

Supplemental Data

Methyl-H3K9 Binding Protein MPP8 Mediates E-cadherin Gene Silencing and Promotes Tumor Cell Motility and Invasion

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Supplemental Experimental Procedures

Generation of Chromodomain Protein Microarray and Peptide Hybridization

The cDNAs encoding the various chromodomains listed in Fig.1 were cloned into expression vector pGEX-KG by PCR using a cDNA library (ORIGENE, INC) and verified by DNA sequencing. GST fusion proteins were purified and arrayed in duplicate using a FLEXYS® robot (Genomic Solutions) as previously described (Espejo et al, 2002; Kim et al, 2006). Peptides were synthesized by the W. M. Keck Biotechnology Resource Center (New Haven, CT). Methylated forms of the following peptides were synthesized:

histone H3 (1-18) - acetyl-ARTKQTARKSTGGKAPRK-biotin and

histone H3 (18-36) - acetyl-KQLATKAARKSAPATGGVK-biotin.

Biotinylated peptides (10 µg) were prebound to 5 µl of Cy3-Streptavidin (Fluorolink™, GE Healthcare) in 500 µl PBST. The fluorescent-labeled peptide was then incubated with 20 µl of biotin agarose beads (Sigma) to remove the free Streptavidin label. Arrayed slides were blocked in PBST with 3% powdered milk, followed by the addition of 400 µl fluorophore-tagged peptide. Blocking and hybridization were performed in an Atlas Glass Hybridization Chamber (Clontech). After one hour of incubation at room temperature, the unbound peptide was washed away with PBST, three times for 10 minutes each. A GenePix 4200A laser scanner (Axon, Inc.) was used for array analysis.

MPP8 Cloning and In vitro Binding Assays

Human *MPP8* was cloned from several overlapping EST clones and verified by sequencing. The *MPP8* (W80A) mutant was generated by overlapping PCR and confirmed by DNA sequencing. For antibody generation, cDNA encoding *MPP8* N-terminal (a-188 aa) was

subcloned into pGEX-KG vector. Recombinant MPP8 protein was purified using Glutathione-Agarose followed with Thrombin (Sigma) digestion and used as antigen to generate antibodies in rabbit. In vitro transcription/translation and peptide pull-down assays were performed essentially as described previously (Cao et al, 2002). Briefly, full-length *MPP8* wild-type, W80A mutant and *HP1 α* cDNA were subcloned into pCITE-4a vector (Novagen) and was transcribed and translated using the T7 coupled TNT Reticulocyte Lysate System (Promega) following manufacturer's instruction. For peptide pull-down assays, 1 μ g of biotinylated histone H3 peptides (aa 1-20 or aa 18-37) that were either un-, mono-, di- or tri-methylated on K9 or K27 were immobilized on 6 μ l of streptavidin sepharose (GE healthcare) in BC150 (40 mM HEPES-KOH, 0.2 mM EDTA, 1 mM DTT, 150 mM KCl, pH 7.9) containing 0.05 % NP40. After washing, the beads were mixed with 5 μ l in vitro translated MPP8 proteins in 300 μ l BC150 and incubated at 4 °C for 2 hours. After washing with BC500 (for MPP8) or BC150 (for HP1 α) containing 0.05 % NP40 three times, bound proteins were eluted in SDS loading buffer, resolved by SDS-PAGE and subjected to autoradiography.

Immunostaining and microscopy

For staining, about 1×10^5 wild-type and *Suv39h1/2* null MEF cells were seeded onto gelatin-coated coverslips in each well of a 12-well and transfected with vectors expressing Flag-tagged MPP8 wild-type or W80A mutant using Effectene (Qiagen). 24 hrs after transfection, cells were washed twice with PBS and then fixed in 4% paraformaldehyde (in PBS) for 10 min at room temperature. After washing with PBS, cells were incubated with 0.5% Triton X-100 (in PBS) for 5 min at 4°C and then blocked with 1% bovine serum albumin (in PBS) for 30 min. Staining was carried out using mouse anti-Flag M2 (Sigma) and chicken anti-H3K9me3 antibodies for 1 hour at room temperature. After three washes with PBS, the cells were first incubated with rhodamine conjugated donkey anti-mouse IgG and FITC-conjugated donkey anti-rabbit IgG (Jackson ImmunoResearch Laboratories) for 30 min and then stained with 4',6'-diamidino-2-phenylindole (DAPI) (Sigma) for 10 s. After three washes with PBS, cells were mounted and visualized by a Zeiss immunofluorescence microscope. For E-cadherin antibody (BD Bioscience) staining, cells on gelatin-coated coverslips were fixed with cold methanol for 10 min at -20 °C and washed three times with TBS (25 mM Tris-Cl, pH=7.4; 1 mM CaCl₂; 0.137 M NaCl; 0.027 M KCl) before blocking with 1% BSA in TBS at room temperature for 30 min.

For Differential interference contrast (DIC) microscopy, cells were grown on glass bottom culture dishes (MatTek Corp., MA, USA). And DIC pictures of live cells are taken from a Zeiss automatic fluorescent Inverted microscope.

Immunoprecipitation and Luciferase Assays

For IP, 293T cells were transfected with various expression vectors in 10-cm dishes for 36 hrs and lysated with IPH buffer containing 5 mM EDTA. Immunoprecipitations were performed with 1 μ g of mouse IgG (Jackson), anti-Myc (9E10, SantaCruz), anti-HA antibody (12CA5) together with 10 μ l of protein-G agarose (Invitrogen) or 10 μ l of anti-FLAG M2 beads (Sigma). After washing with IPH buffer containing 300 mM or 600 mM KCl (high-salt) three times, IPed proteins were analyzed by western blot using indicated antibodies. For endogenous IPs, 293T cell lysates were incubated with 1 μ g of each IgG, anti-GLP (Bethyl Laboratories), anti-ESET, and anti-MPP8 antibodies.

For luciferase assays, wild-type or *MPP8* stable knockdown 293T cells were transfected with E-cad-Luc reporter (Shi et al, 2003) and internal control vector pSV40- β -galactosidase with or without vector expressing HA-tagged MPP8 wt or W80A mutant. Cell extracts were prepared for 36 hrs after transfection and activities for luciferase and β -galactosidase were measured using Luciferase assay system (Promega) and ONPG (Sigma), respectively. All experiments were performed in triplicates.

ChIP Assay, RT-PCR and DNA Methylation Assays

Chromatin IP assays were carried out as previously described (Cao & Zhang, 2004) with modifications. Briefly, control, *MPP8* stable knockdown and rescue MDA-MB-231 cells were cross-linked with formaldehyde (for histones) or DSS (10 mM) and formaldehyde (for enzymes). Chromatin was digested with MNase (Worthington) followed by sonication using Bioruptor. ChIP assays were then performed with IgG, anti-MPP8, anti-GLP (Bethyl Laboratories) and anti-DNMT3A (Imgenex) antibodies. ChIP grade antibodies against histone H3, mono-, di-, and trimethylated H3K9 were purchased from Abcam (ab1791, ab9045, ab1220 and ab8898). Anti-acetyl-Histone H3 antibody was purchased from Millipore (06-599). ChIPed DNA was detected by real-time qPCR using primer pairs for *E-cadherin* gene:

Promoter: TAGAGGGTCACCGCGTCTAT and CTGCGGCTCCAAGGGCCCA

-1kb region: AAAGTGGAGCTTTGGGAGGT and ACTATGTTGCCGAGGCTGAT

Exon 2 region: GAGGGGCGGCGCTGTTGGTTTCGGTGAG and
ACCGGCAGCGCGCCCTCACCTCTGC.

Primer pair TAGAGGGTCACCGCGTCTAT and GCTCTCCAGCGGTTCCATCTTCCA was used for ChIP assays in the promoter region of the exogenous E-cad-Luc reporter.

Primer pair AAAGAAAGGGAGCGGGATGGG and CTTGTGTGAAGCGAAGGGGTTG was used for *Fibronectin* promoter region.

Primer pair GCTCACCACTCCTTCACCGTAA and GGAGGCTGGTGAGGACAGAGAT was used for *APCS* promoter region.

For RT-PCR, total RNA was prepared using RNeasy mini kit (Qiagen) and cDNA was synthesized using ImPromII Reverse Transcription System (Promega). PCR reactions were carried out with primers for *GAPDH* (Ting et al, 2005) and primers for *E-cadherin*:

GAGAGGAATCCAAAGCCTCAGGTC and CTGGTTATCCATGAGCTTGAGATTG and primers for *APCS*: TCTGTCCTCACCGCCTCCT and TCATTATCCCTGCCTTGGGTAT

qPCR primers for MethylScreen DNA methylation analyses are:

Island1: TAGAGGGTCACCGCGTCTAT and CTGCGGCTCCAAGGGCCCA

Island2: CACCCGGCGCCTGCCCTCGCTCGG and GCGAGGCTTCCAGGCCGCTCCGCTC

Island3: GAGCGGAGCGGCCTGGAAGCCTCGC and ACCCCCTACACCCCGCTTCACGCC

Island4: GATAAGAAAGTGAGGTCGGAGGAGGTG and CCCACCCCGAAACCTACGGC

Island5: GGAACGGTGGGCTAGGTCTTGAG and CCTCCTGCTCACCGAAACCAACA

Island6: GAGGGGCGGCGCTGTTGGTTTCGGTGAG and
ACCGGCAGCGCGCCCTCACCTCTGC.

Kokura, et al., Fig. S1

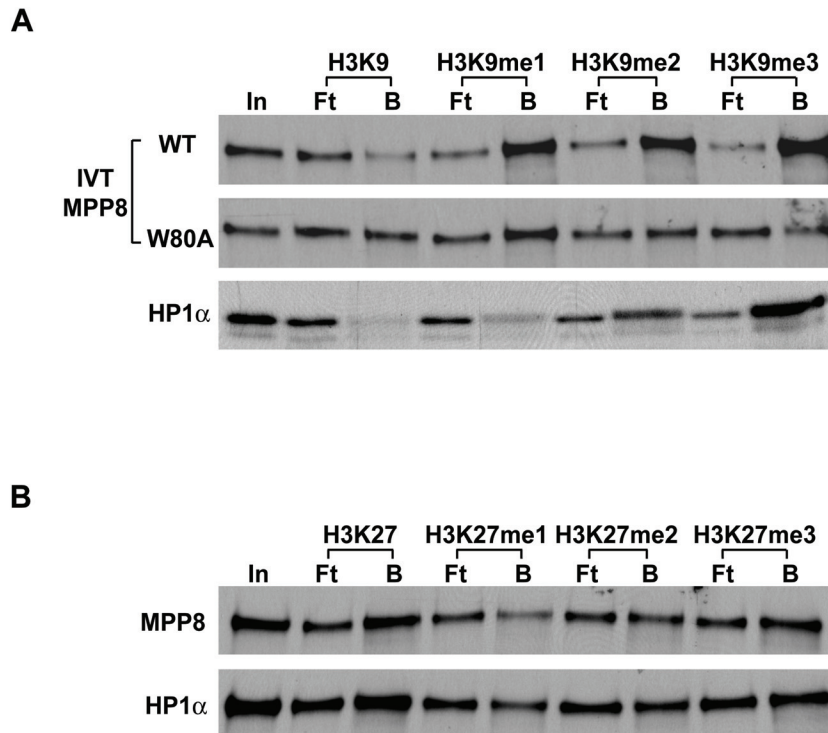


Figure S1. MPP8 recognizes chemically installed methyl-H3K9 analogues. ³⁵S-labeled in vitro translated MPP8-wt or W80A mutant was incubated with immobilized histone H3 containing chemically installed methyl-lysine analogues at H3K9 (**A**) and H3K27 (**B**). Different methylation states from alkylation reactions were indicated. “In” represents 10% of total input, “B” and “Ft” represent bound and flow-through, respectively. HP1α serves as positive controls in the parallel experiment.

Kokura, et al., Fig. S2

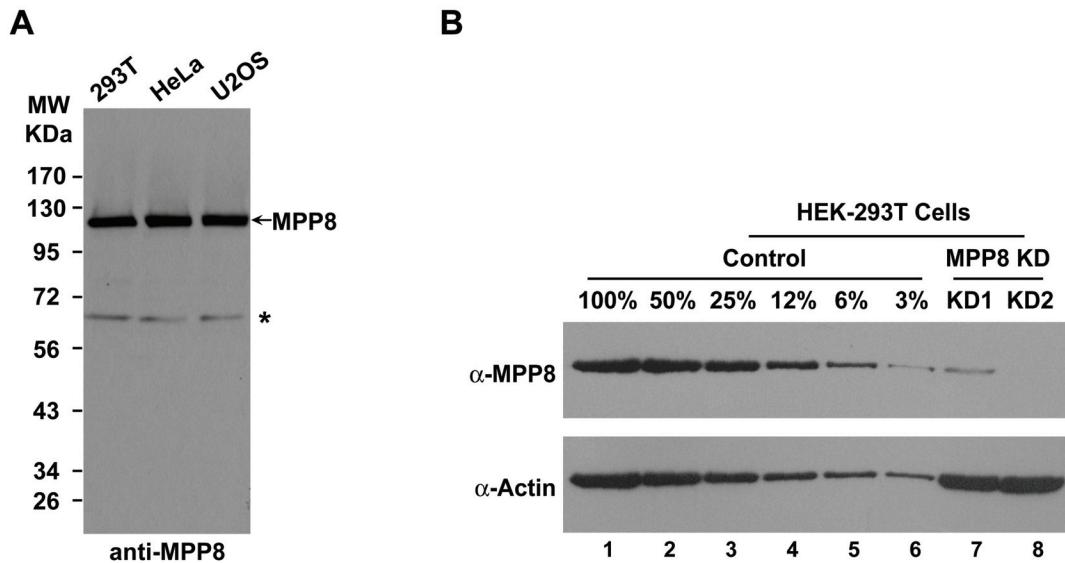


Figure S2. MPP8 antibody is highly specific. **(A)** 150 µg whole cell extracts from different cell lines were analyzed by western blot using anti-MPP8 antibody. A minor non-specific band is marked with a star. **(B)** Western blot analysis of stable *MPP8* knockdown HEK-293T cells. Knocking-down efficiency was estimated by comparing with the control cells infected with mock virus. Actin was used as a loading control.

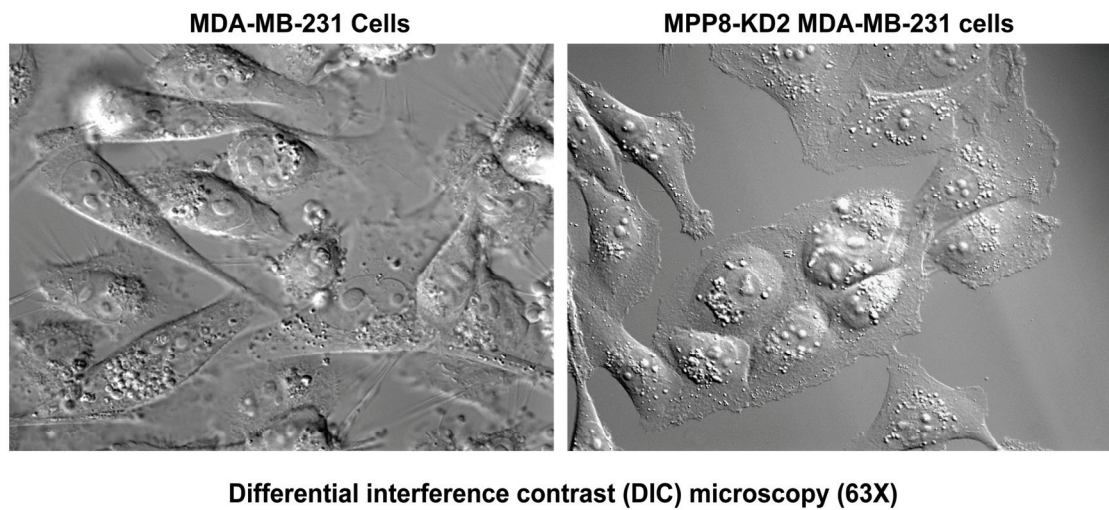
Kokura, et al., Fig. S3

Figure S3. *MPP8* knockdown in MDA-MB-231 cells results in moderate morphology changes. Control and *MPP8*-KD2 MDA-MB-231 cells were grown on glass bottom culture dishes and the differential interference contrast (DIC) images of live cells were taken using a Zeiss automatic fluorescent Inverted microscope.

