Supplementary Methods

Tissue dissociation and glial depletion

Adult brain tissue was obtained during epilepsy surgeries at Stanford Hospital with informed consent under a protocol approved by Stanford University Institutional Review Board. Fetal brain tissue was obtained during elective abortions by Stemexpress Inc., with informed consent under a protocol approved by the Biomedical Research Institute of America Institutional Review Board.

Neurosurgical samples were delivered immediately from the operating room at 4C (time less than 1 hour). Fetal samples were delivered on ice within 4 hours of procurement. The tissue was enzymatically dissociated to make a suspension of single cells by incubating at 33 °C for 90 minutes in 20 ml of a papain solution containing Earle's balanced salts (EBSS, Sigma, St. Louis, MO, E7510), D(+)-glucose (22.5mM), $NaHCO_3$ (26mM), DNase (125U/ml, Worthington, Lakewood, NJ, LS002007), papain (9 U/ml, Worthington, Lakewood, NJ, LS03126), and L-cysteine (1mM, Sigma, St. Louis, MO, C7880). The papain solution was equilibrated with 5% CO_2 and 95% O_2 gas before and during papain treatment. Following papain treatment, the tissue was washed three times with 4.5ml of inhibitor buffer containing BSA (1.0mg/ml, Sigma, St. Louis, MO, A-8806), and ovomucoid (also known as trypsin inhibitor, 1.0 mg/ml, Roche Diagnostics Corporation, Indianapolis, IN 109878) and then mechanically dissociated by gentle sequential trituration using a 5ml pipette. Dissociated cells were layered on top of 10ml of high concentration inhibitor solution with 5mg/ml BSA and 5mg/ml ovomucoid and centrifuged at 130g for 5 minutes. The cell pellet was then resuspended in 12 ml Dulbecco's phosphate-buffered saline (DPBS, Invitrogen, Carlsbad, CA 14287) containing 0.02% BSA and 12.5U/ml DNase and filtered through a 20um Nitex mesh (Sefar America Inc., Depew NY, Lab Pak 03-20/14) to remove undissociated cell clumps. Cell health was assessed by trypan blue exclusion.

After dissociation of adult cortex, the cell suspension contained significant amounts of myelin debris and vascular macrophages. To deplete these populations, we immunopanned the single cell suspension on plates containing antibodies against CD45 (BD Pharmingen 550539, 1.25μg in 12ml of DPBS/0.2% BSA; 30 minute incubation) followed by two sequential plates containing anti GalC hybridoma

antibodies (10 minute incubation each). These quick depletion steps drastically reduced myelin contamination and enriched the suspension for neural cell types.

Single cell capture, cDNA preparation and library preparation for next generation sequencing

Following depletion cells were counted and diluted to 750-1000 cells per microliter. Cells were loaded, captured and stained using viability dyes (LIVE/DEAD cell viability assay; Molecular Probes, Life Technologies) on a medium-sized (10-17 um cell diameter) microfluidic RNA-seq chip (Fluidigm) using the Fluidigm C1 system. Upon capture cells were imaged using phase-contrast and fluorescence microscopy. Lysis, reverse transcription and cDNA preamplification was performed using the SMARTer Ultra Low RNA Kit for the Fluidigm C1 System (Clontech) according to Fluidigm's manual for mRNA sequencing on the C1 system. Resulting cDNA was harvested and analyzed on the Fragment analyzer^{TM} automated fragment analyzer by Advanced Analytical. Only cells that showed no signs of RNA degradation and had a concentration higher than 0.05 ng/ul were selected for library preparation. Library preparation was performed using Nextera XT DNA Sample Preparation Kit (Illumina) as described in the Fluidigm manual. Following library preparation, cells were pooled and sequenced on an Illumina NextSeq instrument using 2x75 paired end reads on a NextSeq high output kit (Illumina).

Processing of mRNA sequencing data

We first used Prinseq to remove short reads (-min_len 30) trim the first 10 bp on the 5'-end (-trim_left 10), trim reads with low quality on the 3'-end (-trim_qual_right 25) and filter low complexity reads (-lc_method entropy \-lc_threshold 65). We used FASTQC to determine overrepresented sequences and removed those using cutadapt (-e 0.15 –m 30). We then used Prinseq to remove orphan pairs less than 30bp in length followed by removal of nextera adapters using Trim Galore (--stringency 1). Remaining reads were aligned to the hg19 genome with STAR using the following options (-outFilterType BySJout \--outFilterMultimapNmax 20 \--alignSJoverhangMin 8 \--alignSJDBoverhangMin 1 \--outFilterMismatchNmax 999 \--outFilterMismatchNoverLmax 0.04 \--alignIntronMin 20 \--alignIntronMax 1000000 \--alignMatesGapMax 1000000 \--outSAMstrandField intronMotif). Aligned reads

were converted to counts for every gene using HTSeq (-m intersection-nonempty \-s no). The counts of all genes for any given cell where converted to counts per million (CPM) by diving with the total number of reads and multiplying by 10^6 followed by conversion to a log base 10.

Data analysis

Data analysis was performed using R. Prior to analysis we excluded cells that had less than 400000 reads, reducing the initial dataset of 482 cells to 466. Pairwise distances between cells were calculated as described in (1) and as implemented in the scde package. Dimensionality reduction of the distances was performed using ViSNE (2) as implemented in the tsne package and subsequent clustering was performed using the Bayesian information criterion (BIC) for parameterized Gaussian mixture models fitted by EM algorithm initialized by model-based hierarchical clustering as implemented in the mclust package (3). Minimum spanning trees, community identification and computation of longest paths were generated using the package igraph (4). Principal components analysis (PCA) was performed using the package FactoMineR (5).

In situ staining

Tissue preparation

Fresh surgical samples of adult human cortex were fixed overnight at 4C in 4% PFA. After fixation, the tissue was immersed in 30% sucrose at 4C for two days before embedding in OCT and sectioning at a thickness of 10 uM. Sections were mounted on slides and frozen for later use.

Antibody staining

Frozen tissue sections were thawed and incubated in 1xPBS for 10 mins at RT, prior to blocking with 1xPBS containing 10% donkey serum and 0.1% Triton X100 for one hour at RT. Primary antibodies were diluted in blocking buffer and incubated overnight at 4^oC. Slides were washed three times with 1xPBS. Donkey-derived secondary antibodies were diluted in blocking buffer and incubated on the tissue sections for 90mins at RT, followed by three washes in 1xPBS. A full list of all antibodies and their respective dilutions can be found in **Table S6.** Tissue sections were incubated in Sudan Black B (.7g SBB in 70% ethanol) for 10 minutes to

eliminate the nonspecific signal produced from abundant lipofuscin in human brain sections. Following SBB treatment, the tissue was washed three times in PBS and embedded in VECTASHIELD mounting medium (VECTOR laboratories) containing DAPI, prior to examination by fluorescence microscopy. All images were analyzed using ImageJ.

References

1. Kharchenko PV, Silberstein L, Scadden DT (2014) Bayesian approach to single-cell differential expression analysis. *Nat Meth* 11:740–742.

2. Amir E-AD et al. (2013) viSNE enables visualization of high dimensional single-cell data and reveals phenotypic heterogeneity of leukemia. *Nature Biotechnology* 31:545–552.

3. Fraley C, Raftery AE (1999) MCLUST: Software for Model-Based Cluster Analysis. *J of Classification* 16:297–306.

4. Csardi G, Nepusz T (2006) The igraph software package for complex network research. *InterJournal*.

5. Lê S, Josse J, Husson F (2008) *FactoMineR: an R package for multivariate analysis* (Journal of statistical software).

Supporting Figure Legends

Fig S1. Histograms showing total number of reads, fraction of mapped reads, Intron/Exon ratio and gene body coverage for a total of 466 cells.

Fig S2. (A) BIC classification using different models identifies ten clusters of cells. EII corresponds to a spherical model with equal volume and equal shape, VII corresponds to a spherical model with variable volume and equal shape, EEI corresponds to a diagonal model with equal volume and equal shape, VEI corresponds to a diagonal model with variable volume and equal shape, EVI corresponds to a diagonal model with equal volume and variable shape, VVI corresponds to a diagonal model with variable volume and variable shape, EEE corresponds to a ellipsoidal model with equal volume and equal shape, EEV corresponds to a ellipsoidal model with equal volume and equal shape, VEV corresponds to a ellipsoidal model with variable volume and equal shape and VVV corresponds to a ellipsoidal model with variable volume and variable shape (B) Uncertainty of classification within members of each cluster.

Fig S3. Fold enrichment and number of mouse brain derived cell-type specific genes used in the hierarchical clustering

Fig S4. Number of detected genes ploted against the fraction of cells expressing each gene. Inlet shows the number of genes detected in at least 50% of the cells for each biased group of cells that was assigned to a known cell type.

Fig S5. Mean expression of all cell-type specific genes in each of the biased groups.

Fig S6. Images acquired in the C1 microfluidic device for a number of cells identified as members of the group of cells expressing both astrocytic and neuronal genes.

Fig S7. Co-staining for NeuN and PVALB in mouse and human cortical sections. Images were taken using a 20X objective and scale bars correspond to 100um. Barplot shows the fraction of PVALB positive cells among the NeuN positive cells for mouse and human respectively. Star indicates significane at $p<10^{-5}$.

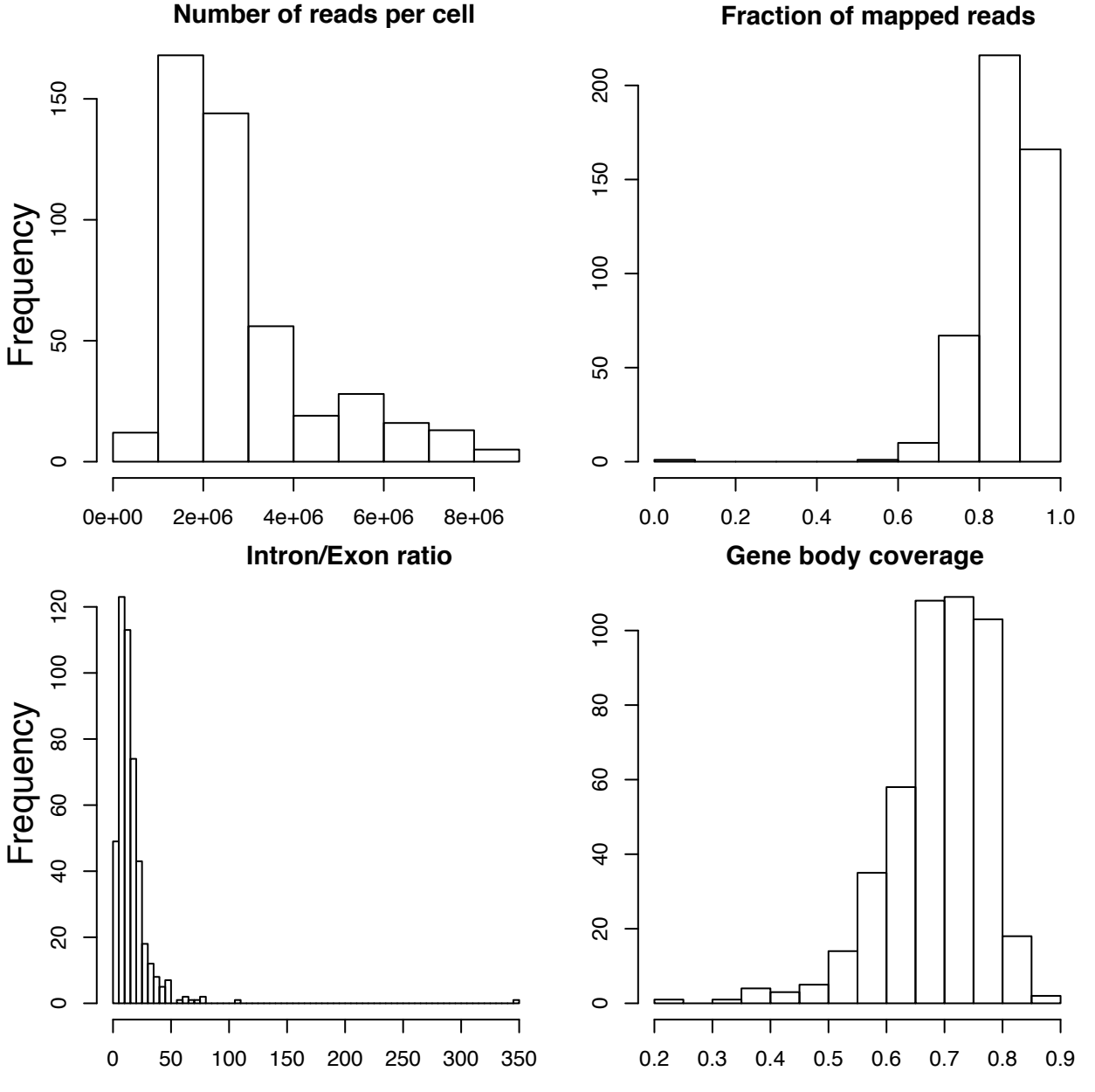
Fig S8. (A) Enrichment of VIP and TAC3 in interneuron community six. **(B)** Enrichment and co-expression of PAX6 and RELN in interneuron community one. **(C)** Enrichment and of CPLX3 and SPARC in interneuron community three and co-staining for CPLX3 and NeuN in human cortical sections.

Fig S9. Minimum spanning trees for all fetal cells indicating the longest path across the tree and the expression of genes FAT3 and EGR1 that appear to change gradually across the longest path.

Fig S10. Correlation plots for genes of the MHCI pathway for all adult and fetal neuronal cells, microglia and endothelial cells. The diagonal shows expression distribution of each gene in cell type. Both upper and lower panels show pairwise correlations between each marker. The last column shows boxplots of expression for each gene per cell type.

Fig S11. Fraction of cells expressing different numbers of MHCI related genes in fetal and adult neurons, endothelial cells and microglia. MHCI related genes are B2M, CALR, ERAP1, HLA-A, HLA-B, HLA-C, HSPA5, PDIA3, SEC61A1, SEC61A2, SEC61B, SEC61G, TAP2 and TAPBP.

Fig S1


Number of reads per cell
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50
100
150
0e+00
2e+06
4e+06
6e+06
8e+06
Fraction of mapped reads
0
50
100
150
200
0.0
0.2
0.4
0.6
0.8
1.0
Intron/Exon ratio
Frequency
0
20
40
60
80
100
120
0
50
100
150
200
250
300
350
Gene body coverage
0
20
40
60
80
100
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9

Fig S2

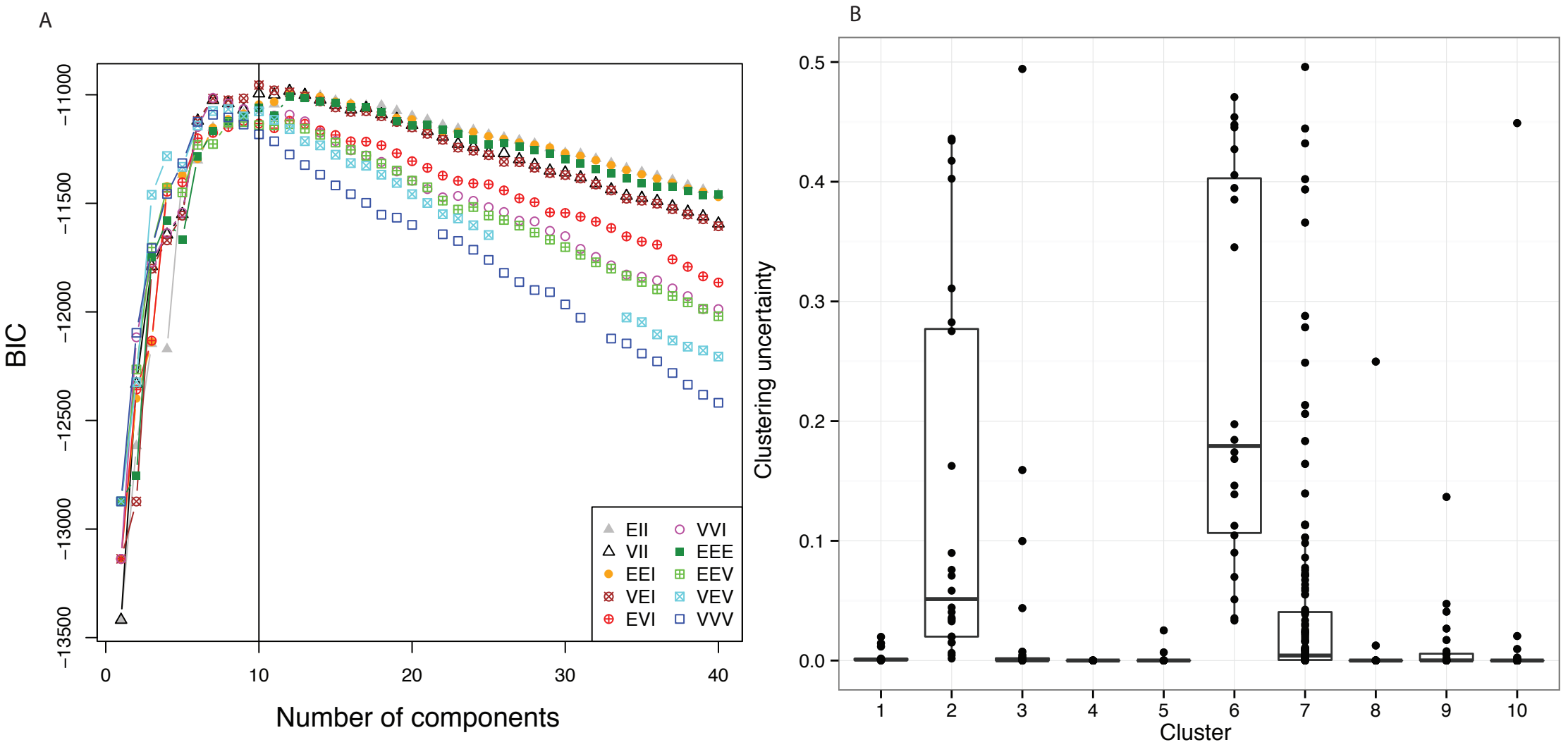

A
BIC
−11000
−11500
−12000
−12500
−13000
−13500
0
10
20
30
40
Number of components
EII
VII
EEI
VEI
EVI
VVI
EEE
EEV
VEV
VVV
B
Clustering uncertainty
0.5
0.4
0.3
0.2
0.1
0.0
1
2
3
4
5
6
7
8
9
10
Cluster

Fig S3

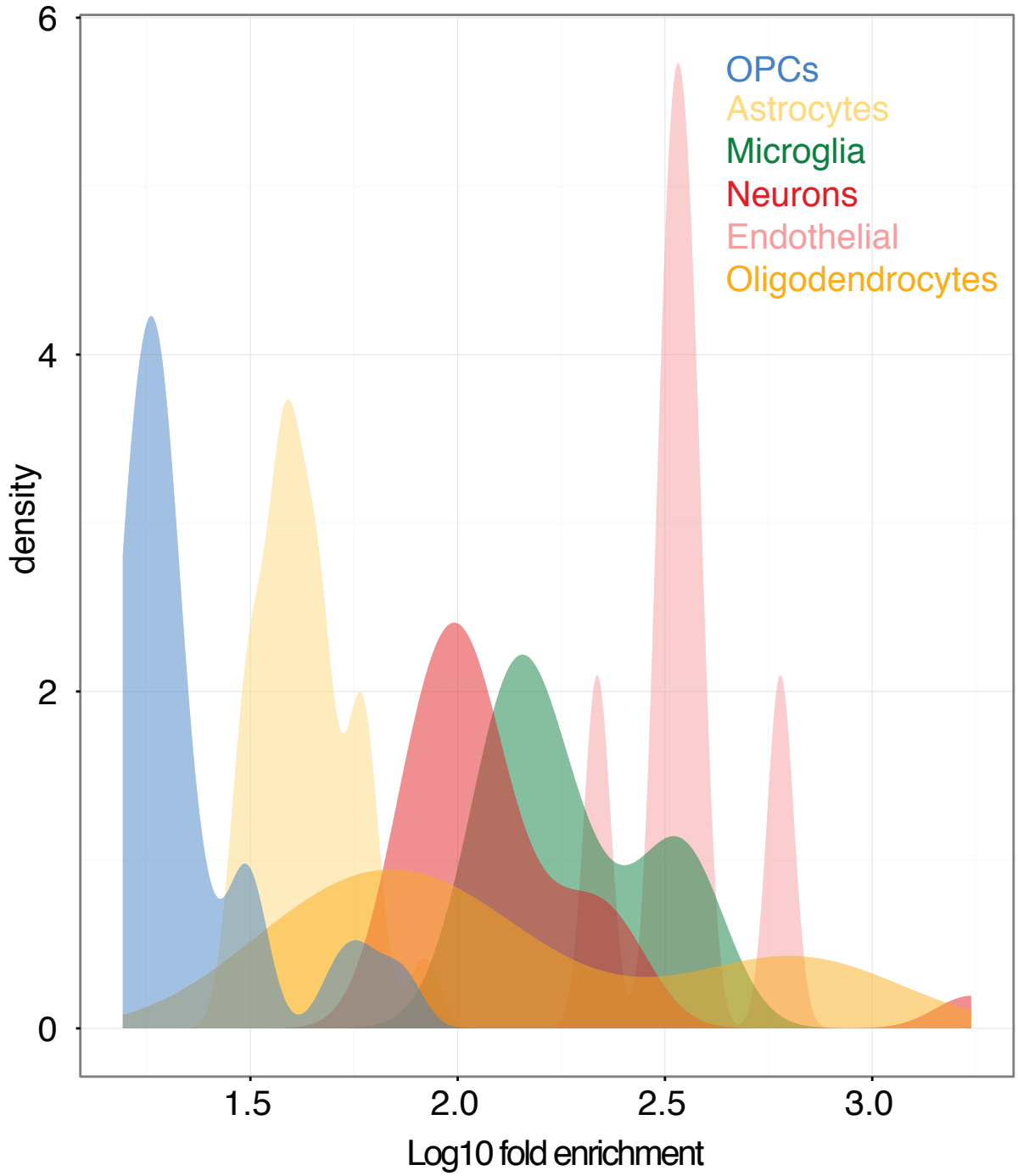

OPCs
Astrocytes
Microglia
Neurons
Endothelial
Oligodendrocytes
density
6
4
2
0
1.5
2.0
2.5
3.0
Log10 fold enrichment

