2907190	UBR2	NM_015255	80.732689	0.78789693	0.9217767	0	--	--	--	
2913983	SENP6	NM_015571	80.342022	0.777630412	0.9171612	0	--	--	--	
2476075	SPAST	NM_199436	72.77832	0.775911988	0.9198537	0	--	--	--	
2588066	ATF2	NM_001880	78.080293	0.775842699	0.9193084	0	6.6E-02	1.3	1.0E-03	
3101893	FSIP2	NM_173651	80.463984	0.775124831	0.9216397	0	--	--	--	
2633587	FLJ11046	NM_018309	103.3634	0.769203067	0.9172531	0	--	--	--	
2548871	HNRPLL	NM_138394	74.917442	0.768664332	0.92726	0	--	--	--	Yes
2922840	KPNA5	NM_002269	71.633435	0.766163527	0.9143875	0	2.0E-01	1.4	1.4E-04	
2601544	CUL3	NM_003590	76.164427	0.753926913	0.9214872	0	--	--	--	
2928874	PEX3	NM_003630	75.496688	0.752770399	0.9343931	0	--	--	--	
2963929	RNGTT	NM_003800	77.038179	0.747981067	0.9280415	0	--	--	--	Yes
2767790	GNPDA2	NM_138335	88.077124	0.742591893	0.9269627	0	--	--	--	
2593670	SF3B1	NM_012433	70.837498	0.728780595	0.9072385	0	6.4E-01	1.3	2.6E-04	Yes
2700197	SMARCA3	NM_003071	74.740614	0.723541565	0.9089743	0	1.0E+00	1.2	1.7E-04	
2746024	ABCE1	NM_002940	88.511323	0.719988614	0.9033409	0	--	--	--	
2599433	USP37	NM_020935	70.503712	0.716531352	0.915914	0	3.5E-01	1.2	7.7E-04	
2911303	ZNF451	NM_015555	68.74734	0.71514595	0.9052714	0	--	--	--	
2686646	BTF3	NM_001207	78.085482	0.713992648	0.909254	0	--	--	--	
2962998	C6orf84	NM_014895	73.740078	0.708726869	0.9137856	0	--	--	--	
2499158	RANBP2	NM_006267	83.534477	0.701322256	0.8877117	0	--	--	--	
2698738	XRN1	NM_019001	72.187639	0.696182068	0.8966268	0	--	--	--	
2418000	ZNF265	NM_203350	78.711783	0.692001806	0.9037477	0	--	--	--	Yes
2612278	CAPN7	NM_014296	80.190896	0.691960468	0.9156503	0	--	--	--	
2346934	MTF2	NM_007358	65.301714	0.671667435	0.8945751	0	--	--	--	
3017795	RINT-1	NM_021930	63.667756	0.667158175	0.9169709	0	--	--	--	
2826064	SRFBP1	NM_152546	62.526607	0.661316087	0.9157243	0	--	--	--	
2666478	TOP2B	NM_001068	61.495305	0.653595914	0.8870097	0	4.1E-02	1.3	5.1E-04	
3019401	ZNF277	NM_021994	68.725417	0.652226927	0.9066381	0	--	--	--	
2417791	ANKRD13C	NM_030816	62.747126	0.649104495	0.9029319	0	--	--	--	
2824483	YTHDC2	NM_022828	65.082627	0.648876003	0.8854486	0	1.0E+00	1.2	3.1E-05	
3030285	CUL1	NM_003592	60.690087	0.643092226	0.9127289	0	4.4E-01	1.2	4.4E-04	
2512330	MARCH7	NM_022826	69.39465	0.641808726	0.8975667	0	--	--	--	
2484305	PAPOLG	NM_022894	70.727403	0.636557721	0.8849898	0	--	--	--	Yes
2415910	DOCK7	NM_033407	63.042821	0.634173763	0.8809271	0	--	--	--	
2348060	PTBP2	NM_021190	73.515626	0.632522506	0.8799114	0	1.0E-06	1.5	5.6E-02	Yes
2617041	GOLGA4	NM_002078	81.650774	0.630411138	0.897495	0	--	--	--	
2884658	SLU7	NM_006425	65.197766	0.630089069	0.9090047	0	--	--	--	Yes
2419235	FUBP1	NM_003902	61.738324	0.629770807	0.8873005	0	4.9E-03	1.3	2.3E-08	
2911257	KIAA1586	NM_020931	66.776677	0.629415779	0.8908534	0	5.4E-03	1.6	1.3E-04	
2380991	IARS2	NM_018060	76.087181	0.629381027	0.9021891	0	8.4E-01	1.3	1.3E-03	
2525852	LOC440001	XM_495848	84.32589	0.624112996	0.8769149	0	--	--	--	
2741083	KIAA1627	NM_020961	77.807783	0.623097271	0.898671	0	--	--	--	
2728448	POLR2B	NM_000938	71.93637	0.622455164	0.8818516	0	4.1E-06	1.7	6.8E-03	
2813364	SLC30A5	NM_024055	66.327896	0.62071563	0.9132901	0	9.6E-01	1.2	4.1E-05	
3068519	FLJ31818	NM_152556	61.450898	0.620287747	0.9082991	0	--	--	--	
2766588	SCC-112	NM_015200	58.941945	0.619808563	0.8850611	0	3.4E-01	1.2	4.8E-04	
2448971	UCHL5	NM_015984	84.765564	0.618801973	0.9030705	0	--	--	--	
2905118	SFRS3	NM_003017	64.640973	0.618552439	0.8954906	0	--	--	--	Yes
2879927	LARS	NM_020117	61.381456	0.617314022	0.8955911	0	7.9E-01	1.1	2.1E-03	
2354082	WDR3	NM_006784	66.852778	0.617276616	0.9130672	0	1.0E+00	1.2	1.2E-16	Yes
2476219	BIRC6	NM_016252	55.898759	0.617053741	0.887991	0	3.8E-01	1.2	1.1E-05	
2427720	MGC54289	NM_178454	87.366267	0.616711131	0.9016805	0	9.6E-01	1.2	5.2E-05	
2806799	NIPBL	NM_015384	61.434313	0.615906872	0.8796096	0	--	--	--	
2346738	C1orf82	NM_024813	56.247774	0.613809301	0.9037709	0	--	--	--	
2810458	GPBP1	NM_022913	62.978196	0.607466472	0.8832003	0	--	--	--	
2512701	PSMD14	NM_005805	72.604562	0.606944471	0.897866	0	--	--	--	
2594497	CLK1	NM_004071	65.609352	0.602191788	0.882388	0	1.0E-02	1.7	3.8E-04	
2857301	FLJ90709	NM_173514	57.232857	0.601115673	0.9088243	0	--	--	--	

2686727	ZBTB11	NM_014415	54.565211	0.60069052	0.889667	0	--	--	--		
2816030	POLK	NM_016218	66.804083	0.599231482	0.8901499	0	--	--	--		
2372141	C1orf27	NM_017847	66.374829	0.597106884	0.8913471	0	--	--	--		
2581430	STAM2	NM_005843	72.704782	0.592182948	0.880014	0	1.0E+00	1.1		3.8E-04	
2366132	TIPRL	NM_152902	88.653551	0.587021667	0.8841196	0	--	--	--		
2348702	LOC440596	XM_498746	60.447335	0.580845369	0.8809973	0	8.6E-02	1.3		1.2E-03	
2739079	SEC24B	NM_006323	67.042846	0.580812288	0.9052646	0	1.0E+00	1.1		2.4E-03	
2456746	BPNT1	NM_006085	61.972566	0.580755789	0.8840729	0	--	--	--		
2990043	PHF14	NM_014660	86.938651	0.57694158	0.8761079	0	1.0E+00	1.1		4.7E-05	
2445141	RFWD2	NM_001001740	57.516303	0.576398399	0.8810604	0	--	--	--		
2642911	UBE1DC1	NM_198329	77.024021	0.574838754	0.8783016	0	1.0E+00	1.1		1.2E-03	
2459866	NUP133	NM_018230	74.749924	0.571480161	0.8944709	0	1.0E+00	1.2		6.6E-09	
2523144	NOP5/NOP58	NM_015934	56.587658	0.571192806	0.8853701	0	--	--	--		Yes
2645275	SLC25A36	NM_018155	64.382556	0.569530647	0.8724442	0	--	--	--		
2727913	SEC3L1	NM_001024924	72.464339	0.567637059	0.8509145	0	--	--	--		
2963313	SNX14	NM_020468	70.740111	0.567187816	0.8713239	0	--	--	--		
2768468	KIAA0826	XM_093839	54.884868	0.567165069	0.8885821	0	--	--	--		
2559649	CGI-121	NM_016058	59.278329	0.566639206	0.9037494	0	--	--	--		
2956438	MUT	NM_000255	77.483452	0.563499309	0.8827825	0	--	--	--		
2814527	BDP1	NM_018429	61.19638	0.562330021	0.867392	0	--	--	--		
2844709	CNOT6	NM_015455	60.421255	0.562262702	0.8730352	0	7.5E-03	1.5		3.7E-04	
2868523	CHD1	NM_001270	58.152992	0.562076427	0.8798469	0	--	--	--		
2448073	IVNS1ABP	NM_016389	65.74733	0.557584394	0.8723565	0	1.3E-05	1.8		1.2E-04	Yes
2900423	ZNF187	NM_001023560	52.653868	0.557397984	0.8959512	0	--	--	--		
2862716	GFM2	NM_170691	64.85627	0.557322193	0.8938755	0	--	--	--		
2656738	EIF4A2	NM_001967	55.673171	0.554868077	0.8973606	0	4.0E-03	1.2		6.0E-05	
2523540	CYP20A1	NM_177538	60.622386	0.553386949	0.8635833	0	--	--	--		
3010082	PHTF2	NM_020432	56.596436	0.548900027	0.8716859	0	2.0E-01	1.3		5.0E-08	
2966371	CCNC	NM_001013399	76.261211	0.547439136	0.8923279	0	--	--	--		
2594569	ORC2L	NM_006190	56.784496	0.543927912	0.8659007	0	4.4E-02	1.5		3.4E-05	
2331771	RLF	NM_012421	52.128941	0.538095543	0.8884195	0	--	--	--		
2978050	SHPRH	NM_173082	52.495629	0.537338831	0.8783188	0	--	--	--		
2553911	KIAA1387	NM_020463	54.840826	0.53670888	0.8643032	0	8.2E-02	1.3		3.7E-08	
2454935	LOC90806	NM_144567	56.228456	0.533275111	0.8827958	0	3.6E-01	1.4		1.1E-06	
2653902	ZNF639	NM_016331	52.048273	0.530777173	0.8831382	0	--	--	--		
2819044	RASA1	NM_002890	55.772067	0.528296423	0.8826892	0	--	--	--		
3067592	LOC440506	XM_498709	79.587086	0.5269908	0.8668533	0	1.0E+00	1.3		9.2E-04	
2339414	USP1	NM_001017416	61.558416	0.525438159	0.856716	0	6.7E-03	1.5		1.3E-03	
2889698	CLK4	NM_020666	67.3196	0.524381041	0.8659399	0	--	--	--		
2761734	FBXL5	NM_033535	57.137878	0.52406043	0.888748	0	--	--	--		
2412834	ZCCHC11	NM_001009882	51.873053	0.523749982	0.8831802	0	--	--	--		
3047963	PSMA2	NM_002787	58.807824	0.523359212	0.8804129	0	--	--	--		
2867145	LOC342096	XM_292357	53.472709	0.523059062	0.8618801	0	1.0E-02	1.4		4.4E-04	
2834093	TCERG1	NM_006706	49.683831	0.522992836	0.8853053	0	9.2E-03	1.3		1.8E-05	
2823326	FER	NM_005246	76.657781	0.522582748	0.8616043	0	--	--	--		
2826550	LOC391827	XM_498018	51.870977	0.522306939	0.8697981	0	6.3E-01	1.2		5.0E-06	
2916246	C6orf162	NM_020425	52.225945	0.521938905	0.8927413	0	--	--	--		
3061191	PEX1	NM_000466	47.448402	0.521912597	0.8951971	0	--	--	--		
2757720	C4orf15	NM_024511	55.953192	0.520683967	0.8920252	0	--	--	--		
2350840	GNAI3	NM_006496	57.729282	0.51833837	0.8796174	0	8.8E-01	1.4		6.1E-19	
2370991	DHX9	NM_001357	49.668266	0.516872799	0.8676171	0	8.8E-01	1.2		1.3E-03	
2476176	YIPF4	NM_032312	57.776942	0.514697085	0.8872266	0	--	--	--		
2625793	LOC440958	XM_498933	55.50326	0.513351298	0.8863709	0	1.0E+00	1.1		2.1E-07	
2509832	EPC2	NM_015630	56.85444	0.512735124	0.860461	0	3.8E-03	1.3		2.4E-04	
2659887	FYTTD1	NM_032288	78.007235	0.511336948	0.8587068	0	--	--	--		
2701927	SLC33A1	NM_004733	55.839477	0.511081996	0.8857004	0	--	--	--		
2591942	ORMDL1	NM_016467	76.823092	0.510398036	0.870126	0	--	--	--		
2672532	HYPB	NM_014159	49.170404	0.506499245	0.8663246	0	1.7E-01	1.3		1.9E-03	
2540477	ROCK2	NM_004850	55.546673	0.506202283	0.8751327	0	--	--	--		
2500722	ZC3H6	NM_198581	54.610147	0.501986553	0.8471212	0	--	--	--		
2763805	DHX15	NM_001358	54.667506	0.501704675	0.8569693	0	3.2E-01	1.2		2.8E-06	Yes
3009959	PTPN12	NM_002835	48.275325	0.500439384	0.8765276	0	1.4E-01	1.2		3.4E-06	
3011250	DMTF1	NM_021145	61.048882	0.499284932	0.8584241	0	1.0E+00	1.1		1.1E-03	Yes
2808290	ZNF131	AK057343	51.157787	0.498819249	0.8609393	0	8.8E-04	1.3		1.3E-01	
2811745	IPO11	NM_016338	83.147998	0.498402272	0.8716236	0	--	--	--		
2620160	ZNF197	NM_006991	52.238231	0.495892321	0.8748735	0	--	--	--		
2780734	MGC16169	NM_033115	55.934421	0.494326725	0.8658629	0	--	--	--		
2825514	DMXL1	NM_005509	67.413849	0.493672779	0.8069483	0	1.0E+00	1.2		8.6E-04	
2345617	PKN2	NM_006256	56.17971	0.49272206	0.849124	0	8.2E-01	1.2		6.8E-14	
2346074	ZNF326	NM_182976	71.384945	0.491062955	0.8681872	0	--	--	--		
2968054	SEC63	NM_007214	46.275184	0.48849763	0.8652032	0	1.2E-01	1.4		4.9E-05	
3020444	CAPZA2	NM_006136	53.186898	0.487997764	0.8715645	0	7.0E-01	1.3		1.6E-03	
2815139	DULLARD	NM_015343	62.543329	0.485592154	0.856535	0	9.0E-05	1.5		4.8E-04	
2645579	RASA2	NM_006506	56.002861	0.485161888	0.870205	0	--	--	--		
2372967	CDC73	NM_024529	45.897956	0.483774383	0.8617684	0	4.0E-01	1.2		2.4E-12	
2546008	SUPT7L	NM_014860	53.547005	0.482444228	0.8802432	0	--	--	--		
3104323	CGI-62	NM_016010	55.389814	0.481303404	0.8325106	0	5.5E-04	1.5		2.0E-02	
2859734	TRIM23	NM_033228	56.51714	0.481016935	0.8489832	0	4.3E-01	1.3		9.1E-08	
2519140	LEREPO4	NM_018471	67.938518	0.480547882	0.8715304	0	--	--	--		
2871717	MGC39633	NM_152549	54.855774	0.479660719	0.8595288	0	1.3E-02	1.5		2.1E-05	
2549260	MAP4K3	NM_003618	71.087149	0.479440516	0.8436046	0	--	--	--		

2908572	CDC5L	NM_001253	48.160975	0.479284213	0.8718207	0	1.7E-02	1.5	7.3E-06	Yes
2812120	SDCCAG10	NM_005869	55.083681	0.47906576	0.8817622	0	--	--	--	
2817386	PAPD4	NM_173797	48.361771	0.478931867	0.8798146	0	2.3E-01	1.3	9.3E-04	
2713950	ZNF141	NM_003441	47.313714	0.478832272	0.8679478	0	--	--	--	
2430370	GDAP2	NM_017686	53.095514	0.478683847	0.8789808	0	--	--	--	
2541944	SMC6L1	NM_024624	87.066024	0.478626879	0.8481223	0	--	--	--	
2807000	WDR70	NM_018034	46.812557	0.47839952	0.8626861	0	--	--	--	
2911944	PHF3	NM_015153	50.23312	0.475784307	0.8363271	0	--	--	--	
2514516	KLHL23	NM_144711	51.581672	0.473734931	0.8657433	0	--	--	--	
2423597	ERBP	NM_014597	47.80533	0.472219273	0.8726994	0	--	--	--	
2475209	PPP1CB	NM_206876	57.215922	0.469017772	0.8690075	0	--	--	--	
2974469	STX7	NM_003569	66.97464	0.464181601	0.8357754	0	--	--	--	
2772614	GRSF1	NM_002092	48.72883	0.462807154	0.8717172	0	--	--	--	Yes
2693217	OSBPL11	NM_022776	53.314965	0.462801377	0.8681586	0	--	--	--	
2566764	REV1L	NM_016316	55.593607	0.462242992	0.8595654	0	7.5E-03	1.3	1.0E-03	
2868283	RIOK2	NM_018343	49.831875	0.46219821	0.8691866	0	--	--	--	
3087813	PCM1	NM_006197	75.410543	0.461279464	0.8465711	0	9.9E-01	1.3	2.6E-06	
2695941	TOPBP1	NM_007027	45.43705	0.45997574	0.8616557	0	1.8E-01	1.2	1.1E-03	
2546285	FLJ20628	NM_017910	49.144613	0.458797955	0.885094	0	9.2E-01	1.2	5.5E-05	
2518743	NUP35	NM_001008544	46.66214	0.458248589	0.8532959	0	--	--	--	
2558511	TIA1	NM_022173	51.866838	0.457538503	0.8390242	0	--	--	--	
2812315	FLJ13611	NM_024941	52.72119	0.456929828	0.8743285	0	--	--	--	
2353881	LOC441899	XM_497699	74.788186	0.456913003	0.8324311	0	--	--	--	
2550790	LRPPRC	NM_133259	59.334182	0.456823182	0.8486523	0	--	--	--	
2743085	LARP2	NM_032239	58.996353	0.454287828	0.8375496	0	2.9E-01	1.3	7.6E-05	
2367537	C1orf9	NM_016227	46.652075	0.453708798	0.8482573	0	--	--	--	
2539607	OACT2	NM_138799	43.48799	0.450870163	0.8614953	0	--	--	--	
2555277	USP34	NM_014709	46.772058	0.450190729	0.8006611	0	2.1E-01	1.3	8.0E-06	
2516332	SCRN3	NM_024583	71.065004	0.448239611	0.8573193	0	--	--	--	
2945645	TTRAP	NM_016614	43.473989	0.447806609	0.8535956	0	--	--	--	
2768981	SGCB	NM_000232	55.975707	0.447355792	0.8676699	0	--	--	--	
2417737	LRRC40	NM_017768	57.439041	0.447130031	0.8313755	0	--	--	--	
2739755	C4orf16	NM_018569	53.460783	0.446610212	0.8495944	0	5.8E-03	1.9	8.8E-05	
2580635	C2orf25	NM_015702	51.394572	0.44619354	0.8493859	0	--	--	--	
2974188	CRSP3	NM_004830	40.533792	0.445198659	0.8693754	0	6.3E-01	1.2	2.0E-04	
2329752	ZNF262	NM_005095	46.174571	0.44507702	0.8429612	0	1.0E+00	1.1	1.3E-04	
2340845	MIER1	NM_020948	50.056511	0.443879456	0.8424526	0	1.0E+00	1.1	9.4E-12	
2502300	DDX18	NM_006773	51.81735	0.443726976	0.8691085	0	4.2E-01	1.2	1.1E-04	
2828564	RAD50	NM_005732	48.324208	0.441272011	0.8435966	0	5.2E-04	1.6	2.3E-04	
3092663	WRN	NM_000553	46.810118	0.440798733	0.8527136	0	8.5E-02	1.3	6.8E-06	
2422517	ZNF644	NM_201269	45.176387	0.438576864	0.8393166	0	1.8E-02	1.4	9.4E-05	
2681157	TMF1	NM_007114	51.644805	0.438556136	0.8439788	0	1.0E+00	1.2	2.2E-03	
2904877	MAPK14	NM_139014	45.970552	0.437209124	0.8672514	0	--	--	--	
2915268	KIAA1117	NM_015018	43.236302	0.436981119	0.8516654	0	1.0E+00	1.2	1.8E-03	
2429277	CSDE1	NM_001007553	43.297195	0.435577617	0.8386733	0	--	--	--	
2654306	TTC14	NM_133462	50.783278	0.435283252	0.846602	0	--	--	--	
2857733	FLJ35954	NM_152622	45.601901	0.428458012	0.8637224	0	--	--	--	
3074362	CNOT4	NM_013316	46.98878	0.426763893	0.8628626	0	--	--	--	
2475628	YPEL5	NM_016061	52.89051	0.425885048	0.8594489	0	--	--	--	
2575054	WDR33	NM_018383	41.06937	0.42577714	0.8647792	0	--	--	--	
2507209	CCNT2	NM_001241	41.574575	0.423576433	0.8491035	0	--	--	--	
2548970	SFRS7	NM_006276	41.857765	0.422765011	0.8257239	0	3.4E-02	1.3	7.2E-09	Yes
2463864	KIAA0470L	XM_496715	56.600946	0.422575828	0.8284956	0	6.1E-08	1.8	4.2E-08	
2964771	MAP3K7	NM_145333	50.854315	0.421364136	0.8680722	0	--	--	--	
2488078	MPHOSPH10	NM_005791	41.014581	0.420698227	0.8568615	0	5.9E-03	1.4	1.3E-06	Yes
3060917	MTERF	NM_006980	43.080268	0.419708113	0.8785086	0	--	--	--	
2853768	NUP155	NM_153485	45.564225	0.418215294	0.8511407	0	1.0E+00	1.2	4.4E-07	
2519981	PMS1	NM_000534	48.460167	0.416670425	0.8448149	0	--	--	--	
2502424	INSIG2	NM_016133	70.131565	0.415032154	0.8502979	0	--	--	--	
2854241	AVO3	NM_152756	40.460834	0.413903252	0.8302945	0	--	--	--	
2352501	LRIG2	NM_014813	41.754596	0.413774838	0.8531315	0	1.7E-01	1.3	3.6E-05	
2484422	PEX13	NM_002618	50.178993	0.413591535	0.8626163	0	--	--	--	
2339740	KIAA1799	NM_032437	44.331228	0.413489575	0.8521411	0	--	--	--	
2790570	PLRG1	NM_002669	46.792906	0.411652556	0.8591902	0	--	--	--	Yes
2553282	PSME4	NM_014614	39.832713	0.411162969	0.8535295	0	--	--	--	
2420229	TTLL7	NM_024686	57.815061	0.409514975	0.8210894	0	4.9E-04	1.7	2.2E-04	
2644461	ARMC8	NM_213654	55.936699	0.406174946	0.8549233	0	--	--	--	
2971378	GOPC	NM_020399	51.758458	0.406056941	0.8606819	0	--	--	--	
2401275	HNRPR	NM_005826	38.632933	0.404498109	0.8354859	0	1.6E-02	1.5	3.6E-05	Yes
3017547	MLL5	NM_018682	43.803628	0.404313463	0.821638	0	3.9E-03	1.3	9.6E-08	
2728224	SRP72	NM_006947	56.895879	0.404300356	0.855728	0	--	--	--	
2647742	eIF2A	NM_032025	42.309802	0.403541977	0.8392755	0	--	--	--	
2743029	FLJ21106	NM_025097	43.15515	0.403139348	0.8525798	0	1.0E+00	1.2	1.3E-03	
3020804	LSM8	NM_016200	52.235587	0.40155484	0.8430929	0	--	--	--	Yes
2880361	KIAA0555	NM_014790	55.091523	0.401338862	0.7837374	0	3.3E-01	1.3	6.8E-06	
2892738	PRPF4B	NM_176800	58.046705	0.401207913	0.8341026	0	7.3E-01	1.1	9.2E-04	Yes
2688759	APG3L	NM_022488	47.535765	0.401196772	0.8671071	0	--	--	--	
2664288	MGC24132	NM_152396	49.198526	0.400235244	0.8676189	0	--	--	--	
2366490	BLZF1	NM_003666	55.79034	0.39950724	0.8424448	0	--	--	--	
2697331	DBR1	NM_016216	38.938914	0.399086113	0.835384	0	--	--	--	Yes
2775756	SEC31L1	NM_016211	47.054003	0.395894512	0.8247858	0	2.7E-03	1.3	6.3E-08	

