

SUPPLEMENTAL METHODS

Negative selection of human primary CD4 T cells. Buffy coats were incubated with 1/10 volume of RosetteSep CD4 T cell enrichment cocktail (StemCell Technologies Inc., Vancouver, Canada) at room temperature for 20 min and diluted with one volume of phosphate buffered saline (PBS) containing 2% human AB serum (2% HAB/PBS). CD4 T cells were separated from the remainder of peripheral blood mononuclear cells (PBMCs) and red cell rosettes by Ficoll (Histopaque-1077, Sigma Chemical Company, St. Louis, MO) density gradient centrifugation and washed twice with 2% HAB/PBS. Cell pellets were resuspended in RPMI 1640 medium supplemented with 2 mM glutamine, 100 U/ml penicillin/100 µg/ml streptomycin, and 5% human AB serum, and left at 37°C overnight prior to histone deacetylase inhibitor (HDACi) treatment the next day.

Analysis of microarray gene expression data. The quality of microarray data was assessed by constructing MA-plots using the *affyPLM* package [1] and by unsupervised clustering. The Bioconductor package *lumi* [2] was used to transform (i.e. variance-stabilizing) and normalize (i.e. robust-spline) the data and remove genes not expressed in any of the samples. Technical batch effects were removed using ComBat [3].

Paired multivariate permutation tests implemented in BRB-Array Tools (version 4.2.1) [4] under default settings (80% confident no more than 10% false positives) were used to identify genes significantly differentially expressed between SAHA treated and untreated samples. Pathway analysis was performed using gene set expression comparison tool in BRB-Array Tools. All pre-defined Kyoto Encyclopedia of Genes and Genomes (KEGG) [5, 6] and BioCarta pathways (http://cgap.nci.nih.gov/Pathways/BioCarta_Pathways) were analyzed between SAHA-treated and untreated samples. The statistical significance of differential expression of each pathway was determined using the functional class scoring method proposed by Pavlidis et al [7]. Briefly, significance of each pathway was assessed by testing a null hypothesis that the list of differentially expressed genes from each pathway was a random selection from the entire project gene list. P-values were estimated based on two statistics, LS score (mean negative natural logarithm of the p-values of respective single gene univariate test) and Kolmogorov-Smirnov (KS) statistics. Gene ontology (GO) analysis was performed using the Biological Networks Gene Ontology (BiNGO) tool version 2.42 in Cytoscape version 2.7.0 [8]. This tool employs a hypergeometric test to identify GO terms significantly overrepresented for differentially expressed genes. Hierarchical clustering was performed using three main GO parameters: Biological Process, Molecular Function and Cellular Component. The list of all the probes present on the Illumina HT12 v3 platform was used as background. For both pathway and GO term analyses, the false discovery rate (FDR) resulting from multiple testing was corrected using the Benjamini-Hochberg method [9]. Pathways and GO terms with p-value <0.05 after FDR correction were considered significant. Differentially expressed genes were only considered overrepresented in a particular pathway if an FDR-corrected p-value was obtained from both the LS and KS tests.

Protein-protein and protein-DNA interactions between the products of genes that were differentially expressed between SAHA treated and untreated primary CD4 T cells greater than +1.4-fold or less than -1.4-fold (N=857) were determined using the direct interaction algorithm in MetaCore (GeneGo, St. Joseph, MI). The interactions documented in MetaCore have been manually curated and are supported by citations in the literature record. When the proteins encoded by genes form well-connected clusters, it is quite likely that they share a common functional response. When protein networks are constructed they often reveal hubs, which represent transcription factors that control the regulation of multiple target genes.

Validation of gene expression by real time quantitative PCR (RT-qPCR). TaqMan® Gene Expression Assays (Applied Biosystems [ABI], Foster City, CA) that matched the region of the gene targeted by the Illumina probe as closely as possible were used in all cases except for PHF17, where custom designed primers and probe were ordered from Integrated DNA Technologies, Inc. (Corallville, IA). TaqMan assays used for the gene expression confirmation were as follows: *CDH23* (Hs00974168_m1), *HLA-DMB* (Hs00157943_m1), *LGALS1* (Hs00355202_m1), *SEPT4* (Hs00910209_g1), *PDE5A* (Hs00905946_m1), *FGFRL1* (Hs00222484_m1), *DLL1* (Hs01011322_g1), *KAT5* (Hs00931525_g1), *ING3* (Hs01565550_m1), *EPC1* (Hs00228677_m1), *MYST4* (Hs01043691_m1), *ING5* (Hs01088639_m1), *BRPH3* (Hs00918830_m1), *BRD1* (Hs01034345_m1), *PHF15* (Hs00209631_m1), *MYC* (Hs00153408_m1), *JUN* (Hs00277190_s1), *BCL6* (Hs00277037_m1). Custom primer and probe sequences for *PHF17* were as follows: forward primer: 5'-AGGATTGAGAAGGATAAACTGGAATC-3', reverse primer: 5'-GCTCATGCACCCCAATTACA-3', probe: 5'-56-FAM/TAAGAAGCCTTTATGCCAGCCCGACAC/3BHQ_1/-3'. Genes with fold changes greater than 2 (*CDH23*, *HLA-DMB*, *LGALS*, *SEPT4*, *PDE5A*, *FGFRL1* and *DLL1*), and also *MYC* and *JUN* were verified using 3 donors, and genes encoding the members of the HAT complexes whose expression was modulated modestly (less than 2-fold change) were verified using 5 or 6 donors to increase power depending on the amount of available RNA.

REFERENCES

1. Bolstad BM, Collin F, Brettschneider J, Simpson K, Cope L, Irizarry R, *et al.* Quality Assessment of Affymetrix GeneChip Data. In: *Bioinformatics and Computational Biology Solutions Using R and Bioconductor*. Edited by Gentleman R, Carey V, Huber W, Irizarry R, Dutoit S. Heidelberg: Springer; 2005. pp. 33-47.
2. Du P, Kibbe WA, Lin SM. lumi: a pipeline for processing Illumina microarray. *Bioinformatics* 2008;**24**:1547-1548.
3. Johnson WE, Li C, Rabinovic A. Adjusting batch effects in microarray expression data using empirical Bayes methods. *Biostatistics* 2007;**8**:118-127.
4. Simon R, Lam A, Li MC, Ngan M, Menenzes S, Zhao Y. Analysis of Gene Expression Data Using BRB-Array Tools. *Cancer Informatics* 2007;**3**:11-17.
5. Ogata H, Goto S, Sato K, Fujibuchi W, Bono H, Kanehisa M. KEGG: Kyoto Encyclopedia of Genes and Genomes. *Nucleic Acids Research* 1999;**27**:29-34.
6. Kanehisa M, Goto S. KEGG: Kyoto Encyclopedia of Genes and Genomes. *Nucleic Acids Research* 2000;**28**:27-30.
7. Pavlidis P, Qin J, Arango V, Mann JJ, Sibille E. Using the Gene Ontology for Microarray Data Mining: A Comparison of Methods and Application to Age Effects in Human Prefrontal Cortex. *Neurochemical Research* 2004;**29**:1213-1222.
8. Maere S, Heymans K, Kuiper M. BiNGO: a Cytoscape plugin to assess overrepresentation of Gene Ontology categories in Biological Networks. *Bioinformatics* 2005;**21**:3448-3449.
9. Benjamini Y, Hochberg, Y. Controlling the false discovery rate: a practical and powerful approach to multiple testing. *J. Roy Stat Soc, B MET* 1995;**57**:289-300.

Figure S1. Immunoblot analysis of histone H3 acetylation after treatment with HDACis. Primary CD4 T cells from 3 donors were treated for 6, 24 or 48 hours with SAHA (340 nM), VPA (40 μ M) or left untreated (i.e. exposed to DMSO only, which was the solvent used to dissolve SAHA). Total protein was extracted and 5 μ g used for immunoblot analysis with anti-acetylated-histone H3 (Ac-H3) and anti-total histone H3 (H3) antibodies. Acetylation is elevated consistently for all 3 donors after 24 h of treatment with SAHA.

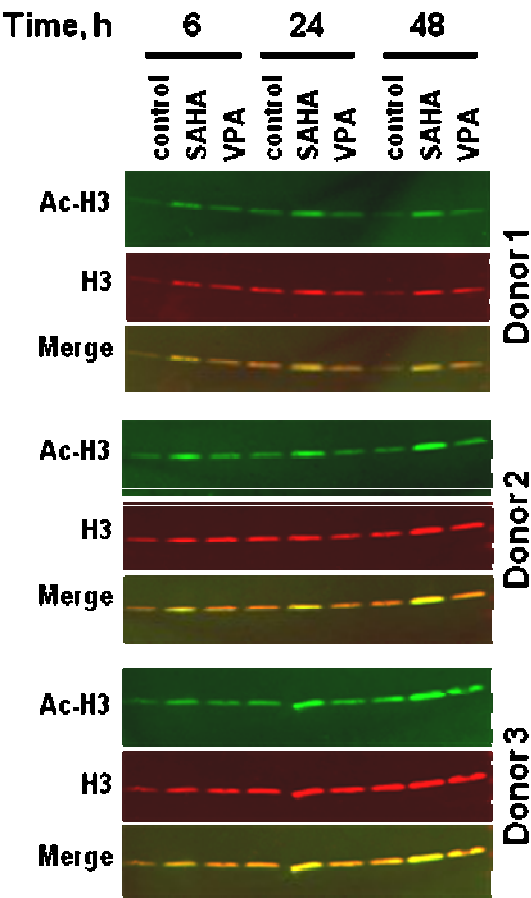
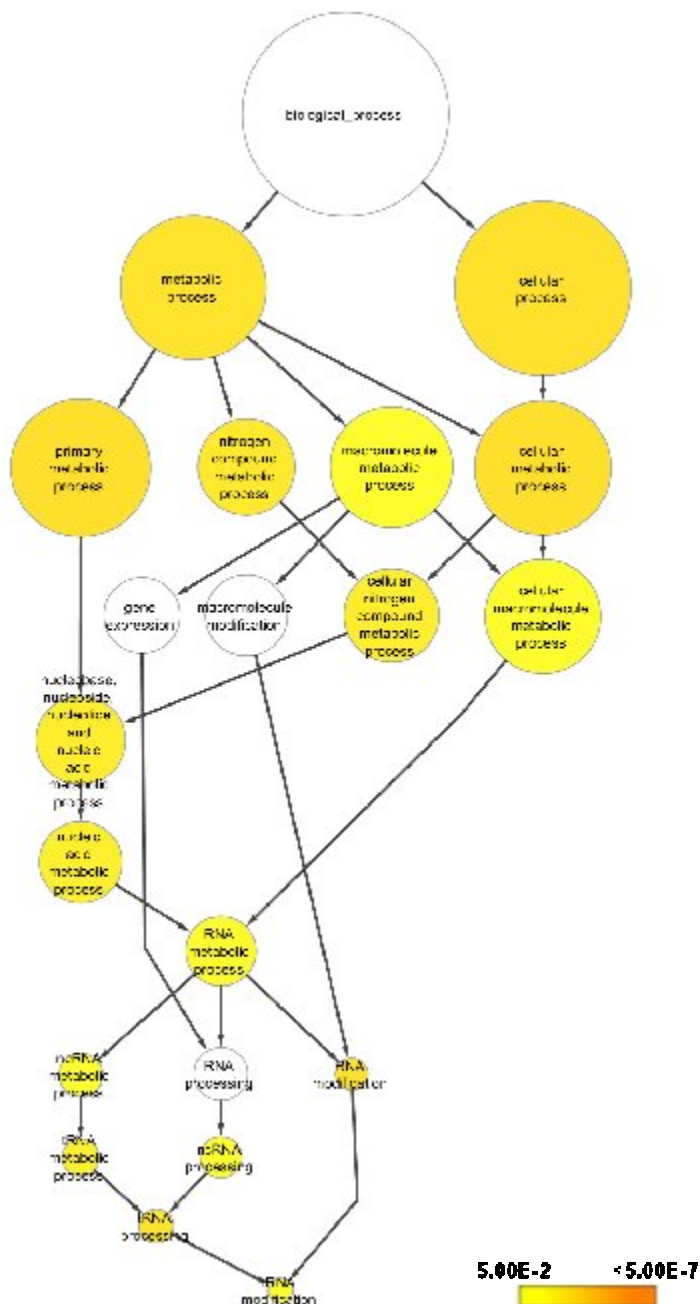


Figure S2. Hierarchical depiction of GO terms significantly over-represented in the set of genes that were significantly modulated by SAHA treatment (N=1847). The size of the node associated with each GO term is relative to the number of differentially expressed genes belonging to that term. The color scale indicates the level of significance associated with each node with red being the most significant. GO terms related to Biological Process (a) and Cellular Component (b) are shown.

