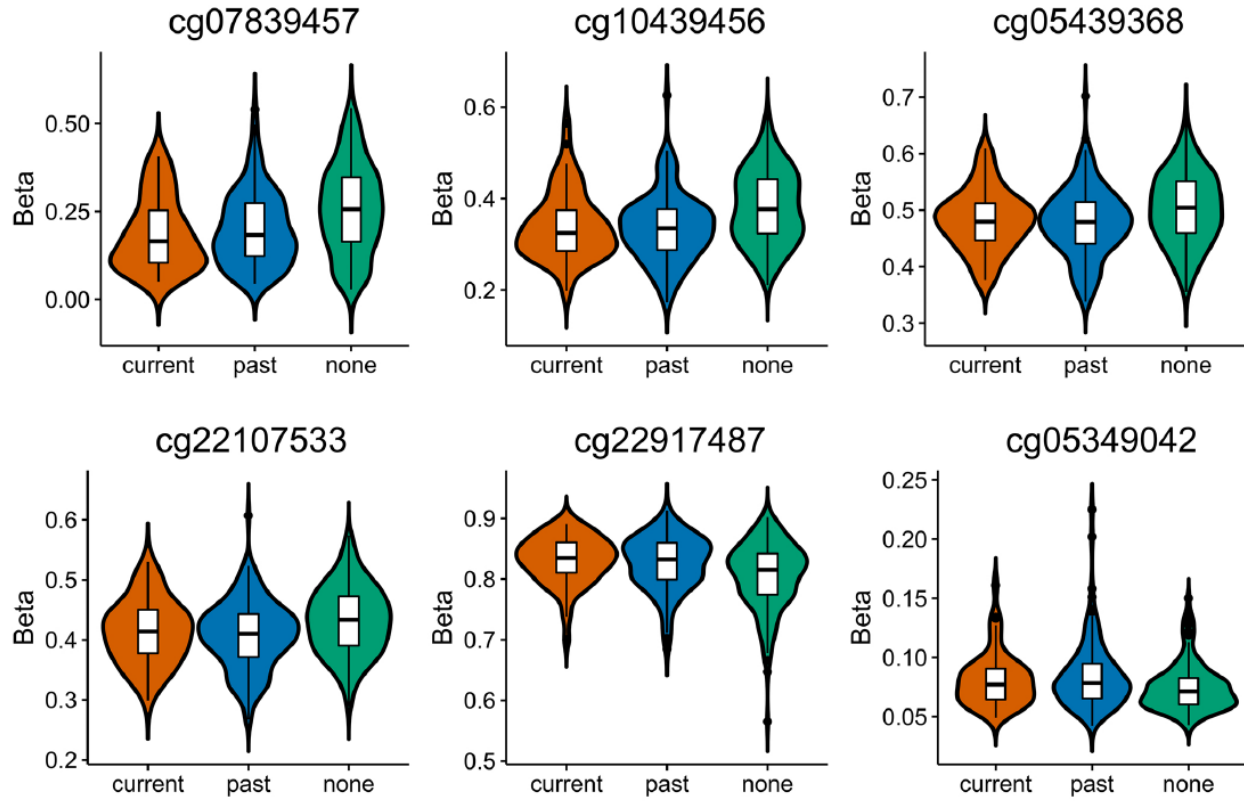
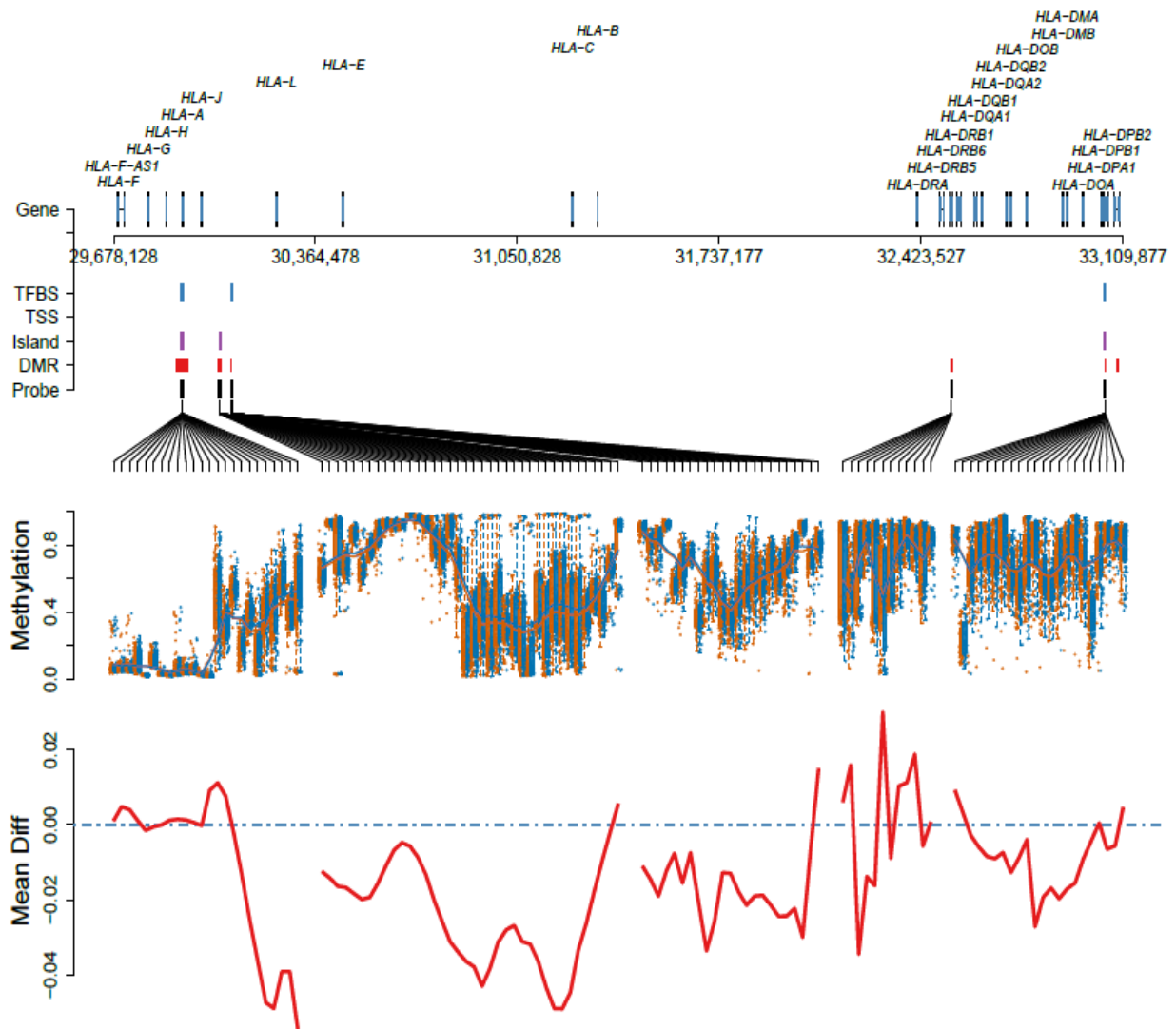


**Supplementary Figure 1:** A QQ plot showing observed versus expected  $-\log_{10}(p)$  values for association at all 437,722 CpG sites.  $\lambda=1.08$  in the discovery epigenome-wide association analysis.