2517549	DRB1	NM_152945	45.961632	0.39573651	0.8619382	0	--	--	--	
2894663	PAK1IP1	NM_017906	38.527056	0.394441239	0.8559995	0	--	--	--	
2686371	TOMM70A	NM_014820	53.276173	0.394030815	0.8249993	0	2.6E-01	1.3	2.1E-03	
2773997	NUP54	NM_017426	40.831085	0.393420934	0.8204489	0	--	--	--	
3012819	FLJ20097	NM_017667	53.845048	0.392814159	0.8521586	0	--	--	--	
2349043	SLC30A7	NM_133496	40.643541	0.388694366	0.8647219	0	5.8E-02	1.4	2.2E-06	
2813524	RAD17	NM_133339	41.990971	0.388245922	0.8580737	0	--	--	--	
2387006	MTR	NM_000254	44.968288	0.387612039	0.8432212	0	6.6E-03	1.3	6.7E-05	
2752243	KIAA1712	NM_030633	47.927461	0.387162838	0.8328556	0	--	--	--	
3642707	C16orf9	NM_032039	44.46733	0.385617707	-0.8525601	1.57E-26	1.3E-03	1.1	4.0E-01	
2553970	PNPT1	NM_033109	76.043157	0.385459559	0.8404918	0	--	--	--	Yes
2775562	HNRPDL	NM_005463	39.280958	0.385351119	0.8326886	0	--	--	--	Yes
2488785	ALMS1	NM_015120	36.712401	0.384861331	0.8431624	0	3.9E-01	1.3	4.6E-08	
2824354	DCP2	NM_152624	39.478387	0.384086287	0.8584695	0	--	--	--	Yes
3012381	AKAP9	NM_147185	42.529361	0.383921343	0.8149729	0	2.4E-01	1.2	4.3E-05	
2998333	C7orf36	NM_020192	47.410683	0.382523926	0.8626402	0	--	--	--	
2571979	SLC35F5	NM_025181	47.400851	0.379632906	0.8418117	0	--	--	--	
2713789	ZNF595	NM_182524	36.265861	0.378392284	0.8311234	0	--	--	--	
2371738	C1orf26	NM_017673	56.084014	0.376526269	0.8186373	0	2.7E-05	1.6	5.0E-08	
2427688	C1orf103	NM_001006945	45.970087	0.374557349	0.8488485	0	--	--	--	
3088405	C8orf35	NM_018142	43.406747	0.374556255	0.8357718	0	3.1E-03	1.5	1.2E-03	Yes
2653932	LOC441511	XM_497141	50.0399	0.373652258	0.8419955	0	--	--	--	
2747893	ARFIP1	NM_014447	41.900698	0.373317859	0.8431866	0	7.9E-01	1.1	2.7E-05	
2726323	KIAA1458	XM_044434	47.591252	0.372182707	0.8231712	0	2.1E-04	1.5	7.7E-02	
2530539	C2orf33	NM_020194	45.232455	0.371612061	0.8588096	0	--	--	--	
2580304	ORC4L	NM_181741	37.221872	0.36805758	0.8421208	0	--	--	--	
2624074	GNL3	NM_206825	38.225178	0.366347325	0.8244346	0	--	--	--	
2491935	FLJ20758	NM_017952	46.669191	0.36580922	0.8198377	0	3.4E-01	1.2	7.0E-05	
2829488	DDX46	NM_014829	35.454779	0.365605823	0.8545604	0	--	--	--	Yes
2746164	MMAA	NM_172250	39.349199	0.365070387	0.8599861	0	--	--	--	
2836451	MFAP3	NM_005927	39.230266	0.364631322	0.8197837	0	1.7E-01	1.4	1.2E-04	
2696802	STAG1	NM_005862	44.264171	0.364624778	0.7968368	0	4.1E-02	1.4	1.6E-07	
2812273	PPWD1	NM_015342	51.598437	0.364101889	0.8324851	0	--	--	--	Yes
2562867	RNF103	NM_005667	39.097904	0.363853773	0.8402453	0	--	--	--	
2454532	C1orf73	NM_015434	44.651103	0.360763205	0.8098356	0	1.0E-03	1.5	1.4E-05	Yes
2678116	FLJ34969	NM_152678	36.88809	0.360320257	0.8402713	0	--	--	--	
2614120	LOC136321	XM_069842	35.972742	0.35925117	0.8438529	0	--	--	--	
2473784	SELI	NM_033505	51.368486	0.357866643	0.764234	0	--	--	--	
2348792	FLJ10287	NM_019083	42.670133	0.356764195	0.8169619	0	6.5E-02	1.2	1.5E-04	
2378256	SYT14	NM_153262	40.023974	0.35591375	0.834351	0	--	--	--	
2943808	NUP153	NM_005124	39.621727	0.353240852	0.8448064	0	--	--	--	
2702307	CCNL1	NM_020307	35.077669	0.353077429	0.8166547	0	2.9E-02	1.4	2.1E-06	
2660648	CRBN	NM_016302	35.775536	0.352646479	0.8384502	0	--	--	--	
2344542	BXDC5	NM_025065	33.44053	0.351229415	0.8379837	0	--	--	--	Yes
2548776	ARL6IP2	NM_022374	38.988243	0.350717812	0.8232554	0	3.7E-02	1.2	1.1E-05	
3044904	KBTBD2	NM_015483	40.203992	0.350341827	0.8365837	0	--	--	--	
2634027	LRRIQ2	NM_024548	34.047022	0.350237507	0.815729	0	9.0E-02	1.2	4.9E-05	
3229628	BTBD14A	NM_144653	46.171176	0.347670197	-0.8519139	1.88E-26	3.2E-14	1.5	4.4E-02	
2704894	PHC3	NM_024947	35.012704	0.347358983	0.828074	0	--	--	--	
2447824	C1orf22	NM_025191	49.714181	0.346033762	0.7254859	4.44E-16	--	--	--	
2766456	UGDH	NM_003359	54.930888	0.345891598	0.8466864	0	--	--	--	
2465493	ZNF670	NM_033213	41.857758	0.343686773	0.8346064	0	8.4E-04	1.3	2.8E-03	
2923819	HSF2	NM_004506	34.163537	0.342898989	0.8478864	0	8.9E-03	1.5	2.3E-03	
2586845	SLC25A12	NM_003705	46.864954	0.339379994	0.8008453	0	--	--	--	
2514658	ZNF650	NM_172070	51.051717	0.33840199	0.7812355	0	--	--	--	
2428313	ST7L	NM_138727	32.269059	0.337914939	0.8426167	0	--	--	--	
2772017	YT521	NM_133370	37.045533	0.337755913	0.8177167	0	--	--	--	
2581548	FNBP3	XM_371575	35.483143	0.33604159	0.8154622	0	--	--	--	
2870397	PJA2	NM_014819	52.806009	0.335921394	0.7546046	0	--	--	--	
2785035	MGC33302	NM_152778	31.536858	0.335608219	0.8339568	0	1.5E-01	1.3	3.2E-05	
2761285	KIAA1327	AB037748	58.465065	0.333968318	0.8071823	0	--	--	--	
3067080	COG5	NM_006348	34.837309	0.333492661	0.8259931	0	1.9E-02	1.3	9.5E-08	
2923359	ASF1A	NM_014034	36.445015	0.333067762	0.8282152	0	--	--	--	
2616018	LOC131405	XM_067369	31.33623	0.33295325	0.8158548	0	--	--	--	
3020496	ST7	NM_018412	37.869733	0.332913709	0.8176998	0	4.6E-04	1.4	5.3E-22	
3018535	BCAP29	NM_001008406	43.98023	0.329796434	0.8098197	0	4.9E-05	1.9	4.5E-02	
2854718	OSRF	NM_012382	38.20597	0.329219235	0.8218577	0	4.6E-02	1.4	7.8E-04	
2832447	PCDHB13	NM_018933	34.190016	0.329075231	0.8370582	0	6.2E-02	1.4	1.8E-03	
2421782	KAT3	NM_001008661	54.21933	0.328579763	0.8180169	0	1.0E+00	1.1	7.4E-09	
2971139	C6orf113	NM_145062	34.959207	0.328463335	0.8379811	0	--	--	--	
3040073	SNX13	NM_015132	44.050218	0.327985853	0.809965	0	--	--	--	
2586227	FLJ21901	NM_024622	35.845052	0.325515588	0.8429826	0	--	--	--	
2609560	THUMPD3	NM_015453	37.378334	0.323747909	0.8465135	0	--	--	--	
2893847	C6orf151	NM_152551	47.879733	0.32361991	0.8260088	0	--	--	--	Yes
3116535	PHF20L1	NM_016018	40.42383	0.322584652	0.8088072	0	1.5E-03	1.6	1.7E-21	
3039731	ANKMY2	NM_020319	34.436712	0.321720376	0.8340254	0	--	--	--	
2396009	LZIC	NM_032368	35.523356	0.32119241	0.8288558	0	--	--	--	
2549092	SOS1	NM_005633	36.598161	0.321043159	0.7828947	0	--	--	--	
2336302	ZFYVE9	NM_004799	55.879797	0.320884415	0.7810489	0	--	--	--	
2653840	PIK3CA	NM_006218	40.807474	0.319568382	0.775912	0	2.1E-04	1.5	3.8E-06	
2593352	GTF3C3	NM_012086	40.144489	0.318868104	0.805619	0	--	--	--	

2975680	BCLAF1	NM_014739	38.745708	0.318622867	0.8250026	0	--	--	--		
2414998	MYSM1	XM_055481	42.345079	0.318311311	0.7669019	0	--	--	--		
2425447	DPH5	NM_015958	31.087331	0.318051979	0.7985156	0	--	--	--		
2521500	PREI3	NM_015387	40.750101	0.316484091	0.8092255	0	--	--	--		
2736259	SMARCAD1	NM_020159	33.190181	0.315637901	0.7909435	0	--	--	--		
2776026	HEL308	NM_133636	30.951635	0.314444054	0.8389167	0	--	--	--		
2664452	ANKRD28	NM_015199	31.803012	0.313647419	0.8055508	0	--	--	--		
3085065	TIGD1	NM_145702	32.173795	0.312640052	0.8430818	0	--	--	--		
2476411	FLJ20272	NM_017735	41.685101	0.312186185	0.8260866	0	1.0E+00	1.1		5.7E-04	
2507495	UBXD2	NM_014607	77.196985	0.312127404	0.801856	0	--	--	--		
2468920	CPSF3	NM_016207	32.825107	0.309951882	0.7654616	0	--	--	--		Yes
2346399	CDC7	NM_003503	34.12504	0.309844688	0.8234843	0	--	--	--		
3111695	EBAG9	NM_004215	32.568353	0.309605308	0.8363	0	--	--	--		
2866543	CETN3	NM_004365	37.781174	0.309349493	0.8355876	0	--	--	--		
2929036	C6orf93	NM_032860	36.52639	0.30924679	0.8358478	0	--	--	--		
2811656	KIF2	NM_004520	38.603169	0.30847342	0.7398472	0	--	--	--		
3065963	ORC5L	NM_181747	38.546841	0.308317199	0.7952471	0	--	--	--		
2473571	RAB10	NM_016131	72.755707	0.308269584	0.7859377	0	--	--	--		
2786462	ELF2	NM_201999	38.5305	0.306510689	0.7904981	0	1.5E-04	1.6		1.9E-24	
2523213	BMPR2	NM_033346	41.922963	0.305196451	0.7369563	0	--	--	--		
2382336	FBXO28	NM_015176	28.505335	0.304491486	0.8425952	0	--	--	--		
2387711	LOC128136	XM_497739	36.522319	0.302886887	0.7857301	0	1.3E-02	1.7		2.9E-05	
2443575	KIFAP3	NM_014970	40.507723	0.301825563	0.780608	0	--	--	--		
2437753	KIAA0907	NM_014949	32.741217	0.299998884	0.8102642	0	--	--	--		
2962525	IBTK	NM_015525	64.34763	0.299211078	0.7784163	0	--	--	--		
2417095	SLC35D1	NM_015139	49.742977	0.298059634	0.8176416	0	--	--	--		
2706297	TBL1XR1	NM_024665	29.981691	0.297395716	0.7890577	0	--	--	--		
2632036	ZNF654	NM_018293	31.47292	0.297172427	0.8019012	0	--	--	--		
2930592	MAP3K7IP2	NM_145342	88.697358	0.296269638	0.8064389	0	--	--	--		
3041519	TRA2A	NM_013293	38.829723	0.296051188	0.8104476	0	2.1E-01	1.6		1.3E-03	Yes
2978876	PPIL4	NM_139126	68.724457	0.294892123	0.8156648	0	--	--	--		
2619344	NKTR	NM_005385	31.401096	0.292846696	0.8046111	0	--	--	--		
2574752	ERCC3	NM_000122	36.979196	0.292689587	0.7883352	0	2.3E-02	1.2		5.3E-04	
2878622	TAF7	NM_005642	30.070541	0.292058787	0.7876494	0	--	--	--		
2793054	CBR4	NM_032783	51.499993	0.291233601	0.8126359	0	--	--	--		
2982381	TCP1	NM_001008897	36.005435	0.290050563	0.7849103	0	9.7E-05	1.4		2.8E-02	
2504883	UGCGL1	NM_020120	28.408121	0.290004533	0.7835753	0	--	--	--		
2858668	ERCC8	NM_001007233	40.503637	0.288958372	0.8355205	0	--	--	--		
2854737	PRKAA1	NM_206907	34.142502	0.288691197	0.8141076	0	5.7E-01	1.2		4.2E-04	
2817837	MSH3	NM_002439	39.571532	0.287799188	0.8133565	0	--	--	--		
2712858	KIAA0794	XM_087353	48.996645	0.28758981	0.7894889	0	6.8E-07	1.6		2.4E-03	
2587747	CIR	NM_004882	31.556359	0.287165055	0.8379652	0	--	--	--		Yes
2972310	TDE2	NM_020755	60.572436	0.285838004	0.7429208	0	--	--	--		
2526980	XRCC5	NM_021141	26.702787	0.285632203	0.7971359	0	2.2E-01	1.1		2.0E-04	
2388525	SDCCAG8	NM_006642	29.238939	0.284094602	0.8062698	0	1.3E-03	1.5		4.0E-12	
2495806	MRPL30	NM_145213	31.133872	0.283422489	0.8361324	0	--	--	--		
3923702	TRPM2	NM_003307	32.874346	0.280704586	-0.8182504	7.16E-23	2.9E-14	1.3		4.3E-29	
2978989	LATS1	NM_004690	27.441621	0.280656671	0.817303	0	--	--	--		
3107661	FLJ20530	NM_017864	35.641055	0.279406519	0.7633116	0	--	--	--		
2485433	AFTIPHILIN	NM_017657	37.18278	0.279273064	0.7755733	0	--	--	--		
2498977	GCC2	NM_181453	55.27848	0.279271744	0.7956071	0	--	--	--		
2632051	MGC26717	NM_173824	39.513583	0.278218539	0.8104558	0	--	--	--		
3100909	YTHDF3	NM_152758	42.836833	0.277475029	0.7775994	0	--	--	--		
2368198	CACYBP	NM_001007214	31.632086	0.276820579	0.8362284	0	--	--	--		
2692573	CCDC14	NM_022757	32.378906	0.274164838	0.7897425	0	2.8E-05	1.8		9.3E-08	
3042421	HNRPA2B1	NM_002137	37.157198	0.272245714	0.7730603	0	--	--	--		Yes
3472225	DDX54	NM_024072	53.879855	0.272084695	-0.7694112	8.10E-19	8.0E-04	1.2		9.3E-06	Yes
2347502	ABCD3	NM_002858	29.060953	0.271966291	0.8192485	0	--	--	--		
3695648	ZDHHC1	NM_013304	38.290778	0.270541876	-0.8084176	5.80E-22	3.8E-20	1.8		1.0E-31	
2523478	RPL7L1	NM_198486	32.596838	0.269746398	0.8142035	0	--	--	--		
2978957	KATNA1	NM_007044	36.32826	0.267647131	0.7740971	0	2.7E-04	1.4		1.1E-03	
2921296	AMD1	NM_001634	37.3362	0.266039805	0.7557806	0	--	--	--		
2363902	DUSP12	NM_007240	25.661103	0.264610213	0.8101614	0	--	--	--		
2865860	CCNH	NM_001239	35.061064	0.264518443	0.7851749	0	2.4E-06	1.8		4.6E-02	
2916952	CASP8AP2	NM_012115	23.808792	0.264084885	0.8091947	0	--	--	--		
2676352	NEK4	NM_003157	26.753123	0.261265628	0.790136	0	--	--	--		
2351940	DDX20	NM_007204	26.42616	0.261211508	0.8060313	0	9.3E-03	1.2		3.4E-05	Yes
2966253	C6orf111	NM_032870	31.419994	0.259821747	0.7800356	0	--	--	--		
2847292	NSUN2	NM_017755	29.55341	0.259290704	0.8204359	0	--	--	--		Yes
2726828	KIAA0276	NM_015115	29.77525	0.258643158	0.8008333	0	1.0E+00	1.4		7.5E-05	
2946845	ZNF184	NM_007149	36.596241	0.258047516	0.7761227	0	4.1E-04	1.6		2.9E-06	
2369843	CAP350	NM_014810	25.039137	0.257594087	0.7883487	0	--	--	--		
2385197	GNPAT	NM_014236	29.979635	0.25678281	0.8199339	0	--	--	--		
2991103	BZW2	NM_014038	27.333029	0.256710716	0.8087149	0	1.4E-03	1.4		8.9E-01	
2773907	SDAD1	NM_018115	27.806743	0.256667397	0.8029455	0	2.8E-01	1.3		1.2E-03	
3066297	SRPK2	NM_182692	48.286823	0.255468506	0.7286068	4.44E-16	2.7E-01	1.3		9.2E-05	Yes
3095719	GOLGA7	NM_001002296	37.145937	0.255416366	0.7756322	0	--	--	--		
2676219	PB1	NM_018165	33.42101	0.254934396	0.7623962	0	1.2E-03	1.3		1.5E-04	
3108901	VPS13B	NM_015243	38.18779	0.254737344	0.770775	0	--	--	--		
2615600	SIMP	NM_178862	31.734811	0.25449525	0.7802985	0	3.0E-05	1.5		7.8E-02	
2456849	STK6	NM_003600	24.502968	0.253427254	0.7675403	0	--	--	--		