Kokura, et al., Fig. S4

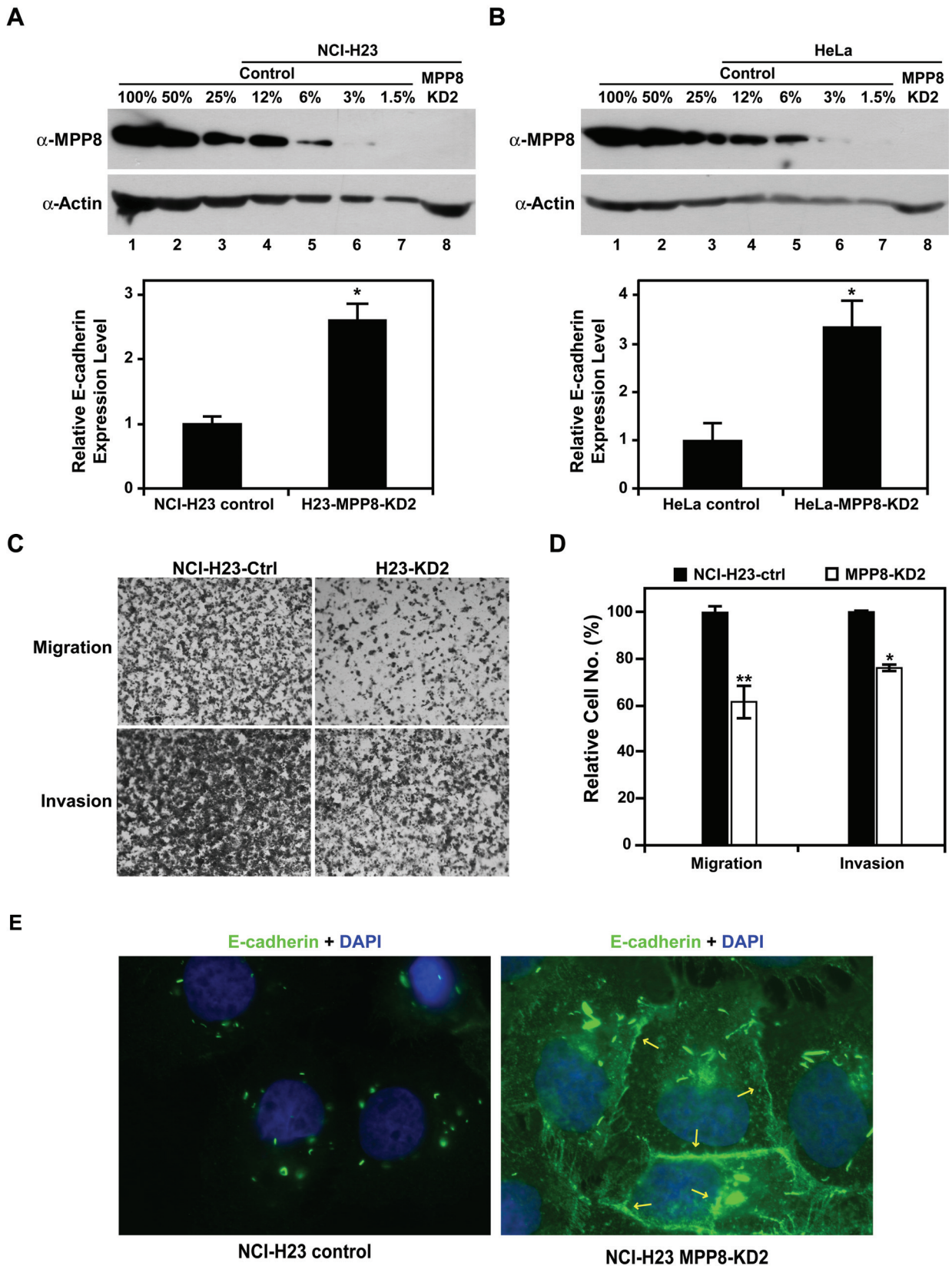


Figure S4. *MPP8* knockdown de-represses *E-cadherin* expression in different tumor cell lines. **(A)** Knocking-down *MPP8* in non-small cell lung cancer cells NCI-H23 de-represses *E-cadherin* expression. Top panels are western blot analysis of control and *MPP8* stable knockdown (KD2) NCI-H23 cells. Bottom panel shows the RT-qPCR analysis of control and *MPP8*-KD2 NCI-H23 cells. qPCR results were derived from three independent samples (\pm s.d.) and normalized to *GAPDH*. **(B)** Knocking-down *MPP8* in HeLa cells causes de-repression of *E-cadherin*. Top panels are western blot analysis of control and *MPP8* stable knockdown (KD2) HeLa cells. Bottom panel shows the RT-qPCR analysis of control and *MPP8*-KD2 HeLa cells. qPCR results were derived from three independent samples (\pm s.d.) and normalized to *GAPDH*. **(C, D)** Migration and invasion assays of control and *MPP8* knock-down (KD2) NCI-H23 cells. Cells were induced to move or invade through uncoated or Matrigel-coated membranes for 24 or 48 h respectively. Membranes were then fixed, photographed **(C)** or quantitated **(D)**. Columns represent the mean of triplicate assays (\pm s.d.). Control cell numbers were normalized as 100%. **(E)** Merged images of cold methanol fixed control and *MPP8*-KD2 NCI-H23 cells stained with E-cadherin (green) antibody and DAPI (blue). Yellow arrows show E-cadherin on cell membrane enables the cells to establish cell-cell contacts. In all panels, ‘*’ Represents *P* values <0.01 and ‘**’ represents *P* values <0.05.

Kokura, et al., Fig. S5

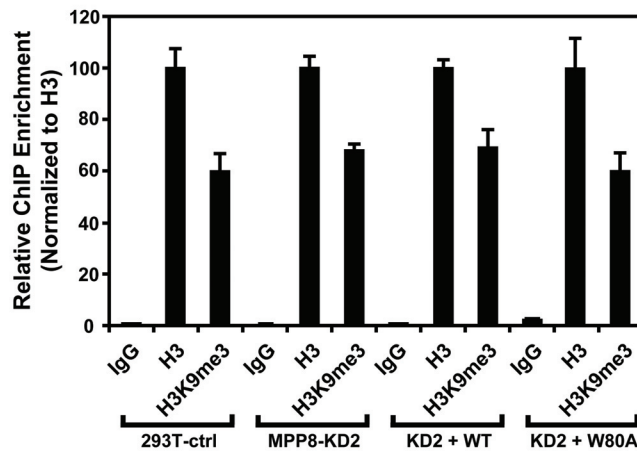


Figure S5. ChIP analysis using H3K9me3- and H3- specific antibodies. qPCR was conducted using primers specific for exogenous E-cad-Luc promoter and chromatin derived from control, *MPP8* knockdown and rescue 293T cells. ChIP enrichment of H3 antibody is normalized to 100% in each assayed cells. Graphs show the mean of relative ChIP enrichment values (n=3) with s.d. (error bars).

Kokura, et al., Fig. S6

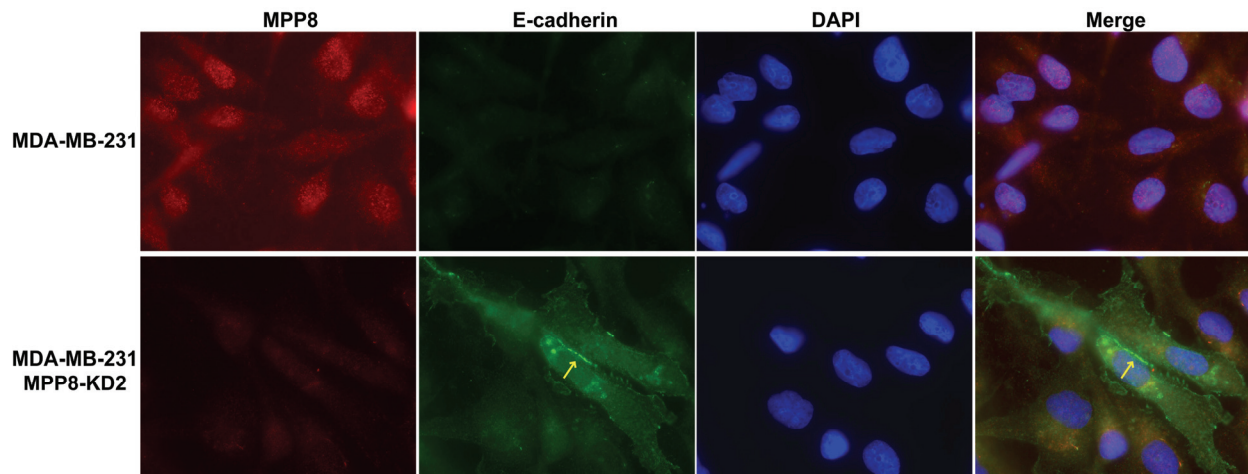


Figure S6. Re-expressed E-cadherin in *MPP8* knockdown MDA-MB-231 cells localizes on the cell membrane. Control and *MPP8* knockdown (KD2) MDA-MB-231 cells were fixed with cold methanol and co-stained with anti- E-cadherin (green) and MPP8 (red) antibodies. DAPI (blue) shows nuclei. Yellow arrows show E-cadherin on cell membrane enables the cells to establish cell-cell contacts.

Kokura, et al., Fig. S7

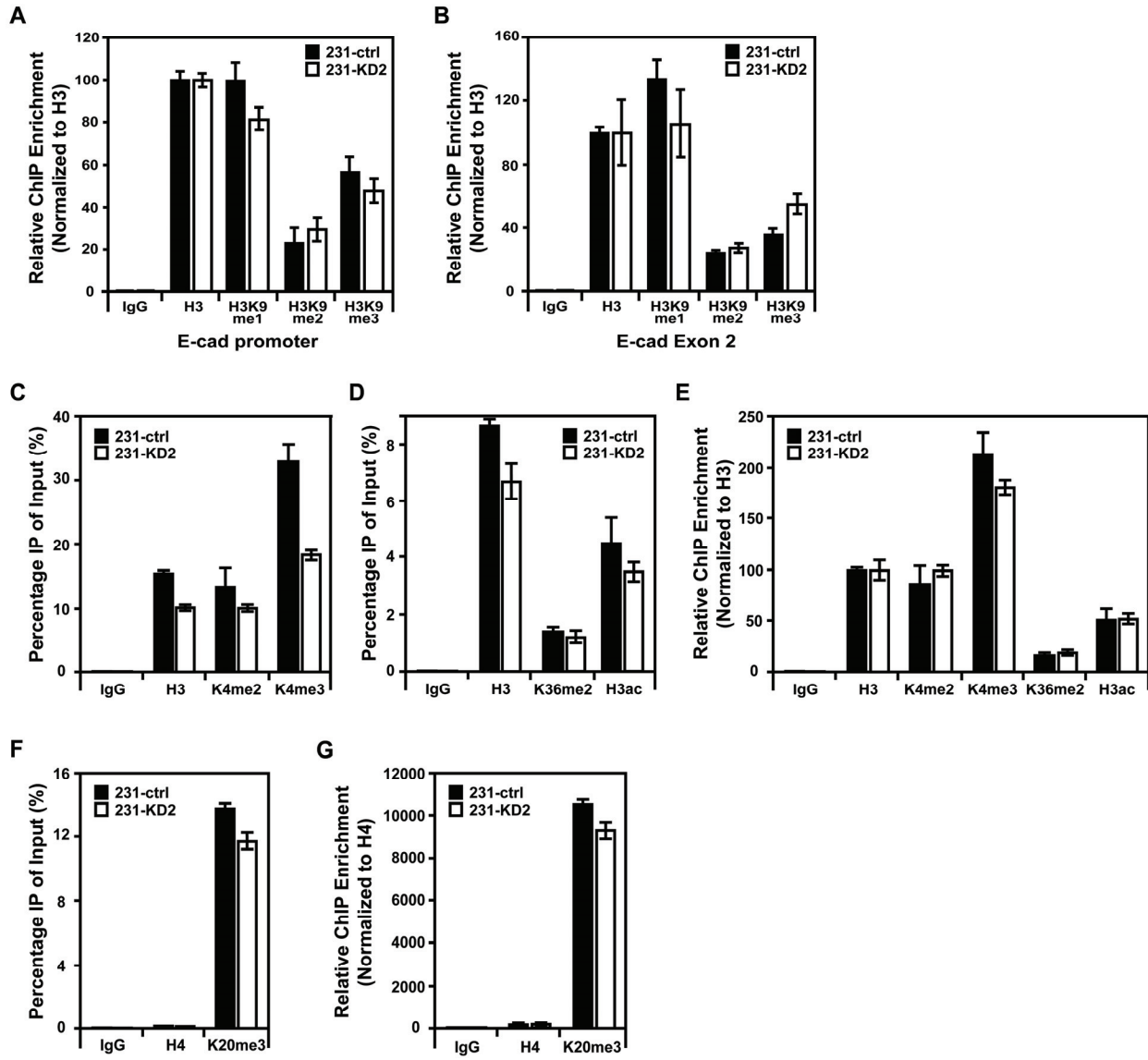


Figure S7. (A, B) ChIP-qPCR analysis using specific antibodies for H3, H3K9me1, H3K9me2 and H3K9me3, and chromatin derived from control and *MPP8* knockdown MDA-MB-231 cells. qPCR was conducted using primers specific for *E-cadherin* promoter **(A)** and exon2 **(B)**. ChIP enrichment of H3 antibody is normalized to 100% in each assayed cells. Graphs show the mean of relative ChIP enrichment values (n=3) with s.d. (error bars). **(C-E)** ChIP-qPCR analysis using specific antibodies for H3, H3K4me2, H3K4me3 **(C)** H3, H3K36me2, H3ac **(D)**, and chromatin derived from control and *MPP8* knockdown (KD2) MDA-MB-231 cells. qPCR was conducted using primers specific for *E-cadherin* promoter. Graphs show the mean ChIP enrichment values (n=3) with s.d. (error bars). **(E)** Same results in **(C-D)** with ChIP enrichment of H3 antibody normalized to 100% in each assay. Graphs show the mean of relative ChIP enrichment values (n=3) with s.d. (error bars). **(F)** ChIP-qPCR analysis using specific antibodies for H4 and H4K20me3 and chromatin derived from control and *MPP8* knockdown MDA-MB-231 cells. qPCR was conducted using primers specific for *E-cadherin* promoter. Graphs show the mean ChIP enrichment values (n=3) with s.d. (error bars). **(G)** Same results in **(F)** with ChIP enrichment of H4 antibody normalized to 100%. Graphs show the mean of relative ChIP enrichment values (n=3) with s.d. (error bars).