Fig S4

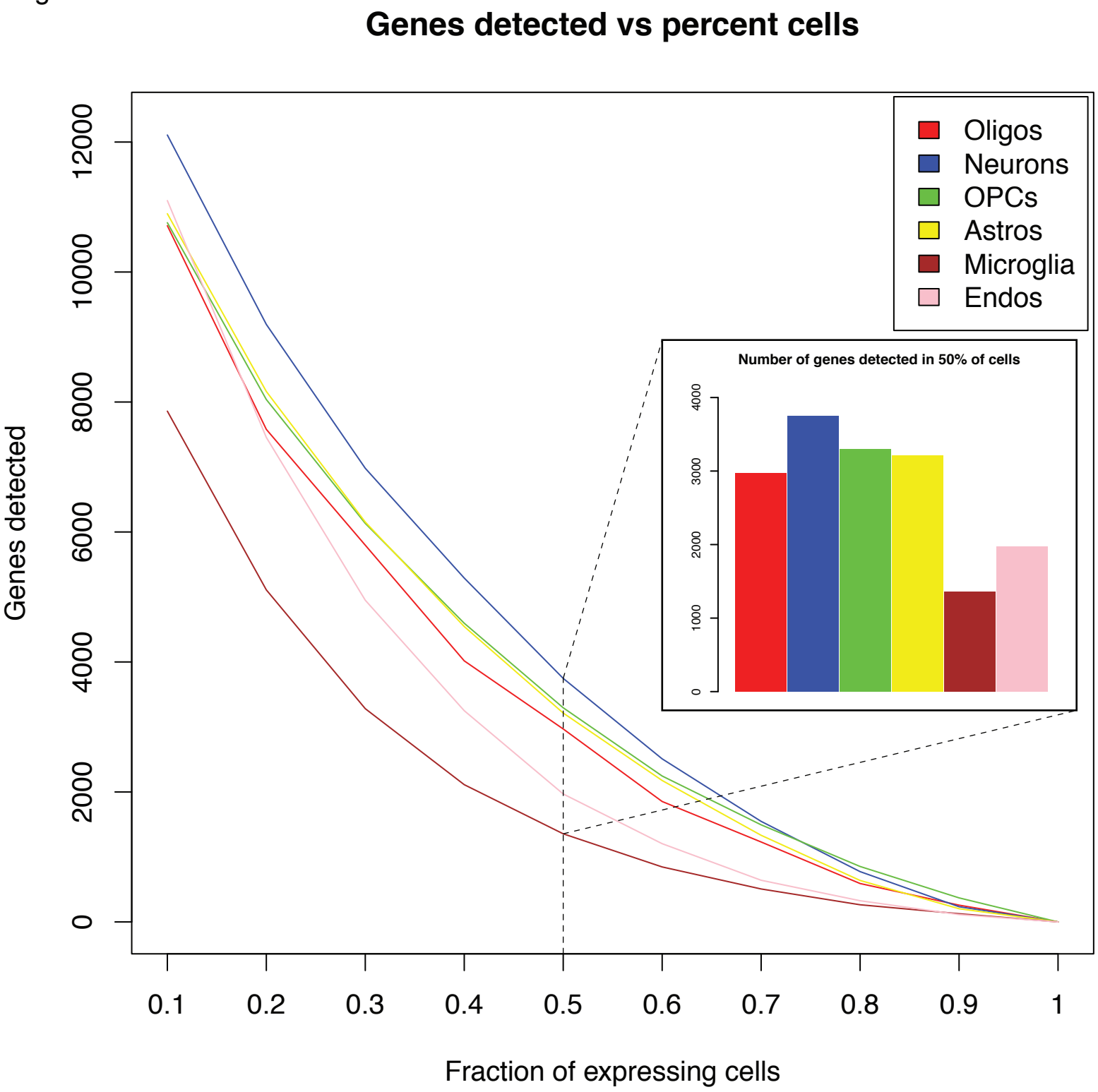
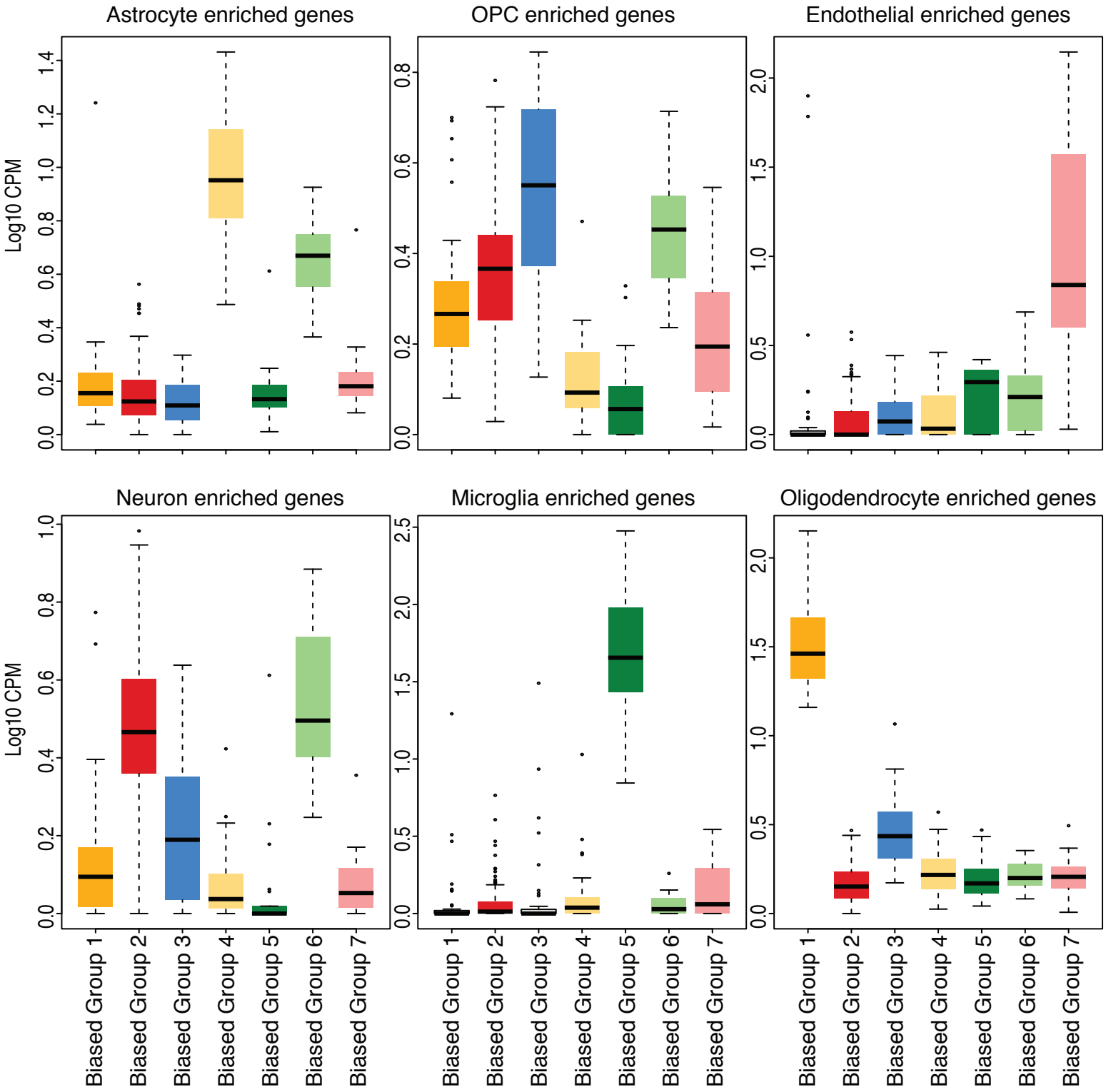

Genes detected vs percent cells
Oligos
Neurons
OPCs
Astros
Microglia
Endos
Number of genes detected in 50% of cells
0
1000
2000
3000
4000
Genes detected
0
2000
4000
6000
8000
10000
12000
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1
Fraction of expressing cells

Fig S5


Astrocyte enriched genes
OPC enriched genes
Endothelial enriched genes
Neuron enriched genes
Microglia enriched genes
Oligodendrocyte enriched genes
Log10 CPM
Biased Group 1
Biased Group 2
Biased Group 3
Biased Group 4
Biased Group 5
Biased Group 6
Biased Group 7

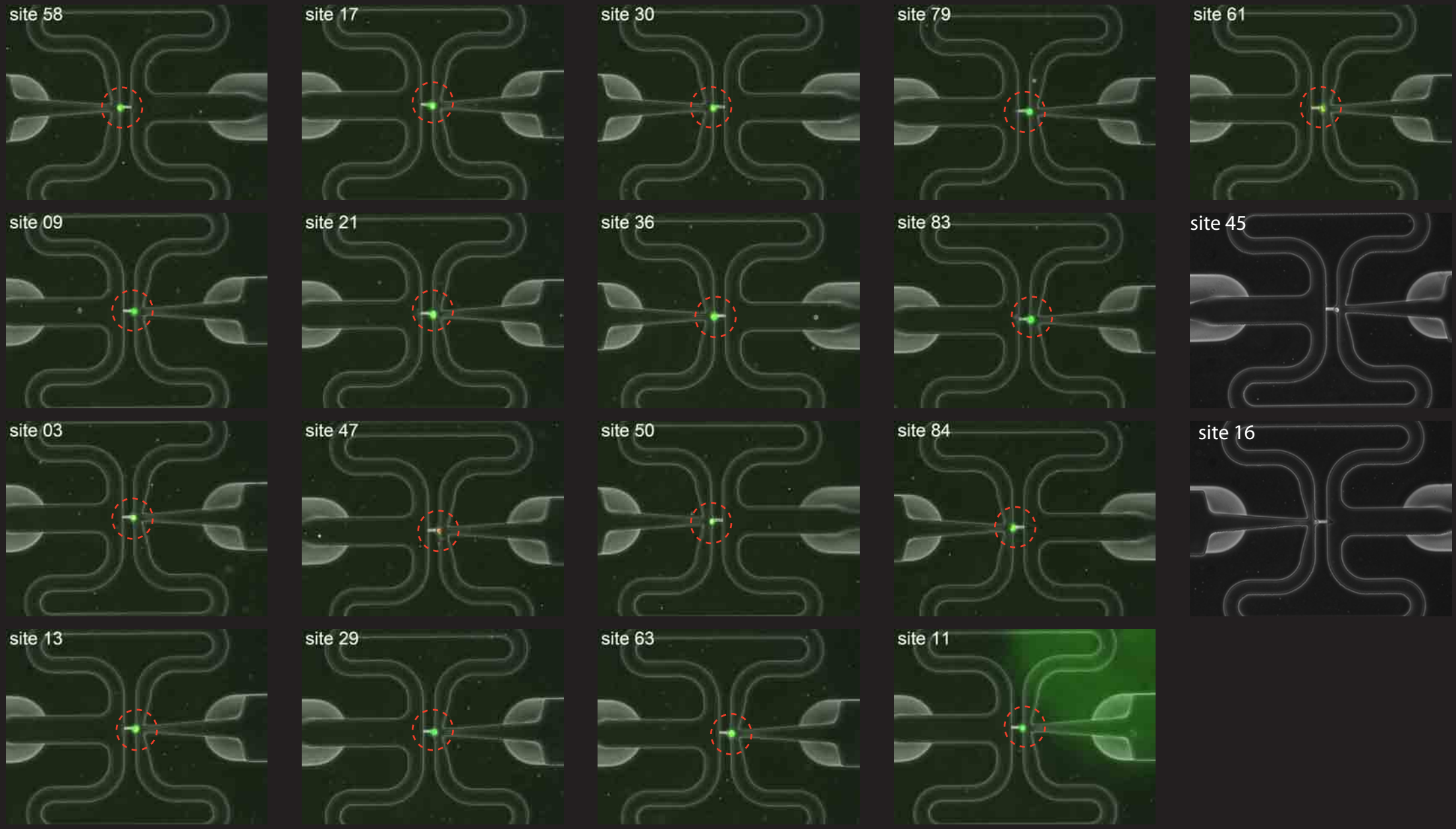
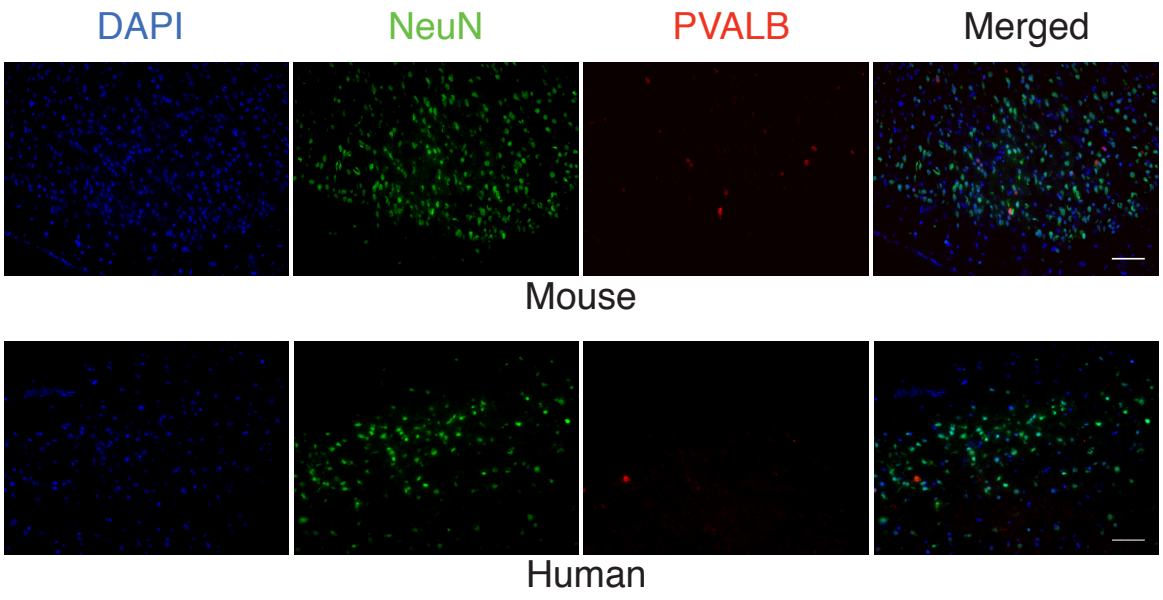

site 58
site 17
site 30
site 79
site 61
site 09
site 21
site 36
site 83
site 45
site 03
site 47
site 50
site 84
site 16
site 13
site 29
site 63
site 11

Fig S7


DAPI
NeuN
PVALB
Merged
Mouse
Human

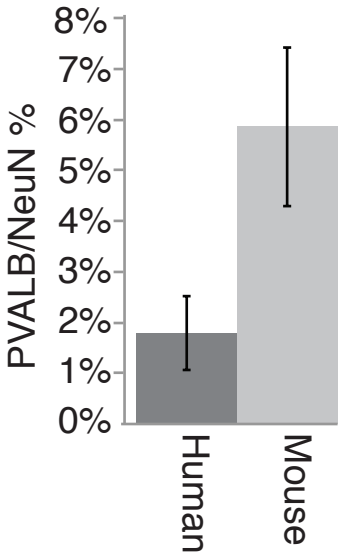
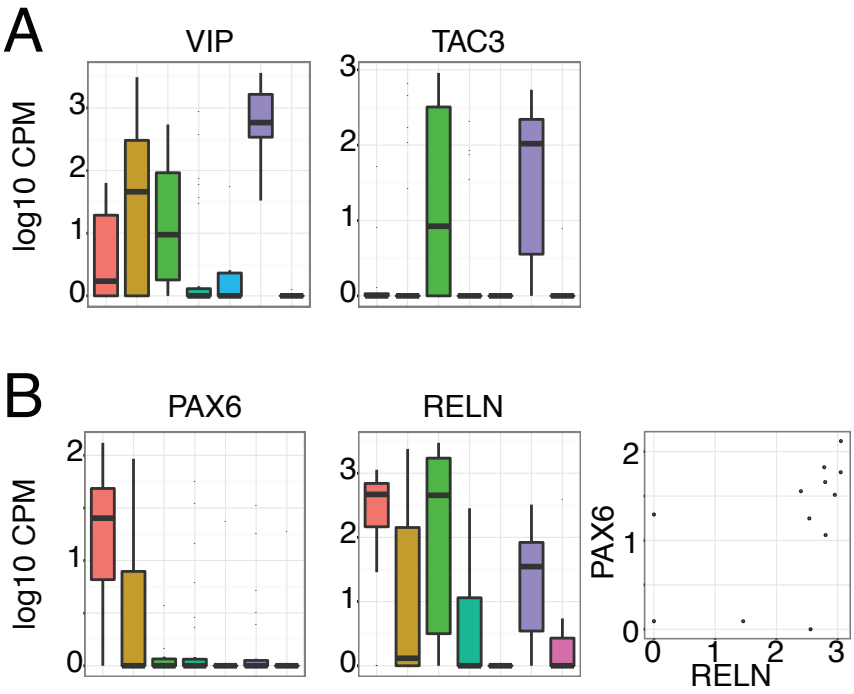

PVALB/NeuN %
8%
7%
6%
5%
4%
3%
2%
1%
0%
Human
Mouse

Fig S8


A
VIP
TAC3
log10 CPM
B
PAX6
RELN
log10 CPM
PAX6
RELN

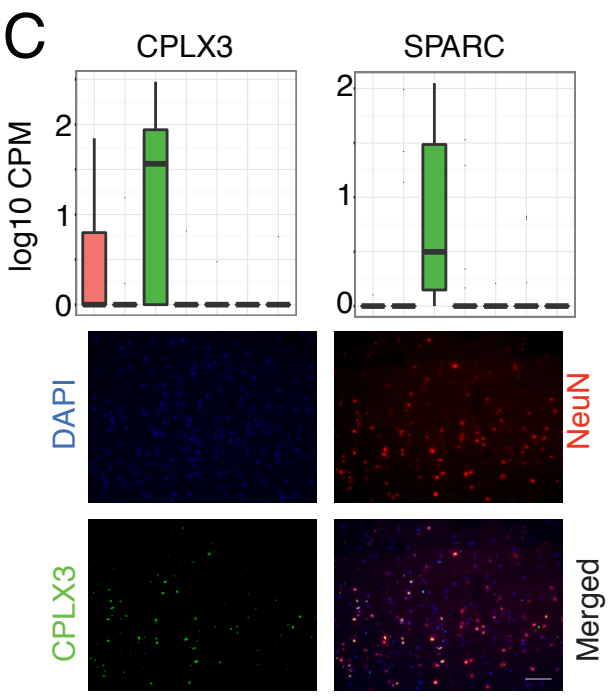

C
CPLX3
SPARC
log10 CPM
DAPI
NeuN
CPLX3
Merged

Fig S9

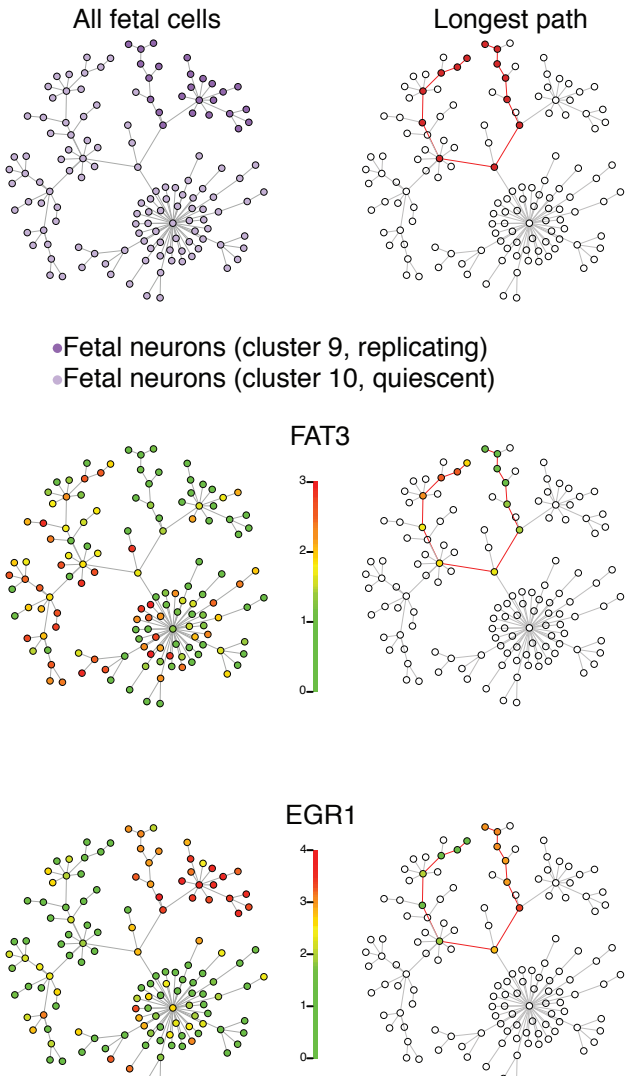

All fetal cells
Longest path
Fetal neurons (cluster 9, replicating)
Fetal neurons (cluster 10, quiescent)
FAT3
3
2
1
0
EGR1
4
3
2
1
0