2866704	ARRDC3	NM_020801	35.455509	0.253143007	0.7582099	0	1.8E-05	1.6	7.5E-05	
2461999	LYST	NM_000081	51.555218	0.252535635	0.7632382	0	1.0E+00	1.1	1.8E-03	
2553192	ASB3	NM_145863	26.363926	0.251564394	0.8097191	0	--	--	--	
2636272	HSPC135	NM_001008236	23.753819	0.250821857	0.8224402	0	--	--	--	
2454485	LPGAT1	NM_014873	30.471413	0.250517546	0.8029871	0	3.5E-02	1.5	7.5E-04	
2768273	NFXL1	NM_152995	36.123277	0.250044089	0.8061461	0	--	--	--	
2602901	TRIP12	NM_004238	27.274995	0.249727267	0.7691509	0	--	--	--	
2590736	NCKAP1	NM_205842	34.592751	0.246660531	0.7798802	0	--	--	--	
2648873	GMPS	NM_003875	26.49863	0.246332774	0.7756245	0	7.5E-03	1.3	1.6E-03	
3114618	RNF139	NM_007218	24.00028	0.24467393	0.8056827	0	--	--	--	
2737069	METAP1	NM_015143	33.966033	0.24385477	0.7385236	0	--	--	--	
2881607	LOC134466	XM_376436	43.512997	0.243060488	0.7447399	0	3.1E-08	2.0	1.0E-02	
3157147	LYNX1	NM_177477	49.978044	0.242949533	-0.8132338	2.11E-22	3.4E-19	2.0	7.6E-10	
2499234	FLJ32745	NM_144978	30.191713	0.242374201	0.8102015	0	--	--	--	
3032017	NYREN18	NM_016118	24.423022	0.241584624	0.8076023	0	--	--	--	
2474651	ZNF512	NM_032434	27.482585	0.241125244	0.8065038	0	--	--	--	
2484970	EHBP1	NM_015252	28.230231	0.240577165	0.7403981	0	--	--	--	
2745499	USP38	NM_032557	25.742982	0.238433794	0.7872527	0	--	--	--	
2958117	HMGCLL1	NM_019036	46.716883	0.238399094	0.7347481	2.22E-16	--	--	--	
2867392	MGC34713	NM_173665	29.359575	0.238262679	0.7667139	0	--	--	--	
3005717	KCTD7	NM_153033	26.383443	0.237672533	0.8018511	0	--	--	--	
2594313	FLJ37953	NM_152382	34.360355	0.237432124	0.7819259	0	--	--	--	
2735598	TIGD2	NM_145715	28.493701	0.236682064	0.8021477	0	--	--	--	
2816563	AGGF1	NM_018046	46.661783	0.236643405	0.7604236	0	--	--	--	Yes
2637980	MDS010	NM_020231	23.279801	0.236282216	0.8151725	0	--	--	--	
2620222	ZNF501	NM_145044	23.968905	0.236128112	0.8066662	0	--	--	--	
2571217	ZC3H8	NM_032494	29.418372	0.234843199	0.7862778	0	--	--	--	
3105430	KIAA1764	NM_033402	27.661906	0.233117402	0.787725	0	--	--	--	
2998536	CDC2L5	NM_031267	27.176019	0.2330913	0.7817023	0	--	--	--	
2525053	CREB1	NM_004379	25.201291	0.232654782	0.7706322	0	--	--	--	
2769947	CLOCK	NM_004898	69.715149	0.229364515	0.7234385	8.88E-16	--	--	--	
2655113	DRE1	NM_017644	27.031568	0.226933845	0.779746	0	9.6E-06	1.6	1.4E-02	
2951916	STK38	NM_007271	22.883695	0.226614457	0.8130663	0	--	--	--	
2808438	NNT	NM_182977	23.842521	0.226604835	0.7863534	0	3.5E-01	1.1	2.8E-07	
2773756	G3BP2	NM_203505	25.000864	0.226448482	0.7130932	3.11E-15	1.3E-01	1.3	5.1E-05	
2973232	KIAA0408	NM_014702	31.616243	0.226026814	0.6963361	2.53E-14	1.4E-02	1.7	1.1E-04	
2853642	FLJ13231	NM_023073	43.271969	0.224920207	0.7130426	3.11E-15	--	--	--	
3842327	HSU79303	NM_013301	39.652798	0.223075074	-0.7778484	1.92E-19	4.8E-09	1.4	2.1E-03	
2934089	WTAP	NM_004906	22.140374	0.221916958	0.7860009	0	--	--	--	Yes
2964200	UBE2J1	NM_016021	30.796414	0.221534555	0.719221	1.33E-15	--	--	--	
2348854	LOC441092	XM_499006	41.891173	0.22072839	0.7667735	0	--	--	--	
2597273	FLJ23861	NM_152519	25.668097	0.220273181	0.7672696	0	6.1E-03	1.5	3.9E-04	
2568968	UXS1	NM_025076	22.883553	0.220050918	0.788156	0	--	--	--	
2796875	FLJ11200	NM_018359	44.930926	0.218990618	0.7448317	0	--	--	--	
2413578	TMEM59	NM_004872	20.983843	0.218735025	0.7765473	0	--	--	--	
2400322	HP1BP3	NM_016287	20.443303	0.218139106	0.7823335	0	--	--	--	
3740462	RILP	NM_031430	43.756801	0.217933548	-0.7872994	3.53E-20	--	--	--	
2829416	SEC24A	XM_094581	23.550993	0.217904508	0.7804732	0	--	--	--	
2876146	CDKL3	NM_016508	22.786942	0.217747974	0.8124897	0	--	--	--	
2589929	SESTD1	NM_178123	28.610241	0.215715095	0.6888757	6.13E-14	3.6E-04	1.4	3.9E-04	
2344393	PRKACB	NM_182948	36.425604	0.215669957	0.7361915	0	5.2E-06	2.1	5.0E-22	
2496536	RPL31	NM_000993	21.916993	0.215633811	0.79348	0	--	--	--	
2970532	HDAC2	NM_001527	22.388373	0.215422736	0.7848346	0	3.8E-04	1.4	4.0E-05	
3157901	PLEC1	NM_201378	28.205392	0.214821377	-0.7628493	2.38E-18	7.9E-13	1.8	2.5E-26	
2700727	SERP1	NM_014445	32.502251	0.21384746	0.7554526	0	--	--	--	
2800906	MTRR	NM_024010	27.315796	0.211958136	0.7940789	0	--	--	--	
2459042	CDC42BPA	NM_003607	45.919797	0.211626665	0.7201263	1.33E-15	8.4E-01	1.2	1.5E-05	
2880932	CSNK1A1	NM_001892	26.111907	0.210955343	0.7693124	0	3.5E-04	1.2	1.5E-05	
2519756	WDR75	NM_032168	24.761132	0.21094851	0.7919346	0	--	--	--	
3190893	C9orf54	NM_032809	29.004739	0.210606046	-0.8039524	1.44E-21	2.7E-10	1.3	1.7E-01	
2400718	USP48	NM_032236	20.85048	0.209341139	0.7968415	0	--	--	--	
2474681	XAB1	NM_007266	23.424807	0.207739738	0.6936272	3.51E-14	--	--	--	
2481271	HTLF	NM_002158	25.3707	0.206987409	0.7578648	0	1.1E-04	1.8	1.1E-01	
2419046	ZZZ3	NM_015534	24.039796	0.206458073	0.7644446	0	--	--	--	
2421753	GTF2B	NM_001514	24.419998	0.205508998	0.759234	0	--	--	--	
2563481	LOC51315	NM_016618	27.401313	0.205319836	0.7997803	0	--	--	--	
2475407	RSNL2	NM_024692	24.139369	0.205287023	0.7841309	0	--	--	--	
2461717	LOC440734	XM_496443	28.3102	0.20526773	0.774197	0	--	--	--	
3004665	ZNF138	NM_006524	23.877501	0.202773082	0.7921362	0	--	--	--	
2724472	HIP2	NM_005339	28.05607	0.202707914	0.7870532	0	--	--	--	
3066751	SYPL1	NM_006754	21.445526	0.201276307	0.7941055	0	--	--	--	
3024275	MKLN1	NM_013255	28.610859	0.200967318	0.7370057	0	8.9E-02	1.4	1.1E-05	
2911413	PRIM2A	NM_000947	29.062223	0.198595829	0.731777	2.22E-16	--	--	--	
3005069	ZNF92	NM_152626	19.645742	0.198273667	0.7850284	0	--	--	--	
2519860	NS3TP1	NM_019048	21.038649	0.198235323	0.7954407	0	6.2E-02	1.3	1.5E-03	
3766893	DDX5	NM_004396	24.081983	0.198107281	0.792821	0	1.8E-04	1.5	2.6E-02	Yes
2443335	C1orf114	NM_021179	32.917006	0.197778799	0.7626174	0	--	--	--	
2988459	RBAK	NM_021163	30.551338	0.197561352	0.7649705	0	--	--	--	
2724235	WDR19	NM_025132	21.71494	0.197328793	0.7783038	0	4.6E-03	1.7	2.1E-07	
2553771	KIAA1212	NM_018084	32.062167	0.196780409	0.6874481	7.26E-14	--	--	--	
2622469	RBM5	NM_005778	17.532091	0.195386683	0.7696117	0	--	--	--	Yes

2512601	TANK	NM_004180	29.916054	0.195314648	0.7971332	0	--	--	--	
2668425	CLASP2	NM_015097	32.915389	0.194080146	0.6779296	2.14E-13	2.3E-02	1.3	1.8E-06	
2924619	C6orf75	NM_021820	26.699941	0.194079017	0.7790369	0	--	--	--	
2823820	WDR36	NM_139281	18.521935	0.193945059	0.7534665	0	--	--	--	Yes
2979679	ZBTB2	NM_020861	22.330098	0.193681191	0.7695882	0	--	--	--	
2434438	MCL1	NM_021960	21.805089	0.193440845	0.7630602	0	3.2E-02	1.3	4.1E-11	
2530599	HRB	NM_004504	21.520696	0.193070439	0.7605689	0	3.4E-01	1.1	1.8E-03	
3078656	FLJ12700	NM_024910	18.879073	0.193034895	0.7834959	0	6.7E-01	1.2	1.7E-05	
2555630	CCT4	NM_006430	20.339661	0.192504645	0.753522	0	1.2E-02	1.4	1.5E-04	
3087555	FLJ32642	NM_152415	20.842798	0.191169869	0.7889465	0	--	--	--	
3358854	DUSP8	NM_004420	30.441217	0.190715994	-0.7773219	2.10E-19	1.2E-05	1.7	9.5E-02	
2869275	FLJ20125	NM_017676	20.027137	0.189652427	0.7766135	0	3.4E-01	1.2	2.4E-04	
3012677	DKFZP564O0523	NM_032120	19.802522	0.189350274	0.7859569	0	--	--	--	
3045739	FLJ22313	NM_022373	25.747818	0.189151047	0.7052965	8.44E-15	1.5E-02	1.2	1.0E-03	
2452319	RBBP5	NM_005057	18.476742	0.188842972	0.7905595	0	--	--	--	
3045004	NT5C3	NM_001002009	18.41074	0.188227772	0.7864055	0	3.2E-01	1.2	4.0E-04	
2688882	C3orf17	NM_015412	19.156788	0.188198268	0.7630423	0	--	--	--	
3266934	NANOS1	NM_001009553	26.740041	0.188060727	-0.7661449	1.39E-18	1.8E-12	1.3	4.0E-02	
2330899	UTP11L	NM_016037	19.457426	0.186365244	0.7924791	0	--	--	--	Yes
2527856	PLCD4	NM_032726	18.126215	0.186219048	0.7572122	0	--	--	--	
2426840	WDR47	NM_014969	25.178691	0.185791043	0.7484699	0	1.7E-07	2.0	2.0E-02	
3726325	XYLT2	NM_022167	27.410182	0.185686933	-0.7696324	7.80E-19	3.6E-22	1.8	8.0E-11	
2693081	ZNF148	NM_021964	19.604556	0.185325723	0.7192251	1.33E-15	--	--	--	
2936564	FGFR1OP	NM_194429	22.131762	0.184743454	0.795178	0	--	--	--	
2890148	HNRPH1	NM_005520	17.959343	0.184111967	0.7099906	4.66E-15	1.5E-03	1.5	4.1E-03	Yes
2443235	NME7	NM_013330	20.749364	0.183830676	0.7727648	0	3.1E-03	1.6	1.3E-04	
2756404	KIAA1982	NM_133474	28.793938	0.183589586	0.7134792	3.11E-15	--	--	--	
3995804	FLJ43855	NM_198857	23.789095	0.182930184	-0.7915167	1.61E-20	3.9E-16	1.5	1.3E-32	
2713074	NCBP2	NM_007362	28.370037	0.182922836	0.7587527	0	--	--	--	Yes
3011977	LOC85865	NM_033107	22.566908	0.182741438	0.7698181	0	--	--	--	
2836665	SAP30L	NM_024632	21.144681	0.182610254	0.7603761	0	--	--	--	
2632491	NSUN3	NM_022072	19.31226	0.181729293	0.7615157	0	--	--	--	
2859195	HSA9761	NM_014473	22.70678	0.181045551	0.7830639	0	--	--	--	Yes
2403557	C1orf79	XM_378848	23.054137	0.180808132	0.758899	0	--	--	--	
2402068	CBPIN	NM_015484	20.664106	0.180546753	0.7487367	0	--	--	--	
2691798	LOC340192	XM_291170	18.578521	0.180230811	0.7780137	0	--	--	--	
2697490	Cep70	NM_024491	31.987412	0.179300788	0.712555	3.33E-15	--	--	--	
2666904	SLC4A7	NM_003615	22.777972	0.178860878	0.741996	0	6.1E-05	1.9	1.0E-24	
2764054	SLA/LP	NM_016955	24.551736	0.178843328	0.7318185	2.22E-16	--	--	--	
2523419	ALS2CR8	NM_024744	26.547495	0.178298162	0.7487984	0	6.3E-02	1.2	4.2E-07	
2758686	LYAR	NM_017816	18.808765	0.17764285	0.7164759	2.00E-15	--	--	--	
2670784	SEC22L3	NM_004206	17.31098	0.176896998	0.7940409	0	--	--	--	
2594535	PPIL3	NM_130906	25.58099	0.176710998	0.705901	7.99E-15	--	--	--	Yes
2992963	LOC90693	NM_138771	24.203557	0.176486012	0.7714455	0	--	--	--	
2749191	GLRB	NM_000824	29.589833	0.175398066	0.7432664	0	--	--	--	
3044753	LSM5	NM_012322	25.157596	0.175260426	0.7796548	0	--	--	--	Yes
2711644	ATP13A3	AK024639	19.94764	0.174882136	0.7190092	1.33E-15	1.1E-01	1.2	8.6E-04	
2472914	UBXD4	NM_181713	28.292772	0.174269428	0.7708318	0	--	--	--	
2654815	ATP11B	NM_014616	18.017717	0.17371026	0.7861945	0	--	--	--	
3053229	ZNF680	NM_178558	18.749738	0.173047974	0.7579128	0	--	--	--	
2560704	C2orf3	NM_003203	18.302229	0.172903296	0.7659696	0	--	--	--	
2621827	ARIH2	NM_006321	17.286704	0.172882756	0.786249	0	9.4E-01	1.1	1.2E-03	
2370123	XPR1	NM_004736	19.86291	0.172686548	0.7500481	0	6.2E-04	1.3	2.6E-02	
2750227	FLJ11184	NM_018352	17.79205	0.171698261	0.7813126	0	--	--	--	
2366028	IQWD1	NM_001017977	29.675501	0.171689346	0.7261842	4.44E-16	--	--	--	
2703133	WDR56	NM_020800	24.739704	0.17141511	0.7756576	0	1.0E+00	1.3	5.8E-10	
2884647	LOC63920	NM_022090	23.323616	0.170847395	0.7692828	0	--	--	--	
2998404	RALA	NM_005402	27.881981	0.1708191	0.7112827	4.00E-15	--	--	--	
2753880	CARF	NM_017632	23.283557	0.170238484	0.7360779	0	--	--	--	
2921086	CDC40	NM_015891	26.010712	0.169603641	0.7478103	0	8.6E-01	1.2	6.8E-05	Yes
2691718	GOLGB1	NM_004487	40.708269	0.168897478	0.7325591	2.22E-16	--	--	--	
2491702	USP39	NM_006590	18.552776	0.167606144	0.6723473	3.98E-13	--	--	--	Yes
2331937	LOC441120	NM_001013718	20.353502	0.167241826	0.7636359	0	--	--	--	
2556017	LOC51057	AL833623	15.775463	0.16723759	0.7641138	0	--	--	--	
2792069	LOC92345	NM_138386	33.228017	0.167117613	0.7838293	0	--	--	--	
2618598	GC20	NM_005875	22.446665	0.166470946	0.761201	0	--	--	--	
2425212	DBT	NM_001918	44.661215	0.166264351	0.7486583	0	--	--	--	
3105467	E2F5	NM_001951	19.370636	0.166235847	0.7184019	1.55E-15	6.1E-02	1.4	6.5E-05	
3091628	ELP3	NM_018091	17.728218	0.165995286	0.7828713	0	--	--	--	
2968652	SESN1	NM_014454	19.168908	0.165949267	0.7785238	0	--	--	--	
2754582	SNX25	NM_031953	18.909946	0.16510961	0.7732564	0	7.0E-04	1.6	7.4E-05	
2642325	ATP2C1	NM_014382	39.666227	0.165034301	0.703213	1.11E-14	--	--	--	
2972063	C6orf170	NM_152730	35.246665	0.164718534	0.7442927	0	--	--	--	
2553682	FLJ31438	NM_152385	23.347116	0.164365476	0.7509396	0	4.5E-05	1.5	1.9E-07	
3101385	CHPPR	NM_014637	19.408469	0.164256832	0.7616269	0	--	--	--	
2664395	HPCL2	NM_012260	23.44734	0.164003704	0.7544777	0	3.0E-04	1.4	1.4E-02	
2349402	AMY2A	NM_000699	17.488559	0.163661354	0.7359726	0	9.6E-01	1.2	1.2E-03	
3847703	MLLT1	NM_005934	27.323357	0.162904995	-0.7482137	2.35E-17	9.1E-05	1.3	1.8E-13	
2938196	SEC5L1	NM_018303	20.683246	0.162653664	0.7407993	0	2.1E-02	1.3	1.7E-04	
2386747	TM7SF1	NM_003272	20.493642	0.162401824	0.7576969	0	5.2E-04	1.5	4.9E-04	
2434490	ENSA	NM_207042	18.235533	0.161256072	0.7659375	0	2.6E-03	1.4	2.4E-08	

2616317	PDCD6IP	NM_013374	15.628396	0.160848921	0.7749652	0	--	--	--		
2986493	PSMB1	NM_002793	19.237107	0.159334594	0.7283733	4.44E-16	--	--	--		
2694644	ZNF9	NM_003418	17.813947	0.159285392	0.6649663	8.82E-13	--	--	--		
2852237	GOLPH3	NM_022130	15.064136	0.15925211	0.7775575	0	--	--	--		
2780656	PHF22	NM_020395	17.595864	0.158818085	0.7766064	0	--	--	--		Yes
2734018	MRPS18C	NM_016067	17.474802	0.15711755	0.7913249	0	--	--	--		
3083778	MCPH1	NM_024596	18.663961	0.156356537	0.7213819	1.11E-15	--	--	--		
2540210	FLJ14075	NM_024894	15.667269	0.155680736	0.7619563	0	--	--	--		
2770193	AASDH	NM_181806	21.897136	0.155641382	0.7624223	0	--	--	--		
3017123	S100A11	NM_005620	14.938076	0.154819707	0.7741044	0	--	--	--		
2866590	LYSMD3	XM_371760	21.413211	0.154454834	0.7548031	0	--	--	--		
2434892	TCFL1	NM_005997	16.661255	0.154034388	0.6725614	3.89E-13	--	--	--		
2951674	SRPK1	NM_003137	18.191855	0.153401648	0.7150874	2.44E-15	7.6E-05	1.4		2.0E-06	Yes
2549455	THUMPD2	NM_025264	22.695978	0.153155541	0.7550436	0	--	--	--		
2350551	SARS	NM_006513	15.571121	0.152593812	0.7055809	8.22E-15	--	--	--		Yes
2607568	CHL1	NM_006614	24.154823	0.152352931	0.6264735	3.99E-11	4.1E-03	1.6		1.4E-06	
3092276	LEPROTL1	NM_015344	15.151444	0.152344117	0.6960892	2.62E-14	--	--	--		
2724585	N4BP2	NM_018177	28.466096	0.151281603	0.6931038	3.73E-14	6.3E-01	1.4		4.7E-04	
2647216	HPS3	NM_032383	17.733316	0.150802683	0.7515377	0	--	--	--		
2591906	OSGEPL1	NM_022353	17.639597	0.150687431	0.7431292	0	--	--	--		
2721809	ZCCHC4	XM_376310	17.833353	0.150228573	0.7590171	0	--	--	--		
2544179	SF3B14	NM_016047	18.376946	0.149622119	0.7409978	0	--	--	--		Yes
2828135	LOC90624	BC022429	34.780406	0.149281228	0.6960699	2.62E-14	--	--	--		
2573786	MKI67IP	NM_032390	15.138341	0.149235262	0.7445435	0	--	--	--		
2644822	MRPS22	NM_020191	17.18285	0.149097148	0.7655699	0	--	--	--		
2361036	DAP3	NM_004632	15.171211	0.148579646	0.66183	1.23E-12	--	--	--		
2880905	CSNK1A1	NM_001025105	28.895157	0.147746571	0.7043145	9.55E-15	3.3E-05	1.6		1.9E-02	
2691982	KPNA1	NM_002264	15.506278	0.147575404	0.7173591	1.78E-15	--	--	--		
3096171	POLB	NM_002690	17.567867	0.14727183	0.6952136	2.91E-14	--	--	--		
2350287	FNDC7	NM_173532	18.823291	0.146907184	0.7347313	2.22E-16	--	--	--		
2376037	MDM4	NM_002393	16.350256	0.146590156	0.7533729	0	1.0E+00	1.2		4.8E-05	
2859494	FLJ36754	NM_173829	18.14115	0.14630818	0.7118068	3.55E-15	--	--	--		
2843804	DKFZp686E2433	XM_293828	14.773548	0.146092829	0.7467329	0	--	--	--		
2679864	PSMD6	NM_014814	22.832969	0.145270014	0.7095559	4.88E-15	--	--	--		
2357996	VPS45A	NM_007259	39.644958	0.144833738	0.6760184	2.66E-13	--	--	--		
2413423	TMEM48	NM_018087	25.621176	0.144085789	0.7182132	1.78E-15	--	--	--		
2659918	LRCH3	NM_032773	16.801113	0.144032774	0.6743287	3.20E-13	3.1E-01	1.2		8.7E-07	
3832830	PAK4	NM_001014833	50.185616	0.143765494	-0.6643777	9.39E-13	1.7E-04	1.2		1.8E-01	
2824872	AP3S1	NM_001002924	18.529772	0.143483432	0.7277432	4.44E-16	--	--	--		
2521997	FLJ38973	NM_153689	22.481745	0.143317091	0.7055132	8.22E-15	--	--	--		
2375810	ZC3H11A	NM_014827	17.862986	0.142829186	0.7600176	0	1.0E+00	1.1		2.2E-04	
3107151	LOC441370	XM_499124	15.989658	0.142637875	0.7654851	0	--	--	--		
2840002	FLJ20364	NM_017785	43.149594	0.141989287	0.6944899	3.15E-14	--	--	--		
2741768	EXOSC9	NM_005033	14.860294	0.140937534	0.6478566	5.14E-12	--	--	--		Yes
2380554	CGI-115	NM_016052	16.662359	0.140456876	0.7538525	0	--	--	--		
3106539	CGI-77	NM_016023	36.781643	0.139720555	0.6945893	3.13E-14	--	--	--		
2767378	ATP8A1	NM_006095	18.761818	0.138632452	0.6732	3.62E-13	--	--	--		
2629693	LOC389129	XM_371647	13.793403	0.136899918	0.7683764	0	--	--	--		
2408111	TRIT1	NM_017646	13.364064	0.136620398	0.693956	3.38E-14	--	--	--		Yes
2685034	LOC401078	XM_379200	16.870848	0.136557792	0.7425633	0	--	--	--		
2996321	B1	NM_198428	18.61219	0.135632179	0.7077115	6.22E-15	4.7E-01	1.2		4.9E-08	
2486520	ETAA16	NM_019002	27.986501	0.135361852	0.7377865	0	--	--	--		
3018375	PRKAR2B	NM_002736	20.312421	0.135151377	0.7011151	1.42E-14	4.1E-04	1.8		2.6E-03	
2406064	SFPQ	NM_005066	13.215273	0.13437169	0.7177019	1.78E-15	1.7E-03	1.4		6.4E-03	Yes
2607020	PASK	NM_015148	12.579467	0.133582055	0.7505457	0	--	--	--		
2491615	MAT2A	NM_005911	12.848498	0.13343415	0.7254092	6.66E-16	--	--	--		
2331903	ZNF643	NM_023070	18.935539	0.133139128	0.7231991	8.88E-16	3.3E-04	1.5		1.0E+00	
3003193	CCT6A	NM_001762	14.653415	0.132342884	0.7587466	0	1.2E-01	1.4		4.4E-06	
2980290	RGS17	NM_012419	19.968576	0.132136055	0.6878277	6.93E-14	--	--	--		
2888519	RAP80	NM_016290	20.381522	0.131775497	0.6653696	8.45E-13	8.8E-04	1.5		1.7E-06	
3076340	BRAF	NM_004333	13.337262	0.131444072	0.7094728	4.88E-15	--	--	--		
2951300	TAF11	NM_005643	25.729066	0.131346369	0.7378623	0	--	--	--		
2966232	COQ3	NM_017421	12.789658	0.131317043	0.7334673	2.22E-16	--	--	--		
2531522	CAB39	NM_016289	16.562689	0.130987543	0.6572271	1.98E-12	--	--	--		
3887069	C20orf161	NM_033421	26.546497	0.130593035	-0.7546403	8.77E-18	1.3E-05	1.1		6.1E-06	
2995254	Ells1	NM_152793	19.255118	0.12939319	0.6140374	1.23E-10	9.4E-05	1.6		2.1E-06	
2484457	AHSA2	NM_152392	14.595915	0.129265421	0.7323014	2.22E-16	3.3E-02	1.6		7.4E-04	
2832431	PCDHB11	NM_018931	12.910577	0.129215098	0.7630196	0	1.5E-02	1.5		2.4E-04	
2706938	GNB4	NM_021629	18.082001	0.12883681	0.7206005	1.33E-15	4.2E-02	1.4		4.2E-04	
2727793	TPARL	NM_018475	23.842348	0.128233198	0.6222694	5.87E-11	5.7E-01	1.4		1.7E-07	
2331213	MACF1	NM_012090	17.7761	0.127601168	0.6418578	9.28E-12	2.9E-02	1.4		2.5E-87	
3831260	ZNF146	NM_007145	18.53805	0.127029938	0.7207474	1.11E-15	--	--	--		
2847710	MGC5297	NM_024091	18.876375	0.126970288	0.7160304	2.22E-15	2.1E-05	1.4		4.6E-01	
2969201	C6orf199	NM_145025	18.396813	0.126706422	0.7106621	4.44E-15	--	--	--		
2374345	CAMSAP1L1	NM_203459	22.175752	0.126353439	0.630144	2.84E-11	1.0E+00	1.2		8.1E-06	
2742134	SPATA5	NM_145207	15.116423	0.125273853	0.7229709	8.88E-16	--	--	--		
3018509	DUS4L	NM_181581	14.514121	0.12497801	0.7420901	0	--	--	--		Yes
3037535	ZNF12	NM_016265	12.074435	0.124701987	0.7521079	0	--	--	--		
3959613	FLJ23322	NM_024955	15.843704	0.124607963	-0.7545887	8.84E-18	1.9E-03	1.4		4.2E-04	
2366753	SCYL1BP1	NM_152281	14.208005	0.124549374	0.7437502	0	--	--	--		
2788195	HSHIN1	NM_199324	26.082002	0.124260702	0.6946358	3.11E-14	--	--	--		