Kokura, et al., Fig.S8

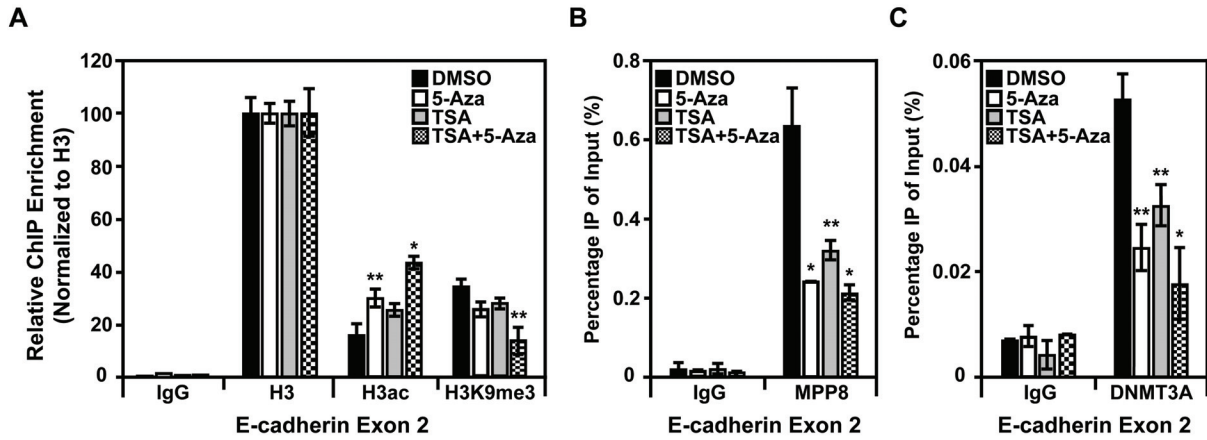


Figure S8. ChIP-qPCR analysis using specific antibodies for H3ac, H3K9me3 (A), MPP8 (B) and DNMT3A (C), and chromatin derived from MDA-MB-231 cells treated with DMSO, 5-Aza, TSA or both inhibitors. qPCR was conducted using primers specific for *E-cadherin* exon 2. Graphs show the mean ChIP enrichment values (n=3) with s.d. (error bars). In all panels, ‘*’ represents *P* values <0.01 and ‘**’ represents *P* values <0.05.

Kokura, et al., Fig. S9

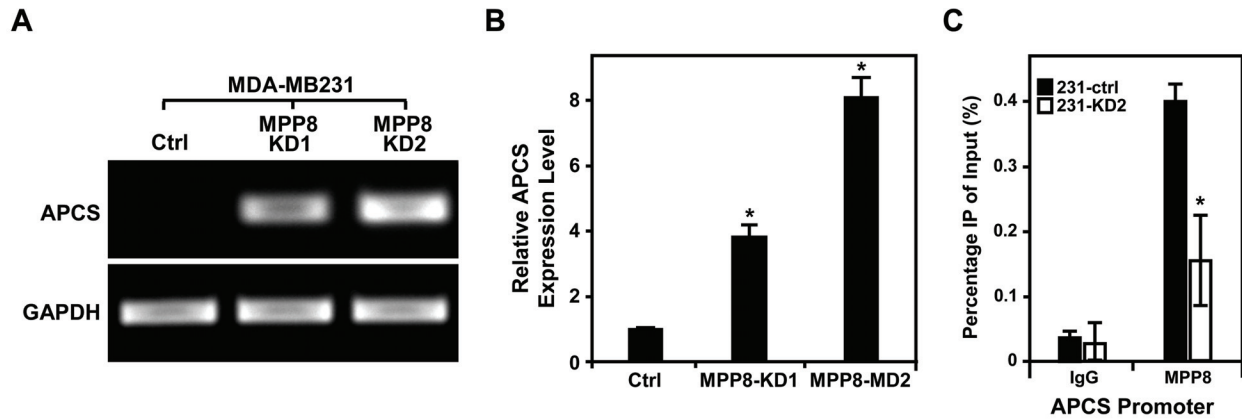


Figure S9 MPP8 represses *APCS* gene expression. **(A)** *APCS* mRNA levels in control and two *MPP8* stable knockdown MDA-MB-231 cells were assayed with RT-PCR. *GAPDH* serves as controls. **(B)** RT-qPCR analysis of control and *MPP8* knockdown MDA-MB-231 cells. qPCR results were derived from three independent samples (\pm s.d.) and normalized to *GAPDH*. **(C)** ChIP-qPCR analysis using MPP8 antibody and chromatin derived from control and *MPP8* knockdown (KD2) MDA-MB-231 cells. qPCR was conducted using primers specific for *APCS* promoter. In all panels, ‘*’ represents *P* values <0.01.

Supplemental References

Cao R, Wang L, Wang H, Xia L, Erdjument-Bromage H, Tempst P, Jones RS, Zhang Y (2002) Role of histone H3 lysine 27 methylation in Polycomb-group silencing. *Science (New York, NY)* **298**(5595): 1039-1043

Cao R, Zhang Y (2004) SUZ12 is required for both the histone methyltransferase activity and the silencing function of the EED-EZH2 complex. *Molecular cell* **15**(1): 57-67

Espejo A, Cote J, Bednarek A, Richard S, Bedford MT (2002) A protein-domain microarray identifies novel protein-protein interactions. *The Biochemical journal* **367**(Pt 3): 697-702

Kim J, Daniel J, Espejo A, Lake A, Krishna M, Xia L, Zhang Y, Bedford MT (2006) Tudor, MBT and chromo domains gauge the degree of lysine methylation. *EMBO reports* **7**(4): 397-403

Shi Y, Sawada J, Sui G, Affar el B, Whetstine JR, Lan F, Ogawa H, Luke MP, Nakatani Y, Shi Y (2003) Coordinated histone modifications mediated by a CtBP co-repressor complex. *Nature* **422**(6933): 735-738

Ting AH, Schuebel KE, Herman JG, Baylin SB (2005) Short double-stranded RNA induces transcriptional gene silencing in human cancer cells in the absence of DNA methylation. *Nature genetics* **37**(8): 906-910

Supplemental Table

Dysregulated gene list in response to *MPP8* knockdown in MDA-MB-231 cells.

Positive genes (621)

Row	Gene ID	Gene Name	Score(d)	Numerator	Denominator	Fold Change	q-value(%)	Row	Gene ID	Gene Name	Score(d)	Numerator	Denominator	Fold Change	q-value(%)
4843	APCS	206350. at	0.774597	2	2.581989	4.56015877	0	15467	RHOJ	235489. at	-0.7746	-2	2.581989	0.159713	
6979	PTGER3	211909. x. at	0.774597	2	2.581989	4.31777909	0	5306	HLA-DRB4	208306. x. at	-0.7746	-2	2.581989	0.189276	
8870	LOC390411	216387. x. at	0.774597	2	2.581989	4.108935813	0	12397	PAPPA	224940. s. at	-0.7746	-2	2.581989	0.200602	
860	ATP11B	1564063. a. at	0.774597	2	2.581989	3.853361946	0	4189	L1CAM	204584. at	-0.7746	-2	2.581989	0.209411	
7993	MST1	213382. a. at	0.774597	2	2.581989	3.572839506	0	12394	PTGFRN	224937. at	-0.7746	-2	2.581989	0.210079	
9048	RPS2	217466. x. at	0.774597	2	2.581989	3.554504832	0	6491	ANXA2	210427. x. at	-0.7746	-2	2.581989	0.222534	
330	DGKE	1554621. at	0.774597	2	2.581989	3.362725451	0	3228	THBS2	203063. at	-0.7746	-2	2.581989	0.233729	
5538	GOLGA8B	208797. s. at	0.774597	2	2.581989	3.362508165	0	1093	RPS24	200061. s. at	-0.7746	-2	2.581989	0.239377	
14795	SUHW2	230789. at	0.774597	2	2.581989	3.328965517	0	8044	ANXA2	213503. x. at	-0.7746	-2	2.581989	0.240569	
243	TWIST2	1554163. at	0.774597	2	2.581989	3.275681342	0	2046	ANXA2	201590. x. at	-0.7746	-2	2.581989	0.242289	
4632	OAS1	205552. s. at	0.774597	2	2.581989	3.269515918	0	201981	at	201981. at	-0.7746	-2	2.581989	0.244925	
6552	SYNGR1	210613. s. at	0.774597	2	2.581989	3.182556497	0	2368	PAPPA	228128. x. at	-0.7746	-2	2.581989	0.246706	
180	ZNF548	1553718. at	0.774597	2	2.581989	3.089891018	0	1055	CFL1	200021. at	-0.7746	-2	2.581989	0.255073	
8796	CYP2C9	216025. x. at	0.774597	2	2.581989	2.997366441	0	6986	EEF1G	211927. x. at	-0.7746	-2	2.581989	0.257963	
4836	RYR3	206306. at	0.774597	2	2.581989	2.981069959	0	7491	GAPDH	212581. x. at	-0.7746	-2	2.581989	0.258163	
15926	GPX2	239595. at	0.774597	2	2.581989	2.942834138	0	6805	EEF1G	211345. x. at	-0.7746	-2	2.581989	0.261035	
642	ADAMTSL3	1557818. x. at	0.774597	2	2.581989	2.903979378	0	1223	EEF1G	200689. x. at	-0.7746	-2	2.581989	0.261712	
8266	NPR2	214066. x. at	0.774597	2	2.581989	2.844799119	0	1562	RPS18	201049. s. at	-0.7746	-2	2.581989	0.265146	
2265	PRG1	201858. s. at	0.774597	2	2.581989	2.812820761	0	9034	GAPDH	217398. x. at	-0.7746	-2	2.581989	0.268539	
876	LENG10	1564776. at	0.774597	2	2.581989	2.806422837	0	14742	PLEKHK1	230469. at	-0.7746	-2	2.581989	0.268568	
12437	H19	224997. x. at	0.774597	2	2.581989	2.799081995	0	316	FAM13C1	1554547. at	-0.7746	-2	2.581989	0.269231	
3779	SGNE1	203889. at	0.774597	2	2.581989	2.772605671	0	1900	VIM	201426. s. at	-0.7746	-2	2.581989	0.269677	
14263	NRXN1	228547. at	0.774597	2	2.581989	2.766990291	0	5622	HLA-DRA	208894. at	-0.7746	-2	2.581989	0.27177	
307	RAD51L1	1554496. at	0.774597	2	2.581989	2.763474621	0	5959	HLA-DRB1	209312. x. at	-0.7746	-2	2.581989	0.273	
8360	RPS9	214317. x. at	0.774597	2	2.581989	2.743260563	0	8365	TNFSF10	214329. x. at	-0.7746	-2	2.581989	0.274583	
795	NDFP2	1560631. at	0.774597	2	2.581989	2.727571392	0	215193	x. at	215193. x. at	-0.7746	-2	2.581989	0.277305	
8920	LOC346735	216635. at	0.774597	2	2.581989	2.654717619	0	227026	at	227026. at	-0.7746	-2	2.581989	0.281106	
6612	NF2	210767. at	0.774597	2	2.581989	2.644012945	0	7644	FTL	212786. x. at	-0.7746	-2	2.581989	0.282332	
8137	KRTHB1	213711. at	0.774597	2	2.581989	2.636241611	0	6789	UBC	211296. x. at	-0.7746	-2	2.581989	0.282332	
671	DDX3X	1558120. at	0.774597	2	2.581989	2.611475976	0	7026	RPLP0	211972. x. at	-0.7746	-2	2.581989	0.283284	
10855	HSPB8	221667. s. at	0.774597	2	2.581989	2.610076456	0	8024	GAPDH	213453. x. at	-0.7746	-2	2.581989	0.284515	
15808	GPRT10	238689. at	0.774597	2	2.581989	2.609238845	0	201105	at	201105. at	-0.7746	-2	2.581989	0.284707	
1022	ZNF709	1570366. x. at	0.774597	2	2.581989	2.606763285	0	200650	s. at	200650. s. at	-0.7746	-2	2.581989	0.288088	
15261	HHLA2	234624. at	0.774597	2	2.581989	2.590939824	0	1553569	at	1553569. at	-0.7746	-2	2.581989	0.289783	
12085	DDI2	224449. at	0.774597	2	2.581989	2.588112617	0	213477	x. at	213477. x. at	-0.7746	-2	2.581989	0.290419	
364	NGA1	1554840. at	0.774597	2	2.581989	2.57970451	0	8035	EEF1A1	213477. x. at	-0.7746	-2	2.581989	0.296763	
16150	ZNF254	242602. x. at	0.774597	2	2.581989	2.578665145	0	6471	HSPA8	210338. s. at	-0.7746	-2	2.581989	0.297815	
716	CCDC32	1558648. at	0.774597	2	2.581989	2.553836663	0	16602	ACTB	1553570. x. at	-0.7746	-2	2.581989	0.298149	
627	ATP6V1H	1557586. s. at	0.774597	2	2.581989	2.544738914	0	224930	x. at	224930. x. at	-0.7746	-2	2.581989	0.298675	
8377	CYP2C9	214421. x. at	0.774597	2	2.581989	2.532291667	0	7045	ACTG1	211995. x. at	-0.7746	-2	2.581989	0.298675	
10515	MYO15A	220288. at	0.774597	2	2.581989	2.530909091	0	5588	RPLP0	208856. x. at	-0.7746	-2	2.581989	0.298742	
14545	FXR1	229519. at	0.774597	2	2.581989	2.524549277	0	1549	RPLP0	201033. x. at	-0.7746	-2	2.581989	0.29919	
4872	CYP24A1	206504. at	0.774597	2	2.581989	2.523628049	0	3247	RPS2	203107. x. at	-0.7746	-2	2.581989	0.299962	
6222	PSG6	209738. x. at	0.774597	2	2.581989	2.492054149	0	2949	TNFSF10	202687. s. at	-0.7746	-2	2.581989	0.300071	
118	ATP6V0D2	1553153. at	0.774597	2	2.581989	2.4891190493	0	3191	RPL27A	203034. s. at	-0.7746	-2	2.581989	0.301135	
906	FBXO9	1566507. a. at	0.774597	2	2.581989	2.462123958	0	200819	s. at	200819. s. at	-0.7746	-2	2.581989	0.303024	
11984	SPANXA1	224032. x. at	0.774597	2	2.581989	2.427607467	0	1348	RPS15	200819. s. at	-0.7746	-2	2.581989	0.303024	
8758	HAB1	215778. x. at	0.774597	2	2.581989	2.425170732	0	6922	RPLP0	211720. x. at	-0.7746	-2	2.581989	0.304079	
10556	C10ORF59	220564. at	0.774597	2	2.581989	2.421694089	0	16600	ACTB	1553570. x. at	-0.7746	-2	2.581989	0.30514	
5061	SLOC1A2	207308. at	0.774597	2	2.581989	2.408256881	0	208645	s. at	208645. s. at	-0.7746	-2	2.581989	0.307806	
8963	SPAM1	216989. at	0.774597	2	2.581989	2.405177994	0	5398	RPS14	208645. s. at	-0.7746	-2	2.581989	0.307806	
8621	DNPEP	215135. at	0.774597	2	2.581989	2.395874541	0	15900	THBS1	239336. at	-0.7746	-2	2.581989	0.308558	
4089	MAOA	204388. s. at	0.774597	2	2.581989	2.383668271	0	7405	FNI	212464. s. at	-0.7746	-2	2.581989	0.310442	
350	PVT1	1554766. s. at	0.774597	2	2.581989	2.374354561	0	200933	x. at	200933. x. at	-0.7746	-2	2.581989	0.310633	
								15816	EG1	238766. at	-0.7746	-2	2.581989	0.310677	