Fig S10

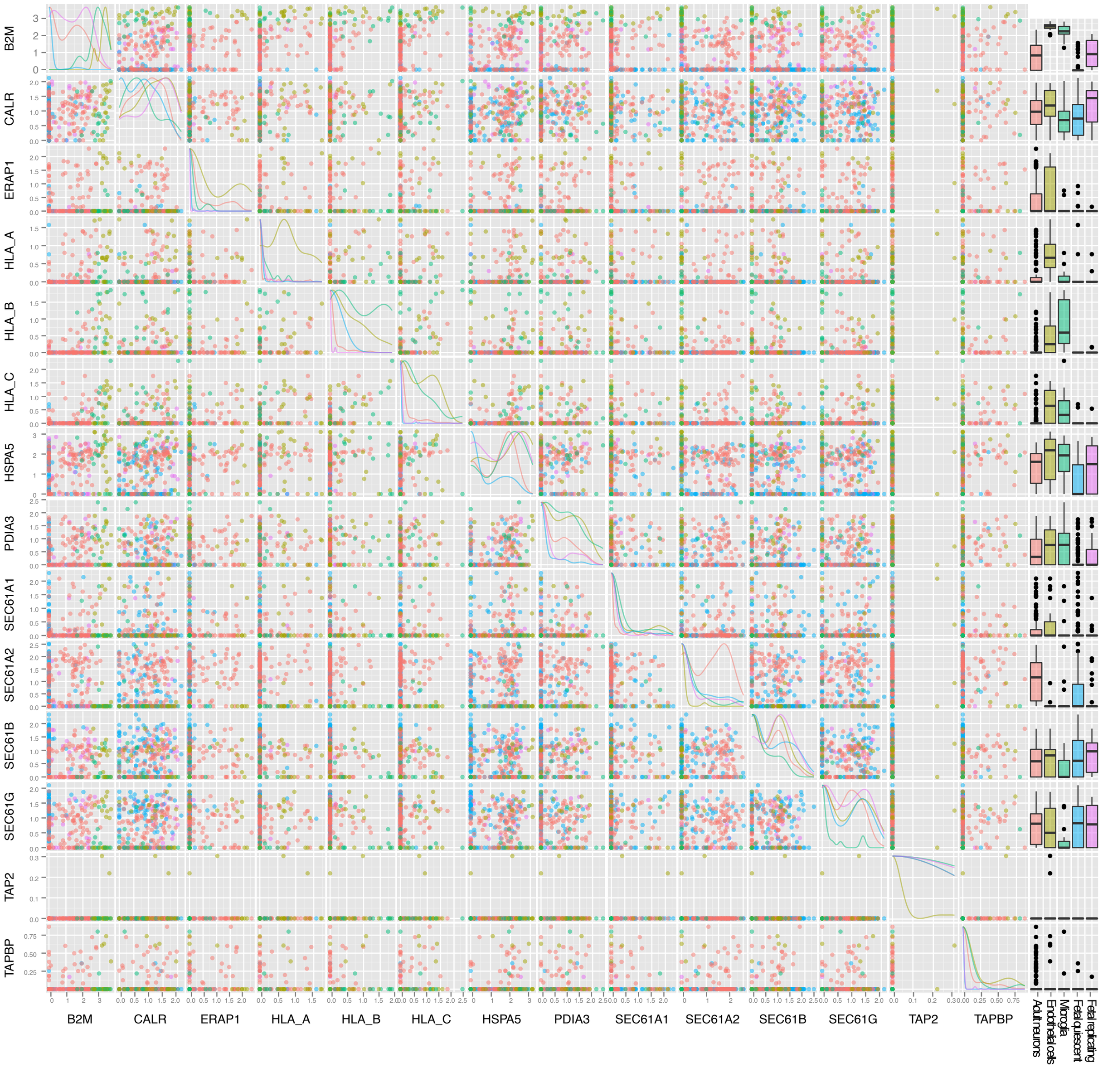

B2M
CALR
ERAP1
HLA_A
HLA_B
HLA_C
HSPA5
PDIA3
SEC61A1
SEC61A2
SEC61B
SEC61G
TAP2
TAPBP
Adult neurons
Endothelial cells
Microglia
Fetal quiescent
Fetal replicating

Fig S11

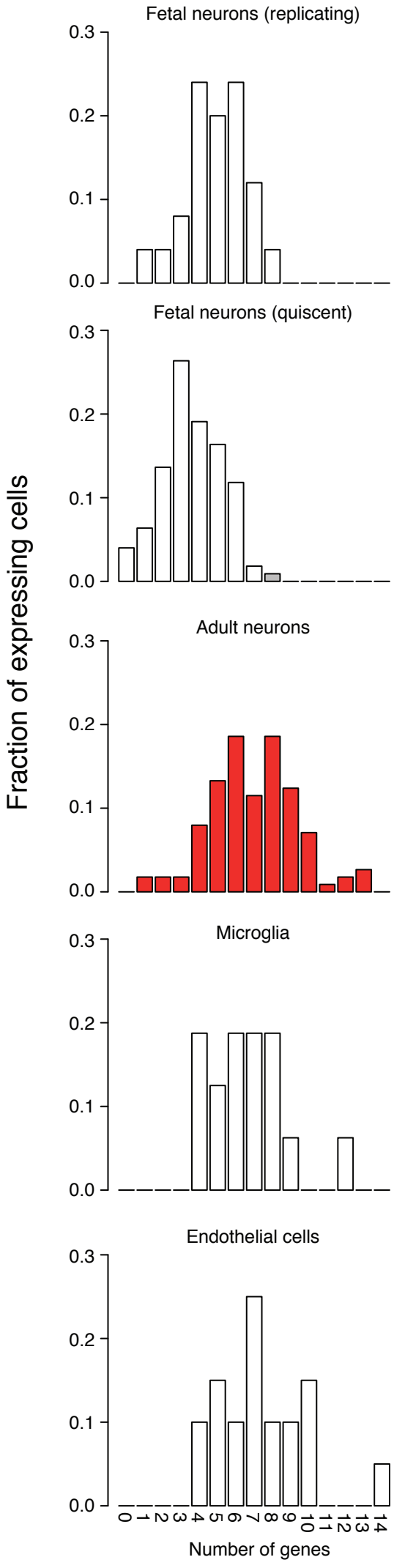

Fetal neurons (replicating)
Fetal neurons (quiscent)
Adult neurons
Microglia
Endothelial cells
Fraction of expressing cells
0.0
0.1
0.2
0.3
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14
Number of genes

Table S1. Information for each surgical sample that was included in the study.

Experiment name	Number of cells	Number of cells after QC	Sample type	Age	Sex
AB_S1	24	24	Adult	47	M
AB_S2	5	5	Adult	63	M
AB_S3	4	4	Adult	22	M
AB_S4	79	77	Adult	50	M
AB_S5	45	44	Adult	63	M
AB_S7	60	57	Adult	21	F
AB_S8	61	58	Adult	54	F
AB_S11	68	63	Adult	37	F
FB_S1	27	26	Fetal	16-18w	
FB_S2	47	46	Fetal	16-18w	
FB_S3	33	33	Fetal	16-18w	
FB_S6	29	29	Fetal	16-18w	
Total	**482**	**466**			

Table S2. Number of cells belonging to each of the unbiased groups

Unbiased group	Number of cells
1	18
2	24
3	38
4	62
5	16
6	22
7	131
8	20
9	25
10	110

Table S3. List of top 20 enriched genes in each of the unbiased groups.

Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6	Cluster 7	Cluster 8	Cluster 9	Cluster 10
C1orf129	GPR17	KLK6	AGXT2L1	CD53	HTR2C	TMEM130	IFITM1	MKI67	CD24
PDGFRA	PLP1	ERMN	FGFR3	ITGAX	PROX1	GABRB2	ITIH5	TOP2A	DCX
LRRK2	FERMT1	UGT8	AQP4	OLR1	SLC10A4	VSNL1	APOLD1	KIAA0101	NEUROD6
LHFPL3	LIMS2	TF	GJA1	FCGR3A	CALB2	GABRA1	TM4SF1	CDK1	SOX11
PCDH15	PLD5	CNDP1	AGT	C3	KCNT2	SYNPR	PTRF	RRM2	SATB2
BLM	C1orf173	OPALIN	MGST1	IL1B	TTTY15	THY1	ANXA1	TFAP2C	TMSB15A
LAMB4	C2orf88	RNASE1	SLC39A12	CCL3	GJA1	CAMK2A	PEAR1	HIST1H1B	STMN2
MEGF11	HRASLS	ENPP2	SLC25A18	CCL4	EDNRB	MEG3	SDPR	CENPF	DPYSL3
B3GNT7	C1orf192	MAG	GPR98	LILRB4	COL21A1	GABRG2	GNG11	BIRC5	SOX4
IL1RAP	SLC2A13	CARNS1	SLCO1C1	C3AR1	VIP	CKMT1B	FOXC1	TNC	BCL11A
SEMA5A	GPNMB	MOBP	SDC4	LAPTM5	TGFB2	CCK	ESAM	NUSAP1	MEX3A
CRISPLD2	HS6ST2	CLDN11	GPR37L1	DHRS9	PTHLH	CHGB	IFI27	AURKB	NREP
XYLT1	KY	C11orf9	ACSBG1	PLEK	AQP4	SCG2	GPR116	CASC5	HN1
HAS2	ZNF268	DBNDD2	SFXN5	ALOX5AP	CLDN18	DNM1	MSX1	UBE2C	NNAT
TNR	DNER	CAPN3	BMPR1B	CD74	NLGN4Y	MAP7D2	TGM2	EOMES	TUBA1A
GALR1	HR	FOLH1	ATP13A4	MSR1	IGFBP5	CELF4	CEBPD	PBK	SLA
RAB31	C2orf27A	LPAR1	RANBP3L	PTPRC	KDM5D	CIT	TBX3	MLF1IP	MN1
SH2D4A	NRIP3	GJB1	GJB6	GPR183	MTUS2	UNC80	IL6	KIF23	NEUROD2
TREM1	SCG2	TMEM144	GFAP	RGS10	USP9Y	NRXN3	EDN3	BRIP1	TMSB10
LUZP2	SENP8	ABCA8	PRODH	C1QA	CALN1	SCN2A	ITGA1	UHRF1	ADRA2A
GAB3	SOX2-OT	HHIP	SLC4A4	LCP1	LOC653653	SNAP25	ICAM1	CLSPN	SRGAP1

Table S4. List of enriched genes in each neuronal community.

Gene name	Enriched community	Correlation coefficient	Wilcoxon p.value
CMKLR1	1	0.49	2.65E-03
COL16A1	1	0.50	4.36E-02
EYA1	1	0.39	1.01E-02
PAX6	1	0.48	1.24E-02
B2M	2	0.48	8.84E-03
CPLX3	3	0.61	9.14E-03
FCRL4	3	0.43	3.03E-02
FSCN3	3	0.52	2.22E-02
KANK2	3	0.58	2.32E-03
LAMP5	3	0.58	8.35E-03
LOC641364	3	0.46	1.42E-04
NMBR	3	0.47	2.50E-04
PIP5K1B	3	0.58	4.63E-03
PROK2	3	0.55	2.20E-02
SPARC	3	0.46	1.20E-03
SV2C	3	0.53	1.01E-04
ANO3	4	0.49	4.46E-02
C1orf115	4	0.50	2.02E-03
CHN1	4	0.62	2.90E-06
CPNE4	4	0.46	3.60E-03
FOXP2	4	0.38	3.58E-02
HTR2A	4	0.55	2.59E-02
IPCEF1	4	0.55	3.15E-03
KCNMB4	4	0.47	3.83E-02
KCNV1	4	0.50	1.64E-04
KHDRBS3	4	0.47	1.75E-02
LMO4	4	0.52	3.75E-03
LRMP	4	0.51	1.82E-03
NEUROD6	4	0.64	1.43E-07
NPTX1	4	0.54	2.80E-02
PDE1A	4	0.60	3.15E-05
PRDM8	4	0.46	2.62E-02
PTPRK	4	0.43	1.23E-02
RASL10A	4	0.39	2.74E-02
RYR2	4	0.43	4.10E-02
SATB2	4	0.49	1.18E-04
SLC17A7	4	0.65	2.11E-06
SV2B	4	0.47	3.05E-02
XYLT1	4	0.40	1.86E-02
C8orf4	5	0.71	7.35E-08
CRHBP	5	0.53	4.86E-02

FCRLB	5	0.55	1.98E-02
HGF	5	0.43	2.05E-02
KIAA0226L	5	0.65	4.00E-06
LHX6	5	0.53	1.58E-02
PVALB	5	0.48	4.37E-02
RGS5	5	0.56	5.16E-03
SNCG	5	0.57	3.02E-03
SPARCL1	5	0.41	4.43E-02
ST8SIA4	5	0.60	7.93E-04
TAC1	5	0.60	4.99E-03
TMEM132C	5	0.59	4.83E-03
VAX1	5	0.56	1.72E-02
WNT16	5	0.60	8.42E-04
COL11A1	6	0.49	2.48E-03
CPNE2	6	0.50	2.35E-03
CTTNBP2	6	0.46	3.17E-02
GAL3ST1	6	0.32	4.25E-02
IQGAP2	6	0.46	3.57E-03
SLC22A3	6	0.44	8.38E-03
SVEP1	6	0.57	1.12E-04
TAC3	6	0.47	4.12E-03
VIP	6	0.62	4.50E-06
VWDE	6	0.36	2.92E-02
AGPAT9	7	0.37	4.54E-02
C4BPA	7	0.59	2.66E-03
GLYCTK	7	0.24	4.53E-03
RBP2	7	0.43	3.80E-03
RRP7B	7	0.48	1.26E-04
SAP25	7	0.51	4.15E-04
SOLH	7	0.55	3.18E-03
TMCO4	7	0.30	6.42E-03
TRIM34	7	0.48	4.15E-04

Table S5. Genes significantly associated with the first 3 principal components after performing PCA on fetal and adult neurons.

Gene name	Correlation coeficient	Significance	Associated dimension
THY1	0.778224397	1.29E-51	1
PKM2	0.755621701	4.20E-47	1
B3GNT1	0.748158058	1.02E-45	1
GABRA1	0.744492285	4.66E-45	1
VSNL1	0.739509296	3.55E-44	1
PRNP	0.738320906	5.73E-44	1
NSF	0.736332525	1.27E-43	1
SNX10	0.736107688	1.38E-43	1
TUBA4A	0.73518509	1.99E-43	1
GOT1	0.733447761	3.95E-43	1
ZNF483	0.727415404	4.07E-42	1
TMEM130	0.7261627	6.55E-42	1
GABRG2	0.725179692	9.50E-42	1
NAP1L5	0.720058232	6.43E-41	1
SELM	0.717738393	1.51E-40	1
TSPYL2	0.717526948	1.63E-40	1
CLU	0.713849708	6.17E-40	1
GUCY1B3	0.709172634	3.26E-39	1
TSPAN7	0.707965111	4.99E-39	1
RAB3A	0.705531357	1.16E-38	1
ALDOA	0.702864229	2.92E-38	1
ATP6AP2	0.699371078	9.61E-38	1
PPM1H	0.693647476	6.51E-37	1
GABRB2	0.691612719	1.27E-36	1
SNAP25	0.690805856	1.65E-36	1
RCAN2	0.690763818	1.68E-36	1
CAMK2A	0.690257879	1.98E-36	1
PNMA2	0.689864122	2.25E-36	1
PNMAL1	0.687543725	4.77E-36	1
ATP6V1H	0.687516645	4.81E-36	1
FAIM2	0.686211493	7.31E-36	1
DNAJC6	0.686149031	7.46E-36	1
PARM1	0.683597645	1.68E-35	1
ATP6V1A	0.680036557	5.16E-35	1
ALDOC	0.679355637	6.39E-35	1
NRSN2	0.678375826	8.67E-35	1
SPOCK2	0.674562721	2.81E-34	1
MDH1	0.673548182	3.83E-34	1
SLC25A4	0.672498631	5.27E-34	1
REEP5	0.670489892	9.66E-34	1

SCOC	0.670267386	1.03E-33	1
SPRYD3	0.669006616	1.51E-33	1
CNTNAP2	0.668513979	1.75E-33	1
ARL6IP5	0.667556754	2.33E-33	1
BEX4	0.667361757	2.46E-33	1
CHGB	0.66692178	2.81E-33	1
PEBP1	0.665868891	3.84E-33	1
CNTN1	0.66365622	7.36E-33	1
GAS7	0.663390745	7.96E-33	1
SERPINI1	0.662868971	9.27E-33	1
CRYAB	0.662062628	1.17E-32	1
CTSB	0.661881148	1.24E-32	1
ATPIF1	0.661421619	1.41E-32	1
LDHA	0.660018672	2.12E-32	1
MAP1A	0.659487975	2.48E-32	1
LSAMP	0.658070647	3.72E-32	1
RAB6B	0.657982646	3.82E-32	1
PREPL	0.657191351	4.79E-32	1
PIN1	0.656641746	5.60E-32	1
PSAP	0.656095435	6.55E-32	1
ATP1B1	0.654985027	8.98E-32	1
SLC22A17	0.654814383	9.42E-32	1
ATP6V1B2	0.654305243	1.09E-31	1
NAP1L3	0.654162264	1.13E-31	1
RHBDD2	0.65306619	1.54E-31	1
CELF4	0.652841577	1.65E-31	1
ENO2	0.651955306	2.11E-31	1
GABBR2	0.651841778	2.18E-31	1
GABRA4	0.650733019	2.97E-31	1
TCEAL6	0.650630975	3.06E-31	1
FABP3	0.650492983	3.18E-31	1
ABAT	0.650237171	3.41E-31	1
OXR1	0.649515306	4.17E-31	1
LGI1	0.647809412	6.69E-31	1
DYNLT3	0.647613739	7.06E-31	1
SYT17	0.647086071	8.17E-31	1
SYT1	0.646370964	9.94E-31	1
NPTN	0.645949049	1.12E-30	1
NDRG4	0.645221001	1.36E-30	1
DKK3	0.644192998	1.80E-30	1
ATP6V1D	0.643266033	2.32E-30	1
NCDN	0.642586347	2.79E-30	1
SCG2	0.642031395	3.24E-30	1
NAPB	0.641569581	3.67E-30	1
SCN2B	0.638985763	7.35E-30	1