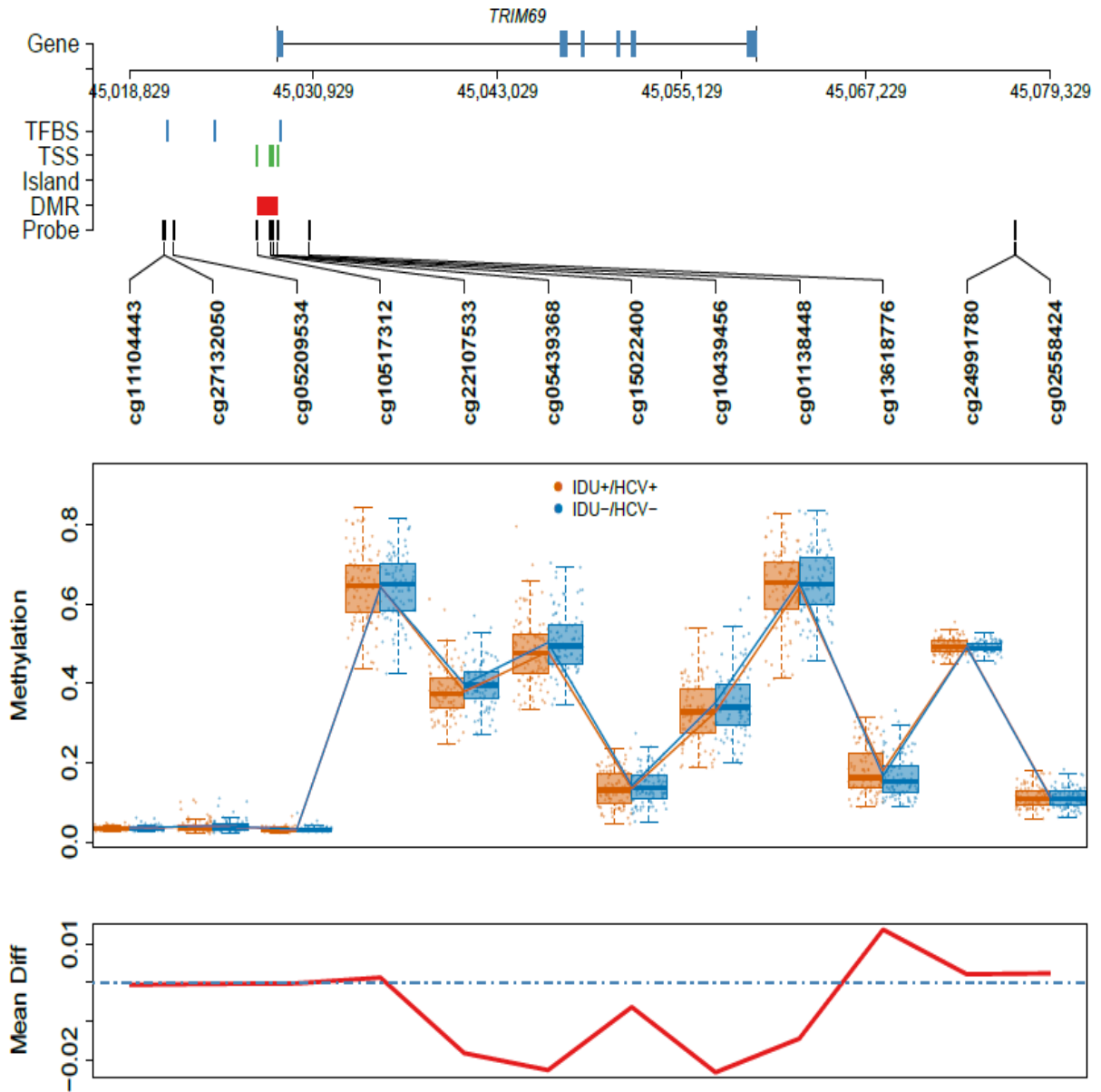


**Supplementary Figure 2:** Comparisons of DNA methylation at six significant CpG sites among HIV-infected current injection drug use comorbid for hepatitis C (IDU+/HCV+, N=58); past IDU+/HCV+ (N=158), and non-IDU/non-HCV (N=170) in the discovery sample.

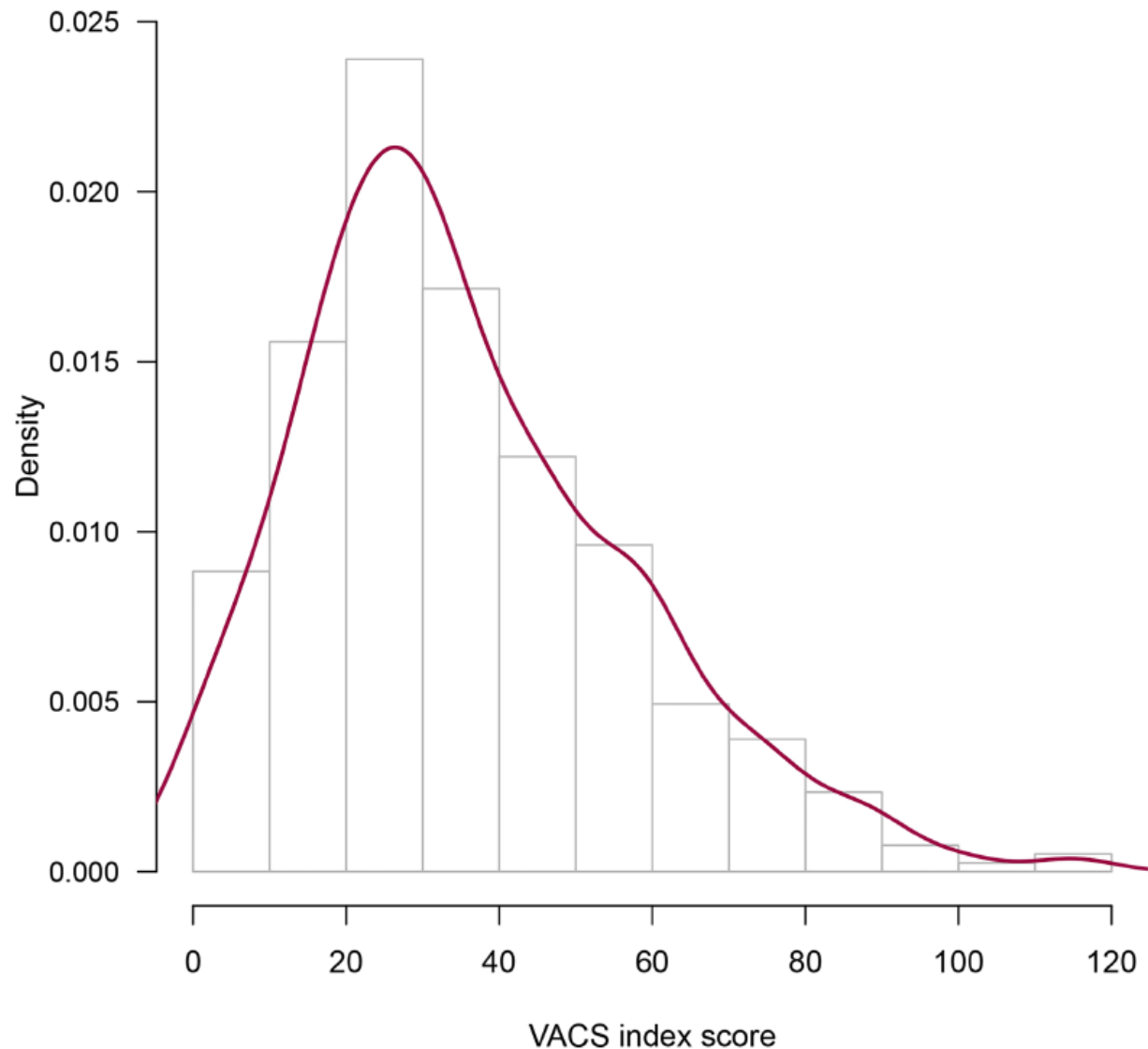


**Supplementary Figure 3:** Replication of differential methylation region on chromosome 6q21 that hosts MHC class I and II: Top panel: from top to bottom, the panel shows gene location, transcription factor binding sites (TFBS), probes located within 1500 bp or 200 bp from transcription start site (TSS), probes in CpG islands (Island), differential methylation region (DMR), genomic location of each probe. Middle panel: methylation ( $\beta$ ) in injection drug use with HCV (IDU+/HCV+) and non-injection drug use without HCV infection (IDU-/HCV-). Bottom

panel: average methylation differences between IDU+/HCV+ and IDU-/HCV-. The replication sample included 104 IDU+/HCV+ and 308 IDU-/HCV- individuals.



**Supplementary Figure 4:** Replication of differential methylation region (DMR) on the promoter of *TRIM69* in the discovery sample. Top panel: Genomic location of each probe, transcription binding site, DMR; Middle panel: methylation at each probe in injection drug use with HCV (IDU+/HCV+) and non-injection drug use without HCV (IDU-/HCV-); Bottom panel: average methylation difference between IDU+/HCV+ and IDU-/HCV-. The replication sample included 104 IDU+/HCV+ and 308 IDU-/HCV- individuals.



**Supplementary Figure 5:** Distribution of Veteran Aging Cohort Study indexes (VACS index) among 386 HIV-infected samples in the discovery set. The greater VACS index indicates higher HIV frailty.

**Supplemental Table 1** Differential DNA methylation regions between IDU+/HCV+ and IDU-/HCV- groups

Discovery sample

<b>CHR</b>	<b>Start</b>	<b>End</b>	<b># CpG</b>	<b>p.value</b>	<b>FDR</b>	<b>Near Gene</b>
chr6	29911494	29911558	3	0.001	0.025	<b>HLA-A</b>
chr6	28601312	28601419	5	0.001	0.025	
chr6	30039403	30039442	5	0.003	0.027	<b>RNF39</b>
chr6	160023581	160024002	5	0.003	0.027	
chr6	33091596	33091751	3	0.004	0.030	<b>HLA-DPB2</b>
chr6	32525805	32525813	2	0.004	0.030	<b>HLA-DRB6</b>
chr6	29895116	29895260	5	0.004	0.030	<b>HCG4B</b>
chr6	139012860	139013146	4	0.004	0.030	<b>FLJ46906</b>
chr6	29894050	29894195	2	0.005	0.031	<b>HCG4B</b>
chr6	110720501	110721349	5	0.006	0.031	<b>DDO</b>
chr6	2768054	2770510	3	0.006	0.032	<b>WRNIP1</b>
chr6	160182438	160182624	4	0.007	0.033	<b>LOC100129518</b>
chr6	29723301	29723407	4	0.007	0.034	
chr6	6894084	6894182	3	0.009	0.039	
chr6	30079203	30079280	4	0.011	0.042	<b>TRIM31</b>
chr6	41068646	41068724	4	0.013	0.045	<b>ADCY10P1</b>
chr6	29520752	29520774	2	0.014	0.046	
chr6	29854740	29854799	2	0.016	0.048	<b>HLA-H</b>
chr15	45028083	45028595	5	0.001	0.0261	<b>TRIM69</b>