(a)



(b)

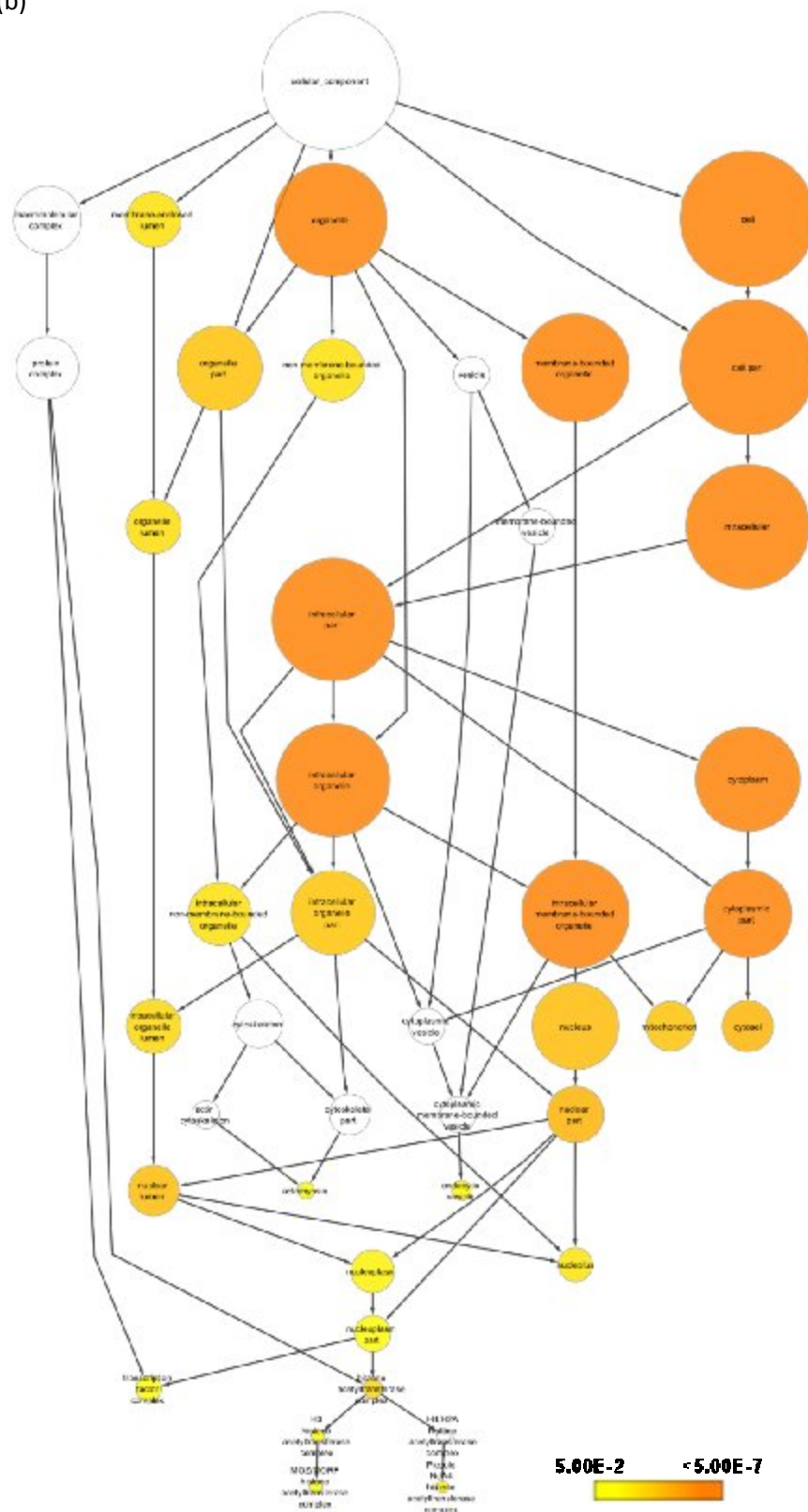


Figure S3. Flow cytometry analysis of CD69+ receptor expression on CD4 T cells following SAHA treatment. A subset of primary CD4 T cells from 3 donors was analyzed by flow cytometry for the surface marker of early activation CD69. The graph represents the means of the percentages of CD69+ cells across donors in the SAHA treated versus untreated groups. SAHA treatment (340 nM) was performed for 24 hours. The error bars represent standard error of the mean.

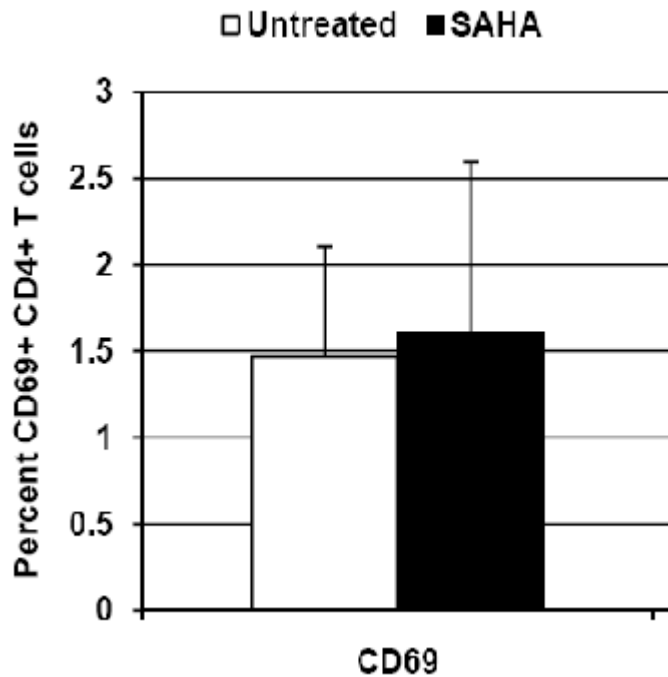


Table S1. Complete list of genes modulated by 24 hours of SAHA treatment (340 nM) in human primary CD4 T cells (N=9). All probes identified as differentially expressed by microarrays (N=2008) are sequentially ordered (*Probe #*) from the probe with the highest to the probe with the lowest fold change. *Accession* refers to NCBI Reference Sequence Accession number. *Parametric p-value* was obtained from the paired parametric *t*-test with random variance model. The criterion of inclusion of a gene in the gene list was specified by the proportion of false discoveries (80% confident that there are no more than 10% false discoveries), which was determined by multivariate permutation testing.

Probe #	Illumina probe ID	Accession	Gene Symbol	Fold change	Parametric p-value
1	ILMN_1761733	NM_002118	HLA-DMB	3.23	< 1e-07
2	ILMN_1768469	NM_001062	TCN1	2.94	6.54E-05
3	ILMN_2195482	NM_000725	CACNB3	2.86	< 1e-07
4	ILMN_1779015	NM_207336	ZNF467	2.86	< 1e-07
5	ILMN_1813386	NM_032854	CORO6	2.86	4.00E-07
6	ILMN_1723978	NM_002305	LGALS1	2.78	< 1e-07
7	ILMN_1757467	NM_005318	H1FO	2.70	< 1e-07
8	ILMN_1813490	NM_024333	FSD1	2.70	1.15E-05
9	ILMN_1742382	NM_014747	RIMS3	2.56	< 1e-07
10	ILMN_1732143	NM_207436	FLJ42957	2.50	< 1e-07
11	ILMN_1685122	NM_001852	COL9A2	2.44	1.00E-07
12	ILMN_1797950	NM_001439	EXTL2	2.38	< 1e-07
13	ILMN_1813175	NM_014921	LPHN1	2.33	< 1e-07
14	ILMN_2120695	NM_004615	TSPAN7	2.33	3.00E-07
15	ILMN_1776157	NM_080415	SEPT4	2.27	1.00E-07
16	ILMN_1743373	NM_005618	DLL1	2.22	< 1e-07
17	ILMN_1737314	NM_001706	BCL6	2.17	< 1e-07
18	ILMN_1815154	NM_005964	MYH10	2.17	< 1e-07
19	ILMN_1670809	NM_007243	NRM	2.17	6.00E-07
20	ILMN_1746408	NM_177401	MIDN	2.13	< 1e-07
21	ILMN_1771622	NM_015722	DRD1IP	2.13	< 1e-07
22	ILMN_1686664	NM_005953	MT2A	2.08	< 1e-07
23	ILMN_2101034	NM_144691	CAPN12	2.08	1.00E-07
24	ILMN_1810836	NM_001083	PDE5A	2.08	1.00E-07
25	ILMN_1746801	NM_020770	CGN	2.08	1.00E-07
26	ILMN_2206722	NR_001442	FER1L4	2.08	3.90E-06
27	ILMN_1653708	NM_001018070	CORO1B	2.04	< 1e-07
28	ILMN_1676893	NM_004036	ADCY3	2.00	< 1e-07
29	ILMN_1795865	NM_021923	FGFRL1	2.00	4.40E-06
30	ILMN_1754727	NM_001004051	GPRASP2	1.96	< 1e-07
31	ILMN_1803018	NM_145754	KIFC2	1.96	2.00E-07
32	ILMN_1728478	NM_022059	CXCL16	1.96	2.00E-07
33	ILMN_1665559	NM_001798	CDK2	1.96	9.00E-07
34	ILMN_1763516	NM_021114	SPINK2	1.92	< 1e-07
35	ILMN_2151281	NM_031412	GABARAPL1	1.92	< 1e-07
36	ILMN_1833858	AF038185	HS.66187	1.92	< 1e-07
37	ILMN_1788416	NM_021214	FAM108C1	1.92	1.00E-07
38	ILMN_1671703	NM_001613	ACTA2	1.92	1.00E-07
39	ILMN_2108735	NM_001958	EEF1A2	1.92	6.05E-05
40	ILMN_1699772	NM_021244	RRAGD	1.89	< 1e-07
41	ILMN_1694432	NM_001312	CRIP2	1.89	< 1e-07
42	ILMN_1794863	NM_018584	CAMK2N1	1.89	1.00E-07
43	ILMN_1670130	NM_005224	ARID3A	1.89	1.00E-07