2432647	POLR3C	NM_006468	14.569286	0.123735228	0.6696613	5.33E-13	9.9E-01	1.1	1.4E-07	
2720181	MED28	NM_025205	13.965825	0.123665962	0.7088663	5.33E-15	--	--	--	
2801608	6-Mar	NM_005885	15.676515	0.123094279	0.6867092	7.90E-14	4.9E-02	1.3	1.4E-04	
2462329	ERO1LB	NM_019891	27.013825	0.122784458	0.6898454	5.48E-14	5.2E-04	1.3	1.5E-02	
2781813	ELOVL6	NM_024090	22.229001	0.122300396	0.6435691	7.85E-12	--	--	--	
3089401	PPP3CC	NM_005605	18.624681	0.122170046	0.6999498	1.64E-14	4.4E-04	1.6	1.4E-02	
2428855	AP4B1	NM_006594	17.846305	0.12209437	0.7038938	1.02E-14	3.8E-04	1.3	1.2E-03	
2806231	BXDC2	NM_018321	13.007637	0.121624907	0.7335496	2.22E-16	--	--	--	
2820925	RHOBTB3	NM_014899	17.311957	0.121262503	0.6551347	2.46E-12	--	--	--	
3820310	FLJ11286	NM_018381	13.318289	0.121053352	-0.7400035	7.91E-17	2.5E-11	1.5	4.4E-07	
2456805	EPRS	NM_004446	12.099551	0.120485635	0.7512696	0	--	--	--	
2520291	GLS	NM_014905	28.257896	0.120417687	0.5653575	6.42E-09	2.0E-02	1.9	1.3E-49	
2912889	SMAP1	NM_021940	21.466645	0.120275132	0.6233666	5.31E-11	--	--	--	
2832052	HARSL	NM_012208	11.466597	0.119448693	0.7203961	1.33E-15	1.0E+00	1.1	3.6E-18	
3114878	C8orf36	NM_173685	15.558506	0.119424039	0.6708358	4.69E-13	--	--	--	
2944068	DEK	NM_003472	13.779109	0.119394364	0.69254	4.00E-14	--	--	--	
2633917	RG9MTD1	NM_017819	19.691521	0.119379735	0.7417578	0	--	--	--	
2888243	KIAA1191	NM_020444	15.172481	0.118954035	0.7521268	0	--	--	--	
2534456	LRRFIP1	NM_004735	17.540939	0.118940993	0.7344728	2.22E-16	--	--	--	
2696252	RYK	NM_002958	13.930189	0.118605478	0.6725747	3.88E-13	2.0E-01	1.3	1.8E-06	
2813481	CDK7	NM_001799	13.185968	0.118401177	0.7512697	0	--	--	--	
2785282	FLJ30655	NM_144643	25.03772	0.118189791	0.6511722	3.68E-12	--	--	--	
2669184	LRRFIP2	NM_006309	21.582627	0.118155892	0.6807026	1.57E-13	--	--	--	
2553576	RTN4	NM_207521	23.010958	0.117669595	0.6208911	6.65E-11	1.8E-02	1.4	7.0E-08	
2709486	RFC4	NM_181573	18.841098	0.1170117	0.619468	7.56E-11	--	--	--	
2757319	SLBP	NM_006527	11.597532	0.116707846	0.6889856	6.06E-14	--	--	--	Yes
2330133	EIF2C3	NM_024852	11.692816	0.116012692	0.7223609	8.88E-16	--	--	--	
2966078	FBXL4	NM_012160	13.499696	0.11573087	0.7430114	0	--	--	--	
2870889	LOC389473	XM_499269	10.891512	0.115426316	0.758607	0	1.0E+00	1.2	3.5E-10	
2883380	CRSP9	NM_004270	14.907594	0.114410669	0.6841179	1.07E-13	--	--	--	
2770242	PPAT	NM_002703	12.475735	0.114156587	0.7373173	0	--	--	--	
2724338	LIAS	NM_194451	12.235869	0.11357219	0.7491272	0	--	--	--	
2436576	C1orf43	NM_015449	17.297467	0.1127789	0.6296154	2.98E-11	--	--	--	
2709062	SFRS10	NM_004593	14.335343	0.112089331	0.6193988	7.61E-11	--	--	--	Yes
2832081	ZMAT2	NM_144723	12.955658	0.111741207	0.7388655	0	--	--	--	
2897635	CDKAL1	NM_017774	12.546085	0.111608232	0.6831444	1.19E-13	--	--	--	
2828115	LOC90624	NM_181705	17.566021	0.110884592	0.6783083	2.06E-13	--	--	--	
2654394	FXR1	NM_001013439	11.526886	0.11054006	0.7263625	4.44E-16	--	--	--	
2488732	CCT7	NM_001009570	12.224751	0.109057533	0.5585911	1.06E-08	--	--	--	
2566645	LOC129531	NM_138798	13.061001	0.108923811	0.6658417	8.04E-13	--	--	--	
2964231	RRAGD	NM_021244	18.658033	0.10874313	0.6567234	2.09E-12	--	--	--	
2714230	PCGF3	NM_006315	11.10592	0.108222477	0.734179	2.22E-16	--	--	--	
2464005	AKT3	NM_181690	17.900769	0.1080458	0.6973889	2.22E-14	2.6E-05	1.8	9.6E-02	
2866045	MGC33214	NM_153354	13.524179	0.108025269	0.6852913	9.33E-14	--	--	--	
3899173	RRBP1	NM_004587	15.590513	0.107983092	-0.7260107	5.67E-16	5.9E-17	1.4	4.1E-08	
2529782	MRPL44	NM_022915	12.745497	0.107877935	0.7429383	0	--	--	--	Yes
2731757	THAP6	NM_144721	14.874825	0.107025257	0.7342923	2.22E-16	--	--	--	
2754371	FLJ33167	NM_152683	17.049107	0.106668271	0.6341161	1.95E-11	--	--	--	
2611122	TSEN2	NM_025265	11.007922	0.106629015	0.6644746	9.29E-13	1.0E-01	1.3	1.5E-03	Yes
2961816	PHIP	NM_017934	15.415133	0.106330014	0.6732724	3.59E-13	3.3E-02	1.4	1.2E-03	
3047202	DKFZp686I1569	CR749225	18.887966	0.106316575	0.6858168	8.75E-14	--	--	--	
2971564	C6orf204	NM_206921	10.733457	0.105344964	0.7244412	6.66E-16	--	--	--	
2677653	RAP140	NM_015224	14.183326	0.105124171	0.6514203	3.59E-12	--	--	--	
2429069	TRIM33	NM_015906	10.736112	0.104326149	0.6925709	3.97E-14	--	--	--	
3034449	WDR60	NM_018051	12.610838	0.103937411	0.7400501	0	--	--	--	
2515369	HAT1	NM_003642	19.602714	0.103036887	0.6025489	3.32E-10	9.8E-03	1.6	2.1E-05	
3893673	SLC2A4RG	NM_020062	15.201384	0.102961172	-0.7302113	3.18E-16	3.8E-15	1.4	4.8E-10	
2342176	FPGT	NM_003838	11.870361	0.102924069	0.6949437	3.00E-14	--	--	--	
3757630	GCN5L2	NM_021078	10.915678	0.10180445	-0.7306983	2.97E-16	6.8E-06	1.3	1.1E-01	
2484358	REL	NM_002908	15.594575	0.101720918	0.7326207	2.22E-16	--	--	--	
2383524	ZNF678	NM_178549	13.227568	0.101599552	0.708808	5.33E-15	--	--	--	
3041550		---	12.130613	0.100881244	0.7012728	1.38E-14	--	--	--	
2690850	TMEM39A	NM_018266	11.550184	0.099079379	0.6895051	5.71E-14	--	--	--	
2832315	PCDHB4	NM_018938	14.300698	0.098386867	0.7177142	1.78E-15	1.7E-01	1.8	1.3E-05	
3082531	LOC388578	XM_371206	11.7992	0.096922928	0.7109104	4.22E-15	3.7E-01	1.3	2.8E-04	
3101765	FLJ11267	NM_019607	12.508296	0.095818573	0.7103919	4.44E-15	--	--	--	
2532793	APG16L	NM_198890	18.118203	0.094509018	0.6723338	3.98E-13	--	--	--	
3091000	BNIP3L	NM_004331	11.581138	0.094418107	0.6804422	1.62E-13	1.8E-03	1.5	1.5E-06	
2410330	GPBP1L1	NM_021639	12.22059	0.093957707	0.699289	1.78E-14	3.5E-01	1.3	9.2E-04	
2639309	SEC22L2	NM_012430	11.443741	0.093923795	0.6622186	1.18E-12	--	--	--	
3025291	FLJ32786	NM_144648	12.760329	0.093839626	0.6736689	3.44E-13	2.4E-03	1.3	3.1E-04	
2769182	SCFD2	NM_152540	11.437065	0.093801178	0.7178092	1.78E-15	--	--	--	
2673684	IHPK2	NM_001005910	10.08743	0.093706037	0.6118826	1.48E-10	1.4E-02	1.5	6.4E-04	
3816112	SCAMP4	NM_079834	12.451634	0.093424749	-0.7104444	4.42E-15	4.2E-07	1.5	1.3E-01	
2864237	HOMER1	NM_004272	10.582602	0.093366379	0.7024921	1.20E-14	1.3E-02	1.3	1.6E-04	
2622359	RBM6	NM_005777	8.7221937	0.093119882	0.7385537	0	--	--	--	Yes
3601348	LOXL1	NM_005576	21.653851	0.092989487	-0.6476994	5.22E-12	2.4E-10	1.6	1.9E-13	
3015178	ZNF38	NM_145914	9.215537	0.091942232	0.7029612	1.13E-14	1.0E+00	1.1	1.9E-10	
3663074	MMP15	NM_002428	17.196711	0.091777723	-0.7179503	1.67E-15	2.0E-05	1.3	2.5E-06	
2889753	ZNF354A	NM_005649	8.4198169	0.091550434	0.7426159	0	--	--	--	
2334404	AKR1A1	NM_006066	10.553209	0.091415442	0.6409895	1.01E-11	5.0E-03	1.3	3.6E-14	

2638017	C3orf1	NM_016589	31.295617	0.09032756	0.5768444	2.67E-09	--	--	--	
3944690	PSCD4	NM_013385	11.476839	0.090106645	-0.7347658	1.68E-16	7.6E-10	1.2	3.0E-04	
2643530	Cep63	NM_025180	11.309284	0.089553854	0.7196384	1.33E-15	--	--	--	
2821417	LNPEP	NM_005575	20.326017	0.089005452	0.6582643	1.78E-12	--	--	--	
2382781	SRP9	NM_003133	8.9393966	0.088866569	0.7292968	4.44E-16	9.5E-01	1.3	2.6E-05	
2446447	ACBD6	NM_032360	12.132013	0.088675699	0.7012445	1.40E-14	--	--	--	
2727976	CEP4	NM_025009	16.376684	0.088072101	0.6682052	6.24E-13	4.5E-04	1.4	3.5E-03	
2611211	MKRN2	NM_014160	8.1992348	0.087784452	0.7299925	4.44E-16	--	--	--	
3935232	C21orf56	NM_032261	15.249113	0.087596111	-0.6875285	7.19E-14	1.8E-04	1.4	1.0E+00	
2519294	KIAA1946	NM_177454	10.207512	0.087397287	0.6636305	1.02E-12	1.2E-04	1.9	3.0E-01	
3766415	SMARCD2	NM_003077	34.952538	0.087244961	-0.6457707	6.32E-12	1.0E-06	1.2	1.1E-02	
2405364	AK2	NM_001625	14.485198	0.08694685	0.7221329	8.88E-16	1.9E-02	1.3	5.8E-07	
2898452	MRS2L	NM_020662	8.5273701	0.085829257	0.7175404	1.78E-15	2.3E-01	1.2	2.2E-07	
2341565	SFRS11	NM_004768	8.5219958	0.085752755	0.6749214	3.00E-13	--	--	--	Yes
3873480	SNPH	NM_014723	14.266935	0.085390541	-0.6987662	1.89E-14	1.5E-09	1.4	3.5E-03	
2843855	ZFP2	NM_030613	8.9620017	0.085299096	0.7211584	1.11E-15	--	--	--	
2515183	FLJ13096	NM_025000	9.0315033	0.085083762	0.6943327	3.24E-14	--	--	--	
3871127	TNNI3	NM_000363	12.93671	0.084700601	-0.7227317	8.84E-16	--	--	--	
2713837	ZNF679	NM_153363	8.6370904	0.084375576	0.7214072	1.11E-15	--	--	--	
3871256	KIAA1115	NM_014931	11.763227	0.083893279	-0.7077091	6.25E-15	1.8E-04	1.2	3.6E-02	
2349345	AMY2B	NM_020978	10.764585	0.082430084	0.699637	1.69E-14	--	--	--	
2745646	SMARCA5	NM_003601	23.80416	0.081991383	0.6183218	8.38E-11	2.3E-02	1.4	1.4E-05	
2515276	DNCI2	NM_001378	9.4206762	0.081905774	0.7423157	0	1.0E+00	1.2	1.9E-05	
2953435	C6orf130	NM_145063	14.147837	0.080951751	0.578283	2.39E-09	--	--	--	
3459604	PPM1H	XM_350880	12.572246	0.080595554	-0.7349948	1.62E-16	4.5E-08	1.3	1.8E-02	
2394784	FLJ23323	NM_024654	8.9130318	0.080536818	0.7044962	9.33E-15	--	--	--	
2577896	MCM6	NM_005915	9.1865793	0.080137678	0.6903092	5.20E-14	--	--	--	
3014904	ZNF655	NM_001009960	8.4993689	0.08009128	0.6488657	4.64E-12	--	--	--	
3067644	THAP5	NM_182529	8.4626353	0.079835372	0.7261489	4.44E-16	--	--	--	
2738466	SCYE1	NM_004757	8.4826929	0.07970821	0.7010098	1.44E-14	--	--	--	
2655387	EIF2B5	NM_003907	8.1585965	0.078316891	0.6876797	7.06E-14	1.0E+00	1.1	3.7E-05	
3003107	FLJ39963	NM_182633	8.7921398	0.07786524	0.7360603	0	--	--	--	
2514563	KLHL23	NM_144711	9.712807	0.07771265	0.6657685	8.10E-13	--	--	--	
3662417	CETP	NM_000078	11.667139	0.077562264	-0.7092387	5.15E-15	7.7E-05	1.1	7.9E-03	
2511432	GPD2	NM_000408	10.887342	0.077204722	0.6495708	4.33E-12	5.4E-05	2.1	1.1E-04	
2687739	CD47	NM_198793	14.683442	0.076454095	0.5572849	1.16E-08	2.3E-05	1.9	1.4E-02	
2500919	SLC20A1	NM_005415	8.9944442	0.075631274	0.7132781	3.11E-15	2.6E-03	1.3	1.3E-06	
2425118	SAS-6	NM_194292	8.8906989	0.074584825	0.6854023	9.19E-14	--	--	--	
3085874	MTMR9	NM_015458	13.859849	0.074373646	0.5847286	1.44E-09	1.2E-01	1.3	6.5E-04	
2358906	PSMB4	NM_002796	8.8523773	0.073893087	0.5028633	4.40E-07	--	--	--	
2796790	KIAA1430	AK091993	6.8124175	0.072735752	0.6817124	1.40E-13	--	--	--	
2899506	HMGN4	NM_006353	7.5868643	0.072148541	0.6935219	3.55E-14	--	--	--	
3063368	DKFZp727G131	AK024526	8.7009243	0.071064664	0.7098038	4.88E-15	--	--	--	
2574884	FLJ10006	NM_017969	8.6164496	0.070238561	0.7190881	1.33E-15	--	--	--	
3866135	PRKD2	NM_016457	18.219721	0.070155115	-0.604381	2.84E-10	4.7E-08	1.3	6.4E-08	
2435195	MRPL9	NM_031420	9.0434371	0.070048787	0.4853833	1.24E-06	--	--	--	
3012019	CLDN12	NM_012129	13.874561	0.06965928	0.6344343	1.90E-11	--	--	--	
3027808	MULK	NM_018238	10.354228	0.069633524	0.69961	1.71E-14	5.8E-02	1.4	1.0E-03	
2748061	TRIM2	NM_015271	12.97454	0.069582396	0.4872068	1.12E-06	7.8E-04	1.5	2.8E-02	
2817793	UNQ9217	NM_205548	9.8927304	0.069091505	0.6952477	2.89E-14	--	--	--	
2713192	LOC391609	XM_497952	7.1251408	0.068877721	0.7001109	1.60E-14	1.2E-01	1.7	1.2E-17	
3968303	APXL	NM_001649	8.6733131	0.068117006	-0.6857877	8.79E-14	1.6E-09	1.8	9.3E-09	
2409069	CCDC23	NM_199342	7.5497439	0.067213193	0.6372688	1.45E-11	--	--	--	
3103494	FLJ20533	NM_017866	6.896827	0.066644493	0.6751581	2.92E-13	2.3E-02	1.7	7.8E-05	
2409904	EIF2B3	NM_020365	7.4483669	0.066395265	0.6772426	2.32E-13	--	--	--	
2963784	C6orf166	NM_018064	7.1518637	0.066360181	0.698438	1.95E-14	--	--	--	
2915357	RWDD2	NM_033411	9.4696698	0.066253042	0.6687671	5.87E-13	--	--	--	
2690776	B4GALT4	NM_212543	8.5620037	0.066183347	0.7099441	4.66E-15	--	--	--	
2559696	CGI-121	NM_016058	6.5320534	0.066159393	0.6920702	4.22E-14	--	--	--	
2562685	IMMT	NM_006839	9.150958	0.065913571	0.591958	8.01E-10	--	--	--	
2363424	UFC1	NM_016406	9.3751248	0.065821728	0.6130409	1.34E-10	--	--	--	
2655773	POLR2H	NM_006232	9.9291075	0.065476719	0.5561058	1.27E-08	--	--	--	
2715749	GRK4	NM_001004057	7.629047	0.064989551	0.6337897	2.02E-11	--	--	--	
2887633	FAM44B	NM_138369	6.6902988	0.064438009	0.5800543	2.08E-09	--	--	--	
2674179	USP4	NM_199443	7.6160592	0.064358832	0.6175173	9.01E-11	--	--	--	
2635998	TAGLN3	NM_001008272	7.8792806	0.064116889	0.6236859	5.16E-11	1.2E-04	1.5	5.7E-02	
2978026	FBXO30	NM_032145	13.911642	0.063793754	0.5434124	3.12E-08	4.9E-01	1.5	1.1E-03	
2768654	OCIAD2	NM_001014446	7.1914659	0.063646067	0.635492	1.71E-11	--	--	--	
2460487	C1orf131	NM_152379	7.6076671	0.063350677	0.6640872	9.68E-13	--	--	--	
2649113	TIPARP	NM_015508	11.704279	0.063308704	0.6010516	3.76E-10	--	--	--	
3053380	ZNF117	NM_024498	8.3946057	0.063298016	0.6436889	7.76E-12	--	--	--	
3585905	APBA2	NM_005503	11.804983	0.063260129	-0.6493096	4.44E-12	3.9E-07	1.4	6.3E-03	
2871801	FEM1C	NM_020177	7.1060886	0.062497898	0.7086735	5.55E-15	7.4E-01	1.2	6.0E-06	
2451463	ADIPOR1	NM_015999	16.791684	0.062459585	0.6111419	1.58E-10	--	--	--	
2465182	TFB2M	NM_022366	6.908683	0.062225051	0.6369016	1.50E-11	--	--	--	Yes
3243846	RET	NM_020975	6.8952306	0.062087237	-0.692618	3.96E-14	1.3E-03	1.3	6.0E-02	
2382419	CNIH4	NM_014184	7.7373509	0.062030127	0.6402284	1.09E-11	--	--	--	
2572601	FLJ10996	NM_019044	7.1335657	0.061153284	0.6867798	7.84E-14	--	--	--	
2336497	ZYG11B	NM_024646	8.9037726	0.061083266	0.541057	3.68E-08	--	--	--	
3636169	RPS17	NM_001021	7.193434	0.060628059	-0.691092	4.74E-14	2.2E-12	1.4	3.0E-02	
3056414	RFC2	NM_002914	6.9941648	0.060348081	0.4823546	1.48E-06	--	--	--	