STEAP2	0.638535053	8.29E-30	1
ZCCHC12	0.637599596	1.06E-29	1
SCG5	0.636282368	1.51E-29	1
TMEM205	0.635581812	1.81E-29	1
OAT	0.635338688	1.93E-29	1
SAMD12	0.634422685	2.46E-29	1
SCN2A	0.634174862	2.63E-29	1
C2orf74	0.633803344	2.90E-29	1
SYNPR	0.633374053	3.24E-29	1
TCEAL5	0.630433008	6.97E-29	1
SOD1	0.630367965	7.09E-29	1
BRP44	0.628860883	1.05E-28	1
PEG3	0.627648426	1.43E-28	1
NRIP3	0.626593828	1.87E-28	1
BEX2	0.625621049	2.40E-28	1
PGK1	0.625338434	2.58E-28	1
SYN1	0.624434789	3.24E-28	1
USP11	0.623993673	3.62E-28	1
MAP7D2	0.623055529	4.59E-28	1
OSBPL1A	0.622558429	5.20E-28	1
ATP1A1	0.622156391	5.76E-28	1
PNPO	0.6208364	8.01E-28	1
HPCAL4	0.61911191	1.23E-27	1
BAG4	0.617645935	1.77E-27	1
ARF3	0.617016105	2.07E-27	1
GABARAPL1	0.615745351	2.83E-27	1
SNRPN	0.614749599	3.61E-27	1
ANXA7	0.613547312	4.85E-27	1
TCEAL7	0.613443435	4.97E-27	1
PHYHIPL	0.612418792	6.38E-27	1
MEG3	0.611834528	7.35E-27	1
PAR-SN	0.611754203	7.49E-27	1
FGF12	0.611604602	7.77E-27	1
ACYP2	0.610586619	9.93E-27	1
TMEM59L	0.610486954	1.02E-26	1
SLC2A13	0.610111369	1.11E-26	1
ATP1B2	0.60970864	1.23E-26	1
QDPR	0.609339605	1.34E-26	1
CDS2	0.609151443	1.40E-26	1
PLEKHB2	0.608950827	1.47E-26	1
TMEM66	0.606047929	2.94E-26	1
ATP6V1E1	0.606001045	2.97E-26	1
GPR155	0.605679178	3.21E-26	1
TCEAL3	0.604839655	3.91E-26	1
ZNF385D	0.604277379	4.47E-26	1

MOAP1	0.60381499	4.98E-26	1
PCSK2	0.602867375	6.23E-26	1
UNC80	0.602103604	7.45E-26	1
VAMP2	0.601808206	7.98E-26	1
ITM2B	0.601707929	8.17E-26	1
SPOCK3	0.601214063	9.17E-26	1
ERLEC1	0.601143791	9.32E-26	1
NTRK2	0.601049146	9.53E-26	1
CAMK2B	0.600847635	9.98E-26	1
ATP6V0B	0.600754325	1.02E-25	1
PSMC5	0.600428034	1.10E-25	1
ATP6V0A1	0.600097828	1.19E-25	1
SYN2	0.599847987	1.26E-25	1
ENTPD3	0.59961702	1.33E-25	1
GHITM	0.59891295	1.56E-25	1
CLSTN1	0.598400639	1.76E-25	1
RAB2A	0.598164891	1.86E-25	1
NDFIP1	0.598006698	1.93E-25	1
ST8SIA3	0.59720195	2.32E-25	1
SPINT2	0.597151428	2.35E-25	1
DNAJB14	0.596888623	2.50E-25	1
TPI1	0.596776157	2.56E-25	1
SLC12A5	0.59664997	2.64E-25	1
NDUFA1	0.595831976	3.18E-25	1
SERINC1	0.59552345	3.41E-25	1
CD99L2	0.595017789	3.83E-25	1
ENO1	0.594835102	3.99E-25	1
PTPRN	0.594531	4.28E-25	1
DNM1	0.594516816	4.29E-25	1
CLTC	0.594419753	4.39E-25	1
GSTM3	0.594180886	4.63E-25	1
ARID5B	0.59388801	4.95E-25	1
NHP2L1	0.593869065	4.97E-25	1
OXCT1	0.59377681	5.08E-25	1
ATP6V1F	0.593186733	5.81E-25	1
DNAJC12	0.593085285	5.94E-25	1
C6orf1	0.593078398	5.95E-25	1
SNCA	0.592975097	6.09E-25	1
KCNMA1	0.59276635	6.39E-25	1
SLC7A14	0.592591855	6.65E-25	1
SLC6A17	0.592228111	7.22E-25	1
NCOA7	0.592123963	7.39E-25	1
LRPAP1	0.592079136	7.46E-25	1
CHD5	0.591564804	8.38E-25	1
HAGH	0.591512039	8.48E-25	1

PCBD1	0.591317533	8.86E-25	1
AP2M1	0.591265604	8.97E-25	1
VSTM2A	0.5912373	9.02E-25	1
PCYOX1	0.590707925	1.02E-24	1
NDUFA4	0.590426966	1.08E-24	1
TSR2	0.59042519	1.08E-24	1
MAST4	0.590003723	1.19E-24	1
PPT1	0.589977478	1.20E-24	1
FGF14	0.589509619	1.33E-24	1
CCK	0.589051176	1.47E-24	1
SIPA1L1	0.588984039	1.50E-24	1
ATP5G3	0.588676661	1.60E-24	1
HPRT1	0.588324836	1.73E-24	1
EFR3A	0.587518726	2.07E-24	1
ATP6V1C1	0.587210251	2.22E-24	1
CALM3	0.586998676	2.33E-24	1
ABCA5	0.58546576	3.27E-24	1
SV2A	0.585393614	3.32E-24	1
NDUFA13	0.584416456	4.12E-24	1
LSMD1	0.583688302	4.83E-24	1
COX7A2L	0.583315173	5.25E-24	1
TMEM14A	0.583140797	5.45E-24	1
NDRG3	0.582340074	6.50E-24	1
MAGEE1	0.582120353	6.81E-24	1
IFIT1	0.581808419	7.29E-24	1
IGF1	0.581261929	8.22E-24	1
GABRB1	0.58080869	9.07E-24	1
CD59	0.580562403	9.57E-24	1
NSFP1	0.579935999	1.10E-23	1
FAM162A	0.579750416	1.14E-23	1
CISD1	0.579726733	1.15E-23	1
TRIM37	0.579500091	1.20E-23	1
ATP5G1	0.57923624	1.27E-23	1
SERINC3	0.578824885	1.39E-23	1
NCEH1	0.578687264	1.44E-23	1
GNG3	0.577880702	1.71E-23	1
SULT4A1	0.577834995	1.72E-23	1
OPCML	0.577738614	1.76E-23	1
GPX1	0.577683271	1.78E-23	1
CADM2	0.577383471	1.90E-23	1
GPI	0.577356947	1.91E-23	1
NIPAL3	0.57697439	2.07E-23	1
ATP2B2	0.576972569	2.08E-23	1
PGAM1	0.576518506	2.29E-23	1
ATP6V0D1	0.576493589	2.30E-23	1

TMEM9	0.576322857	2.39E-23	1
CAMK2N1	0.575628767	2.77E-23	1
AHI1	0.575289235	2.97E-23	1
PAIP2	0.57503296	3.14E-23	1
CREG2	0.574904316	3.23E-23	1
DNAJC19	0.574712888	3.36E-23	1
SEZ6L2	0.574491002	3.53E-23	1
PRKACB	0.574336455	3.64E-23	1
AMPH	0.573434467	4.41E-23	1
SAP18	0.573079257	4.76E-23	1
MINOS1	0.573004044	4.83E-23	1
PGRMC1	0.572496486	5.38E-23	1
KLC1	0.572246874	5.67E-23	1
NDUFB5	0.571799228	6.23E-23	1
RASGRF1	0.57179538	6.24E-23	1
BNIP3	0.571504537	6.63E-23	1
SPOCK1	0.571481212	6.67E-23	1
EDF1	0.570963518	7.43E-23	1
GPRASP1	0.569940868	9.21E-23	1
GPX4	0.569274972	1.06E-22	1
NALCN	0.569008438	1.12E-22	1
EPB41L1	0.568675602	1.20E-22	1
KIAA1217	0.568630406	1.21E-22	1
GRIN2A	0.568062665	1.36E-22	1
TAGLN3	0.567708037	1.47E-22	1
ATP6V0C	0.567570579	1.51E-22	1
LOC100505576	0.567451118	1.55E-22	1
ARNT2	0.567345053	1.58E-22	1
PTPLAD1	0.566974932	1.71E-22	1
BCAP31	0.566542941	1.87E-22	1
YWHAB	0.566311249	1.96E-22	1
PDXK	0.565938794	2.12E-22	1
PAR5	0.565779536	2.19E-22	1
AK5	0.565290063	2.42E-22	1
FBXL16	0.565091163	2.52E-22	1
GOT2	0.564782103	2.69E-22	1
VDAC1	0.564735354	2.71E-22	1
TCEAL2	0.564033049	3.13E-22	1
CPNE6	0.563802148	3.29E-22	1
BCAT1	0.563660582	3.38E-22	1
CHRM1	0.563551714	3.46E-22	1
WBP2	0.563512983	3.49E-22	1
PCGF5	0.563442846	3.54E-22	1
KIF1A	0.562731827	4.09E-22	1
SCAMP5	0.5625235	4.27E-22	1

PSMA5	0.561862003	4.89E-22	1
NR3C1	0.561598593	5.15E-22	1
TERF2IP	0.561403417	5.36E-22	1
NRXN3	0.560865304	5.98E-22	1
OLFM1	0.560154814	6.91E-22	1
ARL8B	0.560089522	7.00E-22	1
BHLHE41	0.559737717	7.52E-22	1
PCDH10	0.559571001	7.78E-22	1
SCAMP1	0.558488606	9.67E-22	1
MOCS2	0.558386056	9.88E-22	1
PRKAR1A	0.558313799	1.00E-21	1
COX5B	0.558298053	1.01E-21	1
OCIAD1	0.557996843	1.07E-21	1
AARS	0.557820302	1.11E-21	1
COPG2	0.557464558	1.19E-21	1
NECAP1	0.557378247	1.21E-21	1
LOC147670	0.556859977	1.34E-21	1
SRPK2	0.556767272	1.37E-21	1
TARBP1	0.556441426	1.46E-21	1
SEPW1	0.556196436	1.53E-21	1
EPB49	0.556143178	1.55E-21	1
PURA	0.555982986	1.60E-21	1
TECR	0.555873445	1.63E-21	1
PRICKLE2	0.555180778	1.88E-21	1
BEX5	0.554871382	2.00E-21	1
TCEAL4	0.554642206	2.09E-21	1
APLP2	0.554192466	2.28E-21	1
MTCH1	0.553077586	2.85E-21	1
ATP6AP1	0.551704887	3.74E-21	1
APOL2	0.551267963	4.07E-21	1
KIAA1467	0.550275848	4.95E-21	1
HIGD1A	0.549800747	5.43E-21	1
WASF3	0.549614011	5.63E-21	1
NDUFB3	0.549365078	5.91E-21	1
NEGR1	0.549181879	6.13E-21	1
STAT1	0.54905676	6.28E-21	1
COX4I1	0.548826866	6.56E-21	1
KCNC2	0.548816965	6.58E-21	1
PDHB	0.548784425	6.62E-21	1
SLITRK4	0.548783031	6.62E-21	1
GLS	0.548377066	7.17E-21	1
NDUFA2	0.547944348	7.79E-21	1
SYNGR3	0.547694599	8.18E-21	1
CD200	0.547516582	8.47E-21	1
IDS	0.547452497	8.58E-21	1

UCHL1	0.547265539	8.89E-21	1
STXBP1	0.54653538	1.02E-20	1
ISCU	0.546297756	1.07E-20	1
HLF	0.545749522	1.19E-20	1
CLCN4	0.545375462	1.28E-20	1
NEBL	0.5451972	1.33E-20	1
TMOD2	0.545022567	1.37E-20	1
LOC285878	0.544843782	1.42E-20	1
CDK5	0.544409637	1.54E-20	1
DNM3	0.544167825	1.62E-20	1
ATP2B3	0.54359657	1.80E-20	1
FKBP2	0.543280345	1.92E-20	1
CD47	0.54320716	1.94E-20	1
ITM2C	0.543112616	1.98E-20	1
NDUFV1	0.543064265	2.00E-20	1
NRCAM	0.542955832	2.04E-20	1
RTN3	0.542905375	2.06E-20	1
ATP6V0E2	0.5427601	2.12E-20	1
PFKM	0.5425974	2.18E-20	1
C14orf2	0.542588311	2.19E-20	1
GLRB	0.542274969	2.32E-20	1
STXBP5L	0.542181604	2.36E-20	1
RAB3C	0.541976127	2.46E-20	1
CNNM1	0.541410529	2.74E-20	1
FRMPD4	0.541339528	2.78E-20	1
C10orf32	0.54111674	2.90E-20	1
CANX	0.540935632	3.00E-20	1
BLCAP	0.540817453	3.07E-20	1
NDUFB6	0.540455252	3.28E-20	1
SNAP91	0.538927662	4.38E-20	1
CNTNAP4	0.538689127	4.58E-20	1
MPV17	0.538516169	4.74E-20	1
MEA1	0.538156107	5.07E-20	1
REPS2	0.53807503	5.15E-20	1
ANKS1B	0.538033155	5.19E-20	1
CALB2	0.538020142	5.20E-20	1
AP3M2	0.537858463	5.36E-20	1
FAM65B	0.537699689	5.52E-20	1
GDA	0.537687968	5.53E-20	1
LGMN	0.537530248	5.70E-20	1
RIMS2	0.53750547	5.73E-20	1
KCNB1	0.536874897	6.45E-20	1
SUMO3	0.536434865	7.00E-20	1
MGST3	0.536330673	7.14E-20	1
ARF5	0.536325445	7.15E-20	1

TCF25	0.536062016	7.51E-20	1
PPP2CA	0.535653428	8.10E-20	1
SQSTM1	0.53544877	8.42E-20	1
HOOK1	0.535150342	8.90E-20	1
CALM1	0.534930631	9.27E-20	1
CIT	0.534911514	9.30E-20	1
NDUFS7	0.534859034	9.39E-20	1
IFI6	0.534772136	9.55E-20	1
C16orf45	0.534762371	9.56E-20	1
MRFAP1	0.534517798	1.00E-19	1
PRRT2	0.534473625	1.01E-19	1
BSG	0.534238046	1.05E-19	1
GABARAPL2	0.534094637	1.08E-19	1
NCAM2	0.534063954	1.09E-19	1
SLC7A8	0.533962328	1.11E-19	1
ATP5B	0.533879458	1.13E-19	1
AKAP6	0.533832523	1.14E-19	1
SUCLG1	0.533757319	1.15E-19	1
RPH3A	0.533712566	1.16E-19	1
TGOLN2	0.533516476	1.21E-19	1
PRKCB	0.533423277	1.23E-19	1
LRRC4C	0.532883074	1.36E-19	1
ACOT7	0.532543834	1.44E-19	1
ZNF204P	0.532535912	1.45E-19	1
RIC3	0.532518774	1.45E-19	1
ZCCHC17	0.532175818	1.54E-19	1
SOD2	0.531574646	1.73E-19	1
PPP2R2C	0.531431434	1.77E-19	1
OAZ1	0.531205637	1.85E-19	1
KRT222	0.53115032	1.87E-19	1
RAD23A	0.531069564	1.89E-19	1
NAP1L2	0.531001892	1.92E-19	1
TIMP2	0.530344721	2.16E-19	1
HMOX2	0.530104515	2.26E-19	1
HMP19	0.530013298	2.30E-19	1
HSPA12A	0.529921878	2.34E-19	1
PRDX5	0.529734504	2.42E-19	1
RBBP7	0.52971621	2.43E-19	1
SYP	0.529394341	2.57E-19	1
EIF4A2	0.529376886	2.58E-19	1
FXYD6	0.529126796	2.70E-19	1
SCN3B	0.529025046	2.75E-19	1
PIK3R1	0.528659216	2.94E-19	1
ISCA1	0.528393699	3.09E-19	1
ARHGEF9	0.528327063	3.13E-19	1

ADRBK2	0.528314027	3.13E-19	1
C19orf53	0.528132507	3.24E-19	1
RABGAP1L	0.527935667	3.36E-19	1
MRPL55	0.527810132	3.44E-19	1
FSTL5	0.527597857	3.57E-19	1
CYFIP2	0.527462098	3.66E-19	1
BSCL2	0.527272185	3.79E-19	1
CIRBP	0.52699126	3.99E-19	1
MRPL20	0.526875268	4.07E-19	1
COX14	0.526708258	4.20E-19	1
C1orf173	0.526674256	4.22E-19	1
PRUNE2	0.526617638	4.27E-19	1
NDUFA12	0.526499095	4.36E-19	1
ECH1	0.526372078	4.46E-19	1
LANCL1	0.526302249	4.52E-19	1
PAK1	0.526247871	4.56E-19	1
DGCR6	0.526219994	4.58E-19	1
PJA2	0.525335418	5.38E-19	1
NDUFAB1	0.525137325	5.57E-19	1
MRPS21	0.52509541	5.62E-19	1
YWHAH	0.524676867	6.06E-19	1
08-sep	0.524671031	6.06E-19	1
SNX3	0.524579816	6.16E-19	1
CMAS	0.524455882	6.30E-19	1
C7orf41	0.524138543	6.67E-19	1
ATCAY	0.524014006	6.82E-19	1
PINK1	0.523971269	6.87E-19	1
EFHA2	0.523925891	6.93E-19	1
ACSL6	0.523553784	7.41E-19	1
SNURF	0.523177005	7.93E-19	1
DDX24	0.523137544	7.98E-19	1
DOCK3	0.523096758	8.04E-19	1
SLC25A12	0.522930139	8.28E-19	1
GPR158	0.522473348	8.99E-19	1
PRR13	0.522037919	9.72E-19	1
HSPA4L	0.522020346	9.75E-19	1
GYG1	0.521667588	1.04E-18	1
NDUFB9	0.521542053	1.06E-18	1
INPP4B	0.520865043	1.20E-18	1
C2orf80	0.520374843	1.31E-18	1
TM2D3	0.520235593	1.34E-18	1
NDUFB8	0.520103649	1.37E-18	1
PDE4A	0.520057415	1.38E-18	1
UQCRB	0.51998529	1.40E-18	1
DIRAS2	0.519837311	1.44E-18	1

CNBP	0.519512213	1.52E-18	1
BEX1	0.519483283	1.53E-18	1
NDUFS8	0.519451295	1.54E-18	1
TMEM242	0.519375676	1.56E-18	1
CKMT1B	0.519372428	1.56E-18	1
RAB6A	0.519285726	1.58E-18	1
PRKAA2	0.519068488	1.65E-18	1
MYL6B	0.519018179	1.66E-18	1
KIAA0513	0.518668252	1.77E-18	1
MAP1LC3B	0.518628477	1.78E-18	1
PRDX3	0.518469204	1.83E-18	1
TSPYL4	0.518361524	1.86E-18	1
COPS6	0.518289445	1.89E-18	1
SMARCA2	0.518273042	1.89E-18	1
DZIP3	0.518260054	1.90E-18	1
DNAJC5	0.517933994	2.01E-18	1
PCMT1	0.517897953	2.02E-18	1
NAPG	0.517853592	2.04E-18	1
LOC150622	0.517783945	2.06E-18	1
MNF1	0.517753798	2.08E-18	1
MEGF8	0.517637963	2.12E-18	1
TSPYL1	0.517579598	2.14E-18	1
DGKB	0.51692356	2.40E-18	1
CAP2	0.516742384	2.48E-18	1
ADCY2	0.51657624	2.55E-18	1
UQCRC1	0.516162364	2.74E-18	1
LONRF2	0.516156444	2.75E-18	1
SRPRB	0.516084032	2.78E-18	1
SLC41A2	0.516068932	2.79E-18	1
PSMD1	0.51601633	2.81E-18	1
RGS7BP	0.515685575	2.98E-18	1
ZMAT4	0.515636448	3.01E-18	1
ATP2A2	0.51507003	3.32E-18	1
ST3GAL5	0.514957849	3.39E-18	1
RAB18	0.514805754	3.48E-18	1
FAM155A	0.514550543	3.63E-18	1
SLC25A11	0.513574889	4.31E-18	1
SYNJ1	0.513567698	4.31E-18	1
NECAB2	0.51345563	4.40E-18	1
TMEM106B	0.513237116	4.57E-18	1
TUBB4A	0.51307899	4.69E-18	1
COX7A1	0.512734518	4.98E-18	1
ARF1	0.512688292	5.02E-18	1
NEFL	0.512606316	5.09E-18	1
HDAC6	0.512512483	5.18E-18	1