44	ILMN_1773964	NM_006026	H1FX	1.89	2.00E-07
45	ILMN_2329914	NM_005841	SPRY1	1.89	5.00E-07
46	ILMN_1714741	XM_943533	LOC346887	1.85	< 1e-07
47	ILMN_1729453	NM_006675	TSPAN9	1.85	1.00E-07
48	ILMN_1713450	NM_002475	MYL6B	1.85	1.00E-07
49	ILMN_2395375	NM_021905	GABBR1	1.85	1.00E-07
50	ILMN_1694780	NM_005258	GCHFR	1.85	1.00E-07
51	ILMN_1717934	NM_152280	SYT11	1.85	2.00E-07
52	ILMN_1712283	NM_003394	WNT10B	1.85	2.00E-07
53	ILMN_1668194	XM_936372	LMTK3	1.85	9.18E-05
54	ILMN_1696699	NM_024581	FAM184A	1.82	< 1e-07
55	ILMN_1770865	NM_025058	TRIM46	1.82	< 1e-07
56	ILMN_1764158	NM_020795	NLGN2	1.82	1.00E-07
57	ILMN_1657796	NM_203401	STMN1	1.82	1.00E-07
58	ILMN_1695311	NM_006120	HLA-DMA	1.82	1.00E-07
59	ILMN_1678781	NM_052948	SNX26	1.82	2.00E-07
60	ILMN_1652540	NM_173828	RELL2	1.82	3.00E-07
61	ILMN_2048607	NM_152326	ANKRD9	1.82	4.00E-07
62	ILMN_1690420	NM_005263	GFI1	1.79	< 1e-07
63	ILMN_1679949	NM_024103	SLC25A23	1.79	1.00E-07
64	ILMN_1769282	NM_152330	FRMD6	1.79	1.00E-07
65	ILMN_1693836	XM_933085	LOC653344	1.79	2.00E-07
66	ILMN_1732182	NM_001014765	FBXO44	1.79	3.00E-07
67	ILMN_2386008	NM_024569	MPZL1	1.79	6.00E-07
68	ILMN_2336609	NM_206929	SYTL2	1.79	6.00E-07
69	ILMN_2212999	NM_004522	KIF5C	1.79	7.00E-07
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79	ILMN_1653292	NM_004567	PFKFB4	1.75	4.00E-07
80	ILMN_1814333	NM_005025	SERPINI1	1.75	6.00E-07
81	ILMN_1690040	NM_003273	TM7SF2	1.75	6.00E-07
82	ILMN_1811702	NM_002087	GRN	1.75	8.00E-07
83	ILMN_1787657	NM_012129	CLDN12	1.75	9.00E-07
84	ILMN_1666206	NM_001042471	GSDMB	1.75	1.00E-06
85	ILMN_1676728	NM_206539	DLK2	1.75	5.70E-06
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92	ILMN_1688565	NM_016202	ZNF580	1.72	2.00E-07
93	ILMN_1776522	NM_018845	RAG1AP1	1.72	3.00E-07
94	ILMN_2345292	NM_005031	FXYP1	1.72	6.00E-07
95	ILMN_1674135	NM_014636	RALGPS1	1.72	2.60E-06
96	ILMN_1733937	NM_012329	MMD	1.72	2.80E-06
97	ILMN_1780825	NM_006270	RRAS	1.72	2.90E-06
98	ILMN_1814917	NM_003260	TLE2	1.72	4.10E-06
99	ILMN_2350801	NM_001039355	SLC25A29	1.72	6.59E-05
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102	ILMN_1736567	NM_001025159	CD74	1.69	3.00E-07
103	ILMN_1680453	NM_001012516	ITM2C	1.69	8.00E-07
104	ILMN_1740170	NM_213720	CHCHD10	1.69	1.10E-06
105	ILMN_2151075	NM_017530	ZNF821	1.69	1.70E-06
106	ILMN_1721833	NM_016545	IER5	1.69	5.90E-06
107	ILMN_1666819	NM_015157	PHLDB1	1.69	8.90E-06
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159	ILMN_2387471	NM_001080403	FLJ22184	1.59	5.00E-07
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166	ILMN_1690454	NM_203370	C3ORF54	1.59	3.55E-05
167	ILMN_1741159	NM_005204	MAP3K8	1.59	4.49E-05
168	ILMN_1655563	NM_014772	KIAA0427	1.59	5.04E-05
169	ILMN_1662846	NM_014373	GPR160	1.59	5.46E-05
170	ILMN_1794914	NM_024954	UBTD1	1.59	5.79E-05
171	ILMN_2310814	NM_016841	MAPT	1.59	0.0003541
172	ILMN_1672503	NM_001386	DPYSL2	1.56	3.00E-07
173	ILMN_1700695	NM_080546	SLC44A1	1.56	4.00E-07
174	ILMN_2371055	NM_004428	EFNA1	1.56	5.00E-07
175	ILMN_1802397	NM_002067	GNA11	1.56	5.00E-07
176	ILMN_1760160	NM_004603	STX1A	1.56	6.00E-07
177	ILMN_1715214	NM_080588	PTPN7	1.56	8.00E-07
178	ILMN_1785170	NM_177949	ARMCX2	1.56	1.30E-06
179	ILMN_2379718	NM_001031677	RAB24	1.56	1.70E-06
180	ILMN_1688479	NM_052940	LRRC42	1.56	1.90E-06
181	ILMN_1653200	NM_016609	SLC22A17	1.56	2.20E-06
182	ILMN_2101832	NM_018407	LAPTM4B	1.56	3.30E-06
183	ILMN_2295518	NM_001039705	TRO	1.56	3.70E-06
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189	ILMN_2109708	NM_001953	ECGF1	1.56	2.74E-05
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191	ILMN_1680856	NM_005491	MAMLD1	1.56	0.0003118
192	ILMN_1721876	NM_003255	TIMP2	1.54	2.00E-07
193	ILMN_1767470	NM_021626	SCPEP1	1.54	3.00E-07
194	ILMN_1724708	NM_004794	RAB33A	1.54	1.60E-06
195	ILMN_1796177	NM_202468	GIPC1	1.54	2.00E-06
196	ILMN_1659888	NM_138689	PPP1R14B	1.54	2.60E-06
197	ILMN_1679093	NM_016535	ZNF581	1.54	3.70E-06
198	ILMN_2201533	NM_152766	C17ORF61	1.54	4.80E-06
199	ILMN_1803686	NM_000022	ADA	1.54	7.80E-06
200	ILMN_1653712	NM_207309	UAP1L1	1.54	8.90E-06
201	ILMN_1704750	XM_929980	LOC647000	1.54	1.27E-05
202	ILMN_2207363	NM_006423	RABAC1	1.54	2.17E-05
203	ILMN_1915076	AK123915	HS.355933	1.54	2.34E-05
204	ILMN_1857335	AK092751	HS.170035	1.54	3.53E-05
205	ILMN_2326273	NM_004000	CHI3L2	1.54	3.74E-05
206	ILMN_1752579	NM_005177	ATP6V0A1	1.54	7.28E-05
207	ILMN_2094875	NM_000927	ABCB1	1.54	1.00E-04
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210	ILMN_1776602	NM_194431	RNASE4	1.54	0.0005317
211	ILMN_1707475	NM_152653	UBE2E2	1.52	2.00E-07
212	ILMN_1657746	NM_004332	BPHL	1.52	4.00E-07
213	ILMN_2119774	NM_024514	CYP2R1	1.52	5.00E-07
214	ILMN_1717052	NM_006645	STARD10	1.52	6.00E-07

215	ILMN_1671265	NM_001564	ING2	1.52	9.00E-07
216	ILMN_1871457	XM_374029	HS.534680	1.52	9.00E-07
217	ILMN_1742332	NM_138444	KCTD12	1.52	1.80E-06
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219	ILMN_1748625	NM_001006937	TCEAL4	1.52	3.50E-06
220	ILMN_1795835	XM_931359	LOC338758	1.52	4.70E-06
221	ILMN_1343295	NM_002046	GAPDH	1.52	1.14E-05
222	ILMN_1801934	NM_013368	SERTAD3	1.52	1.77E-05
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224	ILMN_1665583	NM_178014	TUBB	1.52	1.90E-05
225	ILMN_1807972	NM_022765	MICAL1	1.52	2.05E-05
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227	ILMN_1695354	NM_033503	BMF	1.52	2.82E-05
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233	ILMN_1697460	NM_138393	REEP6	1.49	2.10E-06
234	ILMN_1814247	NM_006602	TCFL5	1.49	3.40E-06
235	ILMN_1664248	NM_182615	MGC40069	1.49	3.60E-06
236	ILMN_1788356	NM_182901	C11ORF17	1.49	3.80E-06
237	ILMN_1765310	NM_080390	TCEAL2	1.49	4.60E-06
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242	ILMN_1695759	NM_015944	AMDHD2	1.49	3.71E-05
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244	ILMN_1772821	XM_371461	KIAA1671	1.49	5.60E-05
245	ILMN_1704554	XM_937514	LOC648470	1.49	7.26E-05
246	ILMN_1910948	BX538057	HS.408455	1.49	9.40E-05
247	ILMN_2117171	NM_006769	LMO4	1.49	1.00E-04
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251	ILMN_2374340	NM_001005376	PLAUR	1.49	0.0012318
252	ILMN_1800739	NM_021102	SPINT2	1.47	5.00E-07
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255	ILMN_2055634	NM_004740	TIAF1	1.47	2.90E-06
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257	ILMN_1810267	NM_144666	DNHD1	1.47	5.00E-06
258	ILMN_1799028	NM_005723	TSPAN5	1.47	5.20E-06
259	ILMN_1809291	NM_004615	TSPAN7	1.47	7.50E-06
260	ILMN_1787879	NM_001667	ARL2	1.47	1.00E-05
261	ILMN_1800308	NM_001517	GTF2H4	1.47	1.07E-05
262	ILMN_1721901	NM_003798	CTNNAL1	1.47	1.18E-05
263	ILMN_1748093	NM_002573	PAFAH1B3	1.47	1.52E-05
264	ILMN_1705602	NM_198317	KLHL17	1.47	1.68E-05
265	ILMN_2098418	NM_001037666	LOC652968	1.47	1.75E-05
266	ILMN_1782439	NM_001839	CNN3	1.47	1.78E-05
267	ILMN_2042771	NM_004219	PTTG1	1.47	2.09E-05
268	ILMN_1736154	NM_014731	PROSAPIP1	1.47	3.44E-05
269	ILMN_1864900	NR_003491	MIAT	1.47	3.52E-05
270	ILMN_1793410	NM_021021	SNTB1	1.47	4.16E-05
271	ILMN_1656011	NM_002922	RGS1	1.47	5.16E-05