Replication sample

<b>CHR</b>	<b>Start</b>	<b>End</b>	<b># CpG</b>	<b>p.value</b>	<b>FDR</b>	<b>Near Gene</b>
chr6	29911550	29913343	3	0.0002	0.0347	<b>HLA-A</b>
chr6	30038998	30039524	14	0.0001	0.0172	<b>RNF39</b>
chr6	30079203	30079280	3	0.0050	0.0984	<b>TRIM31</b>
chr6	32525805	32525813	2	0.0040	0.0928	<b>HLA-DRB6</b>
chr6	32526027	32526260	2	0.0157	0.1647	<b>HLA-DRB6</b>
chr6	33048254	33048310	4	0.0074	0.1164	<b>HLA-DPB1</b>
chr6	33091634	33091751	2	0.0028	0.0842	<b>HLA-DPB2</b>
chr15	45028270	45028595	2	0.0460	0.2707	<b>TRIM69</b>

Note: Bolded genes are consistent in the discovery and replication sample sets

**Supplementary Table 2** Top 748 CpG sites from epigenome-wide association analysis compared IDU+/HCV+ to IDU-/HCV-

probe	CHR	MAPINFO	REFGENE	REFGENE_GROUP	Coefficients	Std_error	Pvalue
cg07839457	16	57023022	NLRC5	TSS1500	-0.0763	0.0119	5.76E-10
cg22107533	15	45028083	RIM69;TRIM6	1500;TSS1500	-0.0353	0.00552	6.04E-10
cg10439456	15	45028270	RIM69;TRIM6	1500;TSS1500	-0.0489	0.00843	1.57E-08
cg22917487	3	39322103	X3CR1;CX3CR5	200;5UTR;TSS1500	0.0175	0.00316	6.64E-08
cg05439368	15	45028098	RIM69;TRIM6	1500;TSS1500	-0.0337	0.00615	9.09E-08
cg05349042	1	1.47E+08	BCL9	TSS200	0.0118	0.00224	2.43E-07
cg04338890	16	57019755			-0.0132	0.00262	7.64E-07
cg16365445	10	33230686	ITGB1;ITGB1	5UTR;5UTR	0.0137	0.00278	1.29E-06
cg21577365	15	22367858	IM2;LOC727	SS1500;Body	-0.0368	0.00751	1.55E-06
cg05201185	6	30459139	HLA-E	Body	-0.0306	0.00645	3.14E-06
cg24119607	5	1.39E+08	CXXC5	5UTR	-0.0183	0.00387	3.22E-06
cg06762442	16	66909285			0.0163	0.00344	3.46E-06
cg09624923	10	33244211	ITGB1;ITGB1	5UTR;5UTR	0.0187	0.00399	4.36E-06
cg00385925	16	3095538	MMP25	TSS1500	-0.00701	0.0015	4.38E-06
cg19896824	11	1.29E+08			-0.016	0.00346	5.32E-06
cg18808777	6	31431503	HCP5	3UTR	-0.0302	0.00653	5.58E-06
cg23637607	3	1.14E+08			-0.0202	0.00437	5.60E-06
cg17046484	17	19269624			-0.0103	0.00222	5.66E-06
cg15807655	7	98869778	MYH16	TSS1500	0.0131	0.00285	6.78E-06
cg20300175	17	27918316			-0.0199	0.00434	7.00E-06
cg09253508	19	12721610	ZNF791;ZNF791	TSS200;5UTR	0.00446	0.000979	7.40E-06
cg15194251	11	2239813			-0.0152	0.00335	8.20E-06
cg15022400	15	45028161	RIM69;TRIM6	1500;TSS1500	-0.0196	0.00433	8.40E-06
cg08818207	6	32820355	TAP1	Body	-0.0358	0.00793	8.83E-06
cg11302624	5	1.77E+08	RGS14	Body	0.0129	0.00286	9.85E-06
cg08252585	2	24931616	NCOA1;NCOA1	Body;Body	0.0114	0.00254	1.05E-05
cg22909759	14	65185328	PLEKHG3	5UTR	-0.0104	0.00234	1.20E-05
cg11351841	8	1.44E+08			0.0229	0.00515	1.22E-05
cg20664636	17	1959596	HIC1;HIC1	TSS200;5UTR	-0.0169	0.00382	1.34E-05
cg23615741	10	1.01E+08			-0.0439	0.00996	1.47E-05
cg16411857	16	57023191	NLRC5	TSS1500	-0.0204	0.00464	1.55E-05
cg09053247	3	44802549	KIF15;KIAA114	SS1500;Body	0.0403	0.0092	1.64E-05
cg26433582	11	68848232	TPCN2	Body	0.0233	0.00533	1.65E-05
cg22071610	22	24086732	ZNF70	Body	0.00852	0.00195	1.65E-05
cg27464311	17	46692347	HOXB8	TSS200	-0.0071	0.00162	1.68E-05
cg13424029	10	1.01E+08			-0.0261	0.00598	1.70E-05
cg08099136	6	32811251	PSMB8;PSMB8	Body;Body	-0.028	0.00642	1.74E-05
cg01309328	6	32811253	PSMB8;PSMB8	Body;Body	-0.0245	0.00561	1.74E-05
cg10517312	15	45027253	RIM69;TRIM6	1500;TSS1500	-0.0134	0.00309	1.81E-05
cg04165933	16	49833847	ZNF423	Body	-0.0132	0.00303	1.91E-05
cg12.41606343	12	43320076			0.00351	0.000809	1.97E-05
cg08516083	14	65210088	PLEKHG3	Body	-0.00934	0.00216	1.98E-05
cg22303930	2	2.04E+08	CYP20A1	Body	0.00393	0.000909	2.06E-05

cg26312951	21	42797847	<i>MX1;MX1</i>	5SS200;5UTR	-0.046	0.0107	2.17E-05
cg10586087	5	1.48E+08	<i>SH3TC2</i>	3UTR	-0.0109	0.00252	2.18E-05
cg01138448	15	45028595	<i>RIM69;TRIM6</i>	1stExon;5UTR;1stExon	-0.0242	0.00563	2.23E-05
cg13491490	3	55646231	<i>ERC2</i>	3UTR	0.0217	0.00504	2.24E-05
cg22102703	21	43346284	<i>C2CD2;C2CD2</i>	Body;5UTR	-0.0293	0.00682	2.30E-05
cg00066153	11	1.26E+08	<i>ACRV1;ACRV1</i>	1stExon;1stExon;1stExon	0.00641	0.00149	2.38E-05
cg07326074	16	2510388	<i>C16orf59</i>	Body	0.00876	0.00204	2.41E-05
cg02020384	12	68704235	<i>MDM1</i>	Body	0.0143	0.00333	2.41E-05
cg24486958	1	2.13E+08			0.0146	0.00342	2.62E-05
cg04581327	17	17687239	<i>RAI1</i>	5UTR	-0.00587	0.00138	2.77E-05
cg07140459	3	1.42E+08	<i>XRN1;XRN1</i>	Body;Body	-0.00976	0.0023	2.93E-05
cg02678476	4	1.84E+08			-0.00695	0.00165	3.15E-05
cg19461344	2	27485922	<i>SLC30A3;SLC30A3</i>	1stExon;5UTR	-0.0102	0.00242	3.25E-05
cg22583148	17	46674041	<i>LOC1004266;LOC1004266</i>	Body;Body;Body;Body;Body	-0.0118	0.00281	3.57E-05
cg09154880	6	32813715	<i>TAP1;PSMB8</i>	Body;TSS1500	-0.0235	0.00561	3.63E-05
cg22553289	17	33469403	<i>NLE1;NLE1</i>	5SS200;TSS200	-0.00179	0.000427	3.64E-05
cg21081878	21	38334730	<i>HLCS</i>	5UTR	0.0244	0.00588	4.15E-05
cg14259466	10	1.35E+08	<i>ADAM8;ADAM8</i>	TSS1500;TSS1500	-0.0151	0.00363	4.20E-05
cg26831566	1	20693014			0.0098	0.00236	4.23E-05
cg26074940	3	66293457	<i>SLC25A26;SLC25A26</i>	STR;Body;Body	-0.0131	0.00316	4.34E-05
cg04067276	6	1.07E+08	<i>AIM1</i>	TSS1500	-0.0061	0.00147	4.41E-05
cg04840203	5	1.56E+08			-0.0188	0.00455	4.63E-05
cg05429117	10	83630419			0.0213	0.00516	4.70E-05
cg24566824	11	1.34E+08	<i>GLB1L2</i>	3UTR	-0.00988	0.0024	4.86E-05
cg22339338	1	1.6E+08	<i>TAGLN2</i>	5UTR	0.0133	0.00323	5.11E-05
cg18019810	2	2.37E+08	<i>GAP1;AGAP1</i>	Body;Body	0.0146	0.00356	5.20E-05
cg13280359	4	1353105	<i>KIAA1530</i>	Body	0.0121	0.00295	5.28E-05
cg06412669	17	78735550	<i>PTOR;RPTOR</i>	Body;Body	0.02	0.0049	5.55E-05
cg08826184	12	44973266	<i>NELL2;NELL2</i>	Body;Body;Body;Body	0.0153	0.00374	5.55E-05
cg16850419	17	74237210	<i>RNF157</i>	TSS1500	-0.00706	0.00173	5.70E-05
cg25214187	11	1.34E+08			-0.017	0.00417	5.81E-05
cg08000336	1	36621206	<i>MAP7D1</i>	TSS1500	-0.00393	0.000965	5.84E-05
cg12204343	5	87964048	<i>LOC645323;LOC645323</i>	Body;Body;Body	0.0296	0.00726	5.85E-05
cg26573274	13	1.1E+08			-0.0105	0.00257	5.99E-05
cg16574134	10	1.03E+08	<i>PAX2;PAX2</i>	3UTR;3UTR;3UTR	-0.00741	0.00182	6.00E-05
cg11803771	11	65408566	<i>SIPA1;SIPA1</i>	Body;Body	-0.013	0.0032	6.09E-05
cg15009294	1	2.15E+08	<i>CENPF</i>	Body	0.0136	0.00335	6.10E-05
cg23326197	7	99382370	<i>CYP3A4</i>	TSS1500	-0.0117	0.00288	6.35E-05
cg05386387	18	71815086	<i>XO15;C18orf1</i>	1stExon;TSS1500;5UTR	0.00144	0.000354	6.38E-05
cg13502346	14	65170209	<i>PLEKHG3</i>	TSS1500	-0.00836	0.00206	6.40E-05
cg19320261	1	64409138	<i>ROR1;ROR1</i>	Body;Body	0.0206	0.0051	6.51E-05
cg15434292	18	77567564			0.0104	0.00257	6.52E-05
cg10919522	14	74227441	<i>C14orf43;C14orf43</i>	5UTR;TSS1500	-0.0167	0.00413	6.58E-05
cg09021952	1	1.73E+08			0.0121	0.003	6.73E-05
cg20408505	6	29911494	<i>HLA-A</i>	Body	-0.0234	0.00579	6.88E-05
cg16316407	1	2.32E+08	<i>DISC1;DISC1</i>	Body;Body;Body;Body;Body	0.00853	0.00212	6.99E-05
cg06960794	6	1.49E+08			-0.00683	0.0017	7.14E-05