2319802	PGD	NM_002631	6.2730168	0.060252936	0.6494159	4.39E-12	1.9E-01	1.1	1.9E-03	
2582979	WDSUB1	NM_152528	12.441362	0.059579075	0.5728221	3.65E-09	--	--	--	
2437577	YY1AP1	NM_018253	9.147798	0.059345651	0.6053447	2.61E-10	--	--	--	
3200040	BNC2	NM_017637	9.1778114	0.05911574	-0.6984205	1.97E-14	--	--	--	
2957462	GSTA4	NM_001512	6.1166502	0.058880111	0.6922183	4.15E-14	--	--	--	
2403335	EYA3	NM_001990	8.0794496	0.05854595	0.6184781	8.26E-11	1.6E-01	1.2	4.0E-04	
2919927	C6orf203	NM_016487	6.9777442	0.058053968	0.6516541	3.51E-12	--	--	--	
2669157	EPM2AIP1	NM_014805	8.1249864	0.057648643	0.6209399	6.62E-11	--	--	--	
2877141	HNRPA0	NM_006805	5.4356856	0.057633867	0.6064637	2.37E-10	--	--	--	Yes
3883013	TP53INP2	NM_021202	7.57088	0.057359684	-0.678432	2.03E-13	3.5E-08	1.4	4.7E-01	
2967321	PREP	NM_002726	9.6110822	0.057212252	0.5592426	1.01E-08	--	--	--	
2651165	SERPINI1	NM_005025	11.057286	0.056782958	0.6141561	1.21E-10	--	--	--	
2840425	RANBP17	NM_022897	6.4793716	0.056612654	0.6509561	3.76E-12	1.7E-02	1.7	3.1E-11	
2761321	FAM44A	NM_148894	6.9524796	0.056441733	0.6499774	4.15E-12	1.0E+00	1.1	1.7E-03	
2958670	RAB23	NM_183227	6.4121448	0.056418126	0.6676351	6.63E-13	--	--	--	
2358761	PSMD4	NM_002810	6.8298482	0.055682184	0.6929824	3.77E-14	7.6E-02	1.2	1.8E-05	
2707764	RP42	NM_020640	7.155417	0.055503399	0.5545827	1.42E-08	--	--	--	
2966193	C6orf168	NM_032511	11.306527	0.054824397	0.5880173	1.10E-09	--	--	--	
2407729	RRAGC	NM_022157	6.7847441	0.054500397	0.6621797	1.18E-12	--	--	--	Yes
2844082	RUFY1	NM_025158	9.8599858	0.054008683	0.5159087	1.95E-07	--	--	--	
2829542	FLJ37562	NM_152409	9.6873219	0.053935733	0.5951733	6.15E-10	--	--	--	
2876011	SKP1A	NM_006930	6.7553338	0.05341002	0.6933752	3.62E-14	7.5E-01	1.4	1.5E-04	
3770799	CASKIN2	NM_020753	17.424701	0.053078781	-0.603101	3.16E-10	--	--	--	
3333668	LOC374395	NM_199337	9.9585861	0.052224546	-0.6067264	2.32E-10	1.8E-06	1.5	2.0E-06	
2443537	SCYL3	NM_020423	5.6564841	0.051907834	0.6764499	2.53E-13	--	--	--	
3273667	ADARB2	NM_018702	7.3307512	0.05150445	-0.6582378	1.79E-12	2.3E-11	1.5	2.6E-06	Yes
2334459	LOC441371	XM_496987	5.1228636	0.051487026	0.6735858	3.47E-13	--	--	--	
3949722	FAM19A5	NM_015381	19.213026	0.051431765	-0.6012399	3.70E-10	3.1E-14	1.8	2.0E-01	
3113456	MTBP	NM_022045	6.7140047	0.051414549	0.6757664	2.73E-13	--	--	--	
2523689	ABI2	NM_005759	13.75688	0.051259984	0.5819925	1.79E-09	2.8E-04	1.6	2.4E-05	
2522014	FLJ22555	NM_024520	6.1006199	0.051213785	0.6993958	1.75E-14	--	--	--	
2886977	FBXW11	NM_033645	7.6205528	0.051008716	0.6277647	3.54E-11	1.0E+00	1.3	6.8E-12	
2774565	LOC440280	XM_496071	6.1498024	0.050450683	0.6651257	8.67E-13	--	--	--	
2510884	ARL6IP6	NM_152522	7.1543278	0.050150839	0.5805863	1.99E-09	--	--	--	
2708229	PSARL	NM_018622	6.6438304	0.049903017	0.4834099	1.39E-06	--	--	--	
2417174	PAI-RBP1	NM_015640	5.2098559	0.049664581	0.6311086	2.59E-11	--	--	--	
2544012	KIAA1240	XM_039676	6.0349025	0.049515658	0.6930087	3.77E-14	--	--	--	
3114064	WDR67	NM_145647	8.527209	0.049420869	0.5825637	1.71E-09	2.4E-06	1.4	3.5E-14	
2617796	ENDOGL1	NM_005107	4.7991414	0.048313588	0.6763971	2.54E-13	--	--	--	
2836886	MRPL22	NM_014180	5.5746092	0.047916933	0.6032042	3.14E-10	--	--	--	
2446567	STX6	NM_005819	6.7804409	0.047727263	0.6120832	1.46E-10	1.7E-04	1.6	3.8E-05	
3629652	NOPE	NM_020962	5.8474248	0.047639216	-0.5658049	6.20E-09	6.4E-04	1.5	2.3E-05	
3094447	ASH2L	NM_004674	8.5571485	0.047462485	0.5118579	2.52E-07	--	--	--	
2363919	ATF6	NM_007348	9.4308683	0.047373827	0.584248	1.49E-09	--	--	--	
2793310	LOC389705	XM_372076	5.9778538	0.047079817	0.6781513	2.09E-13	--	--	--	
2509557	ACVR2A	NM_001616	6.749819	0.046824922	0.6537872	2.82E-12	2.0E-03	1.4	2.6E-05	
3023795	KIAA0265	NM_014997	11.992896	0.046666235	0.596553	5.48E-10	--	--	--	
2989269	AD7C-NTP	AF010144	4.2804309	0.046363775	0.6635693	1.02E-12	--	--	--	
3119735	ZNF623	NM_014789	6.5839009	0.045984724	0.6378248	1.37E-11	--	--	--	
2319340	MGC4399	NM_032315	12.331656	0.045944995	0.5824437	1.72E-09	--	--	--	
3338192	CCND1	NM_053056	12.371362	0.045597331	-0.6373915	1.43E-11	4.8E-16	1.8	1.1E-16	
3645901	FLJ14154	NM_024845	5.440638	0.045250053	-0.6457097	6.36E-12	--	--	--	
2992998	MGC72075	NM_199136	5.9548467	0.045151206	0.6585797	1.73E-12	--	--	--	
2827525	KDELC1	NM_024089	7.2316941	0.044854846	0.6018843	3.51E-10	6.1E-03	1.7	6.9E-11	
3015216	COPS6	NM_006833	5.9952306	0.044576419	0.3110434	0.0028454	--	--	--	
2403740	SFRS4	NM_005626	5.4901185	0.044244777	0.486566	1.16E-06	--	--	--	Yes
3734479	FLJ20255	NM_017728	5.9257464	0.043673664	-0.6580927	1.81E-12	2.2E-05	1.2	4.9E-02	
2963407	SYNCRIP	NM_006372	5.1001404	0.043647013	0.5937366	6.92E-10	4.2E-01	1.2	1.8E-04	Yes
3037304	MGC12966	NM_032706	4.7913687	0.042412278	0.6503888	3.99E-12	--	--	--	
2644702	FAIM	NM_018147	5.8338512	0.042374234	0.5326681	6.51E-08	--	--	--	
2792420	FLJ38482	NM_152681	5.4926451	0.042216897	0.6862183	8.37E-14	1.0E+00	1.3	8.9E-05	
2427500	HBXIP	NM_006402	6.3802789	0.041901951	0.5815184	1.85E-09	--	--	--	
2450416	KIF14	NM_014875	5.5173974	0.04095835	0.5626584	7.84E-09	--	--	--	
2738314	FLJ13273	NM_024751	5.7061572	0.040730549	0.6570496	2.02E-12	--	--	--	
3053691	LOC401204	XM_376416	4.7332413	0.040665188	0.5803619	2.03E-09	--	--	--	
2635641	PVRL3	NM_015480	6.9416819	0.040394821	0.5608221	8.98E-09	5.5E-01	1.4	3.4E-05	
3644973	PDPK1	NM_031268	6.6130415	0.0402535	-0.468763	3.16E-06	--	--	--	
3272566	KNDC1	NM_033404	9.226347	0.039734514	-0.5291605	8.23E-08	1.8E-11	1.8	5.3E-17	
2367793	LOC338862	XM_375029	4.062931	0.039205815	0.6599814	1.49E-12	1.0E+00	1.1	9.8E-04	
2527939	BCS1L	NM_004328	4.2731605	0.039110175	0.6232658	5.36E-11	--	--	--	
2899437	BTN2A1	NM_007049	4.2146965	0.039016018	0.6667109	7.32E-13	--	--	--	
2832459	PCDHB14	NM_018934	4.7666589	0.038319286	0.5914977	8.32E-10	--	--	--	
2808612	LOC441070	NM_001013715	3.5681264	0.037576137	0.6290227	3.15E-11	--	--	--	
2545811	PPM1G	NM_177983	4.0307998	0.036334233	0.4779199	1.90E-06	--	--	--	
2520113	INPP1	NM_002194	10.135002	0.036034047	0.5409378	3.71E-08	--	--	--	
2981874	TCTEL1	NM_006519	5.2322512	0.034782416	0.4995887	5.36E-07	--	--	--	
2878726	HDAC3	NM_003883	3.4321105	0.033947191	0.5150303	2.06E-07	--	--	--	
2449619	ZBTB41	NM_194314	4.764423	0.033473742	0.4783808	1.85E-06	--	--	--	
2512790	SLC4A10	NM_022058	6.7945206	0.032815581	0.5048083	3.90E-07	--	--	--	
2521556	MARS2	NM_138395	3.7413887	0.032340249	0.6340261	1.97E-11	--	--	--	
2875634	ZCCHC10	NM_017665	3.3872532	0.032227486	0.6499638	4.16E-12	--	--	--	

2464484	LOC284702	AK095297	5.7436911	0.031333188	0.552459	1.65E-08	--	--	--	
3073597	CHCHD3	NM_017812	3.7271718	0.031155577	0.5269834	9.51E-08	--	--	--	
3082503	ZNF596	NM_173539	3.3907641	0.030395802	0.6457838	6.31E-12	--	--	--	
2900497	ZNF306	NM_024493	6.1222867	0.029622617	0.6025326	3.32E-10	--	--	--	
3022814	HIG2	NM_013332	3.4872392	0.029313118	0.5813491	1.88E-09	1.7E-01	1.2		2.5E-05
2561955	SUCLG1	NM_003849	5.5915882	0.028764599	0.3942519	0.0001206	--	--	--	
2738723	HADHSC	NM_005327	4.9296194	0.027867521	0.4509119	8.20E-06	1.1E-03	1.4		7.1E-03
2337003	MRPL37	NM_016491	3.0408166	0.026002066	0.440091	1.42E-05	3.1E-01	1.1		2.1E-06
3888850	BCAS4	NM_001010974	4.0285659	0.025707088	-0.6199825	7.22E-11	--	--	--	
2363525	NDUFS2	NM_004550	3.2472638	0.025575195	0.3945807	0.0001189	--	--	--	
2436716	UBE2Q	NM_017582	3.5263879	0.025512159	0.5088594	3.04E-07	--	--	--	
2405312	IBRDC3	NM_153341	5.6406361	0.024803004	0.4977121	6.01E-07	--	--	--	
2901352	PPP1R11	NM_021959	2.860281	0.024435889	0.3777752	0.0002418	9.1E-02	1.4		5.8E-04
2399765	CAPZB	NM_004930	16.014391	0.023784466	0.3455477	0.0008508	6.2E-04	1.4		4.2E-03
2500803	TTL	NM_153712	5.0628089	0.023476222	0.4238516	3.14E-05	3.6E-05	1.4		9.2E-01
2606574	NDUFA10	NM_004544	2.3408369	0.02121915	0.4845717	1.30E-06	3.1E-01	1.2		9.2E-04
2845879	CRR9	NM_030782	2.7343044	0.020740866	0.2526901	0.0162677	--	--	--	
2674168	FLJ43654	NM_198562	4.38986	0.020129238	0.4816626	1.54E-06	--	--	--	
2369110	RASAL2	NM_004841	3.399943	0.019254358	0.5254395	1.05E-07	--	--	--	
2336913	LRRC42	NM_052940	2.0094732	0.018436547	0.4167842	4.38E-05	--	--	--	
2907459	TNRC5	NM_183010	1.746791	0.014755773	0.3247311	0.001792	--	--	--	
2411799	C1orf165	NM_024603	1.6645914	0.014468685	0.4458026	1.07E-05	--	--	--	
3009299	MDH2	NM_005918	2.0002026	0.013884519	0.1388767	0.1917502	8.9E-01	1.2		5.8E-05
2360158	HAX1	NM_006118	1.6211673	0.013045843	0.4262712	2.80E-05	--	--	--	
2409613	PRNPIP	XM_290941	1.5627223	0.011642546	0.3417592	0.0009781	--	--	--	
2864449	C5orf12	NM_178276	2.7069734	0.011039709	0.4653969	3.80E-06	--	--	--	
2326496	DHDDS	NM_024887	2.6152739	0.009765762	0.2199131	0.0372799	2.1E-05	1.3		2.7E-06
3089853	CHMP7	NM_152272	1.1212346	0.009724068	0.3079001	0.0031547	--	--	--	
2649710	DKFZp547E087	AK128772	1.5781431	0.005590396	0.3942551	0.0001206	--	--	--	
2599345	AAMP	NM_001087	0.724029	0.00555083	0.1496175	0.1592817	--	--	--	

Table S20. M41 (wheat2): mRNA metabolism module

Transcript ID	Symbol	Accession	kTotal	kWithin-Connectivity	eigencorr	eigenpval	5-region ANOVA DEX	FoldChng	DAS	Annotated w/ GO BP "gene expression" or "RNA metabolism"?
3932148	BRWD1	NM_033656	52.052755	0.999999901	0.9345749	0	8.9E-02	1.2	2.9E-21	Yes
3347549	CUL5	NM_003478	52.531446	0.977265522	0.93209302	0	--	--	--	
3563922	MAP4K5	NM_006575	55.079817	0.97694571	0.93705411	0	5.5E-03	1.3	1.6E-06	
3517594	KIAA1008	NM_014953	50.533202	0.937923381	0.9389625	0	--	--	--	Yes
3145020	DKFZP434I116	NM_183009	50.738691	0.912269842	0.92221761	0	5.4E-03	1.3	1.7E-04	
3519119	C13orf10	NM_022118	47.616537	0.891933245	0.93310141	0	--	--	--	
3342525	PCF11	NM_015885	47.721181	0.880515684	0.92361758	0	1.9E-02	1.3	1.5E-03	Yes
3134922	LOC115294	NM_052937	55.755882	0.865794666	0.93201951	0	--	--	--	
3888133	CSE1L	NM_001316	48.558133	0.849053041	0.92414112	0	7.9E-02	1.2	2.1E-04	
3345593	PIG8	NM_014679	45.191969	0.810352469	0.90310907	0	1.9E-03	1.2	1.6E-02	
3537884	ARID4A	NM_023000	59.303867	0.795749152	0.92227739	0	5.5E-01	1.3	5.0E-08	Yes
3534128	KIAA0423	NM_015091	46.437385	0.793607046	0.90902312	0	--	--	--	
3320604	USP47	NM_017944	49.491928	0.787166211	0.90974236	0	--	--	--	
3257938	BTAF1	NM_003972	40.681416	0.786030344	0.90354922	0	2.4E-02	1.3	5.9E-07	Yes
3462094	MGC23401	NM_144982	40.36859	0.782637208	0.90251079	0	--	--	--	
3486883	NARG1L	NM_024561	39.241271	0.777253449	0.91373301	0	--	--	--	Yes
3614087	UBE3A	NM_130838	38.603865	0.776198966	0.91809381	0	3.1E-02	1.3	1.1E-14	
3480129	ZNF198	NM_003453	40.315181	0.760244615	0.89026283	0	3.2E-02	1.2	2.1E-04	Yes
3285552	ZNF248	NM_021045	41.317536	0.752712921	0.91206303	0	--	--	--	Yes
3422215	DKFZP564I0422	NM_031435	42.825993	0.749596799	0.90799589	0	3.1E-04	1.4	3.7E-01	
3800619	LOC440487	XM_496271	45.93283	0.74788607	0.90061765	0	--	--	--	
3661065	RBL2	NM_005611	44.641687	0.728688531	0.90709924	0	--	--	--	Yes
3292634	RUFY2	NM_017987	45.718535	0.722863418	0.90216056	0	--	--	--	
3238491	PCGF4	NM_005180	44.811464	0.711972299	0.89594558	0	2.0E-04	1.5	5.5E-03	Yes
3829857	ZNF302	NM_001012320	40.026398	0.707996912	0.89614143	0	--	--	--	Yes
3387413	MGC33371	NM_144664	41.670282	0.695477293	0.88015632	0	2.5E-05	1.3	6.2E-07	
3927949	ZNF294	NM_015565	39.945861	0.691870027	0.88576779	0	--	--	--	
3717539	RHOT1	NM_018307	39.948839	0.689908217	0.9077642	0	--	--	--	
3484005	C13orf22	NM_005800	47.942976	0.685929636	0.89530618	0	--	--	--	
3882854	ITCH	NM_031483	32.768246	0.682863869	0.90631751	0	3.4E-01	1.2	4.0E-04	
3439305	ZNF84	NM_003428	38.609362	0.681005283	0.87825562	0	1.8E-03	1.4	2.7E-01	Yes
3625823	SUHW4	NM_017661	41.138125	0.680959692	0.87147423	0	--	--	--	Yes
3387771	FLJ23518	NM_024725	37.887004	0.677996709	0.88767385	0	1.9E-01	1.3	1.2E-03	
3280224	LOC388972	XM_371511	42.201735	0.67748554	0.89797157	0	1.2E-03	1.4	2.3E-04	
3919952	MORC3	NM_015358	39.461135	0.673669324	0.88220845	0	--	--	--	
3812206	TXNDC10	NM_019022	36.302371	0.667999068	0.89245958	0	--	--	--	
3439378	ZNF10	NM_015394	39.283383	0.654746629	0.90597868	0	--	--	--	Yes
3559497	STRN3	NM_014574	37.344127	0.652404644	0.88751104	0	--	--	--	
3553690	MARK3	NM_002376	34.591784	0.652404607	0.91091199	0	9.0E-01	1.1	2.2E-05	
3422326	TBC1D15	NM_022771	38.862173	0.643616906	0.88530094	0	--	--	--	
3483159	PAN3	NM_175854	37.12723	0.638130013	0.86350455	0	4.0E-03	1.6	1.0E-06	Yes
3534201	PRPF39	NM_017922	38.119535	0.631083985	0.8804836	0	--	--	--	Yes
3508696	PFAAP5	NM_014887	34.65239	0.63046337	0.87881982	0	8.3E-02	1.6	2.2E-19	
3803194	KIAA1012	NM_014939	41.386581	0.629610555	0.89340726	0	--	--	--	
3419239	KIAA1040	NM_015026	30.835341	0.625638784	0.89964397	0	--	--	--	
3791168	KIAA1468	NM_020854	32.221241	0.624965346	0.86500145	0	4.2E-01	1.3	2.2E-03	
3426828	LOC400340	XM_375174	32.300513	0.62132895	0.88424702	0	--	--	--	
3776193	SMCHD1	XM_113962	37.268272	0.619114084	0.86750725	0	--	--	--	
4002011	CXorf23	NM_198279	39.360387	0.614026165	0.84764885	0	4.3E-02	1.3	9.5E-04	
3499453	TPP2	NM_003291	36.960109	0.606904445	0.852104	0	1.2E-03	1.2	2.6E-05	
3386814	MGC5306	NM_024116	37.913297	0.60351304	0.89509147	0	1.2E-01	1.3	8.0E-13	
3347658	ATM	NM_138293	29.172014	0.602746005	0.8615313	0	3.1E-01	1.3	7.3E-05	
3258092	MARCH3	NM_017824	37.495934	0.602455704	0.89970256	0	--	--	--	
3475717	FLJ11021	NM_023012	37.642983	0.600851363	0.87132159	0	5.1E-01	1.3	1.9E-03	
3303300	CHUK	NM_001278	33.360718	0.590171254	0.88807881	0	--	--	--	
3269587	C10orf137	NM_015608	31.683771	0.588928624	0.85895485	0	--	--	--	Yes
3300793	C10orf4	NM_203438	46.857513	0.584014966	0.87254933	0	1.0E+00	1.1	2.2E-03	
3623771	TRPM7	NM_017672	36.352196	0.58347589	0.87550248	0	--	--	--	
3429406	HCFC2	NM_013320	35.499537	0.581748587	0.87000004	0	2.9E-01	1.3	1.1E-04	Yes
3991650	PHF6	NM_032458	28.825447	0.581114386	0.8773394	0	--	--	--	Yes
3563459	SDCCAG1	NM_004713	41.897927	0.576384183	0.87173712	0	--	--	--	
3228097	TTF1	NM_007344	30.947358	0.571317218	0.893288	0	--	--	--	Yes
3627076	BNIP2	NM_004330	39.037937	0.567477979	0.87355369	0	--	--	--	
3343546	FLJ22104	NM_022918	47.306082	0.562065289	0.86173285	0	5.5E-05	1.4	3.3E-08	
3475679	ZCCHC8	NM_017612	31.085683	0.561776943	0.8926442	0	1.8E-03	1.4	3.5E-03	Yes
3534923	KLHDC2	NM_014315	33.443481	0.559480592	0.866162	0	8.1E-02	1.1	3.9E-04	
3962587	ARFGAP3	NM_014570	40.679221	0.559377712	0.87971298	0	1.9E-04	1.3	5.7E-04	
3733999	HLC-8	NM_017941	26.812238	0.558143683	0.89231832	0	--	--	--	
3929821	CRYZL1	NM_145858	44.520149	0.554018765	0.85595583	0	9.2E-10	1.4	4.8E-04	
3783749	RNF138	NM_016271	37.031065	0.551910933	0.89058861	0	--	--	--	
3547610	FLJ11806	NM_024824	29.687608	0.551282292	0.8794114	0	1.0E+00	1.2	1.0E-03	
3786039	PIK3C3	NM_002647	31.744882	0.539178985	0.87053005	0	2.9E-01	1.2	7.7E-04	
3448975	PTX1	NM_016570	45.740502	0.538045621	0.85699822	0	--	--	--	
3243908	dJ341D10.1	NM_001007535	34.293705	0.534938823	0.86443629	0	8.1E-04	1.4	1.5E-03	
3150663	TAF2	NM_003184	26.455745	0.530687104	0.85113468	0	1.0E+00	1.1	1.3E-03	Yes
3429754	KIAA1033	NM_015275	28.50428	0.530288345	0.86291404	0	9.2E-01	1.3	1.8E-04	
3549033	GOLGA5	NM_005113	32.565547	0.524235475	0.89163571	0	--	--	--	
3363923	COPB	NM_016451	26.875651	0.523039934	0.87692565	0	--	--	--	