272	ILMN_2363058	NM_207128	PAOX	1.47	6.89E-05
273	ILMN_1660436	NM_005346	HSPA1B	1.47	7.21E-05
274	ILMN_1774604	NM_022572	PNKD	1.47	7.68E-05
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277	ILMN_1782788	NM_003651	CSDA	1.47	0.0001374
278	ILMN_1691290	NM_001407	CELSR3	1.47	0.0001849
279	ILMN_1803811	NM_025195	TRIB1	1.47	0.0002797
280	ILMN_1752520	NM_152270	SLFN11	1.47	0.0005209
281	ILMN_1675797	NM_017549	EPDR1	1.47	0.0010224
282	ILMN_1801403	NM_015115	DCUN1D4	1.45	9.00E-07
283	ILMN_1714335	NM_172037	RDH10	1.45	2.30E-06
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285	ILMN_1809566	NM_025231	ZSCAN16	1.45	3.00E-06
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292	ILMN_1704369	NM_016357	LIMA1	1.45	1.11E-05
293	ILMN_1749875	XM_001128260	LOC728715	1.45	1.39E-05
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297	ILMN_1715698	NM_001004333	MGC71993	1.45	4.51E-05
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306	ILMN_1682727	NM_175061	JAZF1	1.45	0.0024879
307	ILMN_1706687	NM_001007075	KLHL5	1.43	2.40E-06
308	ILMN_1807767	NM_014615	KIAA0182	1.43	2.50E-06
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319	ILMN_2038778	NM_002046	GAPDH	1.43	3.76E-05
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326	ILMN_1721046	NM_002824	PTMS	1.43	0.0001491
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347	ILMN_1713892	NM_174921	C4ORF34	1.41	1.28E-05
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355	ILMN_1694075	NM_001924	GADD45A	1.41	3.49E-05
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358	ILMN_1728999	XM_001124203	LOC730273	1.41	5.48E-05
359	ILMN_2399463	NM_006113	VAV3	1.41	6.03E-05
360	ILMN_1764188	NM_173550	C9ORF93	1.41	6.57E-05
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378	ILMN_2180371	NM_013300	C12ORF24	1.39	7.30E-06
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381	ILMN_1677376	NM_017780	CHD7	1.39	1.19E-05
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384	ILMN_2147517	NM_001779	CD58	1.39	1.78E-05
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426	ILMN_1654262	NM_152240	ZMAT3	1.37	3.26E-05
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429	ILMN_1703279	NM_018015	CXORF57	1.37	4.07E-05
430	ILMN_1695276	NM_014268	MAPRE2	1.37	4.40E-05
431	ILMN_1797974	NM_016108	AIG1	1.37	5.06E-05
432	ILMN_1680624	NM_003851	CREG1	1.37	5.21E-05
433	ILMN_1753196	NM_004219	PTTG1	1.37	5.61E-05
434	ILMN_1768551	XM_940702	LOC197135	1.37	5.83E-05
435	ILMN_1704014	XM_001134398	LOC730256	1.37	6.96E-05
436	ILMN_2074258	NM_000465	BARD1	1.37	7.59E-05
437	ILMN_1760855	NM_000276	OCRL	1.37	7.60E-05
438	ILMN_1688630	NM_021111	RECK	1.37	7.61E-05
439	ILMN_2413537	NM_197978	HEMGN	1.37	9.50E-05
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445	ILMN_1729112	NM_020244	CHPT1	1.37	0.0001838
446	ILMN_1657977	NM_012228	MSRB2	1.37	0.0002119
447	ILMN_1702691	NM_006290	TNFAIP3	1.37	0.0002241
448	ILMN_1673113	NM_005242	F2RL1	1.37	0.0002463
449	ILMN_1709233	NM_000130	F5	1.37	0.0002556
450	ILMN_1693242	NM_145288	ZNF296	1.37	0.0003549
451	ILMN_1718607	NM_001025235	TSPAN4	1.37	0.0003673
452	ILMN_1722056	NM_000053	ATP7B	1.37	0.0003678
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454	ILMN_1733248	NM_178564	NRBP2	1.37	0.0004468
455	ILMN_2332964	NM_001008530	LGMN	1.37	0.0004692
456	ILMN_1789558	NM_016010	FAM164A	1.37	0.0005481
457	ILMN_1900263	AL359560	HS.452445	1.37	0.0005942
458	ILMN_1810559	NM_012249	RHOQ	1.37	0.0006242
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460	ILMN_1761566	NM_032412	C5ORF32	1.37	0.0010724
461	ILMN_1796925	NM_001338	CXADR	1.37	0.0011913
462	ILMN_1761464	NM_001025159	CD74	1.37	0.0014254
463	ILMN_1757631	NM_001042610	DBNDD1	1.37	0.0015874
464	ILMN_2096623	NM_052910	SLITRK1	1.37	0.0016392
465	ILMN_2305225	NM_022910	NDRG4	1.37	0.0016498
466	ILMN_1778478	NM_024296	CCDC28B	1.37	0.0026506
467	ILMN_2154836	NM_006806	BTG3	1.37	0.0029166
468	ILMN_2150802	NM_025084	FLJ22795	1.37	0.0029238
469	ILMN_1871386	BQ189494	HS.573717	1.37	0.0032362
470	ILMN_2222074	NM_002835	PTPN12	1.35	5.40E-06
471	ILMN_1777526	NM_004275	MED20	1.35	8.50E-06
472	ILMN_1707720	NM_005628	SLC1A5	1.35	2.30E-05
473	ILMN_1838313	BC035081	HS.538259	1.35	2.40E-05
474	ILMN_1761764	NM_032306	ALKBH7	1.35	2.56E-05
475	ILMN_1787567	NM_006022	TSC22D1	1.35	2.74E-05
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477	ILMN_1796923	NM_030941	LOC81691	1.35	3.65E-05
478	ILMN_2323944	NM_001042353	FAM110A	1.35	3.73E-05
479	ILMN_1730612	NM_001048223	DBNDD2	1.35	4.16E-05
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481	ILMN_1802252	NM_002046	GAPDH	1.35	4.43E-05
482	ILMN_1756469	NM_000156	GAMT	1.35	4.54E-05
483	ILMN_1653573	XM_932442	LOC644846	1.35	4.74E-05
484	ILMN_1658628	XM_944937	C14ORF72	1.35	5.06E-05
485	ILMN_1737965	NM_022726	ELOVL4	1.35	5.98E-05
486	ILMN_1795918	NM_031946	CENTG3	1.35	7.74E-05
487	ILMN_1787691	NM_133467	CITED4	1.35	8.47E-05
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489	ILMN_1839750	XM_001133820	LOC729776	1.35	9.29E-05
490	ILMN_1898723	BC090942	HS.91389	1.35	9.77E-05
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493	ILMN_2352190	NM_032421	CLIP2	1.35	0.0001047
494	ILMN_2085722	NM_001564	ING2	1.35	0.0001391
495	ILMN_1874678	BQ050540	HS.26579	1.35	0.0001542
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497	ILMN_2151488	NM_024945	RMI1	1.35	0.0001801
498	ILMN_1812926	NM_058172	ANTXR2	1.35	0.0001981
499	ILMN_1772218	NM_033554	HLA-DPA1	1.35	0.0002029

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503	ILMN_2174369	NM_021814	ELOVL5	1.35	0.0004339
504	ILMN_1749403	NM_178562	TSPAN33	1.35	0.0004411
505	ILMN_1719998	XR_017862	C9ORF45	1.35	0.0004744
506	ILMN_2355665	NM_016498	MTP18	1.35	0.0005789
507	ILMN_1785175	NM_015055	SWAP70	1.35	0.0006427
508	ILMN_2364529	NM_152998	EZH2	1.35	0.0006509
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515	ILMN_1680094	NM_018437	HEMGN	1.35	0.0029766
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525	ILMN_1781638	NM_198527	HDDC3	1.33	5.86E-05
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527	ILMN_1720083	NM_139265	EHD4	1.33	6.68E-05
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537	ILMN_2170930	NM_153700	STRC	1.33	0.0002939
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544	ILMN_1722218	NM_024298	MBOAT7	1.33	0.0009998
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548	ILMN_2223350	NM_020456	C13ORF1	1.33	0.0037048
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551	ILMN_1711699	XM_001127981	LOC728014	1.32	2.26E-05
552	ILMN_1709307	XM_939186	GPSM1	1.32	4.41E-05
553	ILMN_2404065	NM_201414	APP	1.32	6.15E-05
554	ILMN_1654441	NM_000274	OAT	1.32	7.86E-05
555	ILMN_2185665	NM_024989	PGAP1	1.32	8.10E-05
556	ILMN_1658911	XR_019572	LOC647349	1.32	8.11E-05

557	ILMN_1699496	NM_016621	PHF21A	1.32	9.31E-05
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562	ILMN_1681754	NM_003878	GGH	1.32	0.0001236
563	ILMN_1715436	XM_939885	LOC650799	1.32	0.0001274
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625	ILMN_1767509	NM_207514	DEF8	1.30	9.58E-05
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668	ILMN_2070044	NM_152542	PPM1K	1.28	8.93E-05
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679	ILMN_1775943	NM_032352	BRMS1L	1.28	0.0002928
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709	ILMN_1660635	NM_016027	LACTB2	1.28	0.0015633
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713	ILMN_1784709	NM_005471	GNPDA1	1.28	0.0017669
714	ILMN_1779832	XM_375081	LOC400214	1.28	0.001883
715	ILMN_2369666	NM_001877	CR2	1.28	0.0018947
716	ILMN_2401873	NM_144729	DUSP10	1.28	0.0021083
717	ILMN_2333766	NM_001024463	HISPPD2A	1.28	0.0027456
718	ILMN_1736184	NM_000849	GSTM3	1.28	0.002793
719	ILMN_1780444	NM_004311	ARL3	1.28	0.0028172
720	ILMN_1735156	NM_032034	SLC4A11	1.28	0.0032831
721	ILMN_1679324	NM_005875	EIF1B	1.28	0.0033419
722	ILMN_1703408	NM_017412	FZD3	1.28	0.0033608
723	ILMN_2197365	NM_002923	RGS2	1.28	0.0033763
724	ILMN_1708006	NM_005931	MICB	1.28	0.0040321
725	ILMN_2053103	NM_014585	SLC40A1	1.27	9.13E-05
726	ILMN_1750689	NM_022474	MPP5	1.27	0.0001165
727	ILMN_1714397	NM_015974	CRYL1	1.27	0.0001248

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729	ILMN_2075189	NM_017515	SLC35F2	1.27	0.000164
730	ILMN_1781819	NM_005443	PAPSS1	1.27	0.0001954
731	ILMN_1659047	NM_003516	HIST2H2AA3	1.27	0.0002415
732	ILMN_1773119	NM_001761	CCNF	1.27	0.0002759
733	ILMN_2234343	NM_016361	ACP6	1.27	0.0002764
734	ILMN_1757627	NM_138462	ZMYND19	1.27	0.0003381
735	ILMN_2345739	NM_023925	CAPRIN2	1.27	0.000385
736	ILMN_2313782	NM_178270	ATG4A	1.27	0.0004201
737	ILMN_1700109	NM_017432	PTOV1	1.27	0.000436
738	ILMN_1694305	NM_004595	SMS	1.27	0.0004414
739	ILMN_1810055	NM_032039	ITFG3	1.27	0.0004447
740	ILMN_1801348	NM_002080	GOT2	1.27	0.00049
741	ILMN_1761560	NM_153812	PHF13	1.27	0.0004925
742	ILMN_2122953	NM_018464	CISD1	1.27	0.000563
743	ILMN_1657129	NM_003930	SKAP2	1.27	0.0005874
744	ILMN_2204545	NM_006278	ST3GAL4	1.27	0.0006008
745	ILMN_2337928	NM_032966	CXCR5	1.27	0.0006613
746	ILMN_2305112	NM_153742	CTH	1.27	0.0006648
747	ILMN_1651776	NM_013241	FHOD1	1.27	0.0007127
748	ILMN_1786273	NM_198446	C1ORF122	1.27	0.0007161
749	ILMN_1665243	NM_017946	FKBP14	1.27	0.0007524
750	ILMN_1679797	NM_001112	ADARB1	1.27	0.0007974
751	ILMN_1714197	NM_018677	ACSS2	1.27	0.0008023
752	ILMN_1901198	BC071749	HS.279842	1.27	0.0008361
753	ILMN_2354478	NM_001037333	CYFIP2	1.27	0.000894
754	ILMN_1760890	NM_206926	SEPN1	1.27	0.0009032
755	ILMN_1690523	NM_018239	LRRC20	1.27	0.0009519
756	ILMN_1719876	NM_032435	KIAA1804	1.27	0.000972
757	ILMN_2098743	NM_018473	THEM2	1.27	0.0009937
758	ILMN_1795911	NM_014639	TTC37	1.27	0.0009976
759	ILMN_1707464	NM_020998	MST1	1.27	0.0010017
760	ILMN_2252295	NM_201999	ELF2	1.27	0.0010645
761	ILMN_1813120	NM_003618	MAP4K3	1.27	0.0011799
762	ILMN_1736940	NM_000194	HPRT1	1.27	0.001181
763	ILMN_1720235	NM_152328	ADSSL1	1.27	0.0012978
764	ILMN_2080751	NM_014913	ADNP2	1.27	0.0013056
765	ILMN_1672565	NM_017819	RG9MTD1	1.27	0.0015086
766	ILMN_1741475	NM_145030	C7ORF47	1.27	0.0015722
767	ILMN_1852384	AK056312	HS.27048	1.27	0.0016445
768	ILMN_1664644	NM_033388	ATG16L2	1.27	0.0017594
769	ILMN_1830598	XM_374071	HS.518527	1.27	0.0018036
770	ILMN_1744046	NM_006729	DIAPH2	1.27	0.0018219
771	ILMN_1652631	NM_022343	GLIPR2	1.27	0.0019074
772	ILMN_1673352	NM_006435	IFITM2	1.27	0.0019459
773	ILMN_1676515	NM_000883	IMPDH1	1.27	0.0019928
774	ILMN_1721922	NM_005967	NAB2	1.27	0.0020083
775	ILMN_1705302	NM_004107	FCGRT	1.27	0.0020496
776	ILMN_1741003	NM_001154	ANXA5	1.27	0.0021552
777	ILMN_1695491	NM_018024	C8ORF32	1.27	0.0022673
778	ILMN_1680738	NM_004772	C5ORF13	1.27	0.0023892
779	ILMN_1718907	NM_005786	TSHZ1	1.27	0.0024102
780	ILMN_1789596	NM_001987	ETV6	1.27	0.0026175
781	ILMN_1651296	XM_001127524	LOC143666	1.27	0.0026517
782	ILMN_1737089	NM_004055	CAPN5	1.27	0.0027772
783	ILMN_2414533	NM_019007	ARMCX6	1.27	0.0028756
784	ILMN_1683277	NM_024874	KIAA0319L	1.27	0.0029021