cg02426178	19	10747142	C44A2;SLC44	Body;Body	0.00864	0.00215	7.23E-05
cg25308562	13	64516824			-0.0239	0.00595	7.34E-05
cg27160171	13	45237985			-0.0205	0.00511	7.35E-05
cg23394391	1	8409065			0.00439	0.00109	7.50E-05
cg23086176	1	25226129	RUNX3;RUNX3	3UTR;3UTR	-0.00983	0.00245	7.52E-05
cg11270042	17	26219919	C17orf108	5UTR	-0.00694	0.00173	7.67E-05
cg11187245	6	31323397	HLA-B	Body	-0.0271	0.00677	7.72E-05
cg13237033	14	61116216	SIX1	TSS200	0.0092	0.0023	7.81E-05
cg03453880	2	85049005	C2orf89	3UTR	0.00831	0.00208	8.29E-05
cg08617135	6	9516073			-0.0117	0.00293	8.38E-05
cg08140412	12	52014778	SCN8A	5UTR	-0.0165	0.00415	8.44E-05
cg08159663	16	57022486	NLRC5	TSS1500	-0.0235	0.00589	8.54E-05
cg05934682	19	50394298	IL4I1;IL4I1	Body;Body	0.0185	0.00465	8.81E-05
cg05916196	1	2.07E+08	IL19	1stExon	0.00648	0.00164	9.08E-05
cg22160883	5	1.39E+08	MATR3;SNHG4	1500;TSS1500	-0.00983	0.00248	9.12E-05
cg10325659	14	94423950	ASB2	TSS200	-0.00963	0.00243	9.13E-05
cg14615914	9	7380374			0.0151	0.00381	9.20E-05
cg06782686	14	52535964	NID2	TSS200	-0.00681	0.00172	9.41E-05
cg12394377	1	24514218	IL28RA;IL28A	TSS1500;TSS1500	-0.00571	0.00144	9.45E-05
cg27504460	2	1.88E+08			-0.019	0.00482	9.53E-05
cg04023663	7	7031200			0.0212	0.00536	9.60E-05
cg14570479	19	3199082	NCLN	Body	0.00466	0.00118	9.70E-05
cg18112794	21	15057058			-0.0212	0.00538	9.81E-05
cg14958969	2	1942814	MYT1L	Body	-0.0111	0.00281	9.85E-05
cg05139434	1	41328180	CITED4	TSS200	0.00321	0.000815	9.86E-05
cg11521274	1	1.98E+08	NEK7	5UTR	-0.0231	0.00585	9.87E-05
cg18302606	19	39904402	PLEKHG2	5UTR	-0.0225	0.00571	1.00E-04
cg18125510	14	1.01E+08	WARS;WDR25	5UTR;TSS1500;1stExon	-0.0165	0.0042	0.000103
cg16622651	6	76724431	IMPG1	Body	-0.019	0.00483	0.000103
cg00817377	7	73441057	ELN;ELN;ELN	TSS1500;TSS1500;TSS1500	-0.0119	0.00302	0.000103
cg08878352	6	30035220	PPP1R11	1stExon	0.00603	0.00153	0.000103
cg23924326	4	1.49E+08	ARHGAP10	Body	-0.00579	0.00147	0.000104
cg11908294	18	46067903	FOA2;KIAA0404	5UTR;5UTR	-0.0113	0.00288	0.000105
cg00004089	17	74678836	MXRA7;MXRA7	3UTR;Body	0.0119	0.00303	0.000108
cg12737588	15	70546706			-0.0013	0.000332	0.000114
cg22930808	3	1.22E+08	PARP9;PARP9	500;5UTR;5UTR;5UTR;	-0.0697	0.0178	0.000115
cg03770248	15	80762691	ARNT2	Body	-0.00678	0.00174	0.000116
cg14847975	12	26986502	ITPR2	TSS1500	-0.003	0.000768	0.000117
cg19059861	20	31823761	LUNC;PLUNG	S200;TSS200	0.0182	0.00468	0.00012
cg03087163	5	1.79E+08			0.00719	0.00185	0.000122
cg21441076	17	48929520			0.00647	0.00166	0.000123
cg23005227	3	50645426	CISH;CISH	Body;Body	0.0205	0.00528	0.000125
cg14593550	12	7053164	C12orf57	TSS200	0.0112	0.0029	0.000125
cg01090609	18	29264252	B4GALT6	Body	-0.00752	0.00194	0.000127
cg14906976	21	45177538	PDXK	3UTR	-0.00642	0.00165	0.000127
cg23505299	5	1.49E+08	CSF1R	Body	-0.00819	0.00211	0.000128
cg04861640	6	28234605	ZNF187;ZNF187	TSS200;TSS200	0.0175	0.00451	0.000128

cg04901763	2	2.32E+08	CAB39;CAB39	exon;TSS1500;TSS1500	-0.00368	0.000949	0.000129
cg00550976	2	2.03E+08	S2CR4;ALS2C	TSS200;Body	-0.0048	0.00124	0.00013
cg18991321	7	1E+08	AGFG2	Body	-0.01	0.00258	0.00013
cg11200656	17	75956447			0.052	0.0134	0.000132
cg04189149	16	32898433			-0.0128	0.00332	0.000134
cg24095374	5	1.77E+08	RGS14	3UTR	0.0103	0.00268	0.00014
cg17952824	10	44287023	HNRNPA3P1	TSS1500	-0.0148	0.00384	0.000141
cg27000161	16	87688479	JPH3	Body	0.0023	0.000599	0.000143
cg16657479	2	1.32E+08	50786;LOC15	UTR;1stExon	0.0192	0.00498	0.000143
cg08373187	5	1.35E+08	CXCL14	Body	-0.015	0.0039	0.000144
cg03738384	16	84628969	COTL1	Body	-0.0276	0.00719	0.000146
cg25103160	12	76206788			-0.0122	0.00316	0.000148
cg20600850	12	6712515	CHD4	Body	0.00844	0.0022	0.000152
cg26965547	17	73893447	TRIM65	TSS1500	-0.0063	0.00164	0.000154
cg12945444	8	11536969			0.0115	0.003	0.000157
cg21488876	19	5250376	PTPRS;PTPRS;	Body;Body;Body	0.0135	0.00353	0.000161
cg27370808	10	8079737			-0.0104	0.00272	0.000161
cg15641364	1	1.6E+08	TAGLN2	5UTR	0.0289	0.00756	0.000162
cg26990406	7	178829			-0.00871	0.00228	0.000166
cg00118342	2	1.07E+08	UXS1	Body	-0.00844	0.00222	0.000167
cg16650530	1	32538413	TMEM39B	TSS200	0.00329	0.000865	0.000167
cg11085282	22	46262203			0.0143	0.00374	0.000168
cg09178700	15	28344507	OCA2	TSS200	-0.012	0.00314	0.000168
cg06940299	16	75147500	LDHD;LDHD	Body;Body	-0.0067	0.00176	0.000169
cg09216823	3	1.93E+08	P13A4;ATP13	UTR;1stExon	0.0233	0.00614	0.00017
cg27505492	12	1.33E+08			0.0501	0.0132	0.00017
cg05137103	6	29396182	OR11A1	TSS1500	0.00793	0.00208	0.00017
cg01910478	14	76373678	TTL5	Body	0.00748	0.00197	0.000171
cg07981328	1	21724633			0.0571	0.015	0.000171
cg14195992	8	48265917	KIAA0146	Body	-0.0137	0.00361	0.000173
cg14782970	12	53189960	KRT3	TSS200	-0.0189	0.00497	0.000174
cg22670675	1	15533433	EM51;TMEM5	UTR;5UTR;5UTR	-0.0139	0.00365	0.000175
cg23494957	14	64761548	SR2;ESR2;ESR00;	TSS1500;5UTR	-0.00372	0.000979	0.000175
cg09856996	14	1.05E+08	KIF26A	Body	-0.107	0.0283	0.000178
cg14319773	19	292360	PC;PPAP2C;PF;	TSS1500;TSS1500	-0.0174	0.00459	0.000181
cg21127580	6	901081			0.0222	0.00586	0.000182
cg15655935	11	59815177	PLAC1L	3UTR	0.0163	0.0043	0.000184
cg08122652	3	1.22E+08	3L;PARP9;PA	500;5UTR;5UTR;5UTR;	-0.0566	0.0149	0.000184
cg16565901	17	78735596	RPTOR;RPTOF	Body;Body	0.0201	0.00532	0.000186
cg02845988	12	93836455	UBE2N	TSS1500	-0.0281	0.00743	0.000188
cg09304040	12	56360607	CK2;CDK2;SIL1;	5UTR;TSS1500;1stExc	0.00306	0.00081	0.000189
cg08756121	8	8820884			-0.0179	0.00474	0.000189
cg12303582	10	3169516	PFKP	Body	-0.00668	0.00177	0.00019
cg01894064	4	1.54E+08	TRIM2	TSS1500	-0.0123	0.00325	0.000193
cg06790674	8	1.44E+08			0.0139	0.00369	0.000194
cg10196650	21	44588747	CRYAA	TSS1500	0.00452	0.0012	0.000194
cg26487031	11	1.18E+08	MPZL2;MPZL2;	Body;Body	-0.00993	0.00263	0.000195