Negative genes (1139)

8467 BCE-1	0.774597	2 2.581989	2.369739479	0	1330 ACTB	200801	x.at	-0.7746	-2	2.581989	0.311459	0	
8977 LOC646912	217092	x.at	2.581989	2.365904901	0	7602 RPL13	212734	x.at	-0.7746	-2	2.581989	0.31188	0
15566 CDK9	236023	at	0.774597	2.581989	2.361869650	1959 RPL41	201492	s.at	-0.7746	-2	2.581989	0.31238	0
14368 DERL3	228897	at	0.774597	2.581989	2.358965146	14556 RPL10A	229563	s.at	-0.7746	-2	2.581989	0.312514	0
136 WDR64	1553373	at	0.774597	2.581989	2.344152745	1168 UBB	200633	at	-0.7746	-2	2.581989	0.312569	0
4711 CPA4	205832	at	0.774597	2.581989	2.33574582	3571 C10ORF116	203571	s.at	-0.7746	-2	2.581989	0.314561	0
8996 MUC5AC	217182	at	0.774597	2.581989	2.329885877	1363 RPS21	200834	s.at	-0.7746	-2	2.581989	0.315006	0
14011 GPR27	227769	at	0.774597	2.581989	2.328580285	4333 EEF1A1	204892	x.at	-0.7746	-2	2.581989	0.316663	0
768 PTD012	1559623	at	0.774597	2.581989	2.326171292	16605 GAPDH	AFFX-HJMGAP		-0.7746	-2	2.581989	0.316933	0
620 ABC9	1557374	at	0.774597	2.581989	2.304520222	12134 ACTG1	224565	x.at	-0.7746	-2	2.581989	0.317429	0
16169 MOB1	242765	at	0.774597	2.581989	2.302580999	1059 RPL27	200025	s.at	-0.7746	-2	2.581989	0.317781	0
1556 DUSP1	201041	s.at	0.774597	2.581989	2.298916033	7192 MPT2A	212185	x.at	-0.7746	-2	2.581989	0.318505	0
15286 SNTG1	234919	s.at	0.774597	2.581989	2.293901543	8008 RPS19	213414	s.at	-0.7746	-2	2.581989	0.319414	0
16079 FLJ40906	242131	at	0.774597	2.581989	2.268841967	1249 RPL13A	200716	x.at	-0.7746	-2	2.581989	0.320651	0
16230 SYT6	244227	at	0.774597	2.581989	2.254836759	8192 ACTB	213867	x.at	-0.7746	-2	2.581989	0.32135	0
8656 SLC12A3	215274	at	0.774597	2.581989	2.253884047	14007 PCSK9	227759	at	-0.7746	-2	2.581989	0.321949	0
758 ADAM23	1559268	at	0.774597	2.581989	2.251448436	1108 OAZ1	200077	s.at	-0.7746	-2	2.581989	0.323934	0
8828 NEK1	216213	at	0.774597	2.581989	2.247391952	6816 PPIA	211378	x.at	-0.7746	-2	2.581989	0.32432	0
803 MGCA266	1560874	at	0.774597	2.581989	2.229889751	5852 AKR1C3	209160	at	-0.7746	-2	2.581989	0.324866	0
8935 CYLC1	216809	at	0.774597	2.581989	2.219141021	7030 PPIA	211978	x.at	-0.7746	-2	2.581989	0.325431	0
15733 LOC440552	238199	x.at	0.774597	2.581989	2.21502477	6567 RPL13A	210646	x.at	-0.7746	-2	2.581989	0.32687	0
10238 EGFL6	219454	at	0.774597	2.581989	2.207300275	6917 TUBB	211714	x.at	-0.7746	-2	2.581989	0.326972	0
682 LOC145783	1558202	at	0.774597	2.581989	2.189476384	6948 PPIA	211765	x.at	-0.7746	-2	2.581989	0.327779	0
10477 CBWD5	220175	s.at	0.774597	2.581989	2.183152174	1784 PPIA	201293	x.at	-0.7746	-2	2.581989	0.330465	0
8964 COL11A2	216993	s.at	0.774597	2.581989	2.182847992	15936 VAPA	239750	x.at	-0.7746	-2	2.581989	0.330679	0
12052 BEX2	224367	at	0.774597	2.581989	2.184617742	1066 RPL9	200032	s.at	-0.7746	-2	2.581989	0.33095	0
10420 BANP	219966	x.at	0.774597	2.581989	2.184267782	12140 ACTB	224594	x.at	-0.7746	-2	2.581989	0.332437	0
10684 TRIM49	221154	at	0.774597	2.581989	2.178378378	12324 FKBP5	224840	at	-0.7746	-2	2.581989	0.33285	0
6907 IGG HEAVY	211693	at	0.774597	2.581989	2.164757412	7834 RPL23A	213084	x.at	-0.7746	-2	2.581989	0.332997	0
11717 TXNDC11	223325	at	0.774597	2.581989	2.162847682	9108 TMSB10	217733	s.at	-0.7746	-2	2.581989	0.335349	0
5227 GLRA1	207972	at	0.774597	2.581989	2.155779392	9114 RPL7A	217740	x.at	-0.7746	-2	2.581989	0.335898	0
11918 NIPSNAP3B	223764	x.at	0.774597	2.581989	2.151744186	1902 RPL37A	201429	s.at	-0.7746	-2	2.581989	0.336648	0
16583 WNT6	71933	at	0.774597	2.581989	2.15059922	1450 RPS23	200926	at	-0.7746	-2	2.581989	0.33707	0
14655 SAMD9L	230036	at	0.774597	2.581989	2.137556321	1752 RPS3A	201257	x.at	-0.7746	-2	2.581989	0.33771	0
895 NADSYN1	1565906	at	0.774597	2.581989	2.136833731	10341 MNS1	219703	at	-0.7746	-2	2.581989	0.341637	0
10549 HAMP	220491	at	0.774597	2.581989	2.131642512	5440 RPS3	208592	at	-0.7746	-2	2.581989	0.34286	0
908 DPYSL5	1566577	at	0.774597	2.581989	2.128121284	9103 S100A6	217728	at	-0.7746	-2	2.581989	0.3433	0
6614 PPARA	210771	at	0.774597	2.581989	2.122006326	16603 ALU	AFFX-hum1	alu	-0.7746	-2	2.581989	0.344903	0
8699 KIAA1473	1570070	at	0.774597	2.581989	2.115392215	8096 EEF1A1	213614	x.at	-0.7746	-2	2.581989	0.345373	0
163 CDYL2	215532	x.at	0.774597	2.581989	2.11274935	5564 RPL23A	208825	x.at	-0.7746	-2	2.581989	0.345987	0
8890 HNRPA1	1553647	at	0.774597	2.581989	2.109112841	12421 FAM46A	224973	at	-0.7746	-2	2.581989	0.348885	0
8434 ATP8B1	216497	at	0.774597	2.581989	2.107843137	5573 RPL23A	208834	x.at	-0.7746	-2	2.581989	0.349271	0
1018 FMN1	214594	x.at	0.774597	2.581989	2.10743137	11434 NRP2	222877	at	-0.7746	-2	2.581989	0.352731	0
9091 STMN1	1570156	s.at	0.774597	2.581989	2.091779465	5630 RPS28	208904	s.at	-0.7746	-2	2.581989	0.353665	0
10637 CTAGE1	220957	at	0.774597	2.581989	2.083690987	7346 RPS3A	212391	x.at	-0.7746	-2	2.581989	0.35585	0
148 TAS2R50	1553561	at	0.774597	2.581989	2.06422569	12104 MGC12916	224508	at	-0.7746	-2	2.581989	0.356516	0
5034 CD80	207176	s.at	0.774597	2.581989	2.073711121	1125 RPS10	200095	x.at	-0.7746	-2	2.581989	0.362802	0
4697 DUSP9	205777	at	0.774597	2.581989	2.06852638	2730 GSF3	202421	at	-0.7746	-2	2.581989	0.362802	0
10727 VNI1R1	221412	at	0.774597	2.581989	2.06422569	10759 HLA-DRB3	221491	x.at	-0.7746	-2	2.581989	0.363348	0
797 ALG5	1560733	at	0.774597	2.581989	2.059386179	8880 FNI	216442	x.at	-0.7746	-2	2.581989	0.363783	0
3716 MRPL33	203781	at	0.774597	2.581989	2.058945466	14484 KIAA0379	229307	at	-0.7746	-2	2.581989	0.371144	0
15669 ASXL2	237095	at	0.774597	2.581989	2.053208556	6861 RPS10	229088	at	-0.7746	-2	2.581989	0.373275	0
575 LOC284219	1556425	a.at	0.774597	2.581989	2.053208556	12055 MT-ND4	224372	at	-0.7746	-2	2.581989	0.374584	0
15252 OR51B2	234486	at	0.774597	2.581989	2.050998311	9584 PEL11	218319	at	-0.7746	-2	2.581989	0.374908	0
623 LOC339005	1557450	s.at	0.774597	2.581989	2.048971332	6821 FNI	211719	x.at	-0.7746	-2	2.581989	0.375726	0
4852 USP6	206405	x.at	0.774597	2.581989	2.047799697	13191 RPS16	226131	s.at	-0.7746	-2	2.581989	0.376217	0

11981	HIPK2	0.774597	2	2.581989	1.902345742	0	1294	RPLP1	200763 s.at	-0.7746	-2	2.581989	0.440266	0
2266	PRG1	0.774597	2	2.581989	1.901808095	0	10525	MTHFD2L	220346.at	-0.7746	-2	2.581989	0.441313	0
4481	RIN1	0.774597	2	2.581989	1.90026642	0	9066	MGC15606	217540.at	-0.7746	-2	2.581989	0.442289	0
308	RG57	0.774597	2	2.581989	1.899138991	0	14982	AGPAT5	232007.at	-0.7746	-2	2.581989	0.442927	0
16404	ADRBK1	0.774597	2	2.581989	1.898998295	0	1118	RPL12	200088 x.at	-0.7746	-2	2.581989	0.443221	0
15109	LOC149692	0.774597	2	2.581989	1.897986577	0	7041	HPLA-DPA1	211990.at	-0.7746	-2	2.581989	0.443358	0
2593	RAB13	0.774597	2	2.581989	1.897746326	0	70	PODHGC3	1552735.at	-0.7746	-2	2.581989	0.443362	0
315	APOBEC4	0.774597	2	2.581989	1.897698849	0	156	MT-ND3	1553588.at	-0.7746	-2	2.581989	0.444877	0
14751	PRKCBP1	0.774597	2	2.581989	1.895877812	0	16001	DARP	214321.at	-0.7746	-2	2.581989	0.445482	0
14985	LENG1	0.774597	2	2.581989	1.895296872	0	13266	ZNF358	226260 x.at	-0.7746	-2	2.581989	0.446112	0
467	LOC728285	0.774597	2	2.581989	1.891501939	0	2114	GJA1	201667.at	-0.7746	-2	2.581989	0.446262	0
3992	FCER1G	0.774597	2	2.581989	1.889442541	0	15430	LOC148530	222996 s.at	-0.7746	-2	2.581989	0.454037	0
13710	LOC440104	0.774597	2	2.581989	1.887534341	0	11414	AYTL1	222833.at	-0.7746	-2	2.581989	0.45427	0
15907	LOC285620	0.774597	2	2.581989	1.886002886	0	8522	SENP6	214790.at	-0.7746	-2	2.581989	0.454665	0
10448	XAGE1	0.774597	2	2.581989	1.884015287	0	15529	UGCG2	235749.at	-0.7746	-2	2.581989	0.455422	0
10831	PIPOX	0.774597	2	2.581989	1.883235005	0	16604	GAPDH	218437 s.at	-0.7746	-2	2.581989	0.455494	0
14748	EVA1	0.774597	2	2.581989	1.882861502	0	9604	GAPDH	204151 x.at	-0.7746	-2	2.581989	0.456085	0
6287	CRADD	0.774597	2	2.581989	1.881831811	0	14741	HS2ST1	230465.at	-0.7746	-2	2.581989	0.45641	0
630	FLJ32704	0.774597	2	2.581989	1.879456706	0	7348	KIAA0090	212396 s.at	-0.7746	-2	2.581989	0.457662	0
4013	PSEN2	0.774597	2	2.581989	1.879438481	0	10643	SFXN3	220974 x.at	-0.7746	-2	2.581989	0.461938	0
15956	MSRA	0.774597	2	2.581989	1.879345603	0	8355	OPA1	214306.at	-0.7746	-2	2.581989	0.462442	0
6047	SPON1	0.774597	2	2.581989	1.878423729	0	14682	RBBP1	230141.at	-0.7746	-2	2.581989	0.463066	0
10680	NIPSNAP3B	0.774597	2	2.581989	1.870538838	0	8531	BRWD1	214820.at	-0.7746	-2	2.581989	0.463445	0
970	LZTS1	0.774597	2	2.581989	1.861334071	0	473	AP1S3	1555733 s.at	-0.7746	-2	2.581989	0.463837	0
802	PENK	0.774597	2	2.581989	1.860741445	0	5517	PSMD11	208776.at	-0.7746	-2	2.581989	0.465789	0
13563	ADAM12	0.774597	2	2.581989	1.860626345	0	7782	KIAA1794	213008.at	-0.7746	-2	2.581989	0.466127	0
4253	SLC29A2	0.774597	2	2.581989	1.859668357	0	7468	CAP2	212551.at	-0.7746	-2	2.581989	0.466218	0
10367	FLJ22965	0.774597	2	2.581989	1.857720836	0	8425	MAP1B	214577.at	-0.7746	-2	2.581989	0.466223	0
6703	ALDH3B1	0.774597	2	2.581989	1.857720836	0	6236	CHRDL1	209763.at	-0.7746	-2	2.581989	0.466408	0
16035	UQCRC2	0.774597	2	2.581989	1.857720836	0	1990	EIFA41	201530 x.at	-0.7746	-2	2.581989	0.466443	0
721	LOC158960	0.774597	2	2.581989	1.850939658	0	11	PXK	1552274.at	-0.7746	-2	2.581989	0.466635	0
6559	LTBP4	0.774597	2	2.581989	1.850327211	0	9308	TM7SF3	210495 x.at	-0.7746	-2	2.581989	0.467403	0
15997	CDORF23	0.774597	2	2.581989	1.845172031	0	6510	FN1	213839.at	-0.7746	-2	2.581989	0.467959	0
830	TXNDC6	0.774597	2	2.581989	1.843874912	0	8179	CLMN	213839.at	-0.7746	-2	2.581989	0.469105	0
15266	RAB28	0.774597	2	2.581989	1.843220339	0	13149	ARRDC2	226055.at	-0.7746	-2	2.581989	0.471468	0
470	CD209	0.774597	2	2.581989	1.842989571	0	15423	FLJ12505	235343.at	-0.7746	-2	2.581989	0.471528	0
405	WNK3	0.774597	2	2.581989	1.839926378	0	11945	SCARA3	223843.at	-0.7746	-2	2.581989	0.472183	0
5324	MID2	0.774597	2	2.581989	1.839633596	0	12398	PAPPA	224942.at	-0.7746	-2	2.581989	0.474472	0
16363	ANGEL1	0.774597	2	2.581989	1.839147999	0	782	FRMD4A	1560031.at	-0.7746	-2	2.581989	0.474807	0
1004	LOC344806	0.774597	2	2.581989	1.838915447	0	12431	CGORF89	224987.at	-0.7746	-2	2.581989	0.47532	0
755	E2-EPF	0.774597	2	2.581989	1.83699187	0	9892	WARS2	218766 s.at	-0.7746	-2	2.581989	0.478038	0
5908	PEG3	0.774597	2	2.581989	1.83677713	0	3852	SH3YL1	204019 s.at	-0.7746	-2	2.581989	0.478954	0
15160	CDH26	0.774597	2	2.581989	1.834320875	0	3519	LRRRC14	203495.at	-0.7746	-2	2.581989	0.479244	0
15786	MGC61599	0.774597	2	2.581989	1.833133253	0	819	HS3ST3B1	1561908 a.at	-0.7746	-2	2.581989	0.48037	0
345	MCTP1	0.774597	2	2.581989	1.830856186	0	1036	RPL36	200002.at	-0.7746	-2	2.581989	0.480399	0
4906	SSX1	0.774597	2	2.581989	1.829662594	0	16174	MAML3	242794.at	-0.7746	-2	2.581989	0.480493	0
925	BDNFOS	0.774597	2	2.581989	1.829225352	0	8036	KIAA1026	213478.at	-0.7746	-2	2.581989	0.480503	0
8943	ATP8B2	0.774597	2	2.581989	1.827734711	0	14388	C1ORF139	228949.at	-0.7746	-2	2.581989	0.481061	0
14196	CLDN11	0.774597	2	2.581989	1.826659039	0	5914	TUBA6	209251 x.at	-0.7746	-2	2.581989	0.482296	0
10612	GTDC1	0.774597	2	2.581989	1.826185102	0	15795	RAP2B	238622.at	-0.7746	-2	2.581989	0.483647	0
8255	LOC339047	0.774597	2	2.581989	1.826185102	0	3341	ATXN1	203232 s.at	-0.7746	-2	2.581989	0.484009	0
5430	MAGED2	0.774597	2	2.581989	1.825571895	0	4629	TAGLN	205547 s.at	-0.7746	-2	2.581989	0.484222	0
847	LOC91149	0.774597	2	2.581989	1.823187105	0	14788	FLJ33761	230747 s.at	-0.7746	-2	2.581989	0.484411	0
15414	FBN1	0.774597	2	2.581989	1.82306555	0	14771	CLOCK	230657.at	-0.7746	-2	2.581989	0.485117	0
4437	FGF13	0.774597	2	2.581989	1.822646365	0	13387	PDK1	226452.at	-0.7746	-2	2.581989	0.485904	0