NFE2L1	0.512380844	5.30E-18	1
ANO5	0.511866892	5.79E-18	1
HSP90AB2P	0.511671667	5.99E-18	1
EID1	0.511661787	6.00E-18	1
SPRYD7	0.511651734	6.01E-18	1
ACTR10	0.511442929	6.23E-18	1
PRKCE	0.511388687	6.28E-18	1
LYRM7	0.511338961	6.34E-18	1
NDUFA3	0.511246504	6.44E-18	1
ARL1	0.511174861	6.52E-18	1
NUDCD3	0.51106218	6.65E-18	1
TRMT112	0.511042702	6.67E-18	1
CLCN3	0.510967	6.76E-18	1
NT5DC3	0.510963535	6.76E-18	1
FARSA	0.510948856	6.78E-18	1
ECHS1	0.510063594	7.89E-18	1
DGKE	0.50989183	8.13E-18	1
SLC4A10	0.509782151	8.28E-18	1
ASAH1	0.509583699	8.57E-18	1
ATOX1	0.509573165	8.58E-18	1
DHRS7	0.509547563	8.62E-18	1
FAM216A	0.509299296	9.00E-18	1
APP	0.508954219	9.54E-18	1
RGS4	0.508894057	9.64E-18	1
PER3	0.508781288	9.83E-18	1
NDUFA8	0.508476479	1.04E-17	1
G3BP2	0.508229042	1.08E-17	1
CRBN	0.508093603	1.11E-17	1
PLD3	0.507827046	1.16E-17	1
MAGEH1	0.507710219	1.18E-17	1
PNKD	0.507452665	1.23E-17	1
CASD1	0.507240332	1.28E-17	1
LPIN2	0.506898873	1.35E-17	1
TAX1BP1	0.5067912	1.38E-17	1
TPPP	0.506766506	1.38E-17	1
IGIP	0.506758779	1.39E-17	1
GAPDH	0.506706779	1.40E-17	1
CD63	0.506697456	1.40E-17	1
RAPGEF4	0.50657117	1.43E-17	1
KIF3A	0.506465887	1.46E-17	1
IDH3A	0.50625658	1.51E-17	1
MAP9	0.506186805	1.53E-17	1
NDUFAF3	0.506153194	1.54E-17	1
VDAC3	0.506032385	1.57E-17	1
PHPT1	0.505507294	1.71E-17	1

ARHGEF12	0.505107242	1.83E-17	1
NRSN1	0.504921681	1.89E-17	1
VAMP1	0.504850641	1.91E-17	1
DYNLL1	0.504674253	1.97E-17	1
PCP4L1	0.504520322	2.02E-17	1
LY6E	0.504418271	2.06E-17	1
PPP1R2	0.504238092	2.12E-17	1
SNCB	0.503976016	2.22E-17	1
MRPS7	0.503951542	2.23E-17	1
SBDS	0.503843153	2.27E-17	1
PDHA1	0.503105501	2.57E-17	1
USP2	0.503049204	2.59E-17	1
TRIM23	0.50265268	2.77E-17	1
RAB3GAP1	0.502600182	2.79E-17	1
SPARCL1	0.502505715	2.84E-17	1
C7orf59	0.50234968	2.91E-17	1
NDUFB1	0.502307265	2.93E-17	1
NDUFC1	0.502304388	2.94E-17	1
CACNB2	0.502281386	2.95E-17	1
NDUFS2	0.501949384	3.12E-17	1
RASD2	0.501743288	3.22E-17	1
MAT2B	0.501624471	3.29E-17	1
ACYP1	0.501581989	3.31E-17	1
LOC647979	0.501580807	3.31E-17	1
EDARADD	0.501543891	3.33E-17	1
CHMP5	0.501110852	3.58E-17	1
PPM1K	0.501098618	3.59E-17	1
DNAJB4	0.501088205	3.60E-17	1
GCC2	0.501055072	3.62E-17	1
ACSL3	0.500974521	3.67E-17	1
SUCLA2	0.500674897	3.85E-17	1
RAP1GDS1	0.500497319	3.97E-17	1
NKIRAS1	0.500457554	3.99E-17	1
RN45S	0.500427651	4.01E-17	1
BRP44L	0.500426529	4.02E-17	1
HSPA5	0.500336003	4.08E-17	1
COPS8	0.500203707	4.17E-17	1
CACNA2D3	0.500196538	4.17E-17	1
CAMK2D	0.500148063	4.21E-17	1
KIAA1244	0.50012927	4.22E-17	1
DBC1	0.499938529	4.35E-17	1
PARK7	0.499776835	4.47E-17	1
GAD1	0.49949839	4.68E-17	1
POLR2I	0.498914699	5.16E-17	1
OMG	0.498784214	5.27E-17	1

CEND1	0.498502253	5.52E-17	1
EPS15	0.498394048	5.62E-17	1
ANP32E	0.498335143	5.68E-17	1
NDUFA5	0.498300849	5.71E-17	1
ARHGAP26	0.498266401	5.74E-17	1
C1orf212	0.498248606	5.76E-17	1
FBXO44	0.498237755	5.77E-17	1
PSMG3	0.497523246	6.49E-17	1
EPB41L3	0.497202891	6.84E-17	1
ABCC5	0.497086334	6.97E-17	1
ABCF2	0.496932411	7.15E-17	1
THOC7	0.49686342	7.23E-17	1
C11orf31	0.496717207	7.41E-17	1
ENSA	0.496713371	7.41E-17	1
NGFRAP1	0.496507167	7.67E-17	1
WDR61	0.496502369	7.68E-17	1
LRRC8B	0.496478154	7.71E-17	1
SCG3	0.496304954	7.93E-17	1
TRAPPC6B	0.496195452	8.07E-17	1
ABI1	0.496174648	8.10E-17	1
ARL6IP1	0.496110716	8.18E-17	1
FAM126B	0.495623649	8.86E-17	1
RTN1	0.495590701	8.91E-17	1
PLCXD3	0.495527917	9.00E-17	1
KCNAB1	0.495447023	9.12E-17	1
ARHGAP5	0.495396213	9.20E-17	1
GTF2F1	0.494935666	9.92E-17	1
ME1	0.494854351	1.01E-16	1
LOC728730	0.494768439	1.02E-16	1
RNF187	0.49461892	1.04E-16	1
ATP6V1G2	0.494186446	1.12E-16	1
GNAO1	0.494161817	1.13E-16	1
MICU1	0.494118676	1.13E-16	1
CDH9	0.494071813	1.14E-16	1
STMN3	0.49397882	1.16E-16	1
PEG10	0.493913977	1.17E-16	1
CTSF	0.493306867	1.29E-16	1
AIG1	0.493081653	1.34E-16	1
PTPRN2	0.493074466	1.34E-16	1
CYCS	0.492765191	1.41E-16	1
TUBA1B	0.492744882	1.42E-16	1
NPTXR	0.49262084	1.45E-16	1
HSPA9	0.492589719	1.45E-16	1
CCDC136	0.492561214	1.46E-16	1
EPB41L4B	0.492552807	1.46E-16	1

ATP1A3	0.492518444	1.47E-16	1
HSP90AB1	0.492308802	1.52E-16	1
CSGALNACT1	0.492169968	1.55E-16	1
COX8A	0.491888231	1.63E-16	1
CTSD	0.491829107	1.64E-16	1
C9orf125	0.491795693	1.65E-16	1
PPP2R4	0.491794631	1.65E-16	1
TCEAL8	0.491617045	1.70E-16	1
PGM2L1	0.491554667	1.72E-16	1
SARS	0.491553071	1.72E-16	1
GNAI1	0.491392505	1.76E-16	1
PTPRA	0.491362995	1.77E-16	1
CNTN5	0.491199782	1.82E-16	1
ZYG11B	0.491179566	1.82E-16	1
TMEFF2	0.49110057	1.85E-16	1
AKAP11	0.490943641	1.89E-16	1
MRPL33	0.490828693	1.93E-16	1
CAMK1G	0.490634651	1.99E-16	1
PPA1	0.490632884	1.99E-16	1
KIAA1107	0.490349493	2.09E-16	1
PPP1R7	0.490040319	2.19E-16	1
NGRN	0.489770563	2.29E-16	1
FAM171B	0.489504993	2.39E-16	1
SVOP	0.489358268	2.44E-16	1
NCALD	0.489337106	2.45E-16	1
DYNC2LI1	0.489265287	2.48E-16	1
CACNG8	0.489148037	2.53E-16	1
ATP2B1	0.489107896	2.54E-16	1
GLG1	0.489026112	2.58E-16	1
TAOK3	0.4888615	2.65E-16	1
PPP2R1A	0.488433653	2.83E-16	1
SLC25A3	0.488091318	2.99E-16	1
COQ10B	0.48788924	3.09E-16	1
B3GALNT1	0.487714179	3.18E-16	1
LOC653566	0.487583313	3.25E-16	1
PMM1	0.487199886	3.45E-16	1
EIF2AK2	0.486800166	3.68E-16	1
VPS35	0.486194634	4.05E-16	1
RFK	0.486134511	4.09E-16	1
GSTO1	0.485560164	4.48E-16	1
MT3	0.485487957	4.53E-16	1
FBXO3	0.485361763	4.62E-16	1
PITHD1	0.485200253	4.74E-16	1
NDUFA7	0.485142601	4.78E-16	1
CDK14	0.485122621	4.80E-16	1

TMEM50B	0.485005402	4.89E-16	1
SCRN1	0.485000433	4.89E-16	1
GRM5	0.48492706	4.95E-16	1
DNER	0.484857971	5.00E-16	1
ZDBF2	0.484433145	5.35E-16	1
KCNA6	0.484276144	5.48E-16	1
ZBTB8OS	0.484227279	5.53E-16	1
TUB	0.483611723	6.09E-16	1
BABAM1	0.483443647	6.25E-16	1
MRP63	0.483409664	6.28E-16	1
NEDD8	0.483315719	6.38E-16	1
C16orf5	0.483158561	6.54E-16	1
ProSAPiP1	0.483056514	6.64E-16	1
MKKS	0.483028213	6.67E-16	1
MZT1	0.483021708	6.68E-16	1
ATP5L	0.482961115	6.74E-16	1
DCTN1	0.482778559	6.94E-16	1
MRPL34	0.482622964	7.11E-16	1
UQCRC2	0.482403162	7.36E-16	1
SDHB	0.482305875	7.47E-16	1
KCNJ3	0.482257405	7.53E-16	1
MPPE1	0.482109679	7.71E-16	1
RAB3IP	0.482009199	7.83E-16	1
PPP3CB	0.481908926	7.95E-16	1
SCN1A	0.481818673	8.06E-16	1
CHN1	0.481691159	8.23E-16	1
UBR3	0.481645852	8.29E-16	1
KIFAP3	0.481576964	8.38E-16	1
LMBRD1	0.481555696	8.40E-16	1
PEX19	0.481338967	8.69E-16	1
CPLX2	0.481277572	8.78E-16	1
COPS7A	0.481246488	8.82E-16	1
LPCAT4	0.481239752	8.83E-16	1
RMND5A	0.481211536	8.87E-16	1
COBL	0.481177203	8.91E-16	1
DIP2A	0.481142526	8.96E-16	1
GRIK2	0.480811531	9.44E-16	1
SIRPA	0.480574294	9.79E-16	1
PSMB10	0.48025167	1.03E-15	1
ALDH5A1	0.479501422	1.16E-15	1
MAP7	0.479492189	1.16E-15	1
FARSB	0.479351684	1.18E-15	1
PI4KA	0.479299874	1.19E-15	1
GAD2	0.479079997	1.24E-15	1
SLU7	0.47903596	1.24E-15	1

DLD	0.478845981	1.28E-15	1
LDHB	0.478722846	1.31E-15	1
RYR2	0.478694959	1.31E-15	1
TBC1D24	0.478677325	1.31E-15	1
DLG1	0.478563804	1.34E-15	1
UROD	0.478558799	1.34E-15	1
USO1	0.478174922	1.42E-15	1
APBB1	0.478040134	1.45E-15	1
TPRG1L	0.478038582	1.45E-15	1
C4orf3	0.478020176	1.46E-15	1
GUCY1A3	0.477980744	1.46E-15	1
PSMD8	0.477975661	1.47E-15	1
SDHA	0.477945763	1.47E-15	1
DDIT3	0.477771005	1.51E-15	1
PPP1R9A	0.47762725	1.55E-15	1
NQO2	0.477350976	1.61E-15	1
COX7C	0.477235545	1.64E-15	1
FKBP3	0.47714096	1.67E-15	1
EDIL3	0.477129322	1.67E-15	1
RNASEK	0.477121173	1.67E-15	1
ATP5H	0.47711537	1.67E-15	1
TMF1	0.477033558	1.69E-15	1
CSRNP3	0.476937071	1.72E-15	1
FAM169A	0.47691223	1.73E-15	1
MADD	0.476857167	1.74E-15	1
DNAJA4	0.476787611	1.76E-15	1
CDKL2	0.476734965	1.77E-15	1
CSMD1	0.476667621	1.79E-15	1
OPRK1	0.476573136	1.82E-15	1
ENDOD1	0.476546836	1.83E-15	1
RFPL1-AS1	0.47634302	1.88E-15	1
C9orf123	0.476338287	1.89E-15	1
DTNA	0.475945332	2.00E-15	1
CAMK2G	0.475225217	2.24E-15	1
UNC13A	0.474719964	2.42E-15	1
KCNK1	0.474679579	2.43E-15	1
AK1	0.474504938	2.50E-15	1
MRAS	0.47447993	2.51E-15	1
MRPL28	0.473953022	2.72E-15	1
HK1	0.473839968	2.76E-15	1
NMNAT2	0.473671199	2.84E-15	1
TIAM1	0.473499163	2.91E-15	1
MPP2	0.473149877	3.07E-15	1
PACSIN1	0.473142575	3.07E-15	1
CLSTN3	0.473127361	3.08E-15	1

PTPRR	0.473111808	3.09E-15	1
GRIPAP1	0.473053165	3.11E-15	1
PDIA3	0.473031583	3.13E-15	1
PTGR1	0.472689078	3.29E-15	1
KCNIP4	0.472683337	3.29E-15	1
ATMIN	0.472505369	3.38E-15	1
ABHD10	0.472460411	3.41E-15	1
PCDH20	0.472420177	3.43E-15	1
LYRM1	0.472340407	3.47E-15	1
SGSM1	0.472329872	3.48E-15	1
C1orf123	0.472286616	3.50E-15	1
LRPPRC	0.471799043	3.77E-15	1
SCN7A	0.471663141	3.85E-15	1
S100A6	0.471590651	3.89E-15	1
ANKH	0.471558241	3.91E-15	1
TMEM55A	0.470908194	4.31E-15	1
RUNDC3A	0.470841062	4.35E-15	1
MAOB	0.470498954	4.58E-15	1
CYP4X1	0.470445947	4.62E-15	1
PLS3	0.46975911	5.12E-15	1
NARS	0.469754464	5.13E-15	1
COX6B1	0.469690186	5.18E-15	1
SGIP1	0.469576737	5.27E-15	1
SCPEP1	0.469377932	5.43E-15	1
OPTN	0.46928995	5.50E-15	1
NDUFS5	0.469141197	5.62E-15	1
ENPP5	0.468998015	5.75E-15	1
ZDHHC21	0.468836386	5.89E-15	1
MDH2	0.46874848	5.96E-15	1
EHBP1	0.468703909	6.00E-15	1
FRY	0.468681113	6.02E-15	1
LRP1B	0.468647701	6.05E-15	1
CACNG2	0.468554445	6.14E-15	1
NAPA	0.468138607	6.53E-15	1
CALCOCO1	0.46782439	6.85E-15	1
BCAP29	0.467811594	6.86E-15	1
CYB561	0.467625678	7.05E-15	1
DSTN	0.467434177	7.26E-15	1
SERPINB9	0.467272527	7.44E-15	1
KLHL13	0.467240031	7.47E-15	1
PPIL4	0.466840562	7.93E-15	1
CDH8	0.466461353	8.39E-15	1
MAP2K4	0.4663204	8.57E-15	1
AP1S2	0.465955283	9.05E-15	1
EHD3	0.465910328	9.11E-15	1

SRSF5	0.46581826	9.23E-15	1
SYNGR1	0.465783426	9.28E-15	1
ATP5J2	0.465763953	9.31E-15	1
SLC6A1	0.465746244	9.33E-15	1
EEF1A2	0.465475654	9.71E-15	1
TACC1	0.465458653	9.74E-15	1
NDUFB2	0.465430295	9.78E-15	1
AKR1B1	0.465238034	1.01E-14	1
BTBD11	0.465228203	1.01E-14	1
SEC62	0.465020797	1.04E-14	1
ARFGEF2	0.464658503	1.10E-14	1
ARV1	0.464634483	1.10E-14	1
ANAPC13	0.464580341	1.11E-14	1
GNB5	0.46447733	1.13E-14	1
SPOP	0.464322329	1.15E-14	1
ADARB2	0.464265794	1.16E-14	1
CCNH	0.464186533	1.18E-14	1
JTB	0.464185743	1.18E-14	1
ZBTB16	0.463997859	1.21E-14	1
TLK1	0.463949259	1.22E-14	1
ASS1	0.463864693	1.23E-14	1
ZNHIT3	0.463814187	1.24E-14	1
HYOU1	0.463732782	1.26E-14	1
CTSL1	0.463706044	1.26E-14	1
CCDC56	0.463522185	1.30E-14	1
UQCR10	0.463463534	1.31E-14	1
GRPEL1	0.463312128	1.34E-14	1
C9orf5	0.463245051	1.35E-14	1
YPEL5	0.463229195	1.35E-14	1
ZBTB4	0.463216613	1.36E-14	1
UQCRH	0.46320749	1.36E-14	1
SUB1	0.463087462	1.38E-14	1
FIS1	0.463055149	1.39E-14	1
ALCAM	0.462699301	1.46E-14	1
FAM127A	0.462611406	1.48E-14	1
HSP90AB3P	0.462560813	1.49E-14	1
PSMB5	0.462328347	1.55E-14	1
TM9SF2	0.461596851	1.72E-14	1
DPP6	0.461484069	1.75E-14	1
SPCS1	0.461085399	1.85E-14	1
JKAMP	0.460737795	1.95E-14	1
KAZN	0.46049112	2.02E-14	1
COX17	0.460412325	2.05E-14	1
SNAPC5	0.46009131	2.14E-14	1
COX7B	0.459871478	2.21E-14	1

LGALS1	0.459752799	2.25E-14	1
SUSD4	0.459624457	2.29E-14	1
U2AF1L4	0.459567145	2.31E-14	1
RAB5A	0.459545915	2.32E-14	1
DSTYK	0.45939663	2.37E-14	1
CPEB4	0.459385884	2.37E-14	1
C11orf41	0.459273226	2.41E-14	1
CNRIP1	0.459095415	2.48E-14	1
C21orf33	0.45907654	2.48E-14	1
PIM2	0.458995286	2.51E-14	1
GRIA2	0.458917996	2.54E-14	1
HIGD2A	0.458893845	2.55E-14	1
SLC24A2	0.458877332	2.56E-14	1
YPEL2	0.458790106	2.59E-14	1
PTPN11	0.458569794	2.67E-14	1
SLC6A15	0.45851582	2.69E-14	1
POLR2E	0.458502942	2.70E-14	1
CADM3	0.458375599	2.75E-14	1
PEX5L	0.458304724	2.78E-14	1
MYCBP2	0.458296844	2.78E-14	1
TMEM178	0.458231929	2.81E-14	1
ARHGEF7	0.458158245	2.84E-14	1
MED27	0.458108973	2.86E-14	1
DDX1	0.458057219	2.88E-14	1
PDE8B	0.457807832	2.99E-14	1
RNF14	0.457753831	3.01E-14	1
IDH3G	0.457709275	3.03E-14	1
ATP8A1	0.457591137	3.08E-14	1
NDUFA11	0.457443341	3.15E-14	1
FBXW7	0.45722977	3.25E-14	1
PLCB1	0.457199773	3.26E-14	1
ACSL4	0.457188794	3.26E-14	1
RGS12	0.457121038	3.30E-14	1
PPP2R2B	0.457111131	3.30E-14	1
ELAVL4	0.457029514	3.34E-14	1
SPTBN1	0.456893177	3.41E-14	1
HINT1	0.456570927	3.57E-14	1
SLC48A1	0.456297731	3.71E-14	1
CCDC85A	0.456273806	3.72E-14	1
KIF5A	0.456193236	3.77E-14	1
GLO1	0.45618009	3.77E-14	1
CCDC104	0.456003	3.87E-14	1
IL6ST	0.455939656	3.91E-14	1
LCMT1	0.455910104	3.92E-14	1
GOLGA8A	0.455785066	4.00E-14	1