cg21703322	11	1.11E+08	LAYN	TSS200	-0.0125	0.0033	0.000195
cg19459791	15	65363022			0.0161	0.00427	0.000197
cg20380465	5	13919497	DNAH5	Body	0.00505	0.00134	0.000197
cg16421612	18	2571989	DC80;METTLUTR;	TSS1500	-0.00329	0.000873	0.000198
cg09251764	17	6659070	XAF1;XAF1	S200;TSS200	-0.0126	0.00334	0.000199
cg14331029	14	96658912			-0.0348	0.00925	0.000201
cg14632586	6	19844462			-0.0151	0.00403	0.000202
cg05249026	16	11031524	DEXI	3UTR	-0.0104	0.00276	0.000204
cg16849609	2	1.2E+08	C1QL2	TSS200	0.011	0.00292	0.000205
cg17341113	11	69237570			0.0079	0.0021	0.000206
cg25469474	4	2749501	TNIP2;TNIP2	Body;Body	-0.0167	0.00446	0.000211
cg14911132	11	61596755	FADS2	Body	-0.00743	0.00198	0.000211
cg22121647	7	1.35E+08	TMEM140	5UTR	-0.0152	0.00406	0.000211
cg02373380	18	61603746			0.00393	0.00105	0.000213
cg03596645	17	37411353	LOC90110	TSS1500	-0.0063	0.00168	0.000213
cg00945108	1	12806027	C1orf158	TSS200	0.0209	0.00557	0.000213
cg04292615	19	53290079	ZNF600	TSS200	0.0218	0.00581	0.000213
cg04921989	2	1.32E+08			-0.014	0.00375	0.000215
cg11437253	3	1.47E+08			-0.00859	0.00229	0.000215
cg11207763	11	69517471	FGF19	Body	0.0149	0.00399	0.000215
cg26604359	19	15586845	PGLYRP2	Body	-0.00795	0.00213	0.000216
cg18714086	12	1.12E+08			0.0114	0.00306	0.000219
cg03082924	19	18218106	MAST3	Body	0.0151	0.00403	0.000221
cg16495149	7	1.11E+08			-0.0111	0.00297	0.000222
cg19988235	2	9945589			-0.0101	0.00271	0.000223
cg13759676	6	1.29E+08	PTPRK;PTPRK	Body;Body	-0.00961	0.00257	0.000223
cg00221794	2	20776620			-0.0199	0.00533	0.000224
cg23163573	2	1.09E+08	LT1C2;SULT1t	Exon;1stExon;5UTR	0.0287	0.00771	0.000227
cg22354132	1	55273637	orf177;C1orf1	Body;Body	0.0122	0.00327	0.000227
cg01082299	6	31431969	HCP5	3UTR	-0.0294	0.0079	0.000229
cg00569896	4	204382			0.0345	0.00926	0.000229
cg23637705	17	7307466	C17orf61	TSS200	-0.00206	0.000554	0.000232
cg18076767	11	86453358			-0.00976	0.00262	0.000232
cg17304222	5	1.8E+08	FLT4;FLT4	S1500;TSS1500	0.00435	0.00117	0.000232
cg11344744	2	97526122	SEMA4C	3UTR	-0.0152	0.00408	0.000237
cg23712286	16	75182244	ZFP1	TSS200	-0.00417	0.00112	0.000242
cg13810707	7	1.22E+08	S2;CADPS2;Cady;	Body;Body	-0.0163	0.00439	0.000244
cg00074145	15	53075505	ONECUT1	Body	-0.0274	0.0074	0.000245
cg09972864	13	22248760	FGF9	Body	0.00673	0.00181	0.000246
cg25813630	17	1878100	RTN4RL1	Body	0.00695	0.00187	0.000246
cg27319917	16	48592694	N4BP1	Body	0.033	0.00889	0.000247
cg24874638	3	1.56E+08	C3orf33	TSS200	-0.00388	0.00105	0.000248
cg26708638	19	56652447	ZNF444	TSS200	0.00109	0.000293	0.00025
cg26800893	11	67184596	PGD1;ATPGL5	UTR;Body	0.0126	0.00339	0.00025
cg08472795	2	1.29E+08	HS6ST1	Body	0.0335	0.00904	0.000252
cg18614381	19	31844182			0.00992	0.00268	0.000253
cg02340056	19	55141979	B1;LILRB1;LILJTR;	5UTR;5UTR;5UTR;5UTR;5UTR;	-0.0113	0.00305	0.000255

cg20196966	6	47445060	CD2AP	TSS1500	-0.007	0.00189	0.000256
cg11635407	17	49353246	UTP18	Body	0.00807	0.00218	0.000257
cg26980937	14	56991775			-0.0626	0.0169	0.000258
cg22539431	7	1.27E+08	SND1	Body	0.0161	0.00434	0.000258
cg22107986	5	73980935	HEXB	TSS200	0.00296	0.000802	0.00026
cg15770046	19	35764710	USF2;USF2	Body;Body	0.00948	0.00257	0.000261
cg07314829	1	1.12E+08	ADORA3	Body	-0.0104	0.00281	0.000264
cg22276571	20	17549599	DSTN;DSTN	;1500;TSS1500	-0.0116	0.00314	0.000264
cg08199563	19	55816212	BRSK1	Body	0.00661	0.00179	0.000272
cg14791799	13	24227716	RSF19;TNFRS	Body;Body	0.0131	0.00356	0.000273
cg14200725	12	49942757	KCNH3	Body	-0.00856	0.00233	0.000274
cg13696743	14	57287885	OTX2OS1	Body	0.0141	0.00384	0.000276
cg02829285	17	68099642	16;KCNJ16;KCR;	TSS1500;5UTR	-0.0085	0.00231	0.000281
cg04265672	5	1.79E+08	RNF130	Body	-0.00942	0.00257	0.000283
cg04216235	5	1.73E+08			0.0115	0.00312	0.000283
cg15696662	1	46669221	rf190;POMG	1stExon;Body	-0.00664	0.00181	0.000285
cg16148454	16	69385606	TMED6	1stExon	0.00638	0.00174	0.000286
cg13717333	12	1.22E+08	BCL7A;BCL7A	5UTR;5UTR;1stExon	0.00287	0.000783	0.000287
cg25806932	2	4051987			-0.0188	0.00512	0.000289
cg01566028	9	1.23E+08	5RAP2;CDK5	Body;Body	0.00632	0.00172	0.00029
cg20373634	10	1.04E+08	NOLC1	TSS1500	-0.0123	0.00336	0.00029
cg01734786	4	1.63E+08	7L5;FSTL5;FST1;	TSS1500;TSS1500	-0.0067	0.00183	0.00029
cg12921795	14	1.03E+08	90AA1;HSP90	stExon;5UTR;TSS1500;	-0.00473	0.00129	0.000291
cg03855388	11	68580018	CPT1A;CPT1A	Body;Body	0.00231	0.000631	0.000291
cg13733008	4	78088735	CCNG2	3UTR	0.00876	0.00239	0.000292
cg10093103	14	1.02E+08			0.00873	0.00238	0.000294
cg24694018	1	1.45E+08	POLR3GL	Body	-0.0233	0.00637	0.000295
cg23664192	6	34725288	PC;SNRPC;SNR;	Body;1stExon	0.00207	0.000565	0.000295
cg22014887	4	2749539	TNIP2;TNIP2	Body;Body	-0.0141	0.00384	0.000296
cg14755852	8	23386014	SLC25A37	TSS1500	-0.00914	0.00249	0.000297
cg21140633	17	15600659			-0.00743	0.00203	0.000302
cg22591006	15	97814549			0.0081	0.00222	0.000304
cg26711333	8	8821019			-0.0127	0.00347	0.000305
cg13335567	8	71127379	NCOA2	Body	-0.0203	0.00557	0.000305
cg04784948	2	24148492	ATAD2B	Body	-0.00947	0.0026	0.000308
cg11004890	20	3218500	SLC4A11	TSS200	0.0232	0.00635	0.000308
cg09657185	6	34003954	GRM4	Body	0.012	0.00329	0.000309
cg14980667	5	1.73E+08			-0.00942	0.00258	0.00031
cg19633390	13	1.1E+08			0.0151	0.00415	0.000312
cg08973950	7	1083309	0;C7orf50;C	dy;Body;Body	-0.0237	0.00651	0.000314
cg24654228	7	1.39E+08	HAV1;ZC3HA	Body;Body	0.0128	0.00353	0.000315
cg08638044	15	27819924			0.015	0.00412	0.000315
cg16108059	14	81421989	;TSHR;TSHR;	Exon;1stExon;5UTR;1st	-0.0159	0.00438	0.000316
cg17050097	17	60783168	RCH10;MARC	Body;Body	-0.00702	0.00193	0.000318
cg02171008	11	8703884	RPL27A	TSS200	-0.00284	0.00078	0.000319
cg11511908	11	61919362	INCENP;INCEN	Body;Body	0.00531	0.00146	0.00032
cg12308965	11	67291387	CABP2;CABP2;	1500;TSS1500	-0.00802	0.0022	0.00032