3804195	SLC39A6	NM_012319	29.098477	0.518590166	0.87135697	0	6.6E-02	1.2	1.4E-10	
3731228	LOC90799	NM_138363	46.421092	0.514906678	0.80989874	0	4.4E-08	1.7	1.8E-08	
3499585	BIVM	NM_017693	26.15343	0.514696797	0.86774494	0	--	--	--	
3795680	THOC1	NM_005131	30.646162	0.512170107	0.85900406	0	--	--	--	Yes
3603336	IREB2	NM_004136	36.097139	0.508175518	0.82234397	0	1.9E-01	1.3	6.0E-06	
3626555	ADAM10	NM_001110	37.63191	0.505299912	0.83970386	0	2.1E-02	1.5	2.0E-04	Yes
4020444	THOC2	NM_020449	25.919178	0.502349914	0.82961645	0	3.5E-01	1.2	7.9E-05	Yes
3568080	C14orf150	NM_001008726	28.979471	0.500421046	0.86874033	0	2.7E-02	1.3	5.1E-04	
3553607	EIF5	NM_001969	26.675873	0.498266313	0.87404788	0	2.4E-01	1.1	8.7E-06	Yes
3468925	LOC440973	XM_496654	27.123689	0.495914011	0.86844191	0	--	--	--	
3869461	ZNF616	NM_178523	36.274413	0.493757899	0.85787519	0	--	--	--	Yes
3260829	C10orf6	NM_018121	23.876811	0.493331939	0.84070398	0	1.3E-01	1.2	2.6E-04	
3493448	C13orf24	NM_006346	25.990485	0.492701718	0.8623513	0	--	--	--	
3623424	COPS2	NM_004236	31.441292	0.489719438	0.86356411	0	--	--	--	Yes
3909395	DPM1	NM_003859	37.419552	0.489470558	0.82859509	0	--	--	--	
3726772	CROP	NM_006107	29.248308	0.48713641	0.84528046	0	8.9E-02	1.4	2.3E-29	Yes
3476012	MPHOSPH9	NM_022782	25.881097	0.48706919	0.8361447	0	--	--	--	
3451670	DKFZP434G1415	NM_031292	24.814365	0.485201226	0.84345957	0	--	--	--	
3860999	FLJ37549	NM_152605	26.98252	0.480679101	0.86889554	0	--	--	--	Yes
3428088	ACTR6	NM_022496	42.951011	0.471368324	0.84534556	0	--	--	--	
3446796	RECQL	NM_002907	32.651918	0.470407837	0.85675106	0	--	--	--	
3431426	CDV1	NM_014055	33.548968	0.466020519	0.86232483	0	--	--	--	
3309755	C10orf119	NM_024834	38.222498	0.463138011	0.80885865	0	3.7E-06	1.4	1.6E-01	
3420713	CAND1	NM_018448	24.72941	0.462274351	0.82843015	0	--	--	--	Yes
3408018	ETNK1	NM_018638	25.02841	0.460851348	0.84457297	0	--	--	--	
3148796	NUDCD1	NM_032869	39.452221	0.46053617	0.83059848	0	6.5E-04	1.5	1.6E-03	
3538470	C14orf135	NM_022495	28.569923	0.46009984	0.83829835	0	--	--	--	
3518455	FBXL3	NM_012158	29.201471	0.456517445	0.85153945	0	--	--	--	
3282213	YME1L1	NM_139313	35.401096	0.455394981	0.84470993	0	--	--	--	
4014076	CXorf43	NM_144657	26.863099	0.454620399	0.84721667	0	--	--	--	Yes
3788833	POLI	NM_007195	24.028463	0.453135226	0.86448036	0	--	--	--	
3138464	LOC402521	XM_379848	31.016529	0.452904057	0.84505389	0	6.6E-06	1.4	2.0E-07	
3203135	TOPORS	NM_005802	25.186842	0.452658628	0.84562132	0	--	--	--	Yes
3260099	C10orf28	NM_014472	24.463598	0.451766387	0.87183028	0	--	--	--	
3504791	EFHA1	NM_152726	36.282614	0.450266701	0.80440151	0	--	--	--	
3421897	CNOT2	NM_014515	30.567851	0.449912047	0.83854224	0	--	--	--	Yes
3258260	SEC15L1	NM_019053	26.42035	0.449141673	0.84882775	0	--	--	--	
3235932	PRPF18	NM_003675	30.798098	0.447539868	0.85368258	0	--	--	--	Yes
3530982	KIAA1333	NM_017769	26.35962	0.443013326	0.83990133	0	--	--	--	Yes
3629811	MYCPBP	NM_005848	22.822206	0.441706804	0.83899105	0	--	--	--	
3622934	MYEF2	NM_016132	21.925334	0.439519089	0.83593903	0	5.0E-02	1.3	8.2E-04	Yes
3831774	ZNF383	NM_152604	24.513993	0.438434667	0.86480767	0	--	--	--	Yes
3762625	MBTD1	NM_017643	38.500279	0.438125987	0.79041901	0	4.2E-08	1.6	9.7E-04	Yes
3488253	COG3	NM_031431	24.476571	0.437926508	0.85407634	0	--	--	--	
3849797	ZNF561	NM_152289	22.928738	0.437397191	0.84400847	0	--	--	--	Yes
3407824	GOLT1B	NM_016072	27.703305	0.437128468	0.82199948	0	--	--	--	
3627363	NARG2	NM_001018089	27.9936	0.435883082	0.8112676	0	--	--	--	
3550392	PAPOLA	NM_032632	23.172787	0.43335849	0.81863231	0	2.8E-01	1.4	2.6E-04	Yes
3256560	MINPP1	NM_004897	29.806003	0.432780416	0.83678826	0	--	--	--	
3177563	MAK10	NM_024635	20.760601	0.432569713	0.86559305	0	--	--	--	
3717635	ZNF207	NM_003457	21.974105	0.432377949	0.8461476	0	1.5E-02	1.4	1.8E-03	Yes
3462949	OSBPL8	NM_020841	25.827002	0.427641208	0.79193555	0	--	--	--	
3695268	APPBP1	NM_003905	34.408078	0.426577636	0.80992453	0	--	--	--	
3379390	SUV420H1	NM_017635	23.548099	0.426314587	0.81955319	0	8.8E-05	1.4	1.3E-04	Yes
3138414	ARMC1	NM_018120	27.763784	0.425840929	0.85194493	0	1.0E+00	1.2	7.0E-04	
3869379	ZNF614	NM_025040	23.394971	0.424830196	0.84833646	0	4.7E-03	1.4	1.3E-05	Yes
3264004	SHOC2	NM_007373	33.454428	0.424554161	0.79322294	0	1.7E-02	1.3	7.4E-04	
3298738	KIAA0261	NM_015045	23.333744	0.422443435	0.81758032	0	--	--	--	
3247757	UBE2D1	NM_003338	28.559191	0.422151164	0.83366406	0	--	--	--	
3541137	EIF2S1	NM_004094	38.757052	0.420428234	0.85569336	0	--	--	--	Yes
3879467	XRN2	NM_012255	35.223681	0.419426156	0.79198948	0	2.9E-06	1.4	1.4E-01	Yes
3898224	LOC402340	XM_378033	27.986778	0.417759581	0.83010993	0	--	--	--	
3263790	CSPG6	NM_005445	22.812515	0.41651763	0.8459617	0	2.4E-02	1.3	1.4E-06	Yes
3410384	LOC440176	XM_495984	21.035913	0.415269585	0.83837709	0	--	--	--	
3796244	METTL4	NM_022840	19.741935	0.410188807	0.86193521	0	--	--	--	
3800779	ESCO1	NM_052911	21.007626	0.40998033	0.82764433	0	--	--	--	
3537967	KIAA0586	NM_014749	29.23208	0.409651452	0.80257608	0	--	--	--	
3462843	NAP1L1	NM_004537	26.814064	0.407388681	0.82502866	0	3.6E-01	1.5	1.2E-07	
3509910	FAM48A	NM_001014286	20.721187	0.402143801	0.85007601	0	--	--	--	
3780287	RNMT	NM_003799	29.480614	0.400874219	0.78091524	0	1.7E-04	1.3	8.5E-02	Yes
3784727	STATIP1	NM_018255	35.627248	0.399705226	0.78395271	0	7.4E-07	1.4	5.8E-07	Yes
3526378	FLJ11305	NM_018386	25.164564	0.395917276	0.8363751	0	--	--	--	
3284882	CUL2	NM_003591	45.327252	0.392551104	0.80431517	0	--	--	--	
3452323	SLC38A2	NM_018976	28.085116	0.391947328	0.8065994	0	1.1E-06	1.5	5.4E-06	
3989721	LOC339793	XM_291017	23.262208	0.390676112	0.80320678	0	--	--	--	
3529156	C14orf120	XM_033371	22.262218	0.389889712	0.8170926	0	--	--	--	Yes
3636522	HDGFRP3	NM_016073	24.716095	0.388545918	0.81744298	0	1.0E-03	1.5	1.6E-01	
3344897	CRSP6	NM_004268	24.421464	0.387842737	0.7936044	0	9.2E-05	1.4	2.4E-02	Yes
3348891	FLJ10726	NM_018195	24.396629	0.387281879	0.85205084	0	1.1E-01	1.2	2.7E-04	
4018755	LRCH2	NM_020871	19.313973	0.387239239	0.84413077	0	1.7E-01	1.3	2.6E-09	
3292448	HERC4	NM_022079	33.177857	0.385115095	0.80572873	0	--	--	--	
3765642	KIAA1287	NM_020748	20.136301	0.385046188	0.83220682	0	--	--	--	Yes
3249738	HNRPH3	NM_021644	23.652304	0.38475426	0.81576951	0	5.2E-02	1.5	6.6E-04	Yes
3766960	SMURF2	NM_022739	29.683833	0.384126545	0.76606263	0	9.5E-04	1.4	6.5E-15	Yes

3874584		---	24.464732	0.384108774	0.82458268	0	--	--	--	
3130113	GTF2E2	NM_002095	21.939424	0.381584584	0.80781208	0	--	--	--	Yes
3860954	KIAA0961	NM_014898	26.312213	0.381053319	0.83795374	0	--	--	--	
3564790	ERO1L	NM_014584	21.362318	0.380745322	0.8368888	0	--	--	--	
3625326	CCPG1	NM_020739	31.198583	0.379918215	0.79243056	0	--	--	--	
4013730	BRWD3	NM_153252	20.238804	0.378973044	0.79623836	0	4.0E-02	1.3	5.9E-07	
3915087	USP25	NM_013396	24.079298	0.378765117	0.81742889	0	--	--	--	
3340697	UVRAG	NM_003369	26.47704	0.377026518	0.82574787	0	1.1E-02	1.3	1.1E-04	
3365249	LOC113174	NM_138421	26.59136	0.375531784	0.79884993	0	--	--	--	
3362934	LOC58486	NM_021211	26.557064	0.375099032	0.8150084	0	1.8E-03	1.6	1.1E-05	
3799542	C18orf9	NM_024899	20.06949	0.371428434	0.85084289	0	--	--	--	
3719474	TADA2L	NM_001488	25.728868	0.36768052	0.8454668	0	--	--	--	Yes
3860450	ZNF566	NM_032838	20.297837	0.367299391	0.83412299	0	--	--	--	Yes
3499632	ERCC5	NM_000123	24.293492	0.365324754	0.84827204	0	--	--	--	
3439603	JARID1A	NM_005056	23.91859	0.36274968	0.7625087	0	3.3E-04	1.3	6.4E-06	Yes
3345774	JRKL	NM_003772	32.315204	0.361908908	0.82272275	0	--	--	--	Yes
3421446	CPSF6	NM_007007	20.203572	0.361668878	0.79577133	0	4.3E-05	1.4	4.9E-01	Yes
3426215	MRPL42	NM_172178	22.395932	0.361193099	0.80344449	0	--	--	--	Yes
3975467	UTY	NM_182660	19.999705	0.358580795	0.82331612	0	--	--	--	
3362468	SBF2	NM_030962	21.93511	0.358011274	0.7820133	0	--	--	--	
3344861	PTD012	NM_014039	21.228008	0.357981862	0.81710348	0	--	--	--	
3861037	ZNF607	NM_032689	27.304931	0.35393553	0.8199002	0	--	--	--	Yes
3217807	TEX10	NM_017746	28.778089	0.353799882	0.77878814	0	1.4E-03	1.4	1.8E-04	
3849267	ZNF558	NM_144693	23.490544	0.35256704	0.80439231	0	2.1E-05	1.4	3.6E-01	Yes
3327948	TTC17	NM_018259	17.428819	0.352303283	0.81538937	0	9.2E-01	1.3	8.9E-04	
3447129	KIAA0528	NM_014802	17.699574	0.350674925	0.83350067	0	4.6E-01	1.2	7.7E-06	
3389529	KIAA1826	NM_032424	48.132755	0.349414062	0.79963694	0	--	--	--	
3497790	RANBP5	NM_002271	17.545348	0.347646861	0.81120207	0	1.1E-01	1.1	1.5E-11	
3869312	ZNF649	NM_023074	17.562904	0.347607619	0.83428424	0	--	--	--	Yes
3285614	ZNF25	NM_145011	19.992011	0.346836076	0.82011059	0	--	--	--	Yes
3531032	SCFD1	NM_182835	36.557283	0.346824883	0.77912669	0	--	--	--	
3423184	ZDHHC17	NM_015336	23.786147	0.34335445	0.81953669	0	--	--	--	
3240340	WAC	NM_100486	21.595622	0.3428563	0.81505321	0	--	--	--	
3719161	ZNF403	NM_024835	27.888447	0.341655009	0.79688969	0	--	--	--	
3547500	SPATA7	NM_018418	20.306569	0.340943534	0.8163124	0	--	--	--	
3476130	SBNO1	NM_018183	23.656538	0.339267807	0.76089556	0	--	--	--	
3462930	FLJ23560	NM_024685	19.909001	0.337683677	0.81095748	0	--	--	--	
3653317	RBBP6	NM_018703	17.272347	0.335939933	0.80293391	0	1.5E-01	1.3	1.6E-06	
3860824	ZNF569	NM_152484	16.090741	0.334663121	0.83919398	0	--	--	--	Yes
3383322	FLJ23441	NM_024678	17.798527	0.331269402	0.8348163	0	9.0E-01	1.4	2.8E-04	
3414512	LARP4	NM_052879	19.93277	0.330654603	0.80856573	0	--	--	--	
3864847	ZNF155	NM_003445	17.471161	0.329704625	0.84661263	0	--	--	--	Yes
3831698	ZNF420	NM_144689	18.8199	0.328820843	0.8026368	0	--	--	--	Yes
3343252	HSPC138	NM_016401	23.200744	0.328534437	0.78910773	0	--	--	--	
3591963	EIF3S1	NM_003758	29.556389	0.325226822	0.80157952	0	--	--	--	Yes
3346584	BIRC2	NM_001166	26.479715	0.324977981	0.79003576	0	--	--	--	
3322717	GTF2H1	NM_005316	20.850942	0.324975678	0.82418608	0	--	--	--	Yes
3543884	ZNF410	NM_021188	22.616709	0.323244852	0.77908767	0	--	--	--	Yes
3524618	FLJ10154	NM_018011	18.56706	0.321472723	0.78291078	0	7.8E-05	1.6	2.1E-06	
3307795	C10orf118	NM_018017	24.392816	0.320475819	0.77104553	0	--	--	--	Yes
3136782	NSMAF	NM_003580	17.361179	0.320046157	0.8220211	0	3.7E-04	1.5	7.4E-05	
3488022	KIAA1704	NM_018559	17.069295	0.320020538	0.83322859	0	--	--	--	
3828887	ZNF507	NM_014910	19.920401	0.31828991	0.78734427	0	--	--	--	Yes
3512527	RCN1	NM_002901	21.253226	0.3159073	0.78541479	0	5.7E-01	1.2	1.1E-04	
2600218	CHPF	NM_024536	38.86647	0.314269693	-0.8233834	2.28E-23	6.3E-07	1.3	1.8E-03	
3238466	COMMD3	NM_012071	25.73324	0.310587641	0.77988686	0	1.6E-08	1.8	6.0E-04	
3144760	LOC389677	NM_203390	15.347699	0.309244752	0.79061472	0	--	--	--	
3784602	GALNT1	NM_020474	25.808809	0.308936841	0.80260301	0	--	--	--	
3131916	WHSC1L1	NM_023034	16.671587	0.306409622	0.75161027	0	1.1E-02	1.3	1.5E-04	Yes
3749086	AKAP10	NM_007202	17.039501	0.304025662	0.81536203	0	--	--	--	
3463571	PPP1R12A	NM_002480	18.349904	0.303783258	0.78899856	0	--	--	--	
3851374	FLJ38281	NM_152601	17.877493	0.303436296	0.8095306	0	5.7E-01	1.1	2.4E-04	
3412008	PPHLN1	NM_201515	19.153435	0.301857946	0.81951508	0	1.0E+00	1.3	2.6E-09	
3518977	C13orf7	NM_024546	32.295333	0.299064985	0.77427033	0	1.1E-05	1.5	1.7E-03	
3683050	SMG1	NM_015092	19.639727	0.297932197	0.74558991	0	2.6E-03	1.3	1.6E-16	Yes
3410614	ARGFX	NM_001012659	15.936039	0.297624943	0.7658056	0	3.4E-02	1.3	9.7E-07	Yes
3164221	C9orf55	NM_017925	17.002435	0.29700683	0.77296058	0	--	--	--	
3166844	CHMP5	NM_016410	26.524213	0.296464604	0.77632282	0	--	--	--	
3835494	ZNF226	NM_015919	15.275864	0.296456098	0.79851752	0	--	--	--	Yes
3352904	SC5DL	NM_006918	24.801497	0.296416092	0.76592031	0	3.3E-02	1.5	1.4E-07	
3569200	ATP6V1D	NM_015994	40.194993	0.29517668	0.71330641	3.11E-15	--	--	--	
3537747	PSMA3	NM_152132	24.525553	0.293912031	0.72285538	8.88E-16	--	--	--	
3176999	C9orf76	NM_024945	14.275191	0.292980555	0.81496612	0	--	--	--	
3245682	MAPK8	NM_002750	43.497375	0.2927956	0.76837736	0	6.4E-09	1.7	4.5E-01	
3257750	HECTD2	NM_182765	18.886501	0.292272739	0.81536348	0	--	--	--	
3307120	ZDHHC6	NM_022494	39.281674	0.290122243	0.76074034	0	--	--	--	
3277662	UPF2	NM_080599	19.043726	0.289605916	0.79971129	0	--	--	--	Yes
3188299	FLJ41455	XM_499147	18.499875	0.289144863	0.80878773	0	1.0E+00	1.2	5.1E-05	
3660858	LOC390547	XM_372553	20.605053	0.28740533	0.76896756	0	1.0E+00	1.0	1.6E-05	
3221277	LOC441463	XM_499159	18.367583	0.285996843	0.77022937	0	--	--	--	
3181302	NCBP1	NM_002486	16.146177	0.284469948	0.80468974	0	--	--	--	Yes
3304624	NT5C2	NM_012229	15.990045	0.283858539	0.79182009	0	--	--	--	
3571347	NUMB	NM_001005743	19.805556	0.283604927	0.77309137	0	6.7E-03	1.2	6.6E-06	
3183364	DEPDC1	NM_017779	17.186283	0.283604382	0.81633945	0	6.2E-02	1.5	2.7E-07	