CLIP4	0.455593897	4.11E-14	1
TCEAL1	0.455533944	4.14E-14	1
CCDC25	0.455525158	4.15E-14	1
PEX11B	0.455427502	4.21E-14	1
NDUFB4	0.455361279	4.25E-14	1
GOLGA8B	0.455231541	4.33E-14	1
PPM1B	0.455012646	4.46E-14	1
HTR2A	0.455010635	4.46E-14	1
EEA1	0.455006389	4.47E-14	1
TUBG2	0.454984071	4.48E-14	1
C15orf24	0.454960731	4.50E-14	1
GNAS	0.45493523	4.51E-14	1
EVI5	0.454929218	4.52E-14	1
NETO1	0.454777978	4.62E-14	1
NUDT21	0.454687086	4.68E-14	1
AASDHPPT	0.454676595	4.68E-14	1
PDIA3P	0.454639338	4.71E-14	1
CDO1	0.454538053	4.78E-14	1
CX3CL1	0.454512677	4.79E-14	1
RIMS3	0.45442502	4.86E-14	1
HSPH1	0.45437257	4.89E-14	1
KLHDC5	0.454368069	4.89E-14	1
BLOC1S2	0.454367506	4.90E-14	1
SYT11	0.454258926	4.97E-14	1
CMTM4	0.454250818	4.98E-14	1
GMFB	0.454132559	5.06E-14	1
ARL4C	0.453877194	5.25E-14	1
LRRN3	0.453759131	5.34E-14	1
UBE2E2	0.453751364	5.35E-14	1
PTS	0.453725926	5.37E-14	1
RSRC1	0.453569922	5.49E-14	1
NDUFB10	0.453550793	5.50E-14	1
HSPB3	0.453542981	5.51E-14	1
TMED4	0.453423303	5.60E-14	1
SLC2A3	0.453394495	5.62E-14	1
ASPH	0.453209023	5.78E-14	1
MRPL40	0.453180825	5.80E-14	1
FTO	0.453120154	5.85E-14	1
PCNP	0.45296734	5.98E-14	1
BCAS2	0.452888562	6.04E-14	1
FAM134A	0.452770924	6.15E-14	1
CYSTM1	0.452719377	6.19E-14	1
IDH3B	0.452438394	6.44E-14	1
SSR4	0.452329933	6.54E-14	1
ATP5A1	0.452278474	6.59E-14	1

ARHGEF3	0.452242155	6.63E-14	1
TSPAN3	0.452213404	6.65E-14	1
TMEM30A	0.451834065	7.02E-14	1
SLC25A27	0.451816155	7.04E-14	1
CKMT1A	0.451794134	7.06E-14	1
NR1D2	0.45171893	7.14E-14	1
POLR2L	0.451654435	7.20E-14	1
LRRTM3	0.451599478	7.26E-14	1
FECH	0.45150823	7.35E-14	1
04-sep	0.451454484	7.41E-14	1
C1orf43	0.451370032	7.50E-14	1
CLIP1	0.451353267	7.52E-14	1
SNX27	0.451301274	7.57E-14	1
HDHD2	0.451174338	7.71E-14	1
GADD45B	0.451164135	7.72E-14	1
NAA10	0.451160367	7.72E-14	1
PRKCZ	0.451137668	7.75E-14	1
ZNF540	0.451136728	7.75E-14	1
JAKMIP1	0.451107397	7.78E-14	1
NPEPPS	0.451039095	7.86E-14	1
PSMD12	0.451009692	7.89E-14	1
SPG20	0.450993273	7.91E-14	1
CRELD1	0.450674407	8.27E-14	1
MBNL1	0.450590054	8.37E-14	1
PPME1	0.450458903	8.53E-14	1
ACAT1	0.450458237	8.53E-14	1
EFNA5	0.450173152	8.88E-14	1
WRB	0.449767318	9.40E-14	1
PSMB3	0.449645175	9.57E-14	1
TMEM59	0.449627758	9.59E-14	1
APBA1	0.449585601	9.65E-14	1
NFASC	0.449576647	9.66E-14	1
CES4A	0.449509911	9.75E-14	1
MAPK1	0.449166232	1.02E-13	1
LMTK2	0.449050984	1.04E-13	1
TMEM9B	0.448950331	1.05E-13	1
RAP1GAP	0.448939472	1.06E-13	1
IGSF8	0.44846436	1.13E-13	1
RUSC2	0.448403603	1.14E-13	1
CD81	0.448118379	1.19E-13	1
UGP2	0.448079969	1.19E-13	1
EPM2AIP1	0.447972811	1.21E-13	1
INPP5F	0.447903608	1.22E-13	1
ZNF385B	0.447544501	1.28E-13	1
SEMA5A	0.447343211	1.32E-13	1

FAM49A	0.447271017	1.33E-13	1
OLA1	0.447223624	1.34E-13	1
FAM69A	0.447135313	1.36E-13	1
NDFIP2	0.447017463	1.38E-13	1
MRPS14	0.44698539	1.39E-13	1
RAB27B	0.446903476	1.40E-13	1
C20orf3	0.446848877	1.42E-13	1
BECN1	0.446806357	1.42E-13	1
WIPI2	0.446787226	1.43E-13	1
LOC100505876	0.446677868	1.45E-13	1
ABLIM1	0.446677768	1.45E-13	1
SLC32A1	0.446503189	1.49E-13	1
ARPP19	0.4457846	1.64E-13	1
MIA3	0.445635071	1.68E-13	1
UQCR11	0.445470932	1.71E-13	1
ACTR2	0.445402996	1.73E-13	1
RNF157	0.444834904	1.87E-13	1
BNIP3L	0.444696674	1.91E-13	1
ATP5F1	0.444674675	1.92E-13	1
NDUFAF4	0.444568625	1.94E-13	1
PCDH9	0.444537002	1.95E-13	1
GRIA4	0.444523105	1.96E-13	1
MTMR6	0.444467382	1.97E-13	1
LOC147727	0.444326387	2.01E-13	1
DNAJC3	0.444246452	2.03E-13	1
HNRNPH2	0.44402416	2.10E-13	1
PHKG2	0.443888034	2.14E-13	1
ABHD14A	0.443788153	2.17E-13	1
KLHDC3	0.443688137	2.20E-13	1
C20orf30	0.443524951	2.25E-13	1
PDE1B	0.44352422	2.25E-13	1
ZNF25	0.443503945	2.25E-13	1
CNIH	0.443333101	2.31E-13	1
HSPB8	0.443294973	2.32E-13	1
HSP90B1	0.443009387	2.41E-13	1
UBE2V2	0.442968363	2.42E-13	1
JAK1	0.442952818	2.43E-13	1
CHP	0.4428824	2.45E-13	1
MARCH6	0.442815996	2.48E-13	1
TMEM111	0.442769527	2.49E-13	1
AUP1	0.442766607	2.49E-13	1
GRB2	0.442683879	2.52E-13	1
SAT1	0.442528524	2.58E-13	1
HTATSF1	0.442432743	2.61E-13	1
MGLL	0.442370487	2.63E-13	1

PSMD7	0.442365505	2.63E-13	1
RAB5B	0.442300242	2.66E-13	1
SLC10A4	0.442274691	2.67E-13	1
ZBTB38	0.442228921	2.68E-13	1
ATL1	0.442219694	2.69E-13	1
LUC7L2	0.442160835	2.71E-13	1
PAK3	0.442149152	2.71E-13	1
DCTN2	0.442055547	2.75E-13	1
MPHOSPH8	0.442020248	2.76E-13	1
UFC1	0.441901649	2.81E-13	1
CDH18	0.441795459	2.85E-13	1
SKP1	0.441724496	2.88E-13	1
WBSCR17	0.441710727	2.88E-13	1
KHK	0.441634393	2.91E-13	1
SORT1	0.441544034	2.95E-13	1
MAPK10	0.441486236	2.97E-13	1
CYB5B	0.441342107	3.03E-13	1
ATP5I	0.441233514	3.08E-13	1
SEC61A2	0.440987282	3.18E-13	1
TIMM17A	0.44090595	3.22E-13	1
MAGED1	0.440711942	3.30E-13	1
MCFD2	0.440592109	3.36E-13	1
STAC2	0.440422646	3.44E-13	1
DNAJC18	0.440368723	3.46E-13	1
CCT3	0.440206629	3.54E-13	1
POLR2C	0.440168424	3.56E-13	1
TTC1	0.440041374	3.62E-13	1
AGPAT3	0.439992288	3.65E-13	1
PDK3	0.439963988	3.66E-13	1
CYB5R1	0.439948255	3.67E-13	1
TM9SF4	0.439890292	3.70E-13	1
TRNP1	0.439853809	3.71E-13	1
HDDC2	0.439834252	3.72E-13	1
QPCT	0.439790602	3.75E-13	1
ZMAT3	0.439784217	3.75E-13	1
AGL	0.439759373	3.76E-13	1
PPP3CA	0.439750222	3.77E-13	1
MAPK9	0.439748174	3.77E-13	1
GALNTL4	0.439549331	3.87E-13	1
NDUFAF1	0.439492252	3.90E-13	1
CHURC1	0.439490129	3.90E-13	1
RWDD2B	0.439435591	3.93E-13	1
PNMA3	0.439429912	3.94E-13	1
TTC33	0.439427473	3.94E-13	1
RNF41	0.439383194	3.96E-13	1

DNAJA2	0.439248999	4.03E-13	1
THYN1	0.439157813	4.08E-13	1
STAG3L4	0.439153285	4.09E-13	1
UPP1	0.438995475	4.18E-13	1
RGS7	0.438935193	4.21E-13	1
DAP3	0.438878673	4.24E-13	1
VPS29	0.438815238	4.28E-13	1
CDH13	0.43878882	4.29E-13	1
RPAP3	0.43839931	4.53E-13	1
C10orf118	0.438195738	4.65E-13	1
ARL2	0.438112579	4.71E-13	1
PFDN2	0.437888016	4.85E-13	1
CCDC115	0.437687914	4.99E-13	1
SCD5	0.437660554	5.00E-13	1
SPAG16	0.437613095	5.04E-13	1
CSMD3	0.437513012	5.11E-13	1
COPS4	0.43738835	5.19E-13	1
TMX4	0.437322407	5.24E-13	1
FAF2	0.437271951	5.27E-13	1
THTPA	0.437156807	5.36E-13	1
ZFAND1	0.437144053	5.37E-13	1
PDK2	0.437070441	5.42E-13	1
CNTN4	0.437001449	5.47E-13	1
GABRA2	0.436499567	5.85E-13	1
TSNAX	0.43642644	5.91E-13	1
SLC35A5	0.436273652	6.04E-13	1
PLP1	0.436231148	6.07E-13	1
VCP	0.436099961	6.18E-13	1
TMEM151A	0.436063533	6.21E-13	1
FDX1L	0.436062916	6.21E-13	1
KCNT2	0.435976525	6.28E-13	1
PDCD4	0.43572975	6.49E-13	1
NUCB1	0.435664078	6.55E-13	1
TMEM126B	0.435637934	6.57E-13	1
LPPR4	0.435567906	6.64E-13	1
C9orf4	0.435529595	6.67E-13	1
VPS13A	0.43539899	6.79E-13	1
CADPS	0.435310576	6.87E-13	1
MTUS1	0.435269669	6.91E-13	1
ISOC1	0.434580387	7.58E-13	1
TMED10	0.434430894	7.73E-13	1
PRAF2	0.434426348	7.74E-13	1
FAM217B	0.434379804	7.78E-13	1
ERI3	0.434215338	7.96E-13	1
BOLA3	0.434200597	7.97E-13	1

CXCL14	0.434193476	7.98E-13	1
MRPL15	0.434184462	7.99E-13	1
PRPS2	0.43401699	8.17E-13	1
BLVRA	0.433771063	8.44E-13	1
UCHL5	0.433766014	8.45E-13	1
SAR1B	0.433712969	8.51E-13	1
MRPL38	0.43366264	8.57E-13	1
NDUFV2	0.433655647	8.58E-13	1
UNC79	0.433611347	8.63E-13	1
TCEB2	0.4335174	8.74E-13	1
PPARGC1A	0.43348912	8.77E-13	1
TUFM	0.43342506	8.84E-13	1
STK16	0.433393578	8.88E-13	1
ANK3	0.433332718	8.95E-13	1
RNF6	0.433244716	9.06E-13	1
STX1B	0.433019588	9.34E-13	1
DIRAS3	0.432770194	9.65E-13	1
DOCK10	0.432664168	9.79E-13	1
TOMM7	0.4326281	9.84E-13	1
NECAB1	0.432475011	1.00E-12	1
CACNG3	0.432191313	1.04E-12	1
CHGA	0.432129204	1.05E-12	1
ZRANB2	0.432048468	1.06E-12	1
KHDRBS2	0.431840005	1.09E-12	1
LAPTM4B	0.43183532	1.09E-12	1
VPS4B	0.431695181	1.11E-12	1
CNPY2	0.431552774	1.13E-12	1
ZNF706	0.431237698	1.18E-12	1
CLIP3	0.431221187	1.19E-12	1
MYO5A	0.431201121	1.19E-12	1
LOC645212	0.43114242	1.20E-12	1
HSD17B4	0.431067508	1.21E-12	1
PKIB	0.431019968	1.22E-12	1
AMN1	0.430860579	1.24E-12	1
SKAP2	0.430847372	1.25E-12	1
MINA	0.430376459	1.33E-12	1
LOC344967	0.430246259	1.35E-12	1
PCLO	0.430151331	1.37E-12	1
KSR2	0.430110239	1.37E-12	1
VTI1B	0.430064623	1.38E-12	1
CAMLG	0.429969742	1.40E-12	1
FUT9	0.429961554	1.40E-12	1
TRIM9	0.4299514	1.40E-12	1
MCF2	0.429800043	1.43E-12	1
TMEM132B	0.429613322	1.47E-12	1

DNAJB1	0.429573622	1.47E-12	1
DHRS7B	0.429494116	1.49E-12	1
SELT	0.429490994	1.49E-12	1
TOMM6	0.429422165	1.50E-12	1
CLTB	0.429399845	1.51E-12	1
RBP4	0.429320932	1.52E-12	1
C12orf76	0.429180757	1.55E-12	1
ARFGAP2	0.429162905	1.56E-12	1
FXYD7	0.429101773	1.57E-12	1
TUBGCP4	0.429099493	1.57E-12	1
RRAGD	0.429006257	1.59E-12	1
PMVK	0.428846608	1.62E-12	1
OSBPL8	0.428395921	1.72E-12	1
TRMT11	0.428262344	1.75E-12	1
COX6C	0.42825788	1.75E-12	1
MPP5	0.428165727	1.77E-12	1
VAT1L	0.427868659	1.84E-12	1
COX7A2	0.427821808	1.86E-12	1
RASD1	0.427804767	1.86E-12	1
FBXO9	0.427710023	1.88E-12	1
DLX1	0.427555455	1.92E-12	1
PFKP	0.427537156	1.93E-12	1
CACNA1B	0.427529967	1.93E-12	1
PDGFA	0.427452108	1.95E-12	1
MZT2B	0.427394998	1.96E-12	1
MRPL51	0.427349395	1.97E-12	1
ARHGEF4	0.427325439	1.98E-12	1
SLC25A5	0.427171134	2.02E-12	1
TSC22D3	0.427111954	2.04E-12	1
RNF141	0.427031174	2.06E-12	1
GMPR2	0.426880842	2.10E-12	1
RND2	0.426748231	2.14E-12	1
LRRFIP2	0.426665075	2.16E-12	1
MUT	0.426598965	2.18E-12	1
MANBAL	0.426505825	2.20E-12	1
EPDR1	0.426486099	2.21E-12	1
LGI2	0.426473691	2.21E-12	1
SERGEF	0.426406833	2.23E-12	1
DST	0.42589015	2.39E-12	1
C19orf12	0.425756597	2.43E-12	1
SRSF8	0.42574897	2.43E-12	1
DYNC1I1	0.425744263	2.43E-12	1
ANKRD26	0.425585006	2.49E-12	1
UBE2Z	0.425581886	2.49E-12	1
CACYBP	0.425448947	2.53E-12	1

B2M	0.425442649	2.53E-12	1
CALY	0.424948631	2.70E-12	1
ODZ2	0.42489783	2.72E-12	1
TRAPPC2L	0.42483634	2.74E-12	1
ITFG1	0.424696646	2.79E-12	1
KIAA1045	0.424432515	2.89E-12	1
PITPNA	0.424365301	2.91E-12	1
C12orf57	0.424054328	3.03E-12	1
TSFM	0.42391807	3.09E-12	1
RCN2	0.423815801	3.13E-12	1
TMEM208	0.423804398	3.13E-12	1
HSPB11	0.42359189	3.22E-12	1
WARS	0.423498635	3.26E-12	1
VPS13D	0.423472756	3.27E-12	1
WDR5B	0.423333898	3.33E-12	1
PRDM2	0.423303114	3.34E-12	1
SPEF2	0.423261829	3.36E-12	1
ARPC1A	0.423235831	3.37E-12	1
KCND2	0.423172441	3.40E-12	1
CCDC28A	0.423068887	3.44E-12	1
PLA2G16	0.423043976	3.45E-12	1
CAST	0.422941492	3.50E-12	1
CACNA1D	0.422699057	3.61E-12	1
RAPGEF2	0.422582672	3.67E-12	1
C15orf57	0.422579522	3.67E-12	1
RPN1	0.422448445	3.73E-12	1
PAM	0.42236898	3.77E-12	1
MBNL2	0.422233926	3.83E-12	1
MRPL16	0.422225191	3.84E-12	1
LIN7B	0.422208831	3.85E-12	1
CYB5D2	0.422119631	3.89E-12	1
SLC23A2	0.422117313	3.89E-12	1
RASGEF1A	0.421942488	3.98E-12	1
UQCRHL	0.42188467	4.01E-12	1
ADAM22	0.421845542	4.03E-12	1
CCPG1	0.421762692	4.07E-12	1
ATP5J	0.421608963	4.16E-12	1
GPR162	0.42156258	4.18E-12	1
ENTPD6	0.421476449	4.23E-12	1
GPHN	0.421424724	4.25E-12	1
LARP1	0.421373421	4.28E-12	1
PYGB	0.421149026	4.41E-12	1
ERGIC2	0.421083933	4.44E-12	1
SNX32	0.421027435	4.48E-12	1
ZNF365	0.420997718	4.49E-12	1

VPS53	0.420993708	4.50E-12	1
SEMA4D	0.420862333	4.57E-12	1
GSTM4	0.420735494	4.65E-12	1
SSFA2	0.420554093	4.76E-12	1
CPEB3	0.420531604	4.77E-12	1
IMP3	0.420517558	4.78E-12	1
HCN1	0.420491346	4.79E-12	1
MNAT1	0.420328288	4.90E-12	1
PAAF1	0.420266716	4.93E-12	1
TOMM5	0.420241717	4.95E-12	1
DLG2	0.420155249	5.01E-12	1
PDZD11	0.420132744	5.02E-12	1
PPIE	0.420131903	5.02E-12	1
MLF2	0.420079514	5.05E-12	1
RRAGA	0.419901223	5.17E-12	1
SRA1	0.419807165	5.23E-12	1
AKAP1	0.41961037	5.37E-12	1
PDK1	0.419532846	5.42E-12	1
UQCRBP1	0.419437567	5.49E-12	1
PLEKHA1	0.419110686	5.72E-12	1
NAP1L4	0.419062979	5.75E-12	1
RNPC3	0.418921643	5.86E-12	1
TOMM20	0.418851645	5.91E-12	1
NRIP2	0.418800582	5.95E-12	1
ACP1	0.418634415	6.08E-12	1
BHLHB9	0.418620084	6.09E-12	1
OSTM1	0.418515635	6.17E-12	1
KLHDC2	0.418489266	6.19E-12	1
NR1D1	0.418463207	6.21E-12	1
KIF3B	0.418422635	6.24E-12	1
BCAN	0.418323356	6.32E-12	1
SYT14	0.418178094	6.44E-12	1
SULT1A1	0.418063191	6.53E-12	1
KLF9	0.417933501	6.64E-12	1
ZFAND2A	0.417896243	6.67E-12	1
AMD1	0.417750092	6.80E-12	1
VAPB	0.417497237	7.02E-12	1
TMTC3	0.417485761	7.03E-12	1
PLEKHA5	0.417454546	7.06E-12	1
WDR41	0.417396488	7.11E-12	1
PSMA7	0.417252934	7.24E-12	1
MGAT4A	0.417212485	7.28E-12	1
MRPS23	0.417167382	7.32E-12	1
CCND3	0.417161812	7.32E-12	1
CNP	0.417096816	7.38E-12	1