cg18530075	2	25265699	<i>EFR3B</i>	Body	0.00507	0.0014	0.000321
cg27453365	11	1.08E+08	<i>ATM;NPAT</i>	SS1500;Body	0.00712	0.00196	0.000322
cg04724540	1	1.67E+08	<i>ILDR2</i>	Body	-0.0072	0.00198	0.000323
cg18223379	20	31619647	<i>BPIL3</i>	Body	0.00984	0.00271	0.000324
cg17901584	1	55353706	<i>DHCR24</i>	TSS1500	0.0268	0.00738	0.000328
cg14662970	1	1.09E+08	<i>SLC25A24</i>	Body	-0.00212	0.000583	0.000328
cg02897042	10	95720710	<i>PIPSL</i>	Body	0.00941	0.00259	0.000329
cg25556432	2	2.4E+08			0.0127	0.0035	0.000333
cg27614534	18	56296496	<i>ALPK2</i>	TSS1500	-0.00761	0.0021	0.000334
cg23058037	7	1.59E+08	<i>VIPR2</i>	Body	-0.0322	0.00887	0.000334
cg19329389	15	64680051	<i>TRIP4;TRIP4</i>	UTR;1stExon	-0.00404	0.00112	0.000335
cg15024566	2	55496144	<i>F2;MTIF2;Mixon</i>	5UTR;5UTR	0.00331	0.000913	0.000335
ch.5.3304132F	5	1.73E+08	<i>STC2</i>	Body	0.00325	0.000897	0.000335
cg26064870	8	1.03E+08	<i>LD;NCALD;NCTR</i>	5UTR;5UTR;5UTR;5I	-0.013	0.00358	0.000336
cg18960469	10	1.02E+08			0.00649	0.00179	0.000337
cg17626301	6	32820201	<i>TAP1</i>	Body	-0.0183	0.00504	0.000339
cg20759345	11	86745909			0.0114	0.00315	0.00034
cg27032101	11	312841	<i>IFITM1</i>	TSS1500	-0.0284	0.00785	0.00034
cg25939853	12	1.33E+08			-0.0224	0.00617	0.00034
cg00583291	5	1.8E+08			-0.00743	0.00205	0.000342
cg13388983	11	66824140	<i>RHOD</i>	TSS200	-0.00735	0.00203	0.000342
cg18234224	1	1.73E+08			0.00974	0.00269	0.000343
cg09432376	22	36044226	<i>APOL6</i>	TSS200	-0.0155	0.00429	0.000345
cg14930335	2	2.37E+08	<i>GAP1;AGAP1</i>	Body;Body	0.0195	0.00539	0.000345
cg16068812	21	44528396	<i>F1;U2AF1;U2</i>	TSS1500;TSS1500	-0.0247	0.00683	0.000345
cg05687498	5	1.4E+08			0.0405	0.0112	0.000346
cg12821980	11	74702244	<i>NEU3</i>	Body	-0.0105	0.00289	0.000349
cg24969820	3	98497864	<i>ST3GAL6</i>	Body	-0.00762	0.00211	0.000353
cg09092093	5	58335954	<i>PD;PDE4D;PDdy</i>	Body;Body	-0.006	0.00166	0.000355
cg25966198	14	20904303	<i>KLHL33</i>	TSS1500	0.00652	0.00181	0.000356
cg13469633	4	1.86E+08	<i>KIAA1430</i>	TSS1500	-0.0052	0.00144	0.000356
cg00956639	1	35659678	<i>SFPQ</i>	TSS1500	-0.00863	0.00239	0.000357
cg25992382	14	93066811	<i>RIN3</i>	Body	0.0109	0.00302	0.00036
cg14552404	15	25321097	<i>16-11;SNOR1</i>	Body;TSS1500	-0.0212	0.00588	0.000361
cg00826921	3	1.44E+08	<i>3orf58;C3orf5</i>	Body;TSS200	0.00409	0.00114	0.000361
cg19076265	8	25090321	<i>DOCK5</i>	Body	-0.0108	0.00301	0.000362
cg05957730	2	71361235	<i>MPHOSPH10</i>	Body	0.0152	0.00421	0.000363
cg27128489	16	46865867	<i>C16orf87</i>	TSS1500	0.0294	0.00816	0.000364
cg21558893	15	75950332	<i>SNX33</i>	3UTR	-0.00509	0.00141	0.000365
cg05695311	8	37887949	<i>EIF4EBP1</i>	TSS200	0.00281	0.00078	0.000367
cg26855689	17	79668668	<i>HGS</i>	3UTR	0.00342	0.000949	0.000369
cg09717585	16	87517852	<i>ZCCHC14</i>	Body	-0.0167	0.00464	0.00037
cg17101703	2	69793701	<i>AAK1</i>	Body	0.0117	0.00324	0.000372
cg18295183	5	1.61E+08	<i>BRG2;GABRA1</i>	5UTR;5UTR;5UTR;1stI	-0.0124	0.00343	0.000373
cg00622149	14	36295585	<i>BRMS1L</i>	TSS200	0.00456	0.00127	0.000375
cg05002642	20	23969429	<i>GGTLC1</i>	TSS200	0.00429	0.00119	0.000375
cg16815330	1	1.52E+08	<i>SNX27</i>	Body	-0.0122	0.00338	0.000378

cg18752854	2	2.19E+08	TNS1	TSS1500	0.0122	0.00338	0.000378
cg27662789	12	43666281			0.0485	0.0135	0.000381
cg04490037	7	50633773	DDC	TSS1500	0.0171	0.00476	0.000383
cg27130075	13	1.11E+08	COL4A1	Body	-0.00968	0.0027	0.000387
cg22179059	6	29714945	85830;LOC28	Body;Body	-0.0132	0.00369	0.000388
cg19115490	6	37483925			0.00664	0.00185	0.00039
cg06745004	11	62521749	ZBTB3	TSS200	-0.00277	0.000772	0.00039
cg11017057	3	51706056	54;TEX264;TETR;	5UTR;Body	0.00371	0.00103	0.000391
cg03950476	1	53019814	1;ZCCHC11;Z0;	TSS1500;TSS1500	-0.0183	0.00511	0.000391
cg18550509	15	1E+08	LYSMD4	5UTR	-0.00488	0.00136	0.000394
cg24554987	7	1.56E+08			0.0283	0.00791	0.000395
cg04663692	12	97885669	MST;MIR1253	body;TSS200	0.0118	0.00329	0.000396
cg04768449	12	94495274			0.0037	0.00103	0.000396
cg11330307	15	92628595	303A1;SLCO3	Body;Body	-0.00876	0.00245	0.000399
cg17184479	10	94790819	EXOC6;EXOC6	Body;Body	-0.0152	0.00425	0.000401
cg22652999	4	3897762			0.00743	0.00208	0.000402
cg17446339	11	20385254	2;HTATIP2;H	500;1stExon;5UTR;5UT	-0.0759	0.0212	0.000402
cg14854901	5	72793969	BTF3;BTF3	51500;TSS1500	-0.00634	0.00177	0.000403
cg16749570	1	17026817	ESPNP	Body	0.00705	0.00197	0.000403
cg09853936	1	3388196	ARHGEF16	Body	0.0197	0.00552	0.000403
cg02194398	4	1.43E+08	IL15;IL15	51500;TSS1500	0.0135	0.00378	0.000404
cg20102336	12	1.13E+08	OAS3	Body	-0.00436	0.00122	0.000404
cg17782848	5	1.7E+08	21;KCNI1;KC	dy;Body;Body	0.00755	0.00211	0.000404
cg05105745	13	1.13E+08	TP11A;ATP11	Body;Body	0.0105	0.00295	0.000406
cg07170300	12	59434386			0.014	0.00393	0.000407
cg03608515	13	98112404	RAP2A	Body	0.0125	0.00349	0.000407
cg18581191	8	1.46E+08	KIAA1688	Body	-0.00278	0.000779	0.000407
cg19768727	2	2.43E+08	ATG4B;ATG4E	Body;Body	-0.00563	0.00158	0.000408
cg03046819	1	2.02E+08	HISA4;SHISA4	Body;Body	-0.0118	0.00331	0.000409
cg16913841	10	22725451			0.033	0.00925	0.000409
cg19381766	7	5597647			-0.0129	0.0036	0.000414
cg16006965	3	1.12E+08	GCET2;GCET2;	51500;TSS1500	-0.0268	0.0075	0.000415
cg02612963	9	1.14E+08	VF483;ZNF48;	S200;TSS200	-0.00771	0.00216	0.000416
cg11420667	11	1750353	HCCA2	Body	-0.0201	0.00565	0.000422
cg14055655	19	50117794	PRR12	Body	0.0159	0.00447	0.000426
cg16523868	3	1.41E+08	ACPL2;ACPL2	5UTR;5UTR	0.0153	0.00429	0.000429
cg07309864	17	73238441	GGA3;GGA3	Body;Body	-0.0154	0.00432	0.00043
cg08229366	7	1.3E+08	1;MEST;MES;	51500;5UTR;TSS1500	0.0163	0.00458	0.000431
cg04131610	3	46411447	CCR5;CCR5	5200;TSS200	0.0112	0.00315	0.000432
cg07360182	1	1.8E+08	QSOX1;QSOX;	5200;TSS200	-0.00545	0.00153	0.000433
cg17111087	1	1.67E+08	CD247;CD247	Body;Body	0.0184	0.00518	0.000434
cg12809098	8	1.42E+08	DENND3	Body	0.0115	0.00323	0.000436
cg15002250	2	2.37E+08	AGAP1;AGAP1	Body;Body	0.0121	0.00341	0.000439
cg01234420	22	46453808	LOC150381	Body	-0.0184	0.00518	0.00044
cg06782692	10	1.34E+08	TK32C;STK32	UTR;1stExon	0.00226	0.000637	0.00044
cg16517579	16	67598143	CTCF	5UTR	0.0164	0.00462	0.000443
cg20214319	7	65670151	TPST1	TSS200	0.00225	0.000633	0.000447