15536 C1ORF48	0.774597	235799. at	2	2.581989	1.750180766	0	11948	PCDHB10	223854. at	-0.7746	-2	2.581989	0.507093	0
11459 VSX1	0.774597	222972. at	0	2.581989	1.749497656	0	6855	HLA-G	211530. x. at	-0.7746	-2	2.581989	0.5074	0
424 ZNF479	0.774597	1555368. x. at	0	2.581989	1.748865366	0	8077	ATP11A	213582. at	-0.7746	-2	2.581989	0.50806	0
16431 FOXA2	0.774597	40284. at	0	2.581989	1.747622821	0	4466	RBBP6	205178. s. at	-0.7746	-2	2.581989	0.508916	0
14135 TGFβ2	0.774597	228121. at	0	2.581989	1.746354344	0	11392	RBSN1	222791. at	-0.7746	-2	2.581989	0.509066	0
15800 WDFY3	0.774597	238660. at	0	2.581989	1.745841331	0	4037	LOX	202498. s. at	-0.7746	-2	2.581989	0.509317	0
869 SLC24A3	0.774597	1564444. at	0	2.581989	1.744825246	0	12726	KLF13	225390. s. at	-0.7746	-2	2.581989	0.509651	0
1017 LOC347034	0.774597	1570155. at	0	2.581989	1.743232988	0	13318	MGC33202	226348. at	-0.7746	-2	2.581989	0.509608	0
4653 CDA	0.774597	205627. at	0	2.581989	1.741174195	0	10892	MXR36	221748. s. at	-0.7746	-2	2.581989	0.50995	0
7745 DYRK4	0.774597	212954. at	0	2.581989	1.740498985	0	731	SMCHD1	1558747. at	-0.7746	-2	2.581989	0.509968	0
10541 BIRC7	0.774597	220451. s. at	0	2.581989	1.740411932	0	14729	CHPT1	230364. at	-0.7746	-2	2.581989	0.51091	0
6545 SAT	0.774597	210592. s. at	0	2.581989	1.739694181	0	13850	FZD8	227405. s. at	-0.7746	-2	2.581989	0.51095	0
15219 KIAA1772	0.774597	233977. at	0	2.581989	1.739065234	0	16584	RABEP2	74694. s. at	-0.7746	-2	2.581989	0.510971	0
14577 THRB	0.774597	229657. at	0	2.581989	1.738663484	0	9626	FTS	118373. at	-0.7746	-2	2.581989	0.511421	0
5998 XPC	0.774597	208375. at	0	2.581989	1.738415739	0	14562	ERDJ5	229588. at	-0.7746	-2	2.581989	0.511657	0
7895 TRBC1	0.774597	213193. x. at	0	2.581989	1.738231412	0	14618	NMNAT1	229852. at	-0.7746	-2	2.581989	0.511926	0
11104 APTX	0.774597	222338. x. at	0	2.581989	1.738007764	0	14951	KIAA1229	231909. x. at	-0.7746	-2	2.581989	0.512425	0
8970 KPNB1	0.774597	217027. x. at	0	2.581989	1.736675462	0	13830	HS3ST3B1	227361. at	-0.7746	-2	2.581989	0.51267	0
5200 ID3	0.774597	207826. s. at	0	2.581989	1.7360082696	0	2759	GTF2H1	202453. s. at	-0.7746	-2	2.581989	0.512727	0
12858 SH3MD2	0.774597	225589. at	0	2.581989	1.733747424	0	9523	SUV420H1	118242. s. at	-0.7746	-2	2.581989	0.512982	0
10723 KCNIP1	0.774597	221307. at	0	2.581989	1.731843575	0	12209	MLLT4	224865. at	-0.7746	-2	2.581989	0.513574	0
965 SMARCA4	0.774597	1569073. x. at	0	2.581989	1.730733083	0	9624	PSPC1	218371. s. at	-0.7746	-2	2.581989	0.514417	0
13097 C17ORF28	0.774597	225981. at	0	2.581989	1.729341317	0	14510	C10ORF118	229399. at	-0.7746	-2	2.581989	0.51593	0
617 LOC285401	0.774597	1557369. a. at	0	2.581989	1.728753853	0	15272	FLJ13576	234726. s. at	-0.7746	-2	2.581989	0.516092	0
5730 MAGED1	0.774597	209014. at	0	2.581989	1.727409235	0	2548	LMK2	202193. at	-0.7746	-2	2.581989	0.516286	0
11113 COP21	0.774597	222386. s. at	0	2.581989	1.727334873	0	8605	LRRCA2	215084. s. at	-0.7746	-2	2.581989	0.516603	0
217 LARP2	0.774597	1554038. at	0	2.581989	1.727272727	0	15780	FUT11	238551. at	-0.7746	-2	2.581989	0.518015	0
15063 PCCA	0.774597	232376. at	0	2.581989	1.723241159	0	16392	ZFYVE26	37943. at	-0.7746	-2	2.581989	0.51816	0
16165 SREBF2	0.774597	1552482. at	0	2.581989	1.72251471	0	5417	HMGN2	208668. x. at	-0.7746	-2	2.581989	0.51906	0
36 RAPH1	0.774597	1552482. at	0	2.581989	1.71884347	0	4453	CPNE2	225129. at	-0.7746	-2	2.581989	0.519671	0
10340 PLAC1	0.774597	219702. at	0	2.581989	1.716963657	0	15360	TAF3	235119. at	-0.7746	-2	2.581989	0.519722	0
687 SF3B2	0.774597	1558230. at	0	2.581989	1.71664482	0	4022	EDNRB	204273. at	-0.7746	-2	2.581989	0.520559	0
8903 HMG4L	0.774597	216548. x. at	0	2.581989	1.71664482	0	204273	TAF3	156180. at	-0.7746	-2	2.581989	0.520794	0
878 EEA1	0.774597	1564798. at	0	2.581989	1.708987784	0	8678	MGC10940	215436. at	-0.7746	-2	2.581989	0.520927	0
5099 AHCYL1	0.774597	207464. at	0	2.581989	1.708672087	0	14593	DJ462O23.2	229735. s. at	-0.7746	-2	2.581989	0.521129	0
14833 NIN2B3	0.774597	231092. s. at	0	2.581989	1.708559047	0	8204	EMP1	213895. at	-0.7746	-2	2.581989	0.521249	0
12709 ESAM	0.774597	225369. at	0	2.581989	1.707398901	0	3459	HES1	203395. s. at	-0.7746	-2	2.581989	0.521536	0
15819 MGC26744	0.774597	238767. at	0	2.581989	1.706073753	0	673	TNRC6B	1558142. at	-0.7746	-2	2.581989	0.521739	0
6384 FOXA2	0.774597	210103. s. at	0	2.581989	1.70486611	0	14270	PAPOLA	228569. at	-0.7746	-2	2.581989	0.521945	0
16016 MGC72104	0.774597	241484. x. at	0	2.581989	1.704100946	0	11412	GRHL1	222830. at	-0.7746	-2	2.581989	0.521965	0
14806 APBB1P	0.774597	1555289. at	0	2.581989	1.703417533	0	15626	C6ORF52	236504. x. at	-0.7746	-2	2.581989	0.522429	0
8992 MT1F	0.774597	230925. at	0	2.581989	1.702672039	0	13007	C20ORF194	225825. at	-0.7746	-2	2.581989	0.522975	0
4763 ATP5F	0.774597	206031. s. at	0	2.581989	1.701434549	0	4561	CBR3	205379. at	-0.7746	-2	2.581989	0.522982	0
16121 ATP5F1	0.774597	242398. x. at	0	2.581989	1.698465644	0	8791	KIAA0090	215991. s. at	-0.7746	-2	2.581989	0.523122	0
11725 ATP1F1	0.774597	223338. s. at	0	2.581989	1.698432202	0	5164	PKRAA2	235710. at	-0.7746	-2	2.581989	0.523323	0
119 ATP6V0D2	0.774597	1553155. x. at	0	2.581989	1.697980871	0	1094	RPL30	200062. s. at	-0.7746	-2	2.581989	0.523423	0
2323 DAF	0.774597	201926. s. at	0	2.581989	1.696123269	0	10597	PPP4R2	220764. at	-0.7746	-2	2.581989	0.524407	0
3138 HCLS1	0.774597	202957. at	0	2.581989	1.694621696	0	15040	C18ORF4	232235. at	-0.7746	-2	2.581989	0.524559	0
6291 RHOD	0.774597	208885. at	0	2.581989	1.693669082	0	4921	IL7	206693. at	-0.7746	-2	2.581989	0.526113	0
15253 ADAMTS10	0.774597	234490. at	0	2.581989	1.692760181	0	15415	ARL6	235520. at	-0.7746	-2	2.581989	0.526208	0
792 MARK1	0.774597	1560407. at	0	2.581989	1.690544413	0	11589	C6ORF166	223143. s. at	-0.7746	-2	2.581989	0.52687	0
15297 LOC442262	0.774597	234954. at	0	2.581989	1.690060659	0	12846	LIFR	225571. at	-0.7746	-2	2.581989	0.527328	0
8373 CTRL	0.774597	214337. s. at	0	2.581989	1.68878185	0	9877	PACSN3	218744. s. at	-0.7746	-2	2.581989	0.527424	0
14698 KIAA1501	0.774597	230196. x. at	0	2.581989	1.688561721	0	14466	LRRCS7	229232. at	-0.7746	-2	2.581989	0.528372	0
16188 RNF39	0.774597	242895. x. at	0	2.581989	1.688441462	0	14936	MGC39518	231874. at	-0.7746	-2	2.581989	0.529388	0