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787	ILMN_1690970	XM_942795	LOC642233	1.27	0.0030138
788	ILMN_1658399	NM_005810	KLRG1	1.27	0.0040666
789	ILMN_1740620	NM_198079	FLJ40113	1.27	0.004138
790	ILMN_2115340	NM_003548	HIST2H4A	1.27	0.0042256
791	ILMN_1663444	NM_022165	LIN7B	1.27	0.0042645
792	ILMN_2294976	NM_194430	RNASE4	1.25	0.0001444
793	ILMN_1803779	NM_012305	AP2A2	1.25	0.0001532
794	ILMN_1783846	NM_213589	RAPH1	1.25	0.0002217
795	ILMN_1769092	NM_018166	FAM176B	1.25	0.0002538
796	ILMN_1773760	NM_006452	PAICS	1.25	0.0003173
797	ILMN_1865764	BC036485	HS.371609	1.25	0.0003193
798	ILMN_1770811	NM_015946	PELO	1.25	0.0003942
799	ILMN_2122952	NM_018464	CISD1	1.25	0.0004008
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802	ILMN_1663577	NM_022753	S100PBP	1.25	0.0004915
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804	ILMN_1792384	NM_014282	HABP4	1.25	0.0005065
805	ILMN_2317730	NM_133171	ELMO2	1.25	0.0005166
806	ILMN_2091347	NM_005896	IDH1	1.25	0.0006032
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808	ILMN_1771482	NM_020775	KIAA1324	1.25	0.0006119
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813	ILMN_1668629	XM_937968	LOC401115	1.25	0.0009661
814	ILMN_1697820	NM_032593	HINT2	1.25	0.0011283
815	ILMN_2116714	NM_014437	SLC39A1	1.25	0.0011694
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817	ILMN_1671374	NM_014047	C19ORF53	1.25	0.0012121
818	ILMN_1808783	NM_018387	STRBP	1.25	0.001266
819	ILMN_1790008	NM_183075	CYP2U1	1.25	0.0012786
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821	ILMN_1760593	NM_004075	CRY1	1.25	0.0015118
822	ILMN_2319326	NM_015833	ADARB1	1.25	0.0015645
823	ILMN_1683658	NM_000801	FKBP1A	1.25	0.0016359
824	ILMN_1652736	NM_004586	RPS6KA3	1.25	0.0016429
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826	ILMN_1720114	NM_015895	GMNN	1.25	0.0019184
827	ILMN_1716547	NM_017567	NAGK	1.25	0.0019265
828	ILMN_1777660	NM_014746	RNF144	1.25	0.0019355
829	ILMN_1691930	NM_014292	CBX6	1.25	0.0019357
830	ILMN_1757230	NM_021061	ZNF250	1.25	0.0019504
831	ILMN_1712707	NM_024527	ABHD8	1.25	0.0020415
832	ILMN_1719286	NM_000308	CTSA	1.25	0.0020546
833	ILMN_1787256	NM_020897	HCN3	1.25	0.0020604
834	ILMN_2154052	NM_002035	FVT1	1.25	0.0020712
835	ILMN_1684391	NM_000302	PLOD1	1.25	0.0021671
836	ILMN_2267365	NM_020642	C11ORF17	1.25	0.0022068
837	ILMN_1839248	AV745363	HS.317399	1.25	0.0022569
838	ILMN_1758623	NM_138720	HIST1H2BD	1.25	0.0023136
839	ILMN_1802358	XM_926202	LOC642787	1.25	0.0023273
840	ILMN_2415235	NM_152221	CSNK1E	1.25	0.0024288
841	ILMN_2075334	NM_003542	HIST1H4C	1.25	0.002475

842	ILMN_1846517	BC041923	HS.354359	1.25	0.0025066
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844	ILMN_1671731	NM_021732	AVPI1	1.25	0.0029198
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847	ILMN_1801307	NM_003810	TNFSF10	1.25	0.0030746
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849	ILMN_2134039	NM_020186	ACN9	1.25	0.0034066
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851	ILMN_1765146	NM_207584	IFNAR2	1.25	0.0036067
852	ILMN_2069060	NM_144770	RBM11	1.25	0.0037573
853	ILMN_1707748	XM_938171	PIM3	1.25	0.003785
854	ILMN_1775708	NM_006931	SLC2A3	1.25	0.0038421
855	ILMN_1732926	NR_003367	PVT1	1.25	0.0038796
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857	ILMN_2103774	NM_173492	PIP5KL1	1.25	0.0039922
858	ILMN_1791949	NM_032507	PGBD1	1.25	0.0042289
859	ILMN_1815626	NM_001360	DHCR7	1.25	0.0042372
860	ILMN_1714433	NM_023009	MARCKSL1	1.23	0.0002258
861	ILMN_1847308	D87470	HS.475334	1.23	0.0002886
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863	ILMN_1798804	NM_003137	SRPK1	1.23	0.0004256
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865	ILMN_1679995	NM_016447	MPP6	1.23	0.0004856
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867	ILMN_1680675	NM_199177	MRRF	1.23	0.0005351
868	ILMN_1700923	NM_032852	ATG4C	1.23	0.0005361
869	ILMN_1716382	NM_207376	LOC387882	1.23	0.0006923
870	ILMN_2225746	NM_017622	C17ORF59	1.23	0.0007149
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873	ILMN_1713688	NM_018180	DHX32	1.23	0.0008951
874	ILMN_1713124	NM_003739	AKR1C3	1.23	0.0009786
875	ILMN_2289093	NM_020954	KIAA1618	1.23	0.0009814
876	ILMN_1794157	NR_002318	CATSPER2P1	1.23	0.0009836
877	ILMN_1741131	NM_000747	CHRNA1	1.23	0.0010073
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879	ILMN_2296369	NM_199189	MATR3	1.23	0.0010271
880	ILMN_1780132	NM_021255	PELI2	1.23	0.0010293
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883	ILMN_1782551	NM_001951	E2F5	1.23	0.0010986
884	ILMN_2112493	NM_004394	DAP	1.23	0.0011216
885	ILMN_1807106	NM_005566	LDHA	1.23	0.0011519
886	ILMN_1748034	NM_017566	KLHDC4	1.23	0.0011958
887	ILMN_1797964	NM_152522	ARL6IP6	1.23	0.0012013
888	ILMN_1724480	NM_004655	AXIN2	1.23	0.0012085
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893	ILMN_1731181	NM_018469	TEX2	1.23	0.0014215
894	ILMN_1667260	NM_002746	MAPK3	1.23	0.0014447
895	ILMN_2380588	NM_199184	C6ORF108	1.23	0.0014608
896	ILMN_1726928	NM_003196	TCEA3	1.23	0.0015681
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898	ILMN_1800935	NM_022786	ARV1	1.23	0.0016194

899	ILMN_1771695	NM_001268	RCBTB2	1.23	0.0017275
900	ILMN_1776181	NM_001165	BIRC3	1.23	0.0017413
901	ILMN_1791306	NM_001001551	C9ORF103	1.23	0.0017736
902	ILMN_1700044	NM_024545	SAP130	1.23	0.0018902
903	ILMN_1708041	NM_024310	PLEKHF1	1.23	0.0019143
904	ILMN_2306540	NM_001001567	PDE9A	1.23	0.0019171
905	ILMN_1677509	NM_030567	PRR7	1.23	0.0019216
906	ILMN_1785268	NM_001779	CD58	1.23	0.0019565
907	ILMN_1722634	NM_006184	NUCB1	1.23	0.0019702
908	ILMN_2072391	NR_002560	SNORD31	1.23	0.0020064
909	ILMN_1696087	NM_007273	PHB2	1.23	0.0020195
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911	ILMN_1735151	NM_020390	EIF5A2	1.23	0.0021031
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913	ILMN_1712390	NM_001014838	CUTA	1.23	0.0022651
914	ILMN_1732516	NM_014708	KNTC1	1.23	0.0022684
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916	ILMN_1655418	NM_001003962	CAPNS1	1.23	0.0023045
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918	ILMN_1753241	NM_003098	SNTA1	1.23	0.002439
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922	ILMN_1677962	NM_001024218	GPHN	1.23	0.0026929
923	ILMN_1708611	NM_002906	RDX	1.23	0.0028845
924	ILMN_1726308	NR_002183	FAM10A4	1.23	0.0029508
925	ILMN_2272708	NM_001014999	GIYD1	1.23	0.0030512
926	ILMN_2230862	NM_004130	GYG1	1.23	0.0030609
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928	ILMN_1792314	NM_005736	ACTR1A	1.23	0.0032451
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930	ILMN_1815552	NM_173474	NTAN1	1.23	0.0033947
931	ILMN_1685521	NM_016523	KLRF1	1.23	0.0034023
932	ILMN_1731353	NM_024536	CHPF	1.23	0.0035622
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934	ILMN_1680579	NM_001001396	ATP2B4	1.23	0.0035826
935	ILMN_1689200	NM_014475	DHDH	1.23	0.0038116
936	ILMN_1719864	NM_015197	PACS2	1.23	0.0038178
937	ILMN_1805842	NM_001449	FHL1	1.23	0.0044108
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942	ILMN_1794595	NM_000156	GAMT	1.22	0.0006759
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951	ILMN_1791093	NM_016488	PPHLN1	1.22	0.0010491
952	ILMN_1721762	NM_003853	IL18RAP	1.22	0.0010764
953	ILMN_2347234	NM_198318	PRMT1	1.22	0.0010795
954	ILMN_1770690	NM_016508	CDKL3	1.22	0.0011403
955	ILMN_1670377	NM_021143	ZNF20	1.22	0.0011632