3365437	TSG101	NM_006292	14.705866	0.283260596	0.77430465	0	--	--	--	Yes
3471224	MGC14560	NM_016301	25.31628	0.283199546	0.77058095	0	--	--	--	
3504054	ZNF237	NM_014242	15.304878	0.282301195	0.83893314	0	--	--	--	
3482219	NUPL1	NM_001008565	13.329056	0.280647314	0.78598316	0	8.0E-02	1.2	1.7E-04	
3600744	ARIH1	NM_005744	17.270668	0.28031216	0.81081066	0	1.6E-01	1.2	2.7E-05	
3916576	GABPA	NM_002040	15.034636	0.279912518	0.7764924	0	1.8E-04	1.5	1.7E-06	Yes
3250019	DDX50	NM_024045	14.971859	0.279788439	0.78588531	0	1.0E+00	1.2	3.9E-05	
3224259	RBM18	NM_033117	16.218246	0.278813266	0.7761642	0	2.4E-04	1.4	1.9E-01	
3784468	ZNF397	NM_032347	16.98023	0.277808204	0.76349259	0	1.3E-06	1.3	5.4E-06	Yes
3857171	ZNF675	NM_138330	19.340228	0.2764391	0.80475391	0	--	--	--	Yes
3778252	ANKRD12	NM_015208	15.945231	0.275895441	0.77042162	0	3.7E-01	1.5	2.6E-04	
3183238	GARNL1	NM_014990	22.225911	0.274466693	0.72051542	1.33E-15	3.0E-04	1.9	1.7E-02	
3503164	CDC16	NM_003903	16.922834	0.274406794	0.78997134	0	--	--	--	
3257559	RPP30	NM_006413	15.092056	0.274391211	0.81471987	0	--	--	--	Yes
3125001	FLJ23749	NM_152271	20.732911	0.273169257	0.76873009	0	1.7E-03	1.4	3.3E-02	
3325680	hfl-B5	NM_006360	20.602206	0.271476161	0.78432705	0	--	--	--	Yes
3781082	SNRPD1	NM_006938	24.13454	0.269696995	0.77796751	0	--	--	--	Yes
3563734	SOS2	NM_006939	14.678202	0.268124629	0.77062667	0	--	--	--	
3212976	ZCCHC6	NM_024617	13.993324	0.267876421	0.803599	0	--	--	--	
3337618	C11orf23	NM_018312	14.434791	0.267399946	0.7527903	0	--	--	--	
3236448	SUV39H2	NM_024670	14.842894	0.266253333	0.78686176	0	--	--	--	Yes
3641871	LINS1	NM_018148	13.745608	0.265316525	0.80304375	0	2.0E-01	1.2	9.3E-04	
3713575	PRPSAP2	NM_002767	15.767684	0.265258915	0.80551808	0	--	--	--	
3578278	C14orf103	NM_018036	14.424958	0.264897908	0.74911436	0	5.5E-01	1.0	1.3E-03	
3904226	RNPC2	NM_184237	17.82844	0.264487338	0.74192098	0	2.2E-02	1.5	3.9E-05	Yes
3428131	SCYL2	NM_017988	18.494341	0.264102355	0.75537662	0	--	--	--	
3537813	ACTR10	NM_018477	17.971351	0.26345426	0.7651285	0	--	--	--	
3572235	MLH3	NM_014381	15.375114	0.2633454	0.78659214	0	8.2E-02	1.2	6.2E-04	
3390067	NPAT	NM_002519	13.908881	0.26294885	0.75042207	0	--	--	--	
3826041	ZNF253	NM_021047	13.624568	0.262846953	0.7879615	0	8.0E-02	1.2	4.2E-04	Yes
3471704	PCNP	NM_020357	17.53516	0.262458531	0.74025043	0	1.4E-01	1.3	7.9E-04	
3887635	NCOA3	NM_006534	16.238313	0.2612765	0.77078074	0	--	--	--	Yes
4019900	CUL4B	NM_003588	16.459816	0.2612219	0.78409132	0	--	--	--	
3679564	LOC345576	XM_293886	14.671789	0.260641828	0.77979674	0	--	--	--	
3453177	FLJ20436	NM_017822	16.140163	0.26022824	0.74881717	0	--	--	--	
3279410	C10orf97	NM_024948	19.93185	0.260023616	0.76489782	0	2.2E-01	1.3	9.7E-04	
3860491	LOC342892	XM_292740	15.99795	0.259430861	0.79478708	0	--	--	--	Yes
3218067	MRPL50	NM_019051	14.363751	0.258142674	0.78948282	0	1.1E-03	1.5	8.3E-03	
3826601	H-plk	NM_015852	13.048875	0.257526101	0.78289356	0	--	--	--	Yes
3214749	NOL8	NM_017948	13.145957	0.256662401	0.7856947	0	6.6E-01	1.3	1.8E-04	
3906821	C20orf111	NM_016470	12.765198	0.256575343	0.81085089	0	--	--	--	
3784509	ZNF271	NM_006629	55.045973	0.256480632	0.78193803	0	--	--	--	Yes
3690084	DNAJA2	NM_005880	22.889155	0.255226976	0.77138915	0	--	--	--	
3764103	SFRS1	NM_006924	15.76764	0.254728885	0.74904177	0	--	--	--	Yes
3835467	ZNF155	NM_003445	18.435516	0.254148623	0.76082442	0	1.2E-03	1.3	4.1E-08	Yes
3389745	CWF19L2	NM_152434	15.471595	0.253031028	0.77744729	0	--	--	--	
3224366	MNAB	NM_018835	18.068913	0.252432607	0.72326736	8.88E-16	--	--	--	
3250168	VPS26	NM_004896	19.133189	0.252385257	0.77588222	0	--	--	--	
3464622	Cep290	NM_025114	20.014497	0.251941147	0.75005199	0	4.0E-01	1.3	1.2E-04	
3668898	ZFP1	NM_153688	12.618906	0.251226345	0.80987396	0	--	--	--	Yes
3309629	TIAL1	NM_022333	11.846433	0.250688072	0.80877552	0	--	--	--	Yes
3148582	EIF3S6	NM_001568	16.218166	0.250655179	0.78357384	0	1.4E-03	1.8	1.8E-01	Yes
3747288	ZNF287	NM_020653	16.531892	0.250169053	0.80908182	0	--	--	--	Yes
3244539	ZNF22	NM_006963	15.354926	0.248649593	0.77504252	0	4.0E-05	1.8	9.0E-07	Yes
3917155	USP16	NM_001001992	15.812853	0.248113861	0.78809551	0	--	--	--	
3489020	RB1	NM_000321	28.732607	0.246857284	0.76774189	0	--	--	--	Yes
3259631	MLR2	NM_032440	13.240501	0.24668681	0.78776119	0	2.6E-01	1.3	1.2E-03	Yes
3212728	AGTPBP1	NM_015239	23.283639	0.246481106	0.68660251	7.99E-14	9.6E-05	1.5	1.0E-05	
3626704	FLJ13213	NM_024755	20.357862	0.245021892	0.80270404	0	--	--	--	
3576812	TRIP11	NM_004239	35.754747	0.244267192	0.75525062	0	1.0E+00	1.1	4.3E-05	Yes
3385003	ZF	NM_021212	15.682577	0.241861099	0.73538792	0	6.6E-06	1.5	3.0E-06	Yes
3981120	OGT	NM_181673	23.935584	0.241827634	0.74536301	0	5.3E-06	1.4	3.8E-24	
3856075	ZNF66	NM_001009883	24.801003	0.241297346	0.75468793	0	1.7E-04	1.3	9.2E-05	Yes
3420079	LEMD3	NM_014319	22.533155	0.240552274	0.73994727	0	1.9E-03	1.1	4.4E-03	
3238231	MLLT10	NM_001009569	15.249995	0.240223692	0.74741698	0	1.7E-02	1.3	8.7E-05	Yes
3444820	LRP6	NM_002336	32.506646	0.23624378	0.70269243	1.15E-14	3.4E-10	1.6	4.2E-07	
3870195	ZNF677	NM_182609	19.191827	0.234490546	0.79358626	0	--	--	--	Yes
3284073	EPC1	NM_025209	17.203589	0.233287708	0.71968968	1.33E-15	2.6E-07	1.4	5.2E-05	Yes
3811497	VPS4B	NM_004869	15.469357	0.232597342	0.78282436	0	--	--	--	Yes
4012949	ABCB7	NM_004299	13.310118	0.232251865	0.76154853	0	6.8E-03	1.3	9.6E-06	
3666779	NFAT5	NM_138713	13.231622	0.23058939	0.74620264	0	4.2E-01	1.3	3.8E-04	Yes
3631794	MYO9A	NM_006901	17.802812	0.229265899	0.66170311	1.25E-12	9.0E-03	1.4	4.7E-05	
3983154	ZNF6	NM_021998	16.174599	0.228818578	0.74276346	0	--	--	--	Yes
3835565	ZNF233	NM_181756	27.455203	0.226751848	0.71287938	3.11E-15	4.6E-05	1.4	6.5E-02	Yes
3196691	LOC392281	XM_497005	13.431722	0.225944497	0.78329147	0	--	--	--	
3538789	SLC38A6	NM_153811	33.274921	0.225874423	0.70150722	1.35E-14	--	--	--	
3742652	NUP88	NM_002532	46.006401	0.225335635	0.67518046	2.91E-13	4.8E-08	1.5	1.1E-08	
3269328	ZRANB1	NM_017580	11.116598	0.224326149	0.78284858	0	--	--	--	
3809324	TXNL1	NM_004786	14.043697	0.223547115	0.75457542	0	--	--	--	
3511189	MTRF1	NM_004294	17.199298	0.223320233	0.78309717	0	--	--	--	Yes
3462693	HRB2	NM_007043	20.27751	0.223092402	0.74286608	0	--	--	--	Yes
3163136	SNAPC3	NM_003084	12.15933	0.222854188	0.78398511	0	--	--	--	Yes
3534886	KLHDC1	NM_172193	21.951435	0.222432454	0.77345449	0	--	--	--	
3743119	KIAA0753	NM_014804	15.318323	0.221266323	0.74057291	0	--	--	--	

3183111	CDW92	NM_080546	33.352649	0.221227195	0.73327457	2.22E-16	5.6E-09	1.8	6.0E-11	
3685329	FLJ21816	NM_024675	10.297391	0.220958209	0.79438443	0	--	--	--	
3147321	EDD1	NM_015902	13.383765	0.220430916	0.73012866	4.44E-16	9.9E-03	1.2	7.2E-07	Yes
3216476	ZNF510	NM_014930	11.343223	0.219540025	0.74964877	0	--	--	--	Yes
3139035	ARFGEF1	NM_006421	19.178104	0.219266217	0.670807	4.71E-13	2.2E-04	1.5	5.7E-02	
3835418	ZNF224	NM_013398	11.997083	0.21864537	0.79308856	0	9.1E-01	1.1	6.6E-07	Yes
3831475	ZNF382	NM_032825	15.639335	0.218397491	0.71785642	1.78E-15	--	--	--	Yes
3591909	HSPC129	NM_016396	11.185229	0.218254119	0.7286537	4.44E-16	9.4E-03	1.2	6.3E-06	
3752097	C17orf42	NM_024683	11.485527	0.217628793	0.80304913	0	--	--	--	
4001369	SCML2	NM_006089	26.887257	0.217542492	0.68950794	5.71E-14	2.3E-09	1.7	4.2E-07	Yes
3498502	TM9SF2	NM_004800	44.162727	0.217061603	0.7353665	0	--	--	--	
3161167	KIAA1432	XM_039698	14.061445	0.216563458	0.75800562	0	2.3E-01	1.2	1.2E-04	
3216969	XPA	NM_000380	11.54397	0.215659633	0.79585031	0	3.7E-01	1.4	1.1E-04	
3909354	ADNP	NM_181442	10.290639	0.215078739	0.80445117	0	--	--	--	Yes
3514488	DDX26	NM_012141	10.667194	0.214814702	0.79640415	0	--	--	--	Yes
3430552	PWP1	NM_007062	18.85514	0.213574616	0.76082171	0	--	--	--	Yes
3864921	ZNF180	NM_013256	12.436516	0.211612657	0.76614401	0	3.2E-02	1.2	5.4E-04	Yes
3273601	IDI1	NM_004508	18.756714	0.211092427	0.73740529	0	--	--	--	
3872521	ZNF417	NM_152475	16.140932	0.21090491	0.77387864	0	--	--	--	Yes
4022833	MOSPD1	NM_019556	15.094017	0.209795731	0.7848409	0	--	--	--	
3214668	IARS	NM_013417	12.101158	0.209003298	0.75209728	0	8.2E-01	1.2	2.2E-03	Yes
3249788	CCAR1	NM_018237	13.959479	0.208211389	0.72616631	4.44E-16	5.9E-02	1.4	1.2E-04	
3561110	GARNL1	NM_014990	15.385455	0.207679824	0.75891618	0	1.0E+00	1.1	2.3E-05	
3236395	HSPA14	NM_016299	13.640973	0.207104733	0.77471045	0	--	--	--	
3386638	SLC36A4	NM_152313	15.268729	0.206346246	0.76099581	0	--	--	--	
4021508	SUHW3	NM_017666	13.939895	0.205122876	0.73394895	2.22E-16	1.2E-02	1.2	2.2E-03	Yes
3347615	ACAT1	NM_000019	20.932799	0.204828497	0.7195278	1.33E-15	4.6E-01	1.3	1.2E-06	
2392267	FLJ13941	NM_024848	15.883472	0.201715116	-0.7877116	3.27E-20	3.0E-14	1.5	8.0E-11	
3169094	WDR32	NM_024345	11.207269	0.201455291	0.7840089	0	--	--	--	
3369890	TRAF6	NM_145803	15.73671	0.200614829	0.74501766	0	3.0E-08	1.2	1.5E-01	
3872542	ZNF418	NM_133460	13.028757	0.197357004	0.75268859	0	1.7E-01	1.2	8.2E-05	Yes
3992148	DDX26B	NM_182540	9.7204627	0.197170952	0.78317805	0	--	--	--	
3152220	KIAA0196	NM_014846	9.5768543	0.197077547	0.77151011	0	5.8E-01	1.1	3.2E-04	
3398241	BTBD15	NM_014155	18.721365	0.195350125	0.72776874	4.44E-16	3.6E-04	1.3	4.4E-01	Yes
3199790	PSIP1	NM_033222	9.7079722	0.195280268	0.74464298	0	1.7E-01	1.4	2.8E-10	Yes
3826504	ZNF431	NM_133473	10.168105	0.195175142	0.77650561	0	2.4E-03	1.5	1.5E-03	Yes
3766861	POLG2	NM_007215	10.723715	0.194861557	0.77383622	0	--	--	--	Yes
3323443	HRMT1L3	NM_005788	17.993342	0.193955485	0.73194217	2.22E-16	--	--	--	
3513883	KPNA3	NM_002267	13.560062	0.192223603	0.67790693	2.15E-13	--	--	--	
3471819	FLJ13089	NM_024953	10.836111	0.191760337	0.7267018	4.44E-16	--	--	--	
3690550	SIAH1	NM_001006610	19.32272	0.191618976	0.74280348	0	5.6E-05	1.5	3.7E-02	
3490741	SUGT1	NM_006704	11.27301	0.191356414	0.76073753	0	--	--	--	
3625234	C15orf15	NM_016304	11.055248	0.191330813	0.77676949	0	--	--	--	Yes
3320301	SH2BP1	NM_014633	10.869562	0.190688925	0.72354552	8.88E-16	2.1E-01	1.2	5.8E-04	
3444180	KLRA1	NM_006611	10.296944	0.190524759	0.79565538	0	--	--	--	
3840224	ZNF528	NM_032423	9.5724999	0.190433663	0.77687096	0	2.1E-01	1.4	8.3E-06	Yes
3202421	C9orf72	NM_018325	12.662334	0.190423738	0.76147891	0	--	--	--	
3719112	TRIP3	NM_004773	11.659323	0.189867319	0.70617944	7.55E-15	--	--	--	
3265047	NHLRC2	NM_198514	13.566098	0.189672958	0.71157929	3.77E-15	--	--	--	
3513096	ESD	NM_001984	13.458476	0.189646219	0.72747435	4.44E-16	--	--	--	
3974708	USP9Y	NM_004654	15.415438	0.189519965	0.64674511	5.74E-12	--	--	--	
3793588	C18orf55	NM_014177	24.837832	0.188835074	0.72483726	6.66E-16	--	--	--	
3136015	FLJ32370	NM_152417	11.897072	0.188636089	0.77980801	0	--	--	--	
3202171	PLAA	NM_004253	12.67756	0.187971217	0.76666394	0	9.5E-01	1.1	4.7E-04	
3526151	TUBGCP3	NM_006322	10.639078	0.187787816	0.74615188	0	2.0E-01	1.3	1.3E-05	
3633890	ZNF291	NM_020843	15.289109	0.187157823	0.70324264	1.09E-14	7.5E-02	1.2	2.9E-04	
3797015	ZFP161	NM_003409	9.168646	0.186723074	0.76959992	0	--	--	--	Yes
2399718	AKR7A2	NM_003689	11.484075	0.186208195	-0.7399512	7.97E-17	9.6E-12	1.6	1.3E-01	
3726992	WDR50	NM_016001	10.001157	0.185332436	0.78483727	0	--	--	--	Yes
3292735	SLC25A16	NM_152707	14.330784	0.185326852	0.74050451	0	--	--	--	
3566304	SEC10L1	NM_006544	10.079799	0.184917307	0.74458719	0	1.0E+00	1.2	2.3E-05	
3602526	FBXO22	NM_147188	9.6824986	0.184304619	0.7596259	0	1.0E+00	1.2	7.3E-05	
3941907	EWSR1	NM_005243	9.5263892	0.184127861	0.775341	0	1.5E-04	1.4	1.0E+00	Yes
3363979	PSMA1	NM_148976	19.17646	0.184098023	0.63656034	1.55E-11	--	--	--	
3485786	RFXAP	NM_000538	9.7710771	0.183595023	0.75247234	0	--	--	--	Yes
3897431	MKKS	NM_170784	28.087764	0.18353594	0.72760785	4.44E-16	7.2E-02	1.2	2.2E-05	
3476265	EIF2B1	NM_001414	11.989059	0.18036459	0.73094985	4.44E-16	6.8E-04	1.3	7.2E-02	Yes
3449910	LOC196394	NM_207337	19.242376	0.179530037	0.70953353	4.88E-15	--	--	--	
3779817	Cep192	NM_032142	11.115678	0.178760303	0.75074698	0	--	--	--	
3560864	C14orf10	NM_017917	9.7131094	0.178459288	0.75944616	0	--	--	--	Yes
3233547	RBM17	NM_032905	12.446651	0.178111322	0.71791238	1.78E-15	--	--	--	Yes
3697799	AP1G1	NM_001128	9.9229271	0.17729982	0.72685398	4.44E-16	--	--	--	
3310725	C10orf88	NM_024942	9.6761589	0.177234358	0.76520454	0	--	--	--	
3570556	MED6	NM_005466	8.816936	0.175955777	0.78236422	0	--	--	--	Yes
3182409	ZNF189	NM_003452	11.491066	0.175794557	0.77041132	0	--	--	--	Yes
3538703	MAD2L1	NM_002358	8.7369306	0.174239415	0.76657201	0	--	--	--	
3178611	SECISBP2	NM_024077	16.778849	0.174086193	0.67338921	3.55E-13	1.4E-05	1.7	3.7E-02	Yes
3542207	SFRS5	NM_006925	9.9785966	0.173585939	0.71574272	2.22E-15	1.5E-01	1.4	4.1E-08	Yes
3747717	COPS3	NM_003653	13.88318	0.17356351	0.67241883	3.95E-13	--	--	--	
3359751	ZNF195	NM_007152	13.355004	0.172883796	0.7105898	4.44E-15	1.4E-06	1.5	3.3E-05	Yes
3742067	UBE2G1	NM_003342	10.125732	0.171975966	0.74316885	0	--	--	--	
3228007	ALS4	NM_015046	10.164486	0.171890987	0.66995529	5.16E-13	--	--	--	
4017245	FLJ11016	NM_018301	9.1475439	0.171619561	0.75973015	0	--	--	--	
3763687	COIL	NM_004645	8.8636587	0.171423732	0.77990369	0	--	--	--	