6829	DKFZP586A052:211424_x.at	0.774597	2	2.581989	1.687893082	0	183 LOC151194	1553743.at	-0.7746	-2	2.581989	0.529695	0
8599	FLJ20331	215063_x.at	0.774597	2	2.581989	1.686112545	971 PTD002	1569167.at	-0.7746	-2	2.581989	0.530387	0
9033	UBEZNL	217393_x.at	0.774597	2	2.581989	1.685689692	13529 FAM20C	226722.at	-0.7746	-2	2.581989	0.531495	0
3616	CPT1A	203633.at	0.774597	2	2.581989	1.685396463	14520 REFAP	229431.at	-0.7746	-2	2.581989	0.531698	0
13238	MEG3	228211.at	0.774597	2	2.581989	1.682557178	12946 SORBS2	225728.at	-0.7746	-2	2.581989	0.532619	0
8333	DKK3	214247_s.at	0.774597	2	2.581989	1.682466281	12243 ATPAF1	224729_s.at	-0.7746	-2	2.581989	0.532622	0
10620	SPANXA1	220922_s.at	0.774597	2	2.581989	1.681571787	4964 TNFSF9	206907.at	-0.7746	-2	2.581989	0.533984	0
7297	CHMP7	212313.at	0.774597	2	2.581989	1.680810433	15434 CHD9	235388.at	-0.7746	-2	2.581989	0.534844	0
15154	LOC90834	233321_x.at	0.774597	2	2.581989	1.680235672	14823 CAMK2D	231042_s.at	-0.7746	-2	2.581989	0.535746	0
8606	C15ORF39	215087.at	0.774597	2	2.581989	1.678745268	7735 LOC137886	212934.at	-0.7746	-2	2.581989	0.536192	0
3588	FSTL3	203592_s.at	0.774597	2	2.581989	1.677476677	16187 HELLS	242890.at	-0.7746	-2	2.581989	0.536258	0
7600	MEG3	212732.at	0.774597	2	2.581989	1.675771971	15950 RAB12	239891_x.at	-0.7746	-2	2.581989	0.536664	0
10609	METTL5	220839.at	0.774597	2	2.581989	1.674919063	4329 HUS1	204884_s.at	-0.7746	-2	2.581989	0.537409	0
250	ALS2CR15	1554205_s.at	0.774597	2	2.581989	1.674347158	3107 FAM20B	202916_s.at	-0.7746	-2	2.581989	0.537467	0
15735	C6ORF83	238292.at	0.774597	2	2.581989	1.674301242	11321 C6ORF149	222872.at	-0.7746	-2	2.581989	0.537933	0
14976	USP15	231990.at	0.774597	2	2.581989	1.673205528	16425 MAST4	40016_q.at	-0.7746	-2	2.581989	0.538398	0
11710	NTN4	223315.at	0.774597	2	2.581989	1.673094779	10719 SYNC1	221276_s.at	-0.7746	-2	2.581989	0.538676	0
15052	KLHL5	232297.at	0.774597	2	2.581989	1.671810372	11411 PLDN	222826.at	-0.7746	-2	2.581989	0.539284	0
4072	LIMK1	204357_s.at	0.774597	2	2.581989	1.671019224	16454 CCHCR1	42361_q.at	-0.7746	-2	2.581989	0.539499	0
15736	SIMP	238303.at	0.774597	2	2.581989	1.670411985	9081 SOS2	217644_s.at	-0.7746	-2	2.581989	0.540215	0
7965	STIP1	213330_s.at	0.774597	2	2.581989	1.668572318	6957 NFYC	211797_s.at	-0.7746	-2	2.581989	0.540361	0
298	BTBD15	1554469.at	0.774597	2	2.581989	1.667744543	8126 MUC1	213693_s.at	-0.7746	-2	2.581989	0.540511	0
14281	SGCD	228602.at	0.774597	2	2.581989	1.666765667	8429 RSC1A1	202029_x.at	-0.7746	-2	2.581989	0.54087	0
10540	CHST4	220446_s.at	0.774597	2	2.581989	1.664670659	2405 RPL38	203957.at	-0.7746	-2	2.581989	0.541042	0
10608	C21ORF77	220826.at	0.774597	2	2.581989	1.664670659	3812 E2F6	213497.at	-0.7746	-2	2.581989	0.541303	0
3764	ACTN2	203864_s.at	0.774597	2	2.581989	1.664506481	8042 ABTB2	213497.at	-0.7746	-2	2.581989	0.541383	0
8640	CALD1	215198_s.at	0.774597	2	2.581989	1.663859112	7160 GFBP3	212143_s.at	-0.7746	-2	2.581989	0.541561	0
10310	FLJ12649	219626.at	0.774597	2	2.581989	1.663826879	16164 ATBF1	242738_s.at	-0.7746	-2	2.581989	0.542426	0
7169	SDC2	212158.at	0.774597	2	2.581989	1.663088483	254 ZNF638	1554249_a.at	-0.7746	-2	2.581989	0.543133	0
997	IQCH	1569611_a.at	0.774597	2	2.581989	1.66218035	15595 ITC	236235.at	-0.7746	-2	2.581989	0.543268	0
4999	AOC2	207064_s.at	0.774597	2	2.581989	1.662179908	9021 FOXJ3	217310_s.at	-0.7746	-2	2.581989	0.543325	0
10579	C14ORF107	220701.at	0.774597	2	2.581989	1.661259228	9083 BCAP29	217657.at	-0.7746	-2	2.581989	0.543328	0
329	SERPINB8	1554616.at	0.774597	2	2.581989	1.65805564	1522 PRDX2	201006.at	-0.7746	-2	2.581989	0.543453	0
680	FN1	1568199.at	0.774597	2	2.581989	1.6566515227	574 TNRC5	1566389.at	-0.7746	-2	2.581989	0.543561	0
15805	WDR36	238677.at	0.774597	2	2.581989	1.655670376	8197 BBP	213882.at	-0.7746	-2	2.581989	0.544331	0
8241	SAT	213988_s.at	0.774597	2	2.581989	1.655315513	14684 BCAP29	230150.at	-0.7746	-2	2.581989	0.544402	0
3757	IGFBP6	203851.at	0.774597	2	2.581989	1.654170916	2569 FADS2	202218_s.at	-0.7746	-2	2.581989	0.546089	0
6501	TANK	210458_s.at	0.774597	2	2.581989	1.653719311	1208 RPL32	200674_s.at	-0.7746	-2	2.581989	0.546215	0
435	SLC39A14	1555433.at	0.774597	2	2.581989	1.653481894	12339 FKBP5	224856.at	-0.7746	-2	2.581989	0.546215	0
1001	CCDC36	1569690.at	0.774597	2	2.581989	1.65305785	10626 HZAFJ	220936_s.at	-0.7746	-2	2.581989	0.546838	0
9590	LGR4	218326_s.at	0.774597	2	2.581989	1.652742734	9856 SDPR	218711_s.at	-0.7746	-2	2.581989	0.547095	0
15651	LOC146210	236776.at	0.774597	2	2.581989	1.652547156	4764 REL	206036_s.at	-0.7746	-2	2.581989	0.548097	0
231	PRR8	1554095.at	0.774597	2	2.581989	1.652344863	10213 KIAA1212	219387.at	-0.7746	-2	2.581989	0.548137	0
953	LOC199998	1568938.at	0.774597	2	2.581989	1.651880424	12955 RAPGEF1	225738.at	-0.7746	-2	2.581989	0.548399	0
1178	HDLBP	200643.at	0.774597	2	2.581989	1.651531799	14421 DSCR1L2	229064_s.at	-0.7746	-2	2.581989	0.548519	0
10534	TGFB2	220407_s.at	0.774597	2	2.581989	1.649483066	224879.at	224879.at	-0.7746	-2	2.581989	0.548699	0
5053	ABI2	207268_x.at	0.774597	2	2.581989	1.648803144	226534.at	226534.at	-0.7746	-2	2.581989	0.548926	0
3792	DNASE1L1	203912_s.at	0.774597	2	2.581989	1.646782996	4973 NFIC	206929_s.at	-0.7746	-2	2.581989	0.548928	0
13473	PHYHIP1	228623.at	0.774597	2	2.581989	1.646482636	5828 SNAP23	209131_s.at	-0.7746	-2	2.581989	0.549097	0
16178	BCAN	242843.at	0.774597	2	2.581989	1.646386431	556 LOC283012	1556062.at	-0.7746	-2	2.581989	0.5497	0
9596	BEX1	218332.at	0.774597	2	2.581989	1.646172539	8680 LOX	215446_s.at	-0.7746	-2	2.581989	0.549776	0
945	NCOR1	1568748.at	0.774597	2	2.581989	1.64572863	10932 MYST1	221820_s.at	-0.7746	-2	2.581989	0.55012	0
610	BCL10	1557258_a.at	0.774597	2	2.581989	1.645686897	4224 SHB	204657_s.at	-0.7746	-2	2.581989	0.550268	0
10644	STGALNAC5	220979_s.at	0.774597	2	2.581989	1.645047389	16138 FLJ33868	242477.at	-0.7746	-2	2.581989	0.550513	0
9314	FXC1	217981_s.at	0.774597	2	2.581989	1.640140948	10232 TASP1	219443.at	-0.7746	-2	2.581989	0.550726	0
90	FLJ30430	1552942.at	0.774597	2	2.581989	1.640102171	928 ANXA2	1568126.at	-0.7746	-2	2.581989	0.55091	0

13684	SLC39A11	227046	at	0.774597	2	2.581989	1.594909479	0	15613	NDUFS1	236356	at	-0.7746	-2	2.581989	0.567369	0
9421	XAB2	218110	at	0.774597	2	2.581989	1.594710744	0	8830	PLCL2	216218	s.at	-0.7746	-2	2.581989	0.567462	0
865	MGC4189	1564301	a.at	0.774597	2	2.581989	1.594007491	0	6466	MSX2	210319	x.at	-0.7746	-2	2.581989	0.567485	0
905	FLJ35848	1566480	x.at	0.774597	2	2.581989	1.593421654	0	455	UGCGL2	1555561	a.at	-0.7746	-2	2.581989	0.568136	0
11082	PLGLB1	222249	at	0.774597	2	2.581989	1.592446449	0	6739	MAP4K5	211081	s.at	-0.7746	-2	2.581989	0.568236	0
15201	KIAA1442	233850	s.at	0.774597	2	2.581989	1.592351958	0	14245	TAF9L	228483	s.at	-0.7746	-2	2.581989	0.568297	0
5181	SP140	207777	s.at	0.774597	2	2.581989	1.591800518	0	4650	ANGPT1	205609	at	-0.7746	-2	2.581989	0.568374	0
8787	IGHMBP2	215980	s.at	0.774597	2	2.581989	1.591730425	0	10418	MOCOS	219959	at	-0.7746	-2	2.581989	0.568511	0
8176	GTPBP3	213835	x.at	0.774597	2	2.581989	1.591705727	0	16238	SUGT1	244368	x.at	-0.7746	-2	2.581989	0.568734	0
14796	C14ORF116	230790	x.at	0.774597	2	2.581989	1.590103849	0	4589	GSTT2	205439	at	-0.7746	-2	2.581989	0.569761	0
10846	ZFHHC11	221646	s.at	0.774597	2	2.581989	1.590024331	0	14560	CHD9	229586	at	-0.7746	-2	2.581989	0.569871	0
5523	FSTL1	208782	at	0.774597	2	2.581989	1.589949899	0	2780	TRIB2	202479	s.at	-0.7746	-2	2.581989	0.569991	0
15221	ZNF445	233992	x.at	0.774597	2	2.581989	1.589138405	0	11106	RNF126P1	222349	x.at	-0.7746	-2	2.581989	0.570047	0
869	K-ALPHA-1	1556568	at	0.774597	2	2.581989	1.588669951	0	8320	ABCB9	214209	s.at	-0.7746	-2	2.581989	0.570219	0
1520	SSR4	201004	at	0.774597	2	2.581989	1.5885900495	0	2780	TRIB2	202479	s.at	-0.7746	-2	2.581989	0.570367	0
4754	HABP2	206010	at	0.774597	2	2.581989	1.58625818	0	15454	ADCY3	235441	at	-0.7746	-2	2.581989	0.570768	0
10450	MAGEC2	220062	s.at	0.774597	2	2.581989	1.586073106	0	13911	GNA13	227539	at	-0.7746	-2	2.581989	0.570882	0
4825	ZNF239	206261	at	0.774597	2	2.581989	1.585205267	0	14659	FALZ	230056	at	-0.7746	-2	2.581989	0.570972	0
8566	CACNA1A	214933	at	0.774597	2	2.581989	1.584283513	0	16102	C6ORF56	242277	at	-0.7746	-2	2.581989	0.571082	0
13289	PKN3	226299	at	0.774597	2	2.581989	1.583201685	0	9194	VPS24	217837	s.at	-0.7746	-2	2.581989	0.571115	0
3438	POLG	203366	at	0.774597	2	2.581989	1.583178233	0	7394	KIAA0256	212450	at	-0.7746	-2	2.581989	0.571225	0
4327	TAOK2	204878	s.at	0.774597	2	2.581989	1.5830956762	0	16012	C4ORF12	241401	at	-0.7746	-2	2.581989	0.571348	0
2721	IFI27	202411	at	0.774597	2	2.581989	1.580312316	0	10172	GRAMD1C	219313	at	-0.7746	-2	2.581989	0.571628	0
2052	INPPL1	201598	s.at	0.774597	2	2.581989	1.579136169	0	13090	PRICKLE2	225968	at	-0.7746	-2	2.581989	0.571631	0
8595	RREB1	215032	at	0.774597	2	2.581989	1.578683595	0	3258	IMP2A	203126	at	-0.7746	-2	2.581989	0.572238	0
8794	LINK-GEFII	216006	at	0.774597	2	2.581989	1.577579475	0	11426	FLJ70997	222851	at	-0.7746	-2	2.581989	0.572345	0
3002	GPC1	202755	s.at	0.774597	2	2.581989	1.577494692	0	14119	MRPS22	228059	x.at	-0.7746	-2	2.581989	0.572594	0
578	LOC283994	1556533	at	0.774597	2	2.581989	1.577296567	0	16002	LOC157378	241342	at	-0.7746	-2	2.581989	0.572609	0
8462	GNA11	214679	x.at	0.774597	2	2.581989	1.577092061	0	14896	KIAA1217	231807	at	-0.7746	-2	2.581989	0.572815	0
6539	POLR3C	210573	s.at	0.774597	2	2.581989	1.576664197	0	14859	SILC35D2	231437	at	-0.7746	-2	2.581989	0.572917	0
3551	WDR39	203536	s.at	0.774597	2	2.581989	1.576569842	0	1272	RPS27	200741	s.at	-0.7746	-2	2.581989	0.572988	0
636	EHPB1L1	1557749	at	0.774597	2	2.581989	1.576892857	0	14130	PHF14	228095	at	-0.7746	-2	2.581989	0.573082	0
5097	CCR9	207445	s.at	0.774597	2	2.581989	1.576414781	0	15538	CLRF3	235803	at	-0.7746	-2	2.581989	0.573119	0
16183	AKT3	242876	at	0.774597	2	2.581989	1.574971815	0	5926	SILC39A8	209267	s.at	-0.7746	-2	2.581989	0.573763	0
15282	KIAA1728	234870	at	0.774597	2	2.581989	1.574924319	0	15241	NYREN18	234332	at	-0.7746	-2	2.581989	0.573772	0
6460	XDH	210301	at	0.774597	2	2.581989	1.574735331	0	14834	PPP2R5E	231101	at	-0.7746	-2	2.581989	0.573981	0
10467	ANKRD5	220144	s.at	0.774597	2	2.581989	1.574536377	0	4937	DNAJC4	206782	s.at	-0.7746	-2	2.581989	0.573959	0
8889	LOC442175	216490	x.at	0.774597	2	2.581989	1.574428967	0	11206	REP1N1	222501	s.at	-0.7746	-2	2.581989	0.573978	0
4163	TBC1D8	204526	s.at	0.774597	2	2.581989	1.57405244	0	11382	MYEF2	222771	s.at	-0.7746	-2	2.581989	0.574494	0
13002	TBRG1	225818	s.at	0.774597	2	2.581989	1.572063877	0	10478	NUBPL	220176	at	-0.7746	-2	2.581989	0.574606	0
14888	LOC51057	231770	x.at	0.774597	2	2.581989	1.571876152	0	13296	C13ORF10	226316	at	-0.7746	-2	2.581989	0.574621	0
16539	DND1	57739	at	0.774597	2	2.581989	1.571540675	0	5030	DDR1	207169	x.at	-0.7746	-2	2.581989	0.574645	0
12548	ELOF1	225156	at	0.774597	2	2.581989	1.570962199	0	4389	MBNL2	205018	s.at	-0.7746	-2	2.581989	0.574672	0
6409	ME2	210153	s.at	0.774597	2	2.581989	1.570939662	0	11573	USP47	223119	s.at	-0.7746	-2	2.581989	0.574926	0
15371	PARD6B	235165	at	0.774597	2	2.581989	1.57056085	0	7859	MED8	213126	at	-0.7746	-2	2.581989	0.574961	0
14256	SAMD9	228531	at	0.774597	2	2.581989	1.568667838	0	9625	MED9	218372	at	-0.7746	-2	2.581989	0.57502	0
437	KIAA1970	1555437	at	0.774597	2	2.581989	1.568612867	0	16359	KIAA0280	36612	at	-0.7746	-2	2.581989	0.575058	0
5293	C4BPB	208209	s.at	0.774597	2	2.581989	1.568177722	0	10599	GPHN	220773	s.at	-0.7746	-2	2.581989	0.575725	0
4559	PLAG1	206372	at	0.774597	2	2.581989	1.568172731	0	14449	PARP11	229138	at	-0.7746	-2	2.581989	0.575956	0
5957	CASP4	209310	s.at	0.774597	2	2.581989	1.567226891	0	1932	JUN	2201464	x.at	-0.7746	-2	2.581989	0.576129	0
4808	HERC3	206183	s.at	0.774597	2	2.581989	1.565922921	0	134	TEAD1	1553322	s.at	-0.7746	-2	2.581989	0.576318	0
4918	PTPN6	206687	s.at	0.774597	2	2.581989	1.565415716	0	2715	SRF	202401	s.at	-0.7746	-2	2.581989	0.576617	0
2141	PGRM2	201701	s.at	0.774597	2	2.581989	1.565076202	0	2651	EHMT2	202326	at	-0.7746	-2	2.581989	0.576945	0
14870	PROCP	231588	at	0.774597	2	2.581989	1.564329476	0	6311	BRAP	209922	at	-0.7746	-2	2.581989	0.577111	0
14101	CGI-100	228022	at	0.774597	2	2.581989	1.562614379	0	7690	PAQR4	212858	at	-0.7746	-2	2.581989	0.577129	0
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1696	SLC7A5	201195	s.at	0.774597	2	2.581989	1.561828069	0	10383	NARF	219862	s.at	-0.7746	-2	2.581989	0.577698	0