956	ILMN_1740430	NM_020062	SLC2A4RG	1.22	0.001556
957	ILMN_1659189	NM_032310	C9ORF89	1.22	0.0016073
958	ILMN_1789999	NM_133496	SLC30A7	1.22	0.0016407
959	ILMN_1761281	XM_498969	LOC441019	1.22	0.0016439
960	ILMN_1774901	NM_024307	GDPD3	1.22	0.0017288
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962	ILMN_1803476	NM_173562	KCTD20	1.22	0.0018176
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965	ILMN_1862018	NM_001098833	ATXN7L3	1.22	0.0018801
966	ILMN_1789074	NM_005345	HSPA1A	1.22	0.0019991
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968	ILMN_1803745	NM_000456	SUOX	1.22	0.0020732
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971	ILMN_1680037	NM_024519	FAM65A	1.22	0.0022037
972	ILMN_2415949	NM_138777	MRRF	1.22	0.0022555
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975	ILMN_1700628	NM_020414	DDX24	1.22	0.0024882
976	ILMN_1736700	NM_184041	ALDOA	1.22	0.002523
977	ILMN_1746588	NM_006755	TALDO1	1.22	0.0025984
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980	ILMN_2309926	NM_024630	ZDHHC14	1.22	0.0028774
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982	ILMN_2311989	NM_001014840	CUTA	1.22	0.0030825
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1506	ILMN_1761969	NM_016041	DERL2	-1.29	0.0040246
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1757	ILMN_1753010	NM_004564	PET112L	-1.38	0.0001103
1758	ILMN_1726678	NM_014147	HSPC047	-1.38	0.000162
1759	ILMN_2361807	NM_006812	OS9	-1.38	0.0001922
1760	ILMN_1654357	NM_006965	ZNF24	-1.38	0.0002366
1761	ILMN_1744725	NM_033271	BTBD6	-1.38	0.000267
1762	ILMN_1790537	NM_152308	C16ORF75	-1.38	0.0002939
1763	ILMN_2346836	NM_001080439	HSF5	-1.38	0.0004363
1764	ILMN_1673867	NM_030576	LIMD2	-1.38	0.0005453
1765	ILMN_1696991	NM_006484	DYRK1B	-1.38	0.0008089
1766	ILMN_1732577	NM_016499	TMEM216	-1.39	1.17E-05
1767	ILMN_1661717	NM_007111	TFDP1	-1.39	1.87E-05
1768	ILMN_1896406	CN357235	HS.555260	-1.39	3.72E-05
1769	ILMN_1794364	NM_001335	CTSW	-1.39	6.47E-05
1770	ILMN_1719403	NM_002455	MTX1	-1.39	7.83E-05
1771	ILMN_1746276	NM_025209	EPC1	-1.39	9.37E-05
1772	ILMN_1739840	NM_019594	LRRC8A	-1.39	0.000111
1773	ILMN_1867188	BX090843	HS.535392	-1.39	0.0001216
1774	ILMN_1791222	NM_145262	GLYCTK	-1.39	0.0001307
1775	ILMN_1751559	NM_024600	C16ORF30	-1.39	0.0001417
1776	ILMN_1782057	NM_020452	ATP8B2	-1.39	0.0002256
1777	ILMN_1652300	NM_014910	ZNF507	-1.39	0.0002639
1778	ILMN_1693471	NM_001039548	KLHL35	-1.39	0.000356
1779	ILMN_1811171	NM_013345	GPR132	-1.39	0.0003764
1780	ILMN_1718621	NM_005705	TSPAN32	-1.39	0.0003934
1781	ILMN_1887011	BX282075	HS.511718	-1.39	0.0004512
1782	ILMN_1811392	NM_012292	HMHA1	-1.39	0.0006382
1783	ILMN_1724236	NM_004479	FUT7	-1.39	0.0012092
1784	ILMN_2283196	NM_080752	ZSWIM3	-1.39	0.0015911
1785	ILMN_2352293	NM_020228	PRDM10	-1.40	3.10E-06
1786	ILMN_1795285	NM_015288	PHF15	-1.40	5.50E-06
1787	ILMN_2237746	NM_019071	ING3	-1.40	6.50E-06
1788	ILMN_1878885	BX437333	HS.449276	-1.40	9.60E-06
1789	ILMN_1676980	NM_014751	MTSS1	-1.40	1.80E-05
1790	ILMN_1729161	NM_017617	NOTCH1	-1.40	7.13E-05
1791	ILMN_1693552	NM_007261	CD300A	-1.40	8.70E-05
1792	ILMN_1711566	NM_003254	TIMP1	-1.40	0.0001171
1793	ILMN_1702231	NM_024579	C1ORF54	-1.40	0.0001181
1794	ILMN_1749838	NM_198055	MZF1	-1.40	0.0001215
1795	ILMN_1795089	NM_022904	FLJ21438	-1.40	0.0001381
1796	ILMN_1692707	NM_001013663	C2ORF79	-1.40	0.0010283
1797	ILMN_1655684	NM_017827	SARS2	-1.40	0.0024245
1798	ILMN_1757317	NM_020117	LARS	-1.41	8.50E-06
1799	ILMN_2041236	NM_015085	GARNL4	-1.41	9.20E-06
1800	ILMN_2231928	NM_002463	MX2	-1.41	1.22E-05
1801	ILMN_1662328	NM_017623	CNNM3	-1.41	1.78E-05
1802	ILMN_1771651	NM_014940	MON1B	-1.41	2.39E-05
1803	ILMN_1805902	NM_001971	ELA1	-1.41	3.24E-05
1804	ILMN_1652797	NM_207446	FAM174B	-1.41	0.0001302
1805	ILMN_1687247	NM_022827	SPATA20	-1.41	0.0002757
1806	ILMN_2343097	NM_001040626	NCALD	-1.41	0.0003683
1807	ILMN_2371700	NM_017518	UCHL5IP	-1.42	2.40E-06
1808	ILMN_1699728	NM_000060	BTBD	-1.42	3.70E-06
1809	ILMN_2051381	NM_153329	ALDH16A1	-1.42	3.80E-06
1810	ILMN_1690085	NM_052902	STK11IP	-1.42	9.40E-06

1811	ILMN_2053415	NM_000527	LDLR	-1.42	2.57E-05
1812	ILMN_1788538	NM_032041	NCALD	-1.42	3.53E-05
1813	ILMN_1732688	NM_001025248	DUT	-1.42	3.67E-05
1814	ILMN_2262044	NM_032789	PARP10	-1.42	4.37E-05
1815	ILMN_1768251	NM_173471	SLC25A26	-1.42	4.53E-05
1816	ILMN_2369580	NM_001039476	C16ORF35	-1.42	4.86E-05
1817	ILMN_1776778	NM_152615	PARP15	-1.42	5.15E-05
1818	ILMN_1767142	NM_001002843	ZNF280D	-1.42	0.0001046
1819	ILMN_1652846	NM_002861	PCYT2	-1.42	0.0001188
1820	ILMN_1740752	NM_178819	AGPAT6	-1.42	0.0002969
1821	ILMN_2199676	NM_014985	CEP152	-1.42	0.0004738
1822	ILMN_1784822	NM_033215	PPP1R3F	-1.42	0.0004994
1823	ILMN_1667222	NM_198883	MTX1	-1.42	0.00061
1824	ILMN_1756104	NM_016648	LARP7	-1.42	0.0008433
1825	ILMN_1800451	NM_005481	MED16	-1.42	0.0019448
1826	ILMN_1815168	NM_001040107	HVCN1	-1.43	3.50E-06
1827	ILMN_1663080	NM_001040167	LFNG	-1.43	4.20E-06
1828	ILMN_2131861	NM_003877	SOCS2	-1.43	1.09E-05
1829	ILMN_1737418	NM_001009185	ACSL6	-1.43	1.34E-05
1830	ILMN_1672417	NM_005608	PTPRCAP	-1.43	1.54E-05
1831	ILMN_1654319	NM_178232	HAPLN3	-1.43	2.39E-05
1832	ILMN_1711087	XM_937579	LOC648526	-1.43	3.02E-05
1833	ILMN_1747305	NM_175571	GIMAP8	-1.43	3.28E-05
1834	ILMN_1703433	NM_020360	PLSCR3	-1.43	4.14E-05
1835	ILMN_1759691	XM_001132609	LOC731366	-1.43	8.95E-05
1836	ILMN_1764321	NM_152331	ACOT4	-1.43	9.48E-05
1837	ILMN_1756542	NM_024682	TBC1D17	-1.43	0.0002377
1838	ILMN_1686370	NM_153373	AGXT2L2	-1.43	0.0027196
1839	ILMN_1794612	NM_003335	UBA7	-1.44	2.80E-06
1840	ILMN_1682120	NM_053055	THEM4	-1.44	1.86E-05
1841	ILMN_1746138	NM_001013838	RLTPR	-1.44	2.00E-05
1842	ILMN_1772521	NM_015440	MTHFD1L	-1.44	4.01E-05
1843	ILMN_2214473	NM_001003702	FLJ43692	-1.44	6.22E-05
1844	ILMN_1789123	NM_014264	PLK4	-1.44	9.05E-05
1845	ILMN_1706610	NM_015899	PLEKHA9	-1.44	0.0001673
1846	ILMN_1785336	NM_000303	PMM2	-1.44	0.0001684
1847	ILMN_1760556	NM_207035	C1ORF63	-1.44	0.0001908
1848	ILMN_2231020	NR_000034	TMEM185B	-1.44	0.0003568
1849	ILMN_1651557	NM_153705	KDELC2	-1.44	0.0004331
1850	ILMN_1700168	NM_015340	LARS2	-1.44	0.0004918
1851	ILMN_2357777	NM_207343	RNF214	-1.44	0.0005731
1852	ILMN_1684197	NM_015698	GPKOW	-1.44	0.0021619
1853	ILMN_1778836	NM_001031684	SFRS7	-1.45	5.30E-06
1854	ILMN_1662658	NM_001002019	PUS1	-1.45	1.18E-05
1855	ILMN_1719649	NM_014698	TMEM63A	-1.45	1.22E-05
1856	ILMN_2233604	NM_016581	ECSIT	-1.45	1.43E-05
1857	ILMN_1716907	NM_017727	FLJ20254	-1.45	1.78E-05
1858	ILMN_1700419	NM_014187	HSPC171	-1.45	0.0001005
1859	ILMN_1720373	NM_003486	SLC7A5	-1.45	0.0005432
1860	ILMN_2112829	NM_144708	ANKAR	-1.45	0.0006949
1861	ILMN_1675577	NM_152307	C14ORF172	-1.46	5.90E-06
1862	ILMN_2357730	NM_012119	CCRK	-1.46	1.11E-05
1863	ILMN_2334296	NM_173042	IL18BP	-1.46	4.24E-05
1864	ILMN_1829302	BX105911	HS.426229	-1.46	5.05E-05
1865	ILMN_1776490	NM_024032	C17ORF53	-1.46	5.21E-05
1866	ILMN_2138622	NM_207495	DKFZP686I15217	-1.46	7.93E-05
1867	ILMN_1821176	BE622355	HS.276860	-1.46	0.0001148