3843275	ZNF548	NM_152909	9.8508436	0.170654258	0.78408231	0	--	--	--	Yes
3504434	XPO4	NM_022459	16.266693	0.169883596	0.72800677	4.44E-16	--	--	--	
3807474	RPL17	NM_000985	12.081024	0.169783541	0.68114787	1.49E-13	--	--	--	Yes
3387033	MRE11A	NM_005590	12.7728	0.168830776	0.74005273	0	1.0E-01	1.1	3.0E-06	
3659858	FLJ38101	NM_153261	8.8277793	0.166820553	0.75762489	0	--	--	--	
3752002	CRLF3	NM_015986	16.99194	0.165076789	0.69159859	4.46E-14	3.5E-04	1.5	6.0E-07	
3732448	FALZ	NM_182641	8.9837414	0.164742024	0.6747211	3.06E-13	1.6E-02	1.2	1.4E-05	Yes
3319840	IPO7	NM_006391	8.2249977	0.163691954	0.75593837	0	--	--	--	
3364095	CYP2R1	NM_024514	12.192678	0.163676843	0.75605479	0	9.8E-03	1.3	3.8E-06	
3408573	LOC144363	NM_001001660	12.120372	0.162988908	0.73541146	0	--	--	--	
3295032	AP3M1	NM_012095	14.013486	0.162775884	0.67479061	3.04E-13	--	--	--	
3142519	ZFAND1	NM_024699	17.461402	0.162569602	0.695802	2.71E-14	--	--	--	
3907652	NCOA5	NM_020967	13.697086	0.159911891	0.68964086	5.62E-14	9.9E-06	1.5	1.9E-03	Yes
3185063	UGCG	NM_003358	15.20843	0.159741798	0.71630098	2.22E-15	--	--	--	
3652218	UQCRC2	NM_003366	14.154581	0.159573583	0.66152988	1.27E-12	--	--	--	
3269662	BCCIP	NM_078468	19.652609	0.159228586	0.71344966	3.11E-15	2.8E-02	1.4	1.6E-04	
3280902	DNAJC1	NM_022365	13.733714	0.158610994	0.6852636	9.33E-14	9.3E-04	1.5	3.8E-10	
3593770	AP4E1	NM_007347	9.7145048	0.158105231	0.752604	0	--	--	--	
3573261	SKIIP	NM_012245	14.122101	0.157658609	0.67559656	2.78E-13	5.2E-02	1.3	4.1E-07	
3833323	ZNF546	NM_178544	10.093088	0.157331023	0.76561684	0	1.3E-01	1.3	5.2E-04	Yes
3889766	PFDN4	NM_002623	10.050696	0.155895855	0.73761601	0	--	--	--	
3387171	HSPC148	NM_016403	9.5450192	0.155802873	0.71321756	3.11E-15	--	--	--	Yes
3662612	KIAA1972	NM_133368	7.9399806	0.155588844	0.69261705	3.95E-14	1.8E-01	1.3	1.0E-04	
3430776	NIFUN	NM_014301	12.523413	0.155311652	0.66221387	1.18E-12	--	--	--	
3407096	PLEKHA5	NM_019012	10.147317	0.153647734	0.73117995	4.44E-16	--	--	--	
3929721	GART	NM_000819	8.3886583	0.153375569	0.73194108	2.22E-16	1.1E-01	1.2	3.4E-04	Yes
3729294	RPS6KB1	NM_003161	11.108027	0.153302137	0.71601243	2.22E-15	--	--	--	
3391093	ALG9	NM_024740	13.195971	0.152096612	0.6651604	8.64E-13	--	--	--	
3406015	ATF7IP	NM_018179	7.3577775	0.151075128	0.70462472	9.33E-15	--	--	--	Yes
3629494	CLPX	NM_006660	9.1381943	0.15075581	0.75072166	0	--	--	--	
3372459	FNBP4	NM_015308	12.083245	0.149052412	0.66200149	1.21E-12	2.4E-04	1.3	4.5E-01	
3857105	ZNF91	NM_003430	7.7103711	0.148667776	0.6946824	3.11E-14	--	--	--	Yes
3304012	MGEA5	NM_012215	13.31208	0.148462237	0.66448613	9.28E-13	3.6E-02	1.5	1.2E-03	
3216529	FLJ16636	NM_001001662	8.068957	0.147285855	0.74130214	0	--	--	--	Yes
3407229	AEBP2	NM_153207	15.521624	0.147239133	0.70928284	5.11E-15	--	--	--	
3827427	ZNF254	NM_004876	6.8986713	0.147053792	0.74549368	0	--	--	--	Yes
3421523	YEATS4	NM_006530	11.965274	0.146681746	0.60222581	3.41E-10	--	--	--	Yes
3829768	UBA2	NM_005499	12.279052	0.146171775	0.63860291	1.27E-11	4.7E-02	1.5	2.2E-03	
3556418	METTL3	NM_019852	8.4521011	0.145538512	0.6962312	2.58E-14	--	--	--	Yes
3559570	HECTD1	NM_015382	8.3001007	0.144806168	0.70916533	5.33E-15	--	--	--	
3856554	ZNF100	NM_173531	11.048229	0.144416861	0.75056796	0	--	--	--	Yes
3760625	CDC27	NM_001256	8.2443479	0.143724297	0.68384395	1.10E-13	--	--	--	
3131844	LSM1	NM_014462	7.9970563	0.143357365	0.6393177	1.19E-11	--	--	--	Yes
3729014	GDPD1	NM_182569	6.8627055	0.143111063	0.77499462	0	2.1E-01	1.3	3.9E-04	
3396144	FLJ23342	NM_024631	7.0661337	0.142414061	0.73178513	2.22E-16	--	--	--	
3542689	PCNX	NM_014982	9.807159	0.142390789	0.71633415	2.22E-15	--	--	--	
3969455	OFD1	NM_003611	7.6547821	0.141586267	0.75324427	0	--	--	--	
3535674	C14orf166	NM_016039	8.8879274	0.141212302	0.71262963	3.33E-15	--	--	--	
3869339	ZNF350	NM_021632	20.243268	0.141139917	0.69184208	4.35E-14	4.0E-03	1.3	2.0E-03	Yes
3570454	C14orf112	NM_016468	13.16983	0.140968327	0.65564968	2.33E-12	--	--	--	
3201277	KLHL9	NM_018847	7.7288022	0.140937995	0.75477747	0	--	--	--	
3500772	C13orf6	NM_032859	9.3374163	0.140182384	0.72792497	4.44E-16	--	--	--	
3790259	MALT1	NM_173844	7.721626	0.138730938	0.7550539	0	--	--	--	
3452970	SENP1	NM_014554	11.654294	0.138724783	0.64941392	4.40E-12	4.5E-02	1.1	2.9E-07	
3831588	ZNF345	NM_003419	7.9763333	0.138554177	0.71364451	2.89E-15	2.6E-03	1.2	2.2E-04	Yes
3877776	SNRPB2	NM_198220	8.7434892	0.138458152	0.72375752	8.88E-16	--	--	--	Yes
3883547	PHF20	NM_016436	7.9389146	0.137558203	0.68548243	9.10E-14	--	--	--	Yes
3488094	GTF2F2	NM_004128	9.0689107	0.137123485	0.70611659	7.55E-15	--	--	--	Yes
3860596	GIOT-1	NM_153257	10.140715	0.136907186	0.70685392	7.11E-15	--	--	--	Yes
3483348	C13orf12	NM_015932	12.316126	0.13631054	0.56048942	9.21E-09	--	--	--	
3419807	XPOT	NM_007235	8.1829667	0.135826232	0.73647249	0	9.0E-01	1.2	5.7E-04	
3396736	PUS3	NM_031307	7.2521943	0.135752721	0.71362738	2.89E-15	--	--	--	Yes
3698055	TXNL4B	NM_017853	11.398203	0.134951752	0.68868816	6.28E-14	--	--	--	Yes
3409330	MRPS35	NM_021821	8.3590152	0.134188646	0.69144411	4.53E-14	--	--	--	
3807370	DYM	NM_017653	7.4961612	0.133980519	0.73063824	4.44E-16	3.0E-01	1.4	8.2E-04	
3416483	LOC389674	XM_372050	8.6147909	0.133043414	0.7372687	0	1.5E-06	1.4	1.1E-07	
3326183	M11S1	NM_203364	7.1839045	0.131544207	0.71347984	3.11E-15	1.9E-02	1.2	8.2E-04	
3365360	HPS5	NM_007216	8.4955799	0.131359978	0.70727862	6.66E-15	--	--	--	
3512449	NUFIP1	NM_012345	7.2602955	0.130723722	0.7698777	0	--	--	--	Yes
3821479	ZNF439	NM_152262	10.219506	0.129707657	0.70426731	9.77E-15	--	--	--	Yes
3446868	LDHB	NM_002300	13.978639	0.129489942	0.58821963	1.09E-09	--	--	--	
3469865	CRY1	NM_004075	12.275099	0.129209544	0.68857937	6.35E-14	--	--	--	Yes
3366519	FANCF	NM_022725	6.7850099	0.129189813	0.74511291	0	--	--	--	
3205586	EXOSC3	NM_016042	7.839101	0.128683776	0.7308779	4.44E-16	--	--	--	Yes
3143643	DKFZp761D112	AL136588	12.903282	0.127556234	0.65151928	3.56E-12	--	--	--	
3594129	MAPK6	NM_002748	6.1351853	0.127551133	0.74017623	0	--	--	--	
3839818	ZNF175	NM_007147	9.0046228	0.127534644	0.70543068	8.44E-15	9.5E-04	1.3	4.8E-02	Yes
3015603	LOC442715	XM_499461	17.669328	0.127463337	-0.7051781	8.59E-15	6.4E-22	1.5	1.6E-23	
3388914	MGC2714	NM_032299	8.1953676	0.125616563	0.70375305	1.02E-14	--	--	--	
3840142	ZNF480	BC054018	6.7470422	0.125076565	0.68727624	7.42E-14	--	--	--	Yes
3597977	TRIP4	NM_016213	8.4508553	0.124153772	0.70448643	9.33E-15	--	--	--	Yes
3870054	ZNF160	NM_198893	6.5283273	0.124118375	0.71089413	4.22E-15	--	--	--	Yes
3767339	GNA13	NM_006572	7.4626052	0.124083746	0.70682446	7.11E-15	--	--	--	
3576545	KIAA2010	NM_032560	5.7309948	0.120562489	0.74670423	0	--	--	--	

3434393	LOC390498	XM_497418	20.082208	0.118789007	0.63577617	1.67E-11	--	--	--	
3507962	KATNAL1	NM_032116	10.329731	0.116961393	0.64446846	7.19E-12	--	--	--	
3580947	C14orf2	NM_004894	8.1402435	0.116851406	0.55963069	9.81E-09	--	--	--	
3458133	PRIM1	NM_000946	14.120868	0.116075362	0.62681142	3.87E-11	2.6E-06	1.8	4.0E-13	Yes
3219682	C9orf5	NM_032012	9.9741985	0.116037102	0.64794731	5.09E-12	3.3E-01	1.3	1.9E-05	
3750595	IFT20	NM_174887	9.1156539	0.115244793	0.62203619	5.99E-11	--	--	--	
3819968	ZNF177	NM_003451	7.1820849	0.114461336	0.71014802	4.44E-15	5.5E-01	1.1	2.0E-04	Yes
3877221	C20orf7	NM_024120	7.2680266	0.114445361	0.71689787	1.78E-15	--	--	--	
3563372	C14orf104	NM_018139	6.409345	0.114279658	0.72907506	4.44E-16	--	--	--	
3659931	PAPD5	NM_022447	14.916252	0.114095517	0.60971553	1.79E-10	--	--	--	
3635776	LOC440298	XM_496086	6.99113	0.114082122	0.72799689	4.44E-16	--	--	--	
3286393	ZNF32	NM_001005368	7.45551	0.113887381	0.64108221	1.00E-11	--	--	--	Yes
3538555	PPM1A	NM_021003	6.0604985	0.113807022	0.683601	1.13E-13	8.9E-02	1.3	6.8E-04	
3143660	MMP16	NM_005941	16.357517	0.113603608	0.65555585	2.36E-12	1.0E-10	1.7	5.3E-14	
3831620	ZNF568	NM_198539	5.4884527	0.11346261	0.73215716	2.22E-16	--	--	--	Yes
3352503	ARHGEF12	NM_015313	11.982116	0.113224238	0.56381165	7.20E-09	1.0E-01	1.4	2.4E-12	
3169043	RG9MTD3	NM_144964	6.0715131	0.112480069	0.74721847	0	--	--	--	
3855985	ZNF14	NM_021030	5.5346192	0.112157033	0.72948858	4.44E-16	--	--	--	Yes
3544905	C14orf118	NM_017972	6.3862432	0.112074616	0.7050034	8.88E-15	--	--	--	
3831917	ZNF570	NM_144694	7.4405082	0.111196185	0.67938837	1.82E-13	--	--	--	Yes
3327166	LOC119710	NM_138787	6.380055	0.110680753	0.70887117	5.33E-15	--	--	--	
4016193	TMSL8	NM_021992	8.4843335	0.110569979	0.68313115	1.19E-13	--	--	--	
3764872	BIT1	NM_016077	7.9181172	0.110563421	0.73382832	2.22E-16	--	--	--	
3145586	MTERFD1	NM_015942	6.080143	0.110382016	0.72319105	8.88E-16	--	--	--	
3989089	ZBTB33	NM_006777	5.6026575	0.109746635	0.71584578	2.22E-15	--	--	--	Yes
3591281	SPCS2P	XM_170777	7.7599398	0.109720851	0.70167382	1.33E-14	--	--	--	
3256074	LOC283155	XM_208545	6.2068716	0.109703635	0.70703479	6.66E-15	1.7E-04	1.5	4.6E-07	
4022781	LOC159090	NM_145284	6.374583	0.109171332	0.70884329	5.33E-15	--	--	--	
3928070	CCT8	NM_006585	5.2944798	0.108525637	0.74002761	0	--	--	--	
3149754	EIF3S3	NM_003756	10.540219	0.107976055	0.5904898	9.03E-10	--	--	--	Yes
3343202	EED	NM_003797	5.8155904	0.107468161	0.7121492	3.55E-15	1.6E-01	1.4	1.2E-05	Yes
3564997	DDHD1	NM_030637	9.3003535	0.106892443	0.64446754	7.19E-12	--	--	--	
3439356	ZNF140	NM_003440	6.1298761	0.106818402	0.69085167	4.88E-14	--	--	--	Yes
3347831	DDX10	NM_004398	5.9416901	0.10677979	0.69201892	4.26E-14	5.0E-01	1.2	1.6E-03	
3506936	MTIF3	NM_152912	5.4259875	0.106119497	0.75293425	0	--	--	--	Yes
3598721	ZWILCH	NM_017975	8.0428152	0.105237211	0.67129076	4.47E-13	--	--	--	
3843156	ZNF272	NM_006635	5.0745202	0.103885491	0.66772575	6.57E-13	--	--	--	Yes
3842675	ZNF542	NM_194319	5.8387517	0.103696863	0.72078397	1.11E-15	4.7E-01	1.2	1.7E-04	Yes
3996815	VBP1	NM_003372	8.8961479	0.103644881	0.61985922	7.30E-11	--	--	--	
3956290	PITPNB	NM_012399	5.3607661	0.101648227	0.73404933	2.22E-16	--	--	--	
3354731	EI24	NM_001007277	9.7873971	0.098431172	0.61346613	1.29E-10	1.7E-01	1.4	9.7E-04	
3835339	ZNF155	NM_003445	5.9108163	0.097925709	0.70842643	5.77E-15	1.4E-03	1.5	1.9E-01	Yes
3556323	SUPT16H	NM_007192	5.889454	0.097612093	0.64606485	6.14E-12	--	--	--	Yes
3864725	ZNF45	NM_003425	5.1957385	0.097288749	0.73712012	0	--	--	--	Yes
3929395	C21orf66	NM_016631	5.6806627	0.097092112	0.6331345	2.14E-11	--	--	--	Yes
3562721	FKBP3	NM_002013	6.3003854	0.09708678	0.62069829	6.77E-11	--	--	--	
3151401	DERL1	NM_024295	11.803244	0.097021131	0.64794877	5.09E-12	--	--	--	
3849549	ZNF121	NM_001008727	5.7840295	0.096896572	0.64567593	6.38E-12	--	--	--	Yes
3821301	LOC441837	XM_497606	5.7834162	0.096865648	0.69667257	2.44E-14	1.0E-03	1.6	1.9E-03	
3518496	MYCBP2	NM_015057	17.747104	0.095560217	0.53097545	7.30E-08	5.4E-02	1.5	1.9E-06	Yes
3209623	ZA20D2	NM_006007	7.0547129	0.095221062	0.6866557	7.95E-14	5.4E-05	1.4	4.8E-03	
3702352	HSDL1	NM_031463	5.3243902	0.095195319	0.68998547	5.40E-14	--	--	--	
3322958	ZDHHC13	NM_001001483	8.1254015	0.095030857	0.6892382	5.91E-14	--	--	--	
3806711	IER3IP1	NM_016097	6.519412	0.094933324	0.64674046	5.74E-12	--	--	--	
3327906	API5	NM_006595	5.4474467	0.094916991	0.6949488	3.00E-14	--	--	--	
3136413	IMPA3	NM_017813	5.4820885	0.094170283	0.7167846	2.00E-15	--	--	--	
3717452	LRRC37B	NM_052888	5.3119578	0.094130446	0.72325375	8.88E-16	--	--	--	
3781124	MIB1	NM_020774	5.1288682	0.093662348	0.65350259	2.91E-12	--	--	--	
4013224	ATRX	NM_138271	6.8547729	0.093242116	0.67527986	2.88E-13	--	--	--	Yes
3396179		---	5.2285868	0.093064958	0.65797212	1.84E-12	--	--	--	
3250204	SUPV3L1	NM_003171	7.5200017	0.093023783	0.6232688	5.36E-11	--	--	--	
3464000	HSPC128	NM_014167	5.2252971	0.09269496	0.71961343	1.33E-15	--	--	--	
3843399	ZNF134	NM_003435	5.6952262	0.091965792	0.69965132	1.69E-14	--	--	--	Yes
3984907	ARMCX1	NM_016608	6.5331781	0.090899095	0.63769649	1.39E-11	7.1E-02	1.1	8.8E-05	
3454296	LASS5	NM_147190	5.1988477	0.090316168	0.66826679	6.20E-13	--	--	--	Yes
3484768	APRIN	NM_015928	5.1781081	0.090170624	0.69052405	5.06E-14	1.5E-01	1.4	3.8E-07	
3352813	LRRC35	NM_152715	5.2491571	0.089342649	0.66085115	1.36E-12	--	--	--	
4016308	BEX1	NM_018476	8.3561208	0.089300795	0.56520172	6.49E-09	--	--	--	
3925439	STCH	NM_006948	6.4469624	0.089070942	0.65311237	3.03E-12	--	--	--	
3503976	PSPC1	NM_018282	4.1636465	0.088280566	0.68177451	1.39E-13	2.1E-01	1.2	1.8E-06	Yes
3707715	RIP	NM_032308	8.848738	0.087225898	0.58371972	1.56E-09	--	--	--	
3477917	SLC15A4	NM_145648	6.4915422	0.085535851	0.68962826	5.64E-14	--	--	--	
3727962	DGKE	NM_003647	8.998889	0.084910797	0.62715042	3.75E-11	1.1E-01	1.2	7.9E-04	
3861064	ZNF573	NM_152360	4.4672433	0.084694245	0.72060041	1.33E-15	--	--	--	Yes
3806525	PIAS2	NM_173206	4.5512663	0.084441278	0.70673788	7.11E-15	--	--	--	Yes
3189110	GAPVD1	NM_015635	4.8634078	0.083882114	0.63137148	2.53E-11	6.5E-01	1.1	1.5E-03	
3309345	SFXN4	NM_178867	5.4287084	0.08385284	0.65152832	3.55E-12	--	--	--	
3851493	ZNF443	NM_005815	4.2239862	0.083265887	0.7103255	4.44E-15	--	--	--	Yes
4013018	ZDHHC15	NM_144969	4.6476906	0.083262921	0.67458759	3.11E-13	--	--	--	
3534866	MGAT2	NM_001015883	4.623048	0.08255162	0.69721941	2.29E-14	--	--	--	
3301011	NOC3L	NM_022451	4.8179639	0.082406622	0.64127447	9.82E-12	--	--	--	
3125775	CNOT7	NM_013354	5.0682855	0.081692259	0.69428438	3.24E-14	--	--	--	Yes
3475587	RSN	NM_198240	6.3442255	0.079742805	0.55790309	1.11E-08	2.6E-01	1.2	3.3E-08	Yes
3468103	MGC4170	NM_024312	11.294768	0.078118165	0.53099921	7.28E-08	9.8E-05	1.7	8.5E-04	

3864808	ZNF235	NM_004234	4.7229433	0.078110511	0.72412306	8.88E-16	--	--	--	Yes
3685306	NDUFAB1	BC058920	4.7209831	0.077989146	0.5331966	6.29E-08	--	--	--	
2711957	C3orf21	NM_152531	5.41863	0.076721854	-0.6888823	6.14E-14	--	--	--	
3651018	CP110	NM_014711	7.592289	0.076460123	0.61529729	1.10E-10	--	--	--	
4009604	WNK3	NM_001002838	5.9019149	0.075514751	0.51321675	2.31E-07	7.7E-02	1.3	1.7E-03	
3790479	SEC11L3	NM_033280	16.742067	0.075301249	0.47512693	2.22E-06	--	--	--	
3549264	KIAA1409	NM_020818	4.3720703	0.073585676	0.65260638	3.19E-12	3.4E-01	1.1	8.9E-04	
3907934	ZNF334	NM_199441	3.9558575	0.071375059	0.6549664	2.50E-12	--	--	--	Yes
3724698	NPEPPS	NM_006310	5.0629596	0.070929685	0.58822523	1.08E-09	3.5E-04	1.5	1.8E-02	
3808096	RKHD2	NM_016626	4.136122	0.070226128	0.61584707	1.05E-10	--	--	--	
3293280	PP	NM_021129	4.0840526	0.069836162	0.64635352	5.96E-12	--	--	--	
4019967	C1GALT1C1	NM_001011551	4.7343874	0.069575854	0.6896038	5.64E-14	--	--	--	
3742756	DERL2	NM_016041	5.4094122	0.067979639	0.5654232	6.38E-09	--	--	--	
3708826	LOC341784	XM_497370	3.1681373	0.065489599	0.68858924	6.35E-14	2.9E-04	1.3	5.8E-02	
3872310	ZNF550	NM_153231	4.0931484	0.065338579	0.64271269	8.54E-12	1.1E-09	1.6	2.3E-01	Yes
3265432	LOC402694	XM_380042	4.3135702	0.064372847	0.60403386	2.92E-10	--	--	--	
3439063	ZNF26	NM_019591	3.0969584	0.064350545	0.68772864	7.02E-14	--	--	--	Yes
3504691	LOC387905	XM_373559	3.42502	0.063734487	0.66844065	6.08E-13	6.5E-02	1.5	4.1E-06	
3929775	DONSON	NM_017613	2.9971	0.063695835	0.6760231	2.65E-13	--	--	--	
3751830	BLMH	NM_000386	6.5371637	0.063600566	0.53754402	4.68E-08	1.1E-02	1.2	3.5E-05	
3771800	SFRS2	NM_003016	3.5240988	0.061045034	0.59302493	7.34E-10	2.4E-03	1.6	3.5E-05	Yes
3489644	RFP2	NM_213590	6.9437408	0.061026859	0.59804214	4.84E-10	2.6E-04	1.5	6.9E-14	
3706219	LOC440396	XM_496177	5.5157804	0.060597388	0.59093433	8.71E-10	--	--	--	
3235461	C10orf7	NM_006023	3.7502668	0.059933206	0.58372819	1.56E-09	--	--	--	
3562086	FBXO33	NM_203301	3.5182988	0.059893832	0.68863364	6.31E-14	--	--	--	
3460593	CGI-119	NM_016056	4.2174564	0.059621726	0.55054368	1.89E-08	--	--	--	
3769969	FLJ14775	NM_032837	5.4512878	0.0592225	0.58515347	1.39E-09	9.7E-06	1.4	3.4E-03	
3638068	DET1	NM_017996	4.8631144	0.058657107	0.58469381	1.44E-09	--	--	--	
2890326	KIAA0676	NM_015043	2.9456695	0.058177792	-0.6667573	7.29E-13	--	--	--	
3878934	NAT5	NM_016100	3.9536092	0.0562111	0.59822252	4.77E-10	--	--	--	
3599162	MAP2K5	NM_145161	2.9717543	0.05605537	0.63988264	1.12E-11	--	--	--	
3217487	ALG2	NM_197973	2.7203011	0.055542349	0.67725681	2.31E-13	--	--	--	
3941643	FLJ33814	NM_173510	4.8859793	0.055499219	0.64399623	7.53E-12	--	--	--	
3325768	FLJ21924	NM_024774	3.0197569	0.054077324	0.5857768	1.32E-09	3.9E-02	1.4	3.0E-10	
3719702	MRPL45	NM_032351	3.3066092	0.053721836	0.56308194	7.60E-09	3.0E-01	1.2	1.8E-05	Yes
3730899	DDX42	NM_203499	2.8888664	0.048295216	0.58441274	1.47E-09	--	--	--	
3645836	ZNF75A	NM_153028	3.6012001	0.047819284	0.62137884	6.36E-11	--	--	--	Yes
3533397	SIP1	NM_001009183	3.0011354	0.047466145	0.56262389	7.86E-09	--	--	--	Yes
3384471	MDS025	NM_021825	4.3479783	0.046576398	0.51761277	1.75E-07	--	--	--	
3428671	CHPT1	NM_020244	3.1003971	0.046345478	0.61758133	8.96E-11	6.6E-01	1.2	5.3E-05	
3369249	MMRP19	NM_015957	4.0050867	0.046226727	0.55264773	1.63E-08	--	--	--	
3627042	GTF2A2	NM_004492	3.849061	0.045649667	0.52249177	1.28E-07	--	--	--	Yes
3351775	TRAPPC4	NM_016146	3.8793936	0.044150957	0.54335837	3.14E-08	--	--	--	
3451318	MADP-1	NM_033114	2.722813	0.040167045	0.51975013	1.52E-07	--	--	--	
2385797	KIAA1804	NM_032435	4.5513976	0.039004404	-0.5488269	2.14E-08	1.3E-16	1.5	3.4E-03	
3826079	ZNF66	NM_001009883	1.9357193	0.036804928	0.55626754	1.25E-08	4.4E-01	1.3	1.4E-03	Yes
3518169	COMMD6	NM_203495	2.4281868	0.036526182	0.47481499	2.26E-06	1.0E+00	1.3	3.0E-08	
3617458	GM88	NM_015003	3.8093647	0.035811848	0.49931121	5.46E-07	--	--	--	
3954525	SUHW2	NM_080764	2.2170038	0.031727004	0.55663906	1.22E-08	--	--	--	Yes
3138978	COPS5	NM_006837	2.0207451	0.028677045	0.53289309	6.42E-08	--	--	--	Yes
3210179	C9orf95	NM_017881	4.279596	0.023090087	0.49585242	6.71E-07	--	--	--	
3945056	EIF3S6IP	NM_016091	3.5948161	0.02213511	0.39502727	0.0001166	1.2E-04	1.4	2.8E-04	Yes
3302328	EXOSC1	NM_016046	2.3702114	0.018123589	0.42305172	3.27E-05	2.0E-01	1.4	9.5E-07	Yes
4015884	ARMCX2	NM_177949	3.1026713	0.016292515	0.42240932	3.37E-05	3.2E-06	1.7	5.0E-04	