10580	K10RFL110	0.774597	2	2.581989	1.561152662	0	12388	SLC41A3	224931	at	-0.7746	-2	2.581989	0.577839	0
16234	KIAA1324L	0.774597	2	2.581989	1.561001287	0	8730	PRIM2A	215708	s.at	-0.7746	-2	2.581989	0.578229	0
15301	LOC130589	0.774597	2	2.581989	1.560709013	0	9486	OXR1	218197	s.at	-0.7746	-2	2.581989	0.578294	0
8112	GOLGIN-67	0.774597	2	2.581989	1.560630652	0	8233	SUZ12	213971	s.at	-0.7746	-2	2.581989	0.578504	0
5151	MUSK	0.774597	2	2.581989	1.560471976	0	4816	RASA3	206220	s.at	-0.7746	-2	2.581989	0.578539	0
7388	RAI3	0.774597	2	2.581989	1.559956716	0	314	MBP	1554544	a.at	-0.7746	-2	2.581989	0.578597	0
5014	UGT1A1	0.774597	2	2.581989	1.559067132	0	16299	EZH1	32259	at	-0.7746	-2	2.581989	0.578807	0
820	ZNF583	0.774597	2	2.581989	1.5583882926	0	2619	CDKN1A	202284	s.at	-0.7746	-2	2.581989	0.578906	0
1000	DYRK3	0.774597	2	2.581989	1.557754443	0	13863	KIAA2018	227433	at	-0.7746	-2	2.581989	0.579564	0
931	TROAP	0.774597	2	2.581989	1.557660911	0	14331	FLJ13611	228745	at	-0.7746	-2	2.581989	0.579634	0
6167	PLD2	0.774597	2	2.581989	1.555542355	0	1238	LITAF	200704	at	-0.7746	-2	2.581989	0.579768	0
10433	MAN2A2	0.774597	2	2.581989	1.555378486	0	3114	PLAUGL2	202925	s.at	-0.7746	-2	2.581989	0.579834	0
29	ETV3	0.774597	2	2.581989	1.554559505	0	79	TLOC1	1552790	a.at	-0.7746	-2	2.581989	0.57995	0
10678	APOL3	0.774597	2	2.581989	1.554421379	0	8361	NOV	214321	at	-0.7746	-2	2.581989	0.580398	0
15653	DKFZP564O186	0.774597	2	2.581989	1.554396339	0	15951	BTf	239897	at	-0.7746	-2	2.581989	0.580413	0
5185	TPT1	0.774597	2	2.581989	1.553212846	0	14224	PDCD2	228420	at	-0.7746	-2	2.581989	0.580531	0
10606	SLC35E1	0.774597	2	2.581989	1.552682183	0	16176	HCG18	242812	at	-0.7746	-2	2.581989	0.580824	0
192	C21ORF93	0.774597	2	2.581989	1.552533993	0	5978	IKBKB	209342	s.at	-0.7746	-2	2.581989	0.580955	0
5157	TBX6	0.774597	2	2.581989	1.551817957	0	2581	NNMT	202238	s.at	-0.7746	-2	2.581989	0.581055	0
3758	SMN1	0.774597	2	2.581989	1.551143803	0	11129	PNRC2	222406	s.at	-0.7746	-2	2.581989	0.581082	0
15756	FLJ21079	0.774597	2	2.581989	1.550400559	0	3977	RNGT	204208	at	-0.7746	-2	2.581989	0.581104	0
8010	PRSS3	0.774597	2	2.581989	1.550144416	0	1982	NCBP2	201521	s.at	-0.7746	-2	2.581989	0.581258	0
4032	PMAIP1	0.774597	2	2.581989	1.549707602	0	3161	ARNT2	202986	at	-0.7746	-2	2.581989	0.581616	0
14565	SPTY2D1	0.774597	2	2.581989	1.548629007	0	5118	PAHA1	207543	s.at	-0.7746	-2	2.581989	0.581704	0
4131	OSTF1	0.774597	2	2.581989	1.547832955	0	7990	RPS12	213377	x.at	-0.7746	-2	2.581989	0.58175	0
8182	PPP2R2B	0.774597	2	2.581989	1.546141607	0	5171	SPAST	207724	s.at	-0.7746	-2	2.581989	0.581767	0
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11442	MGC3169	0.774597	2	2.581989	1.545302777	0	13490	PANK1	226649	at	-0.7746	-2	2.581989	0.581953	0
6835	TTY9	0.774597	2	2.581989	1.544197531	0	7406	C14ORF154	212465	at	-0.7746	-2	2.581989	0.58203	0
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6422	PSG1	0.774597	2	2.581989	1.544197531	0	12424	CGORF89	224977	at	-0.7746	-2	2.581989	0.582185	0
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12160	TBC1D14	0.774597	2	2.581989	1.541572196	0	10956	EV11	221884	at	-0.7746	-2	2.581989	0.583002	0
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4946	OXTB	0.774597	2	2.581989	1.54040759	0	566	KIAA0090	1556186	s.at	-0.7746	-2	2.581989	0.583303	0
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13242	IL7R	0.774597	2	2.581989	1.537356786	0	6632	COG7	210820	x.at	-0.7746	-2	2.581989	0.584579	0
6802	MCAM	0.774597	2	2.581989	1.536744734	0	1937	ZMYM6	227594	at	-0.7746	-2	2.581989	0.584737	0
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8661	MYH15	0.774597	2	2.581989	1.535320823	0	3424	ETV5	203348	s.at	-0.7746	-2	2.581989	0.585316	0
10258	C10RF82	0.774597	2	2.581989	1.534759358	0	8398	CDC42BPA	214464	at	-0.7746	-2	2.581989	0.586113	0
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3496	SAT	0.774597	2	2.581989	1.534109634	0	3808	ARG2	203946	s.at	-0.7746	-2	2.581989	0.586524	0
2322	DAF	0.774597	2	2.581989	1.533715517	0	1933	JUN	201466	s.at	-0.7746	-2	2.581989	0.586631	0
3169	AMOTL2	0.774597	2	2.581989	1.533087241	0	5476	RAB2	208732	at	-0.7746	-2	2.581989	0.58705	0
11925	AFAP	0.774597	2	2.581989	1.532570183	0	13077	RASSF8	225946	at	-0.7746	-2	2.581989	0.587302	0
6232	MFAP5	0.774597	2	2.581989	1.53222138	0	95	TNRC5	1552977	a.at	-0.7746	-2	2.581989	0.587411	0
104	BCL2L11	0.774597	2	2.581989	1.532073094	0	5355	PTMAP7	208549	x.at	-0.7746	-2	2.581989	0.587447	0
4966	TAT	0.774597	2	2.581989	1.532063739	0	9981	FBXL15	218938	at	-0.7746	-2	2.581989	0.588263	0
13250	PAWR	0.774597	2	2.581989	1.53138612	0	6931	PTN	211737	x.at	-0.7746	-2	2.581989	0.588304	0
4271	NAO1	0.774597	2	2.581989	1.530989534	0	11168	TM6PAI	222449	at	-0.7746	-2	2.581989	0.588317	0
16263	LOC339933	0.774597	2	2.581989	1.529169879	0	10382	LY6G5C	219860	at	-0.7746	-2	2.581989	0.588386	0
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6111	AKAP13	0.774597	209534	x	at	0	15587	HOOK3	236192	at	-0.7746	-2	2.581989	0.588786	0	
16321	RBMS2	0.774597	34187	at		0	9790	HECA	218603	at	-0.7746	-2	2.581989	0.588865	0	
868	TREML4	0.774597	1564052	at		0	16523	MARK4	55065	at	-0.7746	-2	2.581989	0.588901	0	
5036	CASP7	0.774597	207181	s	at	0	15381	FBXW2	235195	at	-0.7746	-2	2.581989	0.588975	0	
4077	F3	0.774597	204363	at		0	11091	KIAA1387	222270	at	-0.7746	-2	2.581989	0.588997	0	
16089	LOC256112	0.774597	242208	at		0	8896	BRCC3	216521	s	at	-0.7746	-2	2.581989	0.589868	0
15421	LOC144871	0.774597	236341	at		0	3239	RAPGEF2	203096	s	at	-0.7746	-2	2.581989	0.5901	0
15217	ZNF295	0.774597	233952	s	at	0	13015	TEF	225840	at	-0.7746	-2	2.581989	0.590436	0	
14825	HRSLSL5	0.774597	231050	at		0	16031	MGC33382	241733	at	-0.7746	-2	2.581989	0.590446	0	
4462	CLTB	0.774597	205172	x	at	0	14920	LOC144501	231849	at	-0.7746	-2	2.581989	0.591002	0	
848	FHAD1	0.774597	1563639	a	at	0	5842	RXR8	209148	at	-0.7746	-2	2.581989	0.591202	0	
8478	ALMS1	0.774597	214707	x	at	0	15367	CORF13	205143	at	-0.7746	-2	2.581989	0.591348	0	
16168	ZNF420	0.774597	242761	s	at	0	6319	RIPK1	209941	at	-0.7746	-2	2.581989	0.591483	0	
14002	CLIC6	0.774597	227742	at		0	967	ZNF642	1569107	s	at	-0.7746	-2	2.581989	0.591514	0
179	RHEBL1	0.774597	1553713	a	at	0	11919	KBTBD4	223765	s	at	-0.7746	-2	2.581989	0.591542	0
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13156	MITF	0.774597	226066	at		0	3003	GPC1	202756	s	at	-0.7746	-2	2.581989	0.592557	0
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13918	C9ORF77	0.774597	227551	at		0	3766	USP46	203869	at	-0.7746	-2	2.581989	0.592966	0	
3870	EDG2	0.774597	204037	at		0	8166	ABHD5	213805	at	-0.7746	-2	2.581989	0.593305	0	
4290	TRIM21	0.774597	204804	at		0	2014	VAMP2	201556	s	at	-0.7746	-2	2.581989	0.593362	0
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14480	KDFZP434E231E	0.774597	229298	at		0	15293	FAM54A	234944	a	at	-0.7746	-2	2.581989	0.594313	0
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10440	STYK1	0.774597	220030	at		0	8948	RRN3	216902	s	at	-0.7746	-2	2.581989	0.596257	0
13787	HPS3	0.774597	227253	at		0	4153	DPH2	204514	at	-0.7746	-2	2.581989	0.59626	0	
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264	C6ORF141	0.774597	1554314	at		0	3878	P1TEN	204054	at	-0.7746	-2	2.581989	0.598047	0	
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11058	GFRR1	0.774597	222164	at		0	14247	LOC221738	228487	s	at	-0.7746	-2	2.581989	0.598258	0
3785	RCP9	0.774597	203898	at		0	6480	SSNA1	210378	s	at	-0.7746	-2	2.581989	0.598287	0
15510	ENSA	0.774597	235679	at		0	8065	SLC18A2	213549	at	-0.7746	-2	2.581989	0.598397	0	
11373	ARRB1	0.774597	222756	s	at	0	8913	AKR1C1	216594	x	at	-0.7746	-2	2.581989	0.598397	0
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2876 NRIP1	<u>202600 .s.at</u>	-0.7746	-2	2.581989	0.608942	0
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15660 LRRC34	<u>236917 .at</u>	-0.7746	-2	2.581989	0.609499	0
7447 KIAA0146	<u>212523 .s.at</u>	-0.7746	-2	2.581989	0.609694	0
4463 CD58	<u>205173 .x.at</u>	-0.7746	-2	2.581989	0.609701	0
5094 RNUJ1	<u>207438 .s.at</u>	-0.7746	-2	2.581989	0.609924	0
16597 EHBPI1	<u>91703 .at</u>	-0.7746	-2	2.581989	0.609981	0
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748 MGC5384	<u>1559059 .s.at</u>	-0.7746	-2	2.581989	0.610476	0
16097 METT5D1	<u>242247 .at</u>	-0.7746	-2	2.581989	0.611229	0
7578 RASA4	<u>212706 .at</u>	-0.7746	-2	2.581989	0.61154	0
8557 TRRAP	<u>214908 .s.at</u>	-0.7746	-2	2.581989	0.611689	0
15915 AFF4	<u>239439 .at</u>	-0.7746	-2	2.581989	0.61182	0
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9049 HLA-DMA	<u>217478 .s.at</u>	-0.7746	-2	2.581989	0.611934	0
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8623 FLJ36166	<u>215143 .at</u>	-0.7746	-2	2.581989	0.612211	0
667 TM6SF1	<u>1558102 .at</u>	-0.7746	-2	2.581989	0.61238	0
9375 WDR41	<u>218055 .s.at</u>	-0.7746	-2	2.581989	0.612455	0
9069 LOC255925	<u>217551 .at</u>	-0.7746	-2	2.581989	0.612462	0
1684 GNAI3	<u>201181 .at</u>	-0.7746	-2	2.581989	0.612702	0
14131 MYLIP	<u>228098 .s.at</u>	-0.7746	-2	2.581989	0.612741	0
4610 GCNT1	<u>205505 .at</u>	-0.7746	-2	2.581989	0.612863	0
14373 CXXC6	<u>228906 .at</u>	-0.7746	-2	2.581989	0.612879	0
7650 SORT1	<u>212797 .at</u>	-0.7746	-2	2.581989	0.612958	0
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11453 EHF	<u>222932 .at</u>	-0.7746	-2	2.581989	0.613549	0
7692 ZDHHC18	<u>212860 .at</u>	-0.7746	-2	2.581989	0.613601	0
5875 PIM1	<u>209193 .at</u>	-0.7746	-2	2.581989	0.613632	0
9214 SLC39A9	<u>217859 .s.at</u>	-0.7746	-2	2.581989	0.613738	0
5946 ID4	<u>209291 .at</u>	-0.7746	-2	2.581989	0.613901	0
14838 HPS3	<u>231121 .at</u>	-0.7746	-2	2.581989	0.61412	0
11896 INADL	<u>223681 .s.at</u>	-0.7746	-2	2.581989	0.614217	0
13160 SPSB1	<u>226075 .at</u>	-0.7746	-2	2.581989	0.614234	0
14588 APRIN	<u>229704 .at</u>	-0.7746	-2	2.581989	0.614385	0
13622 ZC3H7A	<u>226897 .s.at</u>	-0.7746	-2	2.581989	0.614388	0
9863 C1ORF27	<u>218721 .s.at</u>	-0.7746	-2	2.581989	0.615062	0
7704 MPHOSPH10	<u>212885 .at</u>	-0.7746	-2	2.581989	0.615074	0
8481 15E1.2	<u>214711 .at</u>	-0.7746	-2	2.581989	0.615162	0
763 ZCCHC10	<u>1559399 .s.at</u>	-0.7746	-2	2.581989	0.615371	0
13958 PPP2R5E	<u>227630 .at</u>	-0.7746	-2	2.581989	0.615428	0
1749 RPS6	<u>201254 .x.at</u>	-0.7746	-2	2.581989	0.615715	0
4487 IL1RAP	<u>205227 .at</u>	-0.7746	-2	2.581989	0.615816	0
14977 C9ORF82	<u>231995 .at</u>	-0.7746	-2	2.581989	0.615929	0
8637 GA17	<u>215190 .at</u>	-0.7746	-2	2.581989	0.616266	0
14065 PTPN3	<u>227944 .at</u>	-0.7746	-2	2.581989	0.616411	0
221 FLJ32549	<u>1554067 .at</u>	-0.7746	-2	2.581989	0.616416	0
15178 CDADC1	<u>233564 .s.at</u>	-0.7746	-2	2.581989	0.6165	0
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13487 LOC134492	<u>226643 .s.at</u>	-0.7746	-2	2.581989	0.616927	0
7380 RPS2	<u>212433 .x.at</u>	-0.7746	-2	2.581989	0.617091	0
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3988 HDAC4	204225 .at	-0.7746	-2	2.581989	0.617943	0
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4853 DDEF2	206414 .s.at	-0.7746	-2	2.581989	0.618674	0
16024 ZFH4	241700 .at	-0.7746	-2	2.581989	0.618816	0
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16115 MTHFD2L	242370	at	-2	2.581989	0.624512	0
12760 15E1.2	225430	at	-2	2.581989	0.624574	0
3139 PTPN9	202958	at	-2	2.581989	0.624658	0
14154 DISP1	228184	at	-2	2.581989	0.625163	0
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8639 PRKCA	215195	at	-2	2.581989	0.625608	0
10546 SLC25A21	220474	at	-2	2.581989	0.625626	0
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13375 RASSF4	226436	at	-2	2.581989	0.626991	0
3131 IL1R1	202948	at	-2	2.581989	0.627063	0
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13907 C9ORF21	227534	at	-2	2.581989	0.627284	0
8451 ITGA1	214660	at	-2	2.581989	0.627306	0
12032 EGLN1	224314	s.at	-2	2.581989	0.627354	0
3429 PSD3	203355	s.at	-2	2.581989	0.627374	0
1705 RRBP1	201204	s.at	-2	2.581989	0.627431	0
15504 ESCO1	235645	at	-2	2.581989	0.627568	0
5415 ST13	208666	s.at	-2	2.581989	0.627799	0
15984 RP42	240781	x.at	-2	2.581989	0.627817	0
804 DPY19L1	1560916	a.at	-2	2.581989	0.627944	0
15860 FLJ31951	238949	at	-2	2.581989	0.628104	0
15842 KIAA0974	238859	at	-2	2.581989	0.628205	0
182 ZNF644	1553729	s.at	-2	2.581989	0.628426	0
13329 SHPRH	226366	at	-2	2.581989	0.628453	0
7489 RPS17	212578	x.at	-2	2.581989	0.628613	0
8882 TRA1	216449	x.at	-2	2.581989	0.628796	0
16448 SCYL3	41329	at	-2	2.581989	0.629006	0
7024 ACTG1	211970	x.at	-2	2.581989	0.629061	0
5520 DDR1	208779	x.at	-2	2.581989	0.629088	0
3800 HLA-DMB	203932	at	-2	2.581989	0.629208	0
7052 C10RF144	212004	at	-2	2.581989	0.629246	0
11827 CENPJ	223513	at	-2	2.581989	0.62925	0
4201 PKIA	204612	at	-2	2.581989	0.629293	0
7324 KIAA0913	212359	s.at	-2	2.581989	0.629434	0
6354 MALT1	210018	x.at	-2	2.581989	0.629509	0
6417 SFRS10	210180	s.at	-2	2.581989	0.629912	0
10654 ITM2C	221004	s.at	-2	2.581989	0.629951	0
14841 JAG1	231183	s.at	-2	2.581989	0.630144	0
6227 SPAST	209748	at	-2	2.581989	0.630312	0
16162 ITIH4	242720	at	-2	2.581989	0.630525	0
896 FLJ11193	1565939	at	-2	2.581989	0.630575	0
5319 UGT8	208358	s.at	-2	2.581989	0.630658	0
16005 FLJ13215	241360	at	-2	2.581989	0.630867	0
2845 TNKS	202561	at	-2	2.581989	0.631477	0
10677 TNFSF15	221085	at	-2	2.581989	0.631477	0
16284 MRPS22	31799	at	-2	2.581989	0.631572	0
6902 IFNGR1	211676	s.at	-2	2.581989	0.631597	0