cg07392324	7	1.08E+08			-0.0264	0.00746	0.000448
cg24070837	19	37108188	ZNF382	Body	0.00783	0.00221	0.00045
ch.13.80601193I	13	81703192			-0.00705	0.00199	0.000451
cg17521020	6	29617613			0.00329	0.000928	0.000451
cg18065361	8	67344588	ADHFE1	TSS200	0.00218	0.000616	0.000456
cg25880537	1	2365337			-0.0155	0.00437	0.000458
cg07552707	20	44519093	CTSA;NEURL2	51500;1stExon;TSS1500	-0.00795	0.00225	0.000459
cg25506106	19	17970744	IP3;RPL18A;fy	;1stExon;5UTR	0.00233	0.000659	0.000459
cg08921185	16	2285536	NASE1L2;E4FSS	1500;Body	-0.00229	0.000646	0.000459
cg12806892	12	1.13E+08			-0.0105	0.00297	0.000459
cg03598754	17	26711803	SARM1	Body	-0.00921	0.0026	0.000461
cg18139174	14	24605759	PSME1;PSME2	;Body;Body	0.0138	0.0039	0.000463
cg12627299	11	66444235	RBM4B	Body	-0.00746	0.00211	0.000465
cg15343224	11	1.34E+08			-0.00938	0.00265	0.000466
cg09390792	11	44881444	TSPAN18	5UTR	-0.00735	0.00208	0.000474
cg14076258	11	77183807	PAK1;PAK1	5UTR;5UTR	-0.0229	0.0065	0.000474
cg05597554	13	46038994	COG3	TSS200	-0.00173	0.000489	0.000474
cg19051861	22	50243786			-0.0206	0.00583	0.000476
cg12063688	14	65173327	PLEKHG3	5UTR	-0.0102	0.00288	0.000477
cg09985344	16	84648441	COTL1	Body	-0.013	0.00367	0.000478
cg06077876	11	64795361	SNX15;SNX15	Body;Body	0.00376	0.00106	0.000479
cg15324424	11	62105554	SRGL1;ASRGL	Body;Body	-0.00522	0.00148	0.000479
cg27304519	10	14551091			-0.0083	0.00235	0.000479
ch.9.25423502R	9	25433502			-0.0088	0.00249	0.00048
cg16972309	12	1.09E+08	SSH1;SSH1	;1500;TSS1500	-0.00458	0.0013	0.000482
cg06777516	5	529258			0.0231	0.00656	0.000483
cg01696605	7	1.51E+08			0.0345	0.00979	0.000483
cg09900489	11	1.27E+08	RREL3;KIRRE1	Body;Body	-0.0109	0.00309	0.000486
cg21093033	8	1.41E+08	APPC9;TRAPPS	1500;TSS200	-0.0168	0.00475	0.000486
cg07405330	3	39547215	MOBP;MOBP	Body;Body	-0.00928	0.00263	0.000488
cg24693368	2	1.56E+08	KCNJ3	TSS1500	0.00748	0.00212	0.000489
cg07084019	2	1.71E+08	MYO3B;MYO3B	;Body;Body	-0.0095	0.0027	0.00049
cg00363312	7	1.39E+08	HIPK2;HIPK2	Body;Body	-0.0132	0.00375	0.000491
cg14440600	19	50193021	TR1C;C19orf76	SS1500;1stExon;5UTR	0.0187	0.0053	0.000492
cg14716311	13	52601031	ITP14C;ALG1	5UTR;Body	0.00661	0.00188	0.000494
cg01448544	12	1.31E+08	RIMBP2	Body	-0.00614	0.00174	0.000496
cg18865990	13	45970273	SLC25A30	Body	0.0103	0.00293	0.000496
cg27542552	19	11689488	ACP5;ACP5;AC1	TR;5UTR;5UTR;1stExon	-0.00687	0.00195	0.000496
cg03753191	13	43566902	EPSTI1;EPSTI1	;1500;TSS1500	-0.013	0.0037	0.000498
cg20312390	1	2.04E+08	TP2B4;ATP2B5	5UTR;5UTR	0.0128	0.00365	0.000501
cg19145886	12	1.33E+08	EP400	Body	0.00413	0.00118	0.000503
cg15820955	12	48192939	HDAC7;HDAC7	;Body;Body	0.00868	0.00247	0.000505
cg03599575	15	90893182	GABARAPL3	TSS1500	0.00866	0.00246	0.000505
cg27446442	1	36546898			0.00909	0.00259	0.000509
cg26477793	10	1.04E+08	ACTR1A	Body	0.00279	0.000794	0.000511
cg03946955	1	1.56E+08	LMNA;LMNA	;Body;Body	0.00872	0.00248	0.000515
cg23693200	20	4701448	PRND	TSS1500	0.00502	0.00143	0.000518

cg05130405	16	29298242			-0.0118	0.00336	0.000519
cg10003974	7	47552912	TNS3	5UTR	-0.0139	0.00397	0.00052
cg20739904	5	6629638	NSUN2	Body	0.0085	0.00242	0.00052
cg10371643	13	1.1E+08	MYO16	Body	0.0112	0.0032	0.000522
cg24321971	11	27406919	LGR4	Body	0.0103	0.00293	0.000522
cg27285197	13	1.12E+08			0.00945	0.0027	0.000527
cg20006729	12	7033146	ATN1	TSS1500	0.0119	0.00339	0.000528
cg26366107	20	36531652	TM2L;VSTM	stExon;5UTR	0.00709	0.00203	0.00053
cg08182501	2	1.77E+08			-0.0226	0.00647	0.00053
cg12266841	11	45687263	CHST1	TSS200	0.00167	0.000478	0.000532
cg15752436	17	20937757	USP22	Body	0.00474	0.00136	0.000533
cg23229352	6	1.54E+08			0.0145	0.00415	0.000534
cg18107960	5	76787392	WDR41	Body	-0.0184	0.00526	0.000539
cg17608381	6	29911550	HLA-A	Body	-0.0547	0.0157	0.000542
cg09296212	9	1.31E+08	NAIF1	1stExon	0.00748	0.00214	0.000542
cg21625002	11	22022885			0.00731	0.00209	0.000545
cg16827257	11	2884460			0.00654	0.00187	0.000545
cg16755500	17	27918338			-0.0187	0.00536	0.000545
cg03530983	6	32781171	HLA-DOB	Body	0.00826	0.00237	0.000546
cg15538009	14	51304083			-0.0129	0.00369	0.000548
cg20823137	7	56097042	PSPH	5UTR	-0.0102	0.00291	0.000548
cg25937790	3	1.19E+08	CDGAP	Body	-0.0124	0.00355	0.000548
cg12585966	19	17650009	1129C;FAM1	Body;Body	-0.0153	0.00438	0.000549
cg23954629	11	1.21E+08	TBCEL;TBCEL	5UTR;5UTR	-0.00666	0.00191	0.000552
cg10471876	10	1.13E+08	C2;NCRNA00S200	Body;TSS1500;Bo	0.00379	0.00109	0.000553
cg13167431	22	26988419			-0.0108	0.0031	0.000554
cg25843003	6	31431312	HCP5	3UTR	-0.0203	0.00582	0.000555
cg04389164	16	4377470			-0.0093	0.00266	0.000555
cg03627300	2	2.19E+08			0.00731	0.0021	0.000557
cg10580269	2	69056515			0.0107	0.00308	0.000558
cg12532141	12	1.33E+08	GOLGA3	Body	0.00636	0.00182	0.00056
cg07111713	13	19171607			-0.0065	0.00186	0.000562
cg20207890	1	38470622	FHL3	5UTR	0.00718	0.00206	0.000564
cg14435997	2	1808183	MYT1L	Body	0.0104	0.00298	0.000567
cg00333622	20	33459477	GGT7	Body	0.00524	0.00151	0.000572
cg07258474	2	11809858	NTSR2	1stExon	0.0172	0.00494	0.000579
cg07483650	1	2.49E+08	OR2T4	1stExon	0.0118	0.0034	0.00058
cg10057264	4	75174204	EPGN;EPGN	stExon;5UTR	0.0145	0.00417	0.000582
cg26636244	7	1.02E+08	POLR2J	TSS1500	-0.0111	0.00318	0.000583
cg07638500	3	1.23E+08	MYLK;MYLK;	Body;Body;Body	-0.0097	0.00279	0.000584
cg18319689	1	46016267	KR1A1;AKR1A	1500;TSS1500	-0.00265	0.000763	0.000585
cg24898914	6	32810706	SMB8;PSMB8	Body;Body	-0.013	0.00373	0.000585
cg01127300	22	38614796			-0.0245	0.00706	0.000586
cg09322555	6	32826281	SMB9;PSMB9	Body;Body	-0.0112	0.00321	0.00059
cg07512236	6	1.69E+08			-0.00255	0.000733	0.00059
cg23646343	7	1.39E+08	HIPK2;HIPK2	Body;Body	-0.00996	0.00287	0.000592
cg27309098	2	2.37E+08	GAP1;AGAP1	Body;Body	0.0158	0.00454	0.000592