SLC27A5	0.417057701	7.42E-12	1
FMN2	0.417021411	7.46E-12	1
ANAPC11	0.416953424	7.52E-12	1
GPATCH4	0.416865993	7.60E-12	1
TSC22D1	0.416858225	7.61E-12	1
PPID	0.416666054	7.80E-12	1
NAA20	0.416533377	7.93E-12	1
MTX2	0.416458188	8.01E-12	1
VIP	0.41644235	8.02E-12	1
APOA1BP	0.416424553	8.04E-12	1
RYBP	0.416302284	8.16E-12	1
EIF3K	0.416228001	8.24E-12	1
NDUFA6	0.416147327	8.33E-12	1
TERF2	0.416128155	8.35E-12	1
AFTPH	0.415990318	8.49E-12	1
RAB3B	0.415819766	8.68E-12	1
SAE1	0.415731357	8.77E-12	1
TUBB4B	0.415728509	8.78E-12	1
KGFLP2	0.415608032	8.91E-12	1
MORF4L2	0.41560337	8.92E-12	1
SNRK	0.415547449	8.98E-12	1
RAB11FIP4	0.415519359	9.01E-12	1
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GLYR1	0.415300302	9.26E-12	1
ANO4	0.415199655	9.38E-12	1
PSMC4	0.415120209	9.48E-12	1
TRAPPC1	0.415041235	9.57E-12	1
SLC4A1AP	0.415018384	9.60E-12	1
DYRK4	0.414904513	9.74E-12	1
ETFDH	0.414876607	9.77E-12	1
MRPL54	0.414863016	9.79E-12	1
MRFAP1L1	0.414581607	1.01E-11	1
RABAC1	0.414381146	1.04E-11	1
SCP2	0.414148291	1.07E-11	1
TMX2	0.413918358	1.10E-11	1
C1orf96	0.413858813	1.11E-11	1
KCTD3	0.413770243	1.12E-11	1
SMARCA1	0.413768393	1.12E-11	1
GSTK1	0.413747731	1.13E-11	1
SRI	0.413744308	1.13E-11	1
MAPRE2	0.41359677	1.15E-11	1
LNP1	0.413562711	1.15E-11	1
NDUFS1	0.413554912	1.15E-11	1
NDUFS6	0.413524117	1.16E-11	1
ACOT8	0.413504205	1.16E-11	1

KIAA1797	0.413474925	1.16E-11	1
GRINA	0.413331783	1.19E-11	1
NGLY1	0.413197417	1.21E-11	1
MRPS15	0.413095421	1.22E-11	1
SLC25A23	0.413050234	1.23E-11	1
ELOVL4	0.41299834	1.24E-11	1
PSD3	0.412847487	1.26E-11	1
BTBD3	0.412836549	1.26E-11	1
FNDC9	0.412832689	1.26E-11	1
ZDHHC22	0.412832322	1.26E-11	1
PHYHIP	0.412818	1.26E-11	1
NOP56	0.412806331	1.27E-11	1
PLEKHM3	0.412716036	1.28E-11	1
NACC2	0.412601143	1.30E-11	1
RANGAP1	0.412415224	1.33E-11	1
MAN1A2	0.412334867	1.34E-11	1
SLC35F1	0.412260481	1.36E-11	1
FAM13B	0.412227439	1.36E-11	1
STAT4	0.412198592	1.37E-11	1
CRY2	0.412043476	1.39E-11	1
UBXN11	0.412021323	1.40E-11	1
PAFAH1B1	0.411874875	1.42E-11	1
NTPCR	0.411857955	1.42E-11	1
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C5orf41	0.411772932	1.44E-11	1
MFSD4	0.411528694	1.48E-11	1
IFNGR2	0.411461889	1.50E-11	1
SSR3	0.411424559	1.50E-11	1
SIK3	0.411380403	1.51E-11	1
SYNE1	0.411378748	1.51E-11	1
TUSC3	0.411152283	1.56E-11	1
DPP10	0.41112683	1.56E-11	1
CHMP2A	0.41103733	1.58E-11	1
NR3C2	0.411012592	1.58E-11	1
OLFM3	0.410831563	1.62E-11	1
SLC25A46	0.410683393	1.65E-11	1
CALM2	0.410503026	1.69E-11	1
ATP5O	0.410360915	1.72E-11	1
TMEM192	0.410354344	1.72E-11	1
ACCN1	0.410323584	1.72E-11	1
ACADSB	0.41031225	1.73E-11	1
TRAPPC4	0.410293018	1.73E-11	1
RWDD2A	0.410206623	1.75E-11	1
RAD51C	0.409987826	1.80E-11	1
MRPL32	0.409943497	1.81E-11	1

PIP4K2C	0.409932491	1.81E-11	1
PRDX2	0.409929389	1.81E-11	1
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NUCKS1	0.409802357	1.84E-11	1
ITSN2	0.409679353	1.87E-11	1
NDUFA10	0.409614011	1.88E-11	1
ARHGAP12	0.409501418	1.91E-11	1
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CUEDC2	0.409121902	2.00E-11	1
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HERC2	0.408956923	2.04E-11	1
PSME1	0.408927109	2.05E-11	1
EXTL2	0.408861697	2.06E-11	1
TSC1	0.408830779	2.07E-11	1
AKIRIN2	0.408755759	2.09E-11	1
JAZF1	0.408730764	2.10E-11	1
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GUK1	0.40849835	2.16E-11	1
AAK1	0.408434795	2.18E-11	1
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THSD7A	0.407748102	2.37E-11	1
GDI1	0.40774137	2.37E-11	1
YARS	0.40771029	2.38E-11	1
B3GALTL	0.407558437	2.42E-11	1
NFX1	0.407495181	2.44E-11	1
MSH2	0.407441721	2.46E-11	1
NR2F2	0.407237916	2.52E-11	1
TUBB2A	0.407210406	2.53E-11	1
PNMAL2	0.407058134	2.58E-11	1
PIGK	0.406955987	2.61E-11	1
APOO	0.406921667	2.62E-11	1
C3orf75	0.406781201	2.66E-11	1
MRPS28	0.406313921	2.82E-11	1
KCNQ5	0.406148963	2.88E-11	1
LSM10	0.406119218	2.89E-11	1
UBE4A	0.406048885	2.91E-11	1
CSTB	0.40592227	2.96E-11	1
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TMEM126A	0.405534483	3.10E-11	1
GPR123	0.405516173	3.11E-11	1
IMPA1	0.405489911	3.12E-11	1
MRPL27	0.405461753	3.13E-11	1

TBCA	0.405443012	3.14E-11	1
ASNA1	0.405331417	3.18E-11	1
SIRT2	0.405298514	3.19E-11	1
SERF2	0.405225617	3.22E-11	1
MPP1	0.405176069	3.24E-11	1
C1orf51	0.405170104	3.24E-11	1
C7orf63	0.405153408	3.25E-11	1
RPS4Y1	0.405120475	3.26E-11	1
GLOD4	0.405093515	3.27E-11	1
TIMM17B	0.405007095	3.31E-11	1
NSMCE1	0.405004715	3.31E-11	1
PDXP	0.404977064	3.32E-11	1
CHM	0.404938739	3.33E-11	1
PSMD4	0.404934319	3.34E-11	1
IVD	0.404860815	3.37E-11	1
C11orf1	0.404724157	3.42E-11	1
RNF11	0.404708494	3.43E-11	1
GABRG1	0.404625241	3.46E-11	1
ATP5G2	0.404565061	3.49E-11	1
TOX4	0.404353776	3.58E-11	1
SERTM1	0.40408896	3.70E-11	1
INPP4A	0.404078251	3.70E-11	1
PDS5B	0.404067374	3.71E-11	1
DMXL2	0.404047539	3.72E-11	1
MTUS2	0.403975276	3.75E-11	1
C3orf26	0.403892149	3.79E-11	1
MRPS5	0.403837951	3.81E-11	1
TUBGCP5	0.403827546	3.82E-11	1
C14orf43	0.403808836	3.82E-11	1
TPM1	0.403787364	3.83E-11	1
GLS2	0.40376855	3.84E-11	1
WDR75	0.403713448	3.87E-11	1
OAZ2	0.403291014	4.07E-11	1
ACO2	0.403260126	4.09E-11	1
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CMBL	0.403199156	4.12E-11	1
GABARAP	0.403087748	4.17E-11	1
MICAL2	0.403022383	4.21E-11	1
FAM153B	0.402897243	4.27E-11	1
PPA2	0.402876458	4.28E-11	1
RAB1B	0.402835457	4.30E-11	1
BRE	0.402766139	4.34E-11	1
KLHL12	0.402734863	4.35E-11	1
ZC3H13	0.402593438	4.43E-11	1
AP2S1	0.402540875	4.46E-11	1

LYRM5	0.402504596	4.48E-11	1
SPTAN1	0.402418398	4.52E-11	1
TMEM25	0.402322874	4.58E-11	1
CHPT1	0.402295432	4.59E-11	1
PRKCA	0.402254287	4.61E-11	1
FBXL2	0.40224846	4.62E-11	1
TLE2	0.402191289	4.65E-11	1
GRIA1	0.402162561	4.67E-11	1
HAX1	0.402059584	4.72E-11	1
ZDHHC17	0.402024129	4.74E-11	1
TGFB2	0.401951849	4.79E-11	1
LOC157627	0.40191458	4.81E-11	1
N4BP2L1	0.401787774	4.88E-11	1
LOC100128264	0.401786784	4.88E-11	1
RPS6KA2	0.401716099	4.92E-11	1
NME2	0.401714935	4.92E-11	1
SLC35B4	0.401701303	4.93E-11	1
SMYD3	0.401691535	4.94E-11	1
C1orf63	0.401660204	4.96E-11	1
CHST15	0.401630346	4.97E-11	1
SVIP	0.401478331	5.07E-11	1
RIMS1	0.401476415	5.07E-11	1
MAN2A2	0.401468107	5.07E-11	1
WBP4	0.401435058	5.09E-11	1
ENPP4	0.401340704	5.15E-11	1
SUPT5H	0.401327814	5.16E-11	1
FAM102B	0.40129244	5.18E-11	1
ANKRD46	0.401196701	5.24E-11	1
FAR1	0.401120698	5.29E-11	1
CACNB4	0.400754787	5.53E-11	1
SNCG	0.400742071	5.53E-11	1
LINC00116	0.400739305	5.54E-11	1
CISD2	0.400738995	5.54E-11	1
FAM200B	0.400731338	5.54E-11	1
SDF2	0.400729585	5.54E-11	1
CNDP2	0.400720806	5.55E-11	1
BTRC	0.400644721	5.60E-11	1
EPB41L2	0.400634547	5.61E-11	1
VAPA	0.400603745	5.63E-11	1
TMEM155	0.400545259	5.67E-11	1
FHL1	0.4003278	5.81E-11	1
NDUFC2	0.400193407	5.91E-11	1
CYHR1	0.400169317	5.93E-11	1
MRPS9	0.400138683	5.95E-11	1
CCNC	0.400117146	5.96E-11	1

HSPA13	0.40010809	5.97E-11	1
ROCK2	0.399992705	6.05E-11	1
ERP29	0.399982826	6.06E-11	1
HSPA4	0.399831818	6.17E-11	1
OBFC2B	0.399759822	6.22E-11	1
RPP25	0.39974316	6.24E-11	1
UBR2	0.399525558	6.40E-11	1
AP4S1	0.399520915	6.40E-11	1
TYW3	0.399214554	6.64E-11	1
PDCD6	0.399199572	6.65E-11	1
TTBK2	0.399153013	6.69E-11	1
NR4A1	0.398978398	6.83E-11	1
UBL3	0.398849753	6.94E-11	1
SCN8A	0.398637481	7.11E-11	1
C15orf61	0.398551879	7.19E-11	1
PPM1A	0.398390797	7.33E-11	1
PCDH7	0.398326332	7.38E-11	1
INPP1	0.398270814	7.43E-11	1
GGNBP2	0.398002511	7.67E-11	1
RASGRF2	0.397895594	7.77E-11	1
SYBU	0.397876816	7.79E-11	1
TIMMDC1	0.39783972	7.82E-11	1
PDPK1	0.397731315	7.92E-11	1
DDX50	0.397337652	8.30E-11	1
DDB1	0.39721945	8.42E-11	1
PRDX1	0.397188983	8.45E-11	1
MAP2K1	0.397119315	8.52E-11	1
CCDC144A	0.397074043	8.56E-11	1
MEF2C	0.396669858	8.98E-11	1
ADD3	0.396558029	9.10E-11	1
LPGAT1	0.396527499	9.14E-11	1
ERAP1	0.396212439	9.48E-11	1
CDH10	0.396203548	9.49E-11	1
UBE2B	0.396042674	9.67E-11	1
WDR45	0.396000389	9.72E-11	1
GSTM2	0.395931388	9.80E-11	1
PPP2CB	0.395908112	9.83E-11	1
ZNF273	0.395866955	9.88E-11	1
TMSB15A	-0.40249316	4.48E-11	1
MEX3A	-0.428239452	1.76E-12	1
SOX4	-0.446932357	1.40E-13	1
NHSL1	-0.492557347	1.46E-16	1
SOX11	-0.543942275	1.69E-20	1
TUBA1A	0.847471054	1.31E-69	2
MAP1B	0.799666638	2.02E-56	2

EEF1A1	0.781643751	2.40E-52	2
DPYSL2	0.761602777	3.00E-48	2
RPLP0	0.735531264	1.74E-43	2
ACTG1	0.729621966	1.75E-42	2
ACTB	0.725553355	8.25E-42	2
RPL5	0.717957001	1.39E-40	2
RPS19	0.713498769	7.00E-40	2
RPS29	0.695270937	3.80E-37	2
EEF1G	0.688209698	3.85E-36	2
SOX4	0.687798585	4.39E-36	2
RPS14	0.685152385	1.03E-35	2
MARCKS	0.682463339	2.41E-35	2
HMGCS1	0.676696334	1.46E-34	2
RPS3	0.670948834	8.42E-34	2
PTMA	0.668568372	1.72E-33	2
RPS13	0.659442291	2.51E-32	2
SOX11	0.654999349	8.94E-32	2
RPS11	0.653290753	1.45E-31	2
CSRP2	0.650119516	3.53E-31	2
FDFT1	0.649496371	4.19E-31	2
TMSB10	0.64865681	5.29E-31	2
STMN1	0.646645249	9.22E-31	2
HN1	0.644305581	1.75E-30	2
YWHAE	0.644302479	1.75E-30	2
SRGAP1	0.641516414	3.73E-30	2
DPYSL3	0.639948121	5.68E-30	2
RPS5	0.637258845	1.16E-29	2
SET	0.636746162	1.33E-29	2
NNAT	0.635649028	1.78E-29	2
NHSL1	0.634046008	2.72E-29	2
RPL3	0.633285631	3.32E-29	2
CXADR	0.630893773	6.19E-29	2
RPS27A	0.630858644	6.24E-29	2
RPL30	0.630631191	6.62E-29	2
NEUROD6	0.626944441	1.71E-28	2
SATB2	0.625525712	2.46E-28	2
SCD	0.624705852	3.02E-28	2
CD24	0.622983449	4.68E-28	2
C17orf76-AS1	0.622572436	5.19E-28	2
RPL37A	0.622132372	5.79E-28	2
TMSB4X	0.621832994	6.24E-28	2
RPL27	0.620606307	8.49E-28	2
TULP4	0.620200115	9.40E-28	2
YBX1	0.619475323	1.13E-27	2
FABP7	0.619070618	1.24E-27	2

GNB2L1	0.618029769	1.61E-27	2
RPL32	0.617899226	1.66E-27	2
RPS15A	0.617797007	1.71E-27	2
RPS6	0.617479698	1.85E-27	2
YWHAZ	0.616823095	2.17E-27	2
HNRNPA1	0.61614721	2.56E-27	2
SLA	0.61567908	2.88E-27	2
RPL34	0.611095666	8.78E-27	2
RPL23	0.609306877	1.35E-26	2
TUBB2B	0.608955886	1.47E-26	2
RPL11	0.603178915	5.79E-26	2
RPL15	0.602780704	6.35E-26	2
DCX	0.602381182	6.98E-26	2
RPL4	0.601443231	8.69E-26	2
ZNF238	0.598803063	1.60E-25	2
SUMO2	0.594874893	3.96E-25	2
NREP	0.594821588	4.00E-25	2
RPSAP58	0.590713509	1.02E-24	2
TMSB15A	0.589432719	1.35E-24	2
RPS3A	0.588274289	1.75E-24	2
RPL29	0.586193885	2.78E-24	2
HDAC2	0.585610135	3.17E-24	2
ILF2	0.583082462	5.52E-24	2
RPL8	0.58306305	5.55E-24	2
EIF1	0.581119348	8.48E-24	2
MSMO1	0.579562956	1.19E-23	2
CEP170	0.578367	1.54E-23	2
MLLT11	0.577790912	1.74E-23	2
HMGB1	0.577248968	1.96E-23	2
MN1	0.5758445	2.64E-23	2
POTEE	0.574779337	3.32E-23	2
EZR	0.574478156	3.54E-23	2
RPL35A	0.570067249	8.97E-23	2
C6orf62	0.568320627	1.29E-22	2
CYP51A1	0.566805832	1.77E-22	2
RPL18A	0.566483033	1.89E-22	2
PPP1CB	0.565969013	2.10E-22	2
CRMP1	0.561227383	5.56E-22	2
MEX3A	0.559921528	7.24E-22	2
HMGCR	0.559766926	7.47E-22	2
BCL11A	0.559744656	7.51E-22	2
RPS4X	0.559482707	7.92E-22	2
DDX5	0.556866088	1.34E-21	2
SRSF6	0.556794904	1.36E-21	2
SKA2	0.556493664	1.44E-21	2

RPL18	0.553022849	2.88E-21	2
H3F3B	0.552868007	2.97E-21	2
LOC649395	0.551922246	3.58E-21	2
SEMA3A	0.549523637	5.73E-21	2
TUBB3	0.545269383	1.31E-20	2
DYNLT1	0.544084237	1.64E-20	2
CDC42	0.543354844	1.89E-20	2
NFIB	0.541532873	2.68E-20	2
EIF3L	0.541466463	2.71E-20	2
STMN2	0.53880658	4.48E-20	2
EEF2	0.537244589	6.02E-20	2
PTPRZ1	0.536209078	7.30E-20	2
DPYSL5	0.535689761	8.05E-20	2
RPS20	0.534812283	9.48E-20	2
RPS8	0.534269198	1.05E-19	2
PAFAH1B2	0.531750547	1.67E-19	2
CASP2	0.531194914	1.85E-19	2
RPL23P8	0.530001557	2.30E-19	2
XRCC5	0.529806445	2.39E-19	2
EIF4G2	0.528550838	3.00E-19	2
RPS24	0.52667258	4.22E-19	2
HNRNPH1	0.522576038	8.83E-19	2
ACAT2	0.522412697	9.09E-19	2
ARF6	0.521390278	1.09E-18	2
RPL10	0.520786975	1.21E-18	2
RPLP1	0.520386168	1.30E-18	2
MEIS2	0.5141977	3.86E-18	2
RAP2B	0.513265464	4.54E-18	2
KLF6	0.513062365	4.71E-18	2
LSM12	0.509486556	8.71E-18	2
EIF4EBP2	0.506790419	1.38E-17	2
EIF2S3	0.506662753	1.41E-17	2
DOK5	0.506498229	1.45E-17	2
RPL6	0.503988638	2.21E-17	2
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RPL36	0.503336685	2.47E-17	2
OCIAD2	0.502134484	3.02E-17	2
MAPK1IP1L	0.501437711	3.39E-17	2
SQLE	0.501387494	3.42E-17	2
RPL10A	0.496203988	8.06E-17	2
SOX5	0.495812735	8.59E-17	2
FAM117B	0.494876983	1.00E-16	2
PAFAH1B3	0.49424032	1.11E-16	2
FOXG1	0.493733979	1.21E-16	2
NFIA	0.490586792	2.01E-16	2

RAI14	0.488982275	2.60E-16	2
IDH1	0.488268317	2.91E-16	2
PBX1	0.486957704	3.59E-16	2
ZNF286A	0.485204684	4.74E-16	2
NONO	0.485042259	4.86E-16	2
FRMD4B	0.484739774	5.10E-16	2
CBX5	0.484342839	5.43E-16	2
SKIL	0.484019247	5.71E-16	2
BTF3L4	0.482373213	7.39E-16	2
SYNE2	0.482319004	7.46E-16	2
SUMO1	0.48209231	7.73E-16	2
CSNK1A1	0.48168501	8.23E-16	2
PTBP2	0.480834549	9.40E-16	2
MIR100HG	0.479479045	1.16E-15	2
MARCKSL1	0.479278569	1.20E-15	2
RPL39	0.479006474	1.25E-15	2
RPL27A	0.477674603	1.54E-15	2
YWHAQ	0.477170871	1.66E-15	2
RPL19	0.475721862	2.07E-15	2
FNBP1L	0.475495422	2.15E-15	2
SSBP2	0.475047209	2.30E-15	2
RPL7A	0.474517947	2.49E-15	2
CFL1	0.474367686	2.55E-15	2
SF3B14	0.472899921	3.19E-15	2
CAPZA2	0.472499922	3.39E-15	2
RPL14	0.472178722	3.56E-15	2
NELL2	0.472165109	3.56E-15	2
RPL12	0.471501217	3.94E-15	2
CCND2	0.470124098	4.85E-15	2
TTC28	0.470121576	4.85E-15	2
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RPS2	0.467315276	7.39E-15	2
RPL37	0.467201625	7.52E-15	2
MORF4L1	0.466876754	7.89E-15	2
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RPL35	0.465906763	9.11E-15	2
VCAN	0.465579659	9.57E-15	2
ZNFX1-AS1	0.464666998	1.09E-14	2
TMEM33	0.464081784	1.19E-14	2
CDV3	0.463769071	1.25E-14	2
ZC2HC1A	0.463485714	1.30E-14	2
WDR83OS	0.463150451	1.37E-14	2
FTL	0.461182464	1.83E-14	2
ENAH	0.458339885	2.76E-14	2