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581 LOC351847	1556695 a.at	-0.7746	-2	2.581989	0.631962	0
81 SENP1	1552812 a.at	-0.7746	-2	2.581989	0.632789	0
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3868 SCG2	204035 .at	-0.7746	-2	2.581989	0.634456	0
15836 FWINL3	238823 .at	-0.7746	-2	2.581989	0.634815	0
3568 TRIM38	203567 s.at	-0.7746	-2	2.581989	0.634888	0
468 RTN4IP1	1555679 a.at	-0.7746	-2	2.581989	0.635081	0
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7683 NEXILIN	212847 .at	-0.7746	-2	2.581989	0.63533	0
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7817 FRMD4B	213056 .at	-0.7746	-2	2.581989	0.635501	0
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9797 TSSC4	218612 s.at	-0.7746	-2	2.581989	0.635731	0
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12008 EHF	224189 x.at	-0.7746	-2	2.581989	0.636076	0
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4345 MLLT3	204918 s.at	-0.7746	-2	2.581989	0.636247	0
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7337 FEM1B	212373 .at	-0.7746	-2	2.581989	0.636891	0
7315 YIPF6	212342 .at	-0.7746	-2	2.581989	0.636958	0
7511 AKT3	212609 s.at	-0.7746	-2	2.581989	0.63697	0
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9016 SLC37A4	217289 s.at	-0.7746	-2	2.581989	0.637215	0
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10870 MAP3K2	221695 s.at	-0.7746	-2	2.581989	0.637737	0
5919 CSPG6	209258 s.at	-0.7746	-2	2.581989	0.638	0
13320 NSUN4	226351 .at	-0.7746	-2	2.581989	0.638041	0
456 ZCCHC7	1555562 a.at	-0.7746	-2	2.581989	0.63843	0
6909 HBB	211696 x.at	-0.7746	-2	2.581989	0.638601	0
3768 SENP3	203871 .at	-0.7746	-2	2.581989	0.638688	0
9267 C6ORF106	217924 .at	-0.7746	-2	2.581989	0.638961	0
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6215 ZFP4161	209724 s.at	-0.7746	-2	2.581989	0.639264	0
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12634 CZORF12	225269 s.at	-0.7746	-2	2.581989	0.639277	0

13053 CDC91L1	<u>225903 .at</u>	-0.7746	-2	2.581989	0.639383	0
1729 ENO1	<u>201231 .s.at</u>	-0.7746	-2	2.581989	0.639793	0
9885 MGC4172	<u>218756 .s.at</u>	-0.7746	-2	2.581989	0.63996	0
2522 CNOT8	<u>202162 .s.at</u>	-0.7746	-2	2.581989	0.640038	0
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13949 TFIP11	<u>227615 .at</u>	-0.7746	-2	2.581989	0.640396	0
1799 C5ORF13	<u>201310 .s.at</u>	-0.7746	-2	2.581989	0.640413	0
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7387 NBEAL2	<u>212443 .at</u>	-0.7746	-2	2.581989	0.640599	0
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9239 PARVA	<u>217890 .s.at</u>	-0.7746	-2	2.581989	0.640671	0
8265 WDR67	<u>214061 .at</u>	-0.7746	-2	2.581989	0.640863	0
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2112 RPS17	<u>201665 .x.at</u>	-0.7746	-2	2.581989	0.641261	0
11003 HKE2	<u>222019 .at</u>	-0.7746	-2	2.581989	0.641416	0
16197 TFDP1	<u>242939 .at</u>	-0.7746	-2	2.581989	0.641441	0
16179 PGGT1B	<u>242844 .at</u>	-0.7746	-2	2.581989	0.641479	0
14995 FAM176B	<u>232048 .at</u>	-0.7746	-2	2.581989	0.641562	0
3936 ENOSF1	<u>204143 .s.at</u>	-0.7746	-2	2.581989	0.641951	0
14342 HNMT	<u>228772 .at</u>	-0.7746	-2	2.581989	0.642301	0
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15182 USP34	<u>233595 .at</u>	-0.7746	-2	2.581989	0.642544	0
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2182 ADD3	<u>201753 .s.at</u>	-0.7746	-2	2.581989	0.642988	0
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6445 RAD51L1	<u>210255 .at</u>	-0.7746	-2	2.581989	0.643707	0
2626 STAG1	<u>202294 .at</u>	-0.7746	-2	2.581989	0.643752	0
11821 C1QTNF5	<u>223499 .at</u>	-0.7746	-2	2.581989	0.643784	0
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7116 LMNA	<u>212089 .at</u>	-0.7746	-2	2.581989	0.644648	0
9456 HMG20A	<u>218152 .at</u>	-0.7746	-2	2.581989	0.64468	0
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13380 MAP3K2	<u>226441 .at</u>	-0.7746	-2	2.581989	0.644785	0
12691 AK3L1	<u>225342 .at</u>	-0.7746	-2	2.581989	0.644799	0
2616 SPTLC1	<u>202278 .s.at</u>	-0.7746	-2	2.581989	0.644878	0
3123 SOX9	<u>202936 .s.at</u>	-0.7746	-2	2.581989	0.64488	0
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8172 LOC341322	<u>213817 .at</u>	-0.7746	-2	2.581989	0.645101	0
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3246 VPS41	<u>203106 .s.at</u>	-0.7746	-2	2.581989	0.645253	0
3738 SF3A3	<u>1554918 .a.at</u>	-0.7746	-2	2.581989	0.645813	0
13384 FAM89A	<u>203818 .s.at</u>	-0.7746	-2	2.581989	0.645884	0
12356 PLDN	<u>226448 .at</u>	-0.7746	-2	2.581989	0.646588	0
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13805 ZNF689	<u>227294 .at</u>	-0.7746	-2	2.581989	0.64722	0
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11381 FLJ13220	<u>222770 .s.at</u>	-0.7746	-2	2.581989	0.647711	0
135 C10RF55	<u>1553338 .at</u>	-0.7746	-2	2.581989	0.647786	0

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375 DOC1	1554966 a.at	-0.7746	-2	2.581989	0.649242	0
4695 AKAP7	205771 s.at	-0.7746	-2	2.581989	0.649521	0
4879 CHRNA5	206533 at	-0.7746	-2	2.581989	0.649539	0
12274 RBM17	224780 at	-0.7746	-2	2.581989	0.649745	0
7528 LOC154084	212631 at	-0.7746	-2	2.581989	0.649762	0
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7408 SPAG9	212468 at	-0.7746	-2	2.581989	0.650181	0
740 IFT80	1558956 s.at	-0.7746	-2	2.581989	0.650191	0
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8952 CD58	216942 s.at	-0.7746	-2	2.581989	0.6506	0
12069 MED28	224416 s.at	-0.7746	-2	2.581989	0.650689	0
9758 TMEM57	218562 s.at	-0.7746	-2	2.581989	0.650691	0
8109 TUBA1B	213646 x.at	-0.7746	-2	2.581989	0.65078	0
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1396 RPL18A	200869 at	-0.7746	-2	2.581989	0.651302	0
12901 SAMD1	225650 at	-0.7746	-2	2.581989	0.651431	0
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8700 UBE4B	215533 s.at	-0.7746	-2	2.581989	0.651773	0
1010 LOC285961	1568974 x.at	-0.7746	-2	2.581989	0.651846	0
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10158 DTWD1	219291 at	-0.7746	-2	2.581989	0.652045	0
14707 KHDRBS3	230249 at	-0.7746	-2	2.581989	0.652104	0
15509 GM2A	235678 at	-0.7746	-2	2.581989	0.65218	0
7544 ZCCHC14	212655 at	-0.7746	-2	2.581989	0.652231	0
15233 GKAP1	234192 s.at	-0.7746	-2	2.581989	0.65231	0
4948 ACYP2	206833 s.at	-0.7746	-2	2.581989	0.652345	0
1917 TIA1	201447 at	-0.7746	-2	2.581989	0.652434	0
10068 OBFC1	219100 at	-0.7746	-2	2.581989	0.6525	0
15667 TNRC15	237052 x.at	-0.7746	-2	2.581989	0.652548	0
16545 C9ORF116	59437 at	-0.7746	-2	2.581989	0.652601	0
6989 HNRPA3	211930 at	-0.7746	-2	2.581989	0.652743	0
13987 C10ORF118	227701 at	-0.7746	-2	2.581989	0.652781	0

4767 BRAF	206044	s.at	-0.7746	-2	2.581989	0.65294	0
9732 E4F1	218524	.at	-0.7746	-2	2.581989	0.653043	0
1787 MOBK1B	201297	s.at	-0.7746	-2	2.581989	0.65318	0
935 LOC162073	1568619	s.at	-0.7746	-2	2.581989	0.653297	0
7555 CEP68	212675	s.at	-0.7746	-2	2.581989	0.65335	0
8879 TMSB4X	216438	s.at	-0.7746	-2	2.581989	0.653488	0
4355 PTPRG	204944	.at	-0.7746	-2	2.581989	0.653579	0
7728 SMC5L1	212926	.at	-0.7746	-2	2.581989	0.653604	0
6499 C10ORF28	210455	.at	-0.7746	-2	2.581989	0.653687	0
1717 ZRANB1	201219	.at	-0.7746	-2	2.581989	0.653689	0
2779 TRIB2	202478	.at	-0.7746	-2	2.581989	0.653705	0
15712 TCF12	238041	.at	-0.7746	-2	2.581989	0.653728	0
15523 TRA2A	235716	.at	-0.7746	-2	2.581989	0.65448	0
5247 NAB1	208047	s.at	-0.7746	-2	2.581989	0.654509	0
14441 GAB1	229114	.at	-0.7746	-2	2.581989	0.654614	0
14800 ST8SIA4	230836	.at	-0.7746	-2	2.581989	0.654723	0
472 AP1S3	1555731	a.at	-0.7746	-2	2.581989	0.654993	0
4470 SMAD5	205187	.at	-0.7746	-2	2.581989	0.655087	0
16283 CD24	266	s.at	-0.7746	-2	2.581989	0.655117	0
15473 MGC10871	235511	.at	-0.7746	-2	2.581989	0.65524	0
11796 DKFZP564J0863	223453	s.at	-0.7746	-2	2.581989	0.655349	0
15107 PRICKLE1	232811	x.at	-0.7746	-2	2.581989	0.655417	0
269 COG3	1554339	a.at	-0.7746	-2	2.581989	0.655607	0
5645 SRI	208920	.at	-0.7746	-2	2.581989	0.655708	0
12568 ARID1B	225181	.at	-0.7746	-2	2.581989	0.655877	0
9730 UBE2W	218521	s.at	-0.7746	-2	2.581989	0.655897	0
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14184 NDUFB10	228301	x.at	-0.7746	-2	2.581989	0.657096	0
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2916 RPS19	202649	x.at	-0.7746	-2	2.581989	0.658644	0
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89 PDE8A	1552931 a.at	-0.7746	-2	2.581989	0.661163	0
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7688 DCUN1D4	212855 .at	-0.7746	-2	2.581989	0.665879	0
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