1868	ILMN_1680618	NM_002467	MYC	-1.46	0.0002037
1869	ILMN_1772302	NM_006441	MTHFS	-1.46	0.0002377
1870	ILMN_2329429	NM_001007224	GIMAP6	-1.47	1.85E-05
1871	ILMN_1685661	NM_016052	RRP15	-1.47	1.93E-05
1872	ILMN_1800540	NM_000574	CD55	-1.47	2.98E-05
1873	ILMN_2112049	NM_001080849	DNLZ	-1.47	4.72E-05
1874	ILMN_2113049	NM_012413	QPCT	-1.47	6.06E-05
1875	ILMN_1769782	NM_017773	LAX1	-1.47	0.0001455
1876	ILMN_1676014	XM_001131304	LOC728635	-1.47	0.0002262
1877	ILMN_1653613	NM_152850	PIGO	-1.47	0.0002785
1878	ILMN_1662741	NM_004720	EDG4	-1.47	0.000745
1879	ILMN_1771093	NM_032370	ZNF414	-1.47	0.0012566
1880	ILMN_1714352	NM_004943	DMWD	-1.47	0.0012579
1881	ILMN_1721116	NM_005153	USP10	-1.47	0.0036001
1882	ILMN_1805863	NM_152348	WDR81	-1.47	0.0036923
1883	ILMN_1692276	NM_001037277	GGPS1	-1.48	5.80E-06
1884	ILMN_2373982	NM_012407	PICK1	-1.48	7.50E-06
1885	ILMN_1785644	NM_018347	C20ORF29	-1.48	1.29E-05
1886	ILMN_1751075	NM_017438	SETD4	-1.48	1.41E-05
1887	ILMN_1676285	NM_001357	DHX9	-1.48	1.88E-05
1888	ILMN_1736555	NM_001002844	ZNF280D	-1.48	0.0001898
1889	ILMN_1730284	NM_004948	DSC1	-1.48	0.0003329
1890	ILMN_2093500	NM_021211	ZBED5	-1.48	0.0010778
1891	ILMN_1656111	NM_013262	MYLIP	-1.48	0.0015272
1892	ILMN_1655694	XM_936101	LOC642031	-1.49	1.00E-06
1893	ILMN_2123871	NM_152834	TMEM18	-1.49	1.40E-06
1894	ILMN_2349129	NM_005700	DPP3	-1.49	4.00E-06
1895	ILMN_1709484	NM_000057	BLM	-1.49	6.10E-06
1896	ILMN_2117987	NM_007111	TFDP1	-1.49	2.02E-05
1897	ILMN_1655093	XM_001126273	LOC727773	-1.49	4.52E-05
1898	ILMN_2125747	NR_002454	LOC606724	-1.49	8.77E-05
1899	ILMN_1693702	NM_203462	MRFAP1L1	-1.50	1.30E-06
1900	ILMN_2386205	NM_198155	C21ORF33	-1.50	2.10E-06
1901	ILMN_2110281	NM_016406	UFC1	-1.50	3.20E-06
1902	ILMN_1800276	NM_002901	RCN1	-1.50	5.70E-06
1903	ILMN_2073289	NM_014751	MTSS1	-1.50	9.30E-06
1904	ILMN_1743104	NM_031492	RBM4B	-1.50	9.30E-06
1905	ILMN_1715583	NM_015201	BOP1	-1.50	1.66E-05
1906	ILMN_1815169	NM_006739	MCM5	-1.50	6.92E-05
1907	ILMN_1772700	NM_152834	TMEM18	-1.50	9.48E-05
1908	ILMN_1684446	NM_004890	SPAG7	-1.52	2.20E-06
1909	ILMN_1709750	NM_022486	SUSD1	-1.52	1.53E-05
1910	ILMN_1690101	NM_001033030	FAIM	-1.52	2.76E-05
1911	ILMN_1776188	NM_181509	MAP1LC3A	-1.52	0.0004694
1912	ILMN_1713995	NM_001038	SCNN1A	-1.53	4.00E-06
1913	ILMN_1815890	NM_153701	IL12RB1	-1.53	9.90E-06
1914	ILMN_1815190	NM_005371	METTL1	-1.53	0.0008486
1915	ILMN_1716733	NM_003970	MYOM2	-1.53	0.0031296
1916	ILMN_1689189	NM_024784	ZBTB3	-1.53	0.0033066
1917	ILMN_1664243	NM_018467	USE1	-1.54	7.00E-07
1918	ILMN_1685052	NM_015512	DNAH1	-1.54	8.80E-06
1919	ILMN_1652287	NM_005450	NOG	-1.54	3.43E-05
1920	ILMN_2211534	NM_152468	TMC8	-1.54	9.05E-05
1921	ILMN_1698213	NM_006743	RBM3	-1.54	0.0001164
1922	ILMN_1701244	NM_018463	ITFG2	-1.55	1.00E-06
1923	ILMN_2320250	NM_139235	NOL6	-1.55	1.70E-06
1924	ILMN_1776998	NM_018602	DNAJA4	-1.55	2.50E-06

1925	ILMN_1676822	NM_032411	C2ORF40	-1.55	3.40E-06
1926	ILMN_1762990	NM_014773	KIAA0141	-1.55	1.04E-05
1927	ILMN_1691578	NM_138408	GTF3C6	-1.55	2.02E-05
1928	ILMN_1668910	NM_014430	CIDEB	-1.55	5.20E-05
1929	ILMN_1806651	NM_024615	PARP8	-1.55	0.0002077
1930	ILMN_1780667	NM_015426	WDR51A	-1.56	8.00E-07
1931	ILMN_1719627	NM_024330	SLC27A3	-1.56	1.10E-06
1932	ILMN_1679880	NM_024339	THOC6	-1.56	1.20E-05
1933	ILMN_1781225	NM_153044	FLJ35801	-1.56	1.55E-05
1934	ILMN_1737360	XR_001421	TSPYL3	-1.56	9.13E-05
1935	ILMN_1738718	NM_007022	CYB561D2	-1.57	4.00E-07
1936	ILMN_1789196	NM_213674	TPM2	-1.57	3.20E-06
1937	ILMN_2185675	NM_001042693	FAM159A	-1.57	3.40E-06
1938	ILMN_2355225	NM_001013255	LSP1	-1.58	0.0001665
1939	ILMN_2214910	NM_004444	EPHB4	-1.58	0.0007394
1940	ILMN_1674390	NM_002735	PRKAR1B	-1.59	5.50E-06
1941	ILMN_1784737	NM_003775	S1PR4	-1.59	7.00E-05
1942	ILMN_2357272	NM_014739	BCLAF1	-1.60	2.00E-07
1943	ILMN_2235137	NM_001018115	FANCD2	-1.60	4.00E-07
1944	ILMN_1708009	NM_018697	LANCL2	-1.60	3.60E-06
1945	ILMN_1701655	NM_024959	SLC24A6	-1.60	4.30E-06
1946	ILMN_1747192	NM_017831	RNF125	-1.60	8.30E-06
1947	ILMN_1688152	NM_004843	IL27RA	-1.60	1.15E-05
1948	ILMN_1730294	NM_194281	INO80C	-1.61	6.00E-07
1949	ILMN_1812940	NM_017722	TRMT1	-1.61	4.90E-06
1950	ILMN_1663422	NM_153615	RGL4	-1.61	1.76E-05
1951	ILMN_2180827	NM_019606	MEPCE	-1.62	2.00E-07
1952	ILMN_2411190	NM_001042550	SMC2	-1.62	4.90E-06
1953	ILMN_2284591	NM_025136	OPA3	-1.62	1.26E-05
1954	ILMN_1731745	NM_016533	NINJ2	-1.63	8.00E-07
1955	ILMN_1655654	NM_004870	MPDU1	-1.63	1.30E-06
1956	ILMN_1755911	NM_032329	ING5	-1.63	3.20E-06
1957	ILMN_1800354	NM_000099	CST3	-1.63	0.0002089
1958	ILMN_1654566	NM_005527	HSPA1L	-1.64	< 1e-07
1959	ILMN_1755138	NM_178170	NEK8	-1.64	3.00E-06
1960	ILMN_2409318	NM_001017919	RCCD1	-1.64	1.27E-05
1961	ILMN_2276397	NM_005825	RASGRP2	-1.64	6.86E-05
1962	ILMN_1779558	NM_000820	GAS6	-1.65	5.00E-07
1963	ILMN_2383305	NM_182679	GPATCH4	-1.65	7.00E-07
1964	ILMN_1763467	NM_025262	LY6G5C	-1.65	8.00E-07
1965	ILMN_2234873	NM_001018138	NME2	-1.65	2.00E-06
1966	ILMN_1663068	NM_001004307	MGC33556	-1.65	2.70E-06
1967	ILMN_1739751	XM_001132495	SLC26A11	-1.66	2.20E-06
1968	ILMN_1757730	NM_017735	TTC27	-1.66	2.20E-06
1969	ILMN_1843640	CD697230	HS.568805	-1.66	0.0002477
1970	ILMN_1677714	XM_001126273	LOC727773	-1.67	1.08E-05
1971	ILMN_1760449	NM_139022	TSPAN32	-1.67	3.83E-05
1972	ILMN_1757604	NM_213674	TPM2	-1.68	7.78E-05
1973	ILMN_1788887	XR_000910	LOC338799	-1.69	5.00E-07
1974	ILMN_1751963	NM_017984	ZCWPW1	-1.69	1.10E-06
1975	ILMN_1669113	NM_012068	ATF5	-1.69	2.55E-05
1976	ILMN_2098947	NR_002809	LOC338799	-1.70	4.00E-07
1977	ILMN_1794594	NM_153819	RASGRP2	-1.71	< 1e-07
1978	ILMN_2151056	NM_144591	C10ORF32	-1.71	2.00E-07
1979	ILMN_1784749	NM_000820	GAS6	-1.71	2.00E-07
1980	ILMN_1908840	AJ571891	HS.199657	-1.73	1.00E-07
1981	ILMN_2227195	NM_033124	CCDC65	-1.73	2.00E-07

1982	ILMN_1674645	NM_182911	TSGA10	-1.73	5.04E-05
1983	ILMN_1740265	NM_181864	ACOT7	-1.76	2.00E-07
1984	ILMN_1658800	NM_015695	BRPF3	-1.79	1.03E-05
1985	ILMN_1814022	NM_005693	NR1H3	-1.80	1.00E-06
1986	ILMN_1752502	NM_025130	HKDC1	-1.81	2.00E-07
1987	ILMN_1723235	NM_020175	DUS3L	-1.82	5.00E-07
1988	ILMN_1710954	NM_175901	LOC283932	-1.83	3.00E-07
1989	ILMN_1806999	NM_030578	B9D2	-1.85	1.26E-05
1990	ILMN_1658486	NM_172251	MRPL54	-1.86	< 1e-07
1991	ILMN_2375319	NM_005825	RASGRP2	-1.86	1.00E-07
1992	ILMN_2300664	NM_001003406	CACNA1I	-1.88	< 1e-07
1993	ILMN_1772706	NM_144591	C10ORF32	-1.90	4.00E-07
1994	ILMN_1808999	NM_153213	ARHGEF19	-1.91	< 1e-07
1995	ILMN_1760011	NM_001003795	GTF2IRD2B	-1.91	< 1e-07
1996	ILMN_1809577	XM_942178	GTF2IRD2	-1.94	< 1e-07
1997	ILMN_1783805	NM_013364	PNMA3	-1.96	3.00E-07
1998	ILMN_1756445	NM_007221	PMF1	-1.96	8.50E-06
1999	ILMN_1697925	NM_018690	APOB48R	-1.98	6.00E-07
2000	ILMN_1689160	NM_022355	DPEP2	-2.00	< 1e-07
2001	ILMN_1746403	NR_002164	GTF2IRD2P	-2.01	2.00E-07
2002	ILMN_1707169	NM_024758	AGMAT	-2.02	< 1e-07
2003	ILMN_1729170	NM_005814	GPA33	-2.06	< 1e-07
2004	ILMN_1886515	AY726563	HS.556255	-2.09	< 1e-07
2005	ILMN_1680501	NM_001003795	GTF2IRD2B	-2.13	< 1e-07
2006	ILMN_1806149	NM_206967	C16ORF74	-2.28	< 1e-07
2007	ILMN_2158705	NM_138448	ACYP2	-2.32	< 1e-07
2008	ILMN_1783149	NM_022124	CDH23	-2.47	< 1e-07

Table S2. Genes modulated more than 2-fold by 24 h of SAHA treatment (340 nM).