GDI2	0.45553555	4.14E-14	2
GJC1	0.454312311	4.93E-14	2
SMAD2	0.453890848	5.24E-14	2
KIDINS220	0.453853563	5.27E-14	2
IGF1R	0.4537647	5.34E-14	2
ARF4	0.452350677	6.53E-14	2
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NACA	0.452305837	6.57E-14	2
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POU3F2	0.448947367	1.06E-13	2
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NKAIN1	0.447699977	1.26E-13	2
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PPIA	0.442851631	2.46E-13	2
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ETNK1	0.441782825	2.85E-13	2
EPHA3	0.441105049	3.13E-13	2
GPM6A	0.440955794	3.20E-13	2
EEF1B2	0.439977582	3.65E-13	2
TPT1	0.439484839	3.91E-13	2
HSPA8	0.438405815	4.52E-13	2
H2AFZ	0.43835738	4.55E-13	2
BZW1	0.438150008	4.68E-13	2
PSMB6	0.437995965	4.78E-13	2
SNRPF	0.437842072	4.88E-13	2
MAP4K4	0.436939444	5.52E-13	2
GSTP1	0.433849644	8.36E-13	2
SC5DL	0.433471482	8.79E-13	2
CSDE1	0.432796646	9.62E-13	2
EIF3E	0.432311726	1.03E-12	2
SHISA2	0.431972108	1.07E-12	2
CELF2	0.431799129	1.10E-12	2
CLEC2D	0.431653356	1.12E-12	2
FAM126A	0.431548408	1.14E-12	2
WIPF3	0.431437105	1.15E-12	2
ADRA2A	0.431217681	1.19E-12	2
TGFBR1	0.430747799	1.26E-12	2
MASP1	0.428269136	1.75E-12	2
DDX3X	0.428237248	1.76E-12	2
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FKBP1A	0.427009042	2.06E-12	2
MAP2	0.426012298	2.35E-12	2
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NEUROD2	0.42477102	2.76E-12	2
RPL13	0.424373242	2.91E-12	2
RPLP2	0.424083355	3.02E-12	2
ZNF462	0.422870344	3.53E-12	2
RPS23	0.421949332	3.98E-12	2
TUBA1C	0.421817325	4.05E-12	2
KIF3C	0.42148091	4.22E-12	2
YTHDF2	0.421265006	4.34E-12	2
DYRK2	0.420948336	4.52E-12	2
RPS16	0.420762795	4.63E-12	2
CRIP2	0.418776915	5.97E-12	2
RBMXL1	0.418214048	6.41E-12	2
TOP2B	0.417509492	7.01E-12	2
SRSF10	0.416963447	7.51E-12	2
HNRNPA0	0.415631139	8.89E-12	2
SBK1	0.414166028	1.07E-11	2
MLLT3	0.413621467	1.14E-11	2
MAPRE1	0.413507301	1.16E-11	2
TTC3P1	0.412828814	1.26E-11	2
BACH2	0.412707146	1.28E-11	2
MTHFD2	0.412586618	1.30E-11	2
UBA52	0.412353577	1.34E-11	2
RPS15	0.412258203	1.36E-11	2
MAPRE2	0.411188276	1.55E-11	2
SDCBP	0.410252923	1.74E-11	2
PKIA	0.410086739	1.77E-11	2
C20orf112	0.409864079	1.82E-11	2
TBL1XR1	0.405641262	3.06E-11	2
DCAF7	0.404068987	3.71E-11	2
SYT4	0.403502688	3.97E-11	2
SEMA3C	0.403404944	4.02E-11	2
NKIRAS2	0.402960965	4.24E-11	2
PSMB7	0.402092648	4.70E-11	2
CLIC4	0.402044475	4.73E-11	2
ZNF644	0.402031107	4.74E-11	2
AUTS2	0.401958314	4.78E-11	2
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RAP2A	0.401282727	5.19E-11	2
PER2	0.400348589	5.80E-11	2
HNRNPC	0.400078892	5.99E-11	2

THRAP3	0.399802553	6.19E-11	2
SMC3	0.399679031	6.28E-11	2
CSNK1E	0.398959257	6.85E-11	2
RHOA	0.398715977	7.05E-11	2
IDI1	0.398654462	7.10E-11	2
PTPRS	0.398528579	7.21E-11	2
ST8SIA2	0.398489069	7.24E-11	2
LOC100506421	0.397879245	7.79E-11	2
PABPC3	0.397836214	7.83E-11	2
HIST1H4C	0.39762924	8.02E-11	2
SNRPD1	0.397552001	8.09E-11	2
HP1BP3	0.396801948	8.84E-11	2
CORO6	-0.397373179	8.27E-11	2
SLC12A5	-0.399175989	6.67E-11	2
KCNC2	-0.399666064	6.29E-11	2
DLX6-AS1	-0.402412084	4.53E-11	2
SCG2	-0.405328855	3.18E-11	2
GPRASP1	-0.407682537	2.39E-11	2
ACSL6	-0.407880903	2.33E-11	2
ABCA5	-0.408675549	2.11E-11	2
CXCL14	-0.408980423	2.03E-11	2
ALDOC	-0.409100358	2.00E-11	2
NALCN	-0.40914666	1.99E-11	2
NR2C1	-0.415867731	8.62E-12	2
SCN1A	-0.421726492	4.09E-12	2
OXR1	-0.426607138	2.18E-12	2
NRIP3	-0.426897881	2.09E-12	2
FAM153B	-0.429470857	1.49E-12	2
SPOCK2	-0.429517616	1.49E-12	2
OSBPL1A	-0.433574229	8.67E-13	2
RNPC3	-0.438498933	4.47E-13	2
GABRB2	-0.446178685	1.55E-13	2
STEAP2	-0.447863787	1.23E-13	2
CKMT1B	-0.455108574	4.40E-14	2
SERPINB9	-0.456328777	3.69E-14	2
DOCK10	-0.456346181	3.69E-14	2
CLU	-0.459080949	2.48E-14	2
TSPYL2	-0.459373702	2.38E-14	2
MAP7	-0.46153019	1.74E-14	2
GABRA1	-0.466682816	8.12E-15	2
SYNPR	-0.473672409	2.83E-15	2
SPARCL1	-0.47395648	2.71E-15	2
CCK	-0.482844206	6.87E-16	2
AHI1	-0.48472386	5.11E-16	2
ATP1B1	-0.485895138	4.25E-16	2

NRXN3	-0.502307895	2.93E-17	2
CIT	-0.502906832	2.65E-17	2
ERBB4	-0.504771515	1.94E-17	2
GAD1	-0.512622736	5.08E-18	2
MEG3	-0.525711806	5.02E-19	2
UNC80	-0.53194492	1.61E-19	2
SLC6A1	-0.577983079	1.67E-23	2
TFAP2C	0.758295179	1.30E-47	3
MKI67	0.727298916	4.25E-42	3
GLI3	0.725786902	7.55E-42	3
TOP2A	0.703066236	2.73E-38	3
CDK1	0.697755287	1.66E-37	3
FAM111A	0.694096546	5.61E-37	3
CREB5	0.689903547	2.22E-36	3
BIRC5	0.689227689	2.77E-36	3
TNC	0.684696248	1.19E-35	3
ZFP36L1	0.683574631	1.70E-35	3
RRM2	0.679664249	5.80E-35	3
KIAA0101	0.668689121	1.66E-33	3
NUSAP1	0.667709957	2.22E-33	3
UBE2C	0.659985615	2.14E-32	3
HIST1H1B	0.657064506	4.97E-32	3
PAX6	0.655133202	8.61E-32	3
CASC5	0.655010303	8.92E-32	3
SLC1A3	0.650980658	2.77E-31	3
MLF1IP	0.649837589	3.81E-31	3
UHRF1	0.629129365	9.76E-29	3
ECT2	0.627767429	1.39E-28	3
HES1	0.624139962	3.49E-28	3
WEE1	0.617347814	1.91E-27	3
FANCD2	0.61588615	2.73E-27	3
PTTG1	0.612124019	6.85E-27	3
STON2	0.603187005	5.78E-26	3
SOX2	0.598424334	1.75E-25	3
SLCO1C1	0.59590845	3.12E-25	3
EGR1	0.591767428	8.01E-25	3
HIST1H1C	0.591225469	9.05E-25	3
ZFHX4	0.585263987	3.42E-24	3
GPR98	0.585154827	3.50E-24	3
HMGB2	0.585137053	3.52E-24	3
NOTCH2	0.583131014	5.46E-24	3
AURKB	0.582714369	5.98E-24	3
SGOL1	0.579046225	1.33E-23	3
NDC80	0.578160047	1.61E-23	3
MELK	0.576121135	2.49E-23	3

KIF23	0.57607298	2.52E-23	3
CYR61	0.575250959	3.00E-23	3
DUSP10	0.573311387	4.53E-23	3
NBPF10	0.573224191	4.61E-23	3
PDPN	0.573171443	4.67E-23	3
GNG5	0.57196567	6.02E-23	3
HJURP	0.571049994	7.30E-23	3
ZIC2	0.570603323	8.02E-23	3
DACH1	0.56999477	9.11E-23	3
CENPF	0.567785168	1.44E-22	3
CENPK	0.564467979	2.87E-22	3
KIF15	0.5640174	3.14E-22	3
SMC4	0.563583743	3.44E-22	3
PBK	0.562144947	4.61E-22	3
PRDM16	0.561629338	5.12E-22	3
TPX2	0.561584371	5.17E-22	3
GMNN	0.560808669	6.05E-22	3
MIS18BP1	0.560512333	6.43E-22	3
RFTN2	0.559791693	7.44E-22	3
HIST1H1E	0.559685543	7.60E-22	3
LTBP1	0.559063436	8.62E-22	3
ZWINT	0.558562091	9.53E-22	3
ESCO2	0.556892858	1.33E-21	3
SKA3	0.555182394	1.88E-21	3
PRR11	0.554556468	2.12E-21	3
F3	0.553097173	2.84E-21	3
NBPF14	0.550312215	4.91E-21	3
ASPM	0.549953594	5.27E-21	3
CCNB2	0.543709883	1.77E-20	3
KNTC1	0.543693846	1.77E-20	3
C21orf58	0.542280799	2.32E-20	3
TAGLN2	0.542071818	2.41E-20	3
GPX3	0.541474255	2.71E-20	3
BRIP1	0.541043709	2.94E-20	3
PON2	0.536733651	6.62E-20	3
MLC1	0.535036038	9.09E-20	3
SALL3	0.533893422	1.12E-19	3
CLSPN	0.533154737	1.29E-19	3
PTN	0.532649334	1.42E-19	3
NUF2	0.53210355	1.57E-19	3
MMS22L	0.531133794	1.87E-19	3
PTTG3P	0.531073391	1.89E-19	3
CENPN	0.530260791	2.20E-19	3
DIAPH3	0.528155751	3.23E-19	3
NOTCH3	0.527212974	3.83E-19	3

SGOL2	0.526625936	4.26E-19	3
CDK2	0.526597311	4.28E-19	3
SFRP1	0.524917734	5.80E-19	3
SOCS3	0.524605485	6.13E-19	3
DMRTA2	0.52425176	6.54E-19	3
S1PR1	0.524062239	6.76E-19	3
TRIM59	0.52066437	1.24E-18	3
KIF11	0.517296059	2.25E-18	3
CEP152	0.516795885	2.46E-18	3
SOX9	0.516604885	2.54E-18	3
EOMES	0.516300452	2.68E-18	3
DLGAP5	0.515796303	2.93E-18	3
MYO10	0.515353616	3.16E-18	3
FAM64A	0.514837174	3.46E-18	3
PDLIM3	0.513977563	4.02E-18	3
TMEM98	0.512280284	5.39E-18	3
CDKN3	0.511064497	6.64E-18	3
IQGAP3	0.509024095	9.43E-18	3
ANP32E	0.508069367	1.11E-17	3
FOS	0.505677667	1.67E-17	3
NEK2	0.504076472	2.18E-17	3
BUB1	0.503300998	2.48E-17	3
KIF4A	0.502652448	2.77E-17	3
DHFR	0.502436626	2.87E-17	3
BMP7	0.50141545	3.41E-17	3
CHD7	0.500153538	4.20E-17	3
MFAP2	0.499494659	4.69E-17	3
TK1	0.499284653	4.85E-17	3
CKS2	0.499077742	5.02E-17	3
MOXD1	0.496683264	7.45E-17	3
ATAD2	0.496360409	7.86E-17	3
PMP2	0.493487052	1.26E-16	3
LITAF	0.492983688	1.36E-16	3
HMGN5	0.492790964	1.41E-16	3
E2F8	0.490911792	1.90E-16	3
JUND	0.490567112	2.01E-16	3
CNTLN	0.490486115	2.04E-16	3
PRC1	0.490295798	2.10E-16	3
TP53	0.490084243	2.18E-16	3
NCAPH	0.489408784	2.42E-16	3
PHLDA1	0.489043968	2.57E-16	3
LOC284454	0.488333696	2.88E-16	3
VIM	0.487732175	3.17E-16	3
SDC4	0.486210304	4.04E-16	3
DOCK1	0.484672055	5.15E-16	3

C8orf4	0.484260917	5.50E-16	3
CD9	0.483060685	6.64E-16	3
MCM3	0.483007488	6.69E-16	3
ZEB1	0.482812004	6.90E-16	3
CENPM	0.482286746	7.50E-16	3
GTSE1	0.475340918	2.20E-15	3
MSI1	0.475098064	2.28E-15	3
NKAIN3	0.474120841	2.65E-15	3
B2M	0.471298997	4.06E-15	3
JUN	0.470210131	4.79E-15	3
CDCA3	0.469735844	5.14E-15	3
TEAD2	0.469586256	5.26E-15	3
MAFF	0.469193719	5.58E-15	3
BRCA1	0.468882581	5.85E-15	3
COL11A1	0.468307135	6.37E-15	3
HIST1H3C	0.466884947	7.88E-15	3
CDC20	0.466761128	8.03E-15	3
MAD2L1	0.4666278	8.19E-15	3
TTK	0.463166854	1.37E-14	3
TIMELESS	0.462570995	1.49E-14	3
CENPE	0.460908926	1.90E-14	3
CDCA8	0.458528561	2.69E-14	3
MEIS1	0.458127375	2.85E-14	3
ATF3	0.458125727	2.85E-14	3
ZFP36L2	0.457964681	2.92E-14	3
AASS	0.456905046	3.40E-14	3
RAD51AP1	0.455546988	4.13E-14	3
CDC25C	0.455531342	4.14E-14	3
TMX1	0.454777813	4.62E-14	3
SPC25	0.454084518	5.10E-14	3
CAPG	0.451726457	7.13E-14	3
PARPBP	0.4515367	7.32E-14	3
NEIL3	0.451255881	7.62E-14	3
GAB1	0.450994472	7.91E-14	3
E2F2	0.449570574	9.67E-14	3
FABP5	0.449389373	9.92E-14	3
ANLN	0.449117542	1.03E-13	3
CKS1B	0.448683282	1.10E-13	3
FOSB	0.447809672	1.24E-13	3
FOXM1	0.447448178	1.30E-13	3
MYADM	0.446951729	1.40E-13	3
HSDL2	0.446294561	1.53E-13	3
CTNNB1	0.445892454	1.62E-13	3
BUB1B	0.445436464	1.72E-13	3
COL4A5	0.444273481	2.02E-13	3

ITGB8	0.441066247	3.15E-13	3
PDLIM5	0.437640061	5.02E-13	3
ACBD7	0.437396129	5.19E-13	3
CXCL2	0.437192096	5.33E-13	3
TGIF2	0.43714723	5.36E-13	3
NEDD1	0.437077889	5.41E-13	3
ID4	0.437039488	5.44E-13	3
BRCA2	0.436282588	6.03E-13	3
LOC100507206	0.436219018	6.08E-13	3
KIF2C	0.435422527	6.77E-13	3
LPAR4	0.434273846	7.89E-13	3
THBS2	0.433717349	8.50E-13	3
E2F7	0.433233	9.07E-13	3
SOX6	0.43290859	9.47E-13	3
TRPS1	0.432244074	1.04E-12	3
HIST1H1A	0.432184555	1.04E-12	3
EMP3	0.430886137	1.24E-12	3
ARHGEF6	0.429923895	1.41E-12	3
SAMD9L	0.429561682	1.48E-12	3
ATP1A2	0.429561263	1.48E-12	3
SMC2	0.429402723	1.51E-12	3
IQGAP2	0.428861606	1.62E-12	3
LGALS3	0.427831721	1.85E-12	3
MCM10	0.427446541	1.95E-12	3
CKAP2	0.427225748	2.01E-12	3
CHEK1	0.42695071	2.08E-12	3
ARHGAP11A	0.426873368	2.10E-12	3
FSTL1	0.426580069	2.18E-12	3
FAM114A1	0.425289113	2.58E-12	3
FAT1	0.424615922	2.82E-12	3
FAM83D	0.424478248	2.87E-12	3
KCNJ2	0.423438429	3.28E-12	3
YAP1	0.420616177	4.72E-12	3
FAIM	0.419909348	5.17E-12	3
STAT3	0.419065996	5.75E-12	3
KIF20A	0.418654746	6.06E-12	3
SPATA13	0.417014413	7.46E-12	3
IER2	0.415385652	9.16E-12	3
MSN	0.415381231	9.17E-12	3
GFAP	0.415355421	9.20E-12	3
MEGF10	0.415279297	9.29E-12	3
CSF1	0.414626213	1.01E-11	3
NFKBIZ	0.414334579	1.05E-11	3
SPARC	0.414139003	1.07E-11	3
SFRP2	0.413033457	1.23E-11	3

HEG1	0.412232073	1.36E-11	3
GYPC	0.412026183	1.40E-11	3
LIPG	0.410580769	1.67E-11	3
AXL	0.409284681	1.96E-11	3
RAB13	0.408692624	2.11E-11	3
CNN3	0.40761188	2.41E-11	3
NFIC	0.404033074	3.72E-11	3
CENPO	0.403551178	3.95E-11	3
PSAT1	0.402940463	4.25E-11	3
RGS16	0.402724406	4.36E-11	3
MFAP4	0.402226672	4.63E-11	3
HMGN2	0.402028136	4.74E-11	3
CYBRD1	0.400960433	5.39E-11	3
RFX4	0.400824183	5.48E-11	3
NCAPG	0.400312681	5.83E-11	3
SKA1	0.399671975	6.29E-11	3
WDR76	0.3996157	6.33E-11	3
MCM2	0.398958802	6.85E-11	3
CHEK2	0.395793073	9.96E-11	3
MIAT	-0.395915232	9.82E-11	3
GAP43	-0.397035423	8.60E-11	3
CHL1	-0.402210866	4.64E-11	3
NELL2	-0.406300197	2.83E-11	3
RBFOX1	-0.414711229	9.97E-12	3
LRRC7	-0.417644852	6.89E-12	3
PTPRD	-0.419440846	5.48E-12	3
DLG2	-0.426231956	2.28E-12	3
KIAA1598	-0.428942816	1.60E-12	3
MAPT	-0.438666743	4.37E-13	3
GRIA2	-0.450730729	8.21E-14	3
SLC38A1	-0.458832639	2.57E-14	3
NEUROD6	-0.466514467	8.33E-15	3
SATB2	-0.470925737	4.30E-15	3
RUNX1T1	-0.491603902	1.70E-16	3
MYT1L	-0.537805403	5.41E-20	3
STMN2	-0.585139874	3.51E-24	3
MEF2C	-0.612752325	5.88E-27	3

Table S6. List of antibodies used in the study.

Antigen name	Species	Dilution	Vendor	Catalog #
CPLX3	Rabbit	1:50	AbCam	ab107063
NeuN	Rabbit	1:1000	Millipore	ABN78
NeuN	Mouse	1:1000	Millipore	MAB377
PVALB	Mouse	1:500	Swant	235
CALB2	Goat	1:500	Swant	CG1
VIP	Rabbit	1:100	Santa Cruz	sc-20727
CRHBP	Goat	1:200	R&D systems	AF2796
SOX6	Rabbit	1:500	AbCam	ab30455