Accession	Gene Symbol	Fold change	Parametric p-value	Description
NM_002118	HLA-DMB	3.23	<1.00E-07	major histocompatibility complex, class II, DM beta (HLA-DMB), mRNA
NM_001062	TCN1	2.94	6.54E-05	transcobalamin I (vitamin B12 binding protein, R binder family) (TCN1), mRNA
NM_000725	CACNB3	2.86	<1.00E-07	zinc finger protein 467 (ZNF467), mRNA
NM_207336	ZNF467	2.86	<1.00E-07	coronin 6 (CORO6), mRNA
NM_032854	CORO6	2.86	4.00E-07	calcium channel, voltage-dependent, beta 3 subunit (CACNB3), transcript variant 1, mRNA
NM_002305	LGALS1	2.78	<1.00E-07	lectin, galactoside-binding, soluble, 1 (LGALS1), mRNA
NM_005318	H1F0	2.70	<1.00E-07	fibronectin type III and SPRY domain containing 1 (FSD1), mRNA
NM_024333	FSD1	2.70	1.15E-05	H1 histone family, member 0 (H1F0), mRNA
NM_014747	RIMS3	2.56	<1.00E-07	regulating synaptic membrane exocytosis 3 (RIMS3), mRNA
NM_207436	FLJ42957	2.50	<1.00E-07	FLJ42957 protein (FLJ42957), mRNA
NM_001852	COL9A2	2.44	1.00E-07	collagen, type IX, alpha 2 (COL9A2), mRNA
NM_001439	EXTL2	2.38	<1.00E-07	exostoses (multiple)-like 2 (EXTL2), transcript variant 1, mRNA
NM_014921	LPHN1	2.33	<1.00E-07	latrophilin 1 (LPHN1), transcript variant 2, mRNA
NM_004615	TSPAN7	2.33	3.00E-07	tetraspanin 7 (TSPAN7), mRNA
NM_080415	SEPT4	2.27	1.00E-07	septin 4 (SEPT4), nuclear gene encoding mitochondrial protein, transcript variant 2, mRNA
NM_005618	DLL1	2.22	<1.00E-07	delta-like 1 (Drosophila) (DLL1), mRNA
NM_001706	BCL6	2.17	<1.00E-07	nurim (nuclear envelope membrane protein) (NRM), mRNA
NM_005964	MYH10	2.17	<1.00E-07	myosin, heavy chain 10, non-muscle (MYH10), mRNA
NM_007243	NRM	2.17	6.00E-07	B-cell CLL/lymphoma 6 (BCL6), transcript variant 1, mRNA
NM_177401	MIDN	2.13	<1.00E-07	calcyon neuron-specific vesicular protein (CALY), mRNA
NM_015722	DRD1IP	2.13	<1.00E-07	midnolin (MIDN), mRNA
NM_005953	MT2A	2.08	<1.00E-07	Record removed
NM_144691	CAPN12	2.08	1.00E-07	cingulin (CGN), mRNA
NM_001083	PDE5A	2.08	1.00E-07	phosphodiesterase 5A, cGMP-specific (PDE5A), transcript variant 1, mRNA
NM_020770	CGN	2.08	1.00E-07	calpain 12 (CAPN12), mRNA

NR_001442	FER1L4	2.08	3.90E-06	metallothionein 2A (MT2A), mRNA coronin, actin binding protein, 1B (CORO1B), transcript variant
NM_001018070	CORO1B	2.04	<1.00E-07	2, mRNA
NM_004036	ADCY3	2.00	<1.00E-07	adenylatecyclase 3 (ADCY3), mRNA fibroblast growth factor receptor-like 1 (FGFRL1), transcript
NM_021923	FGFRL1	2.00	4.40E-06	variant 3, mRNA
NM_022355	DPEP2	-2.00	<1.00E-07	dipeptidase 2, mRNA GTF2I repeat domain containing 2 pseudogene 1
NR_002164	GTF2IRD2P	-2.01	2.00E-07	(GTF2IRD2P1), non-coding RNA
NM_024758	AGMAT	-2.02	<1.00E-07	agmatineureohydrolase (agmatinase) (AGMAT), mRNA
NM_005814	GPA33	-2.06	<1.00E-07	glycoprotein A33 (transmembrane) (GPA33), mRNA
AY726563	HS.556255	-2.09	<1.00E-07	clone TESTIS-609 mRNA sequence
NM_001003795	GTF2IRD2B	-2.13	<1.00E-07	GTF2I repeat domain containing 2B (TF2IRD2B), mRNA
NM_206967	C16ORF74	-2.28	<1.00E-07	chromosome 16 open reading frame 74 (C16orf74), mRNA
NM_138448	ACYP2	-2.32	<1.00E-07	acylphosphatase 2, muscle type (ACYP2), mRNA
NM_022124	CDH23	-2.47	<1.00E-07	cadherin-related 23 (CDH23), transcript variant 1, mRNA

^aFold change was calculated in BRB-Array Tools as the log₂ of geometric mean of intensities in the SAHA treated group minus the untreated control group, and then converted to actual fold changes. Genes are sorted by fold change. ^b*Parametric p-value* was obtained from the paired parametric *t*-test with random variance model. The criterion of inclusion of a gene in the gene list was specified by the proportion of false discoveries (80% confident that there are no more than 10% false discoveries), which was determined by multivariate permutation testing.

Table S3. List of genes that interact with major hubs in the protein-protein and protein-DNA interaction network. Gene names are presented as in the MetaCore network output.

Genes interacting with c-Myc			
14-3-3 eta	DUS3L	LXR-alpha	R-Ras
ACYP2	EBP2 (NoBP)	MAPRE2(RP1)	RRP46
Adenylate cyclase type III	eEF1A2	MCM5	S100P
Annexin I	E-FABP	MD-2	SAP30
AP-1	EHD1	Metallothionein-II	SCD
ASCT2 (SLC1A5)	eIF4H	METTL1	Securin
ATP5D	ES1	MTSS1	SERPINE2
ATP6V0B	EZH2	MxB	SFRS7 (9G8)
Bcl-3	FAAA	Myosin IG	SGK3
Bcl-6	FGF9	NDPK B	SGPP2
BLM	FTHFSDC1	NDRG2	SLC25A1
BOP1	G3BP1 (hdhVIII)	Neuroserpin	SLC7A5
BTF	G3P2	NOL6	SLTM
C12orf24	GADD45 alpha	NOTCH1 (NICD)	SMYD2
C8FW (GIG2)	Galectin-1	NOTCH1 precursor	SR-BI
CAP-E	GFI-1	NPM3	StARD10
CD69	GPATCH4	OAS1	Stathmin
CDK10	GSDML	p90RSK3(RPS6KA2)	SWAP-70
CDK2	Histone H4	PAFAH gamma	Tau (MAPT)
CDK6	HMG1/Y	PDE5A	Thioredoxin
Ceb1	HoxC13	PFKM	TIMP2
c-Jun	HSPA1B	Prolylcarboxypeptidase	TPL2(MAP3K8)
c-Myc	ID2	PSP	TRFP
COL9A2	ID3	Rab-33A	Tropomyosin-2
CRMP2	IMPA2	Rac3	WNT10B
CSDA	IRP1	RalGEF2	
CTDSPL	ISYNA1	RBM3	
CTE2	KIAA1984	RECK	
Cyclin D2	LEC2	RGS1	
DLL1	LSP1	RPL34	
Genes interacting with AP-1			
ACADVL	DAF	LDLR	RGS1
ADA	E-FABP	Metallothionein-II	RXRA
ALDOC	EPLIN	MxB	SCD
ALEX2	FAK1	NDPK B	Securin
alpha-ENaC	GADD45 alpha	NDRG4	SERPINE2
Annexin I	GBP5	p18	Skelemin
ATF-5	GFI-1	PCY2	SLC26A6
ATP7B	HAI-2	PDE5A	SLC7A5
Bcl-3	HMG1/Y	PFKP	Tau (MAPT)
CDK2	HSD17B8	PGE2R4	Thioredoxin
c-Jun	HSP70	PLAUR (uPAR)	TIMP1
c-Jun/c-Jun	ID2	PLK4 (STK18)	TIMP2

c-Myc	ID3	PPP1R3F	TPL2(MAP3K8)
COL6A1	IER5	RDH10	TSC-22
CXCL16	IP3R1	Reticulocalbin 1	WNT10B
Cyclin D2	ITM2C		

Genes interacting with ZNF42

ACADVL	Fc epsilon RI beta	ITM2C	R-Ras
ADA	Galectin-1	OAS1	SCD
ADAM15	HAI-2	OBSCN	SLC26A6
CD74	HMG1/Y	p18	SLC44A1
CDK6	HoxC13	PGE2R4	SR-BI
CRMP2	IMPA2	PLK4 (STK18)	TARBP1
Cyclin D2	ING2	PRKAR1B	Tau (MAPT)
E-FABP	ISYNA1	RDH10	

Genes interacting with c-Jun

14-3-3 eta	CDK6	LAPTM4B	PRKAR1B
alpha-ENaC	c-Jun	LDLR	Securin
Annexin I	c-Jun/c-Jun	MDR1	SNFT
AP-1	c-Myc	Metallothionein-II	Stathmin
Bcl-3	Cyclin D2	NDRG4	TARBP1
Bcl-6	FOXC2	PLAUR (uPAR)	TIMP1
Bcl-9	HMG1/Y	PLK4 (STK18)	VAV-3

Genes interacting with EZH2

Alpha-1 catenin	CXADR	FLJ22184	PPP2R2B
BMF	Cyclin D2	ID2	SOCS2
CAMK2N1	EPC1	LSP1	Synaptotagmin XI
CDK2	EPDR1	Metallothionein-II	TR2(TNFRSF14)
c-Myc	Ephrin-B receptor 6	NOTCH1 precursor	WNT10B

Genes interacting with Bcl-6

ATP6V0B	c-Jun	FUT7	MORF
Bcl-9	c-Myc	ID2	RXRA
CACNB3	Cyclin D2	IL-12RB1	SOCS2
CD69	DAF	IRF9	TR2(TNFRSF14)
CD74			

Genes interacting with CDK2

Angiomotin (AMOT)	CHD7	FTHFSDC1	PARP-10
AP-1	c-Myc	ID2	PLK4 (STK18)
Bard1	Cyclin D2	ING5	Stathmin
CCRK	EZH2		

Table S4. Comparative analysis of genes modulated by an HDAC inhibitor SAHA and a bromodomain inhibitor JQ1. A list of genes that were modulated by JQ1 was obtained from 3 previously published data sets (Mertz et al., 2011; Delmore et al., 2011 and Benerjee et al., 2012) and comprised 204 unique genes. This gene list was compared to the list of 1,847 unique genes modulated by SAHA in the present study. The genes listed below were found in both JQ1 and SAHA modulated gene lists.

Genes modulated by SAHA and JQ1		
ACSL5	HIST1H2BD	PAG1
ANKRD37	HIST2H4A	POLE2
C1ORF63	ITFG3	PPA1
CD2	LARP7	PRDM10
CD79A	LAX1	RAI14
CLDN12	LGALS1	RGS1
CREBBP	MEPCE	RNF125
FADS1	MTHFD1L	SERPINI1
GTF3C6	MYC	SYT11
H1F0	NFKBIZ	TH1L
H1FX	NXF1	TTC27