cg01362383	19	47760943	CCDC9	5UTR	-0.0169	0.00487	0.000593
cg11850508	17	78172311	IRD14;CARD1	Body;Body	-0.00721	0.00208	0.000593
cg03359362	19	47289611	SLC1A5;SLC1A5	500;Body;5UTR	-0.00651	0.00188	0.000593
cg03962451	2	1.92E+08	GLS	Body	-0.0173	0.005	0.000594
cg14009947	10	12238299	DC123;NUDT1	Exon;TSS200	-0.00334	0.000964	0.000595
cg20036996	8	1.45E+08	PUF60;PUF60	Body;5UTR	-0.00655	0.00189	0.000596
cg23030040	4	3414302	RGS12;RGS12	Body;Body	0.00457	0.00132	0.000598
cg25525778	2	1.13E+08	TMEM87B	TSS1500	0.0294	0.00848	6.00E-04
cg03130891	1	91550			0.0196	0.00565	0.000601
cg21286701	6	1.28E+08	C6orf174	Body	0.014	0.00405	0.000601
cg00966098	16	30596551	ZNF785	Body	-0.0143	0.00413	0.000602
cg19314834	18	72201018	CNDP1	TSS1500	-0.00612	0.00176	0.000603
cg06604690	12	1.23E+08	CCDC62;CCDC62	TSS200;TSS200	-0.00429	0.00124	0.000605
cg16623710	22	45073049	PRR5;PRR5	5UTR;5UTR;5UTR;1stExon	-0.00793	0.00229	0.000605
cg03935116	12	31476565	M60A;FLJ132	UTR;TSS1500;5UTR	-0.00962	0.00278	0.000606
cg10848140	21	46268755			0.0193	0.00557	0.000608
cg22160784	2	73460416	T7;CCT7;C2orf10	TSS1500;TSS200;TSS200	-0.00238	0.000687	0.000608
cg05634649	4	7056300	TADA2B	Body	0.00768	0.00222	0.00061
cg11574975	1	1.12E+08	ADORA3	Body	-0.016	0.00461	0.00061
cg15552370	5	1.72E+08	NEURL1B	3UTR	0.0111	0.00321	0.000614
cg03303515	2	47213998	TTC7A	Body	-0.00795	0.0023	0.000618
cg15657641	11	47939769			0.00918	0.00265	0.00062
cg02757488	19	41193662	NUMBL	Body	0.0118	0.0034	0.000621
cg19540797	2	3607301	RNASEH1	TSS1500	-0.00542	0.00157	0.000624
cg02240030	7	2089880	MAD1L1;MAD1L1	Body;Body	0.0105	0.00305	0.000625
cg12045511	15	42193157	EHD4	Body	-0.00357	0.00103	0.000627
cg22711792	1	50883329	DMRTA2	3UTR	0.00703	0.00204	0.000628
cg17375177	6	29627845	OG;MOG;MOG	Body;Body;Body;Body;Body	0.00871	0.00252	0.000628
cg20023898	16	67048469			-0.0128	0.0037	0.00063
cg23241201	19	45580017	ZNF296	TSS1500	-0.0105	0.00303	0.000631
cg25935014	12	1.04E+08	C12orf42;C12orf42	5UTR;5UTR	-0.0106	0.00308	0.000631
cg10499651	3	12465415	PPARG;PPARG	Body;Body;Body	0.0238	0.00688	0.000633
cg18067793	3	1.29E+08			-0.0111	0.0032	0.000635
cg00585776	16	30790892	ZNF629	3UTR	0.00816	0.00237	0.000636
cg23680451	10	3823790	KLF6;KLF6	Body;Body;Body	-0.0114	0.0033	0.000637
cg16876219	3	1.97E+08			0.00916	0.00265	0.000637
cg21959757	5	1.15E+08			0.0136	0.00394	0.000637
cg00745735	10	69868860	MYPN	TSS1500	-0.0112	0.00325	0.00064
cg15179454	19	2274042			-0.0111	0.00323	0.000641
cg11005651	6	32065890	TNXB	Body	0.0103	0.00299	0.000642
cg23479065	3	3843811	LRRN1	5UTR	-0.00814	0.00236	0.000651
cg18895336	10	50290996	C10orf72	Body	-0.00934	0.00271	0.000652
cg27284331	7	1.06E+08			-0.0354	0.0103	0.000655
cg15892650	5	1.51E+08	ANXA6;ANXA6	Body;Body	-0.0102	0.00295	0.000658
cg03549856	1	33593141			0.00411	0.0012	0.000659
cg00676801	2	1.92E+08	STAT1;STAT1	5UTR;5UTR	-0.0201	0.00583	0.00066
cg19054184	6	30654762	KIAA1949;KIAA1949	5UTR;1stExon	-0.00327	0.00095	0.000661

cg05931265	11	1.23E+08	UBASH3B	Body	-0.00957	0.00278	0.000662
cg03187444	22	33426343	SYN3	5UTR	-0.0155	0.00451	0.000667
cg04197935	17	42631005			-0.00901	0.00262	0.000669
cg08498247	11	14382755			0.00598	0.00174	0.000671
cg27315556	3	1.73E+08	NLGN1	TSS1500	-0.00834	0.00243	0.000675
cg03330490	10	94452236	HHEX	Body	-0.0159	0.00463	0.000676
cg22629111	1	1.66E+08	FAM78B	Body	-0.0136	0.00396	0.000677
cg05757757	10	80008637			-0.0154	0.00448	0.000678
cg10542562	11	1.29E+08			-0.011	0.00321	0.000681
cg10546626	20	57424521	NASAS;GNAI	Body;3UTR	0.01	0.00293	0.000683
cg26689097	2	88355367	KRCC1	TSS200	-0.00297	0.000866	0.000686
cg26326298	15	42867856	ARD9;STAR	stExon;5UTR	-0.00481	0.0014	0.000687
cg20741134	1	1.81E+08			0.0026	0.000758	0.000688
cg25499099	17	7284662	TNK1	5UTR	-0.0103	0.003	0.000689
cg13852948	9	1.38E+08	COL5A1	Body	0.0101	0.00295	0.000692
cg24116687	6	1.07E+08	PRDM1	Body	0.0145	0.00423	0.000692
cg22975853	10	1.28E+08	AM12;ADAM	Body;Body	-0.00598	0.00174	0.000695
cg09666237	17	18128581	LLGL1	TSS1500	-0.00393	0.00115	0.000697
cg17723958	12	1.24E+08	CCDC92	5UTR	0.021	0.00614	0.000698
cg09757109	11	1.12E+08	IXDC1;DIXDC	Body;Body	-0.0158	0.00462	0.000699
cg06734985	11	26849501			-0.0178	0.00519	0.000699
cg03796580	17	80333624			0.02	0.00585	0.000699
cg23514324	3	12329213	RG;PPARG;PPD	0;TSS200;TSS200	0.00518	0.00151	0.000704
cg15472170	1	12012720	PLOD1	Body	0.0145	0.00425	0.000709
cg17262810	10	35676874	CCNY;CCNY	Body;5UTR	0.0145	0.00425	0.000713
cg22822599	8	61779045	CHD7	3UTR	-0.00807	0.00236	0.000713
cg20145426	1	30179925			0.00762	0.00223	0.000719
cg00611548	6	1.17E+08	TSPYL1;DSE	SS1500;5UTR	-0.0196	0.00573	0.000723
cg22809682	17	63549924	AXIN2	Body	-0.0632	0.0185	0.000724
cg19576738	4	1.24E+08	FGF2	Body	-0.0167	0.0049	0.000725
cg01791034	15	42328501			0.0121	0.00355	0.000726
cg20673481	2	18059454	KCNS3	TSS1500	0.005	0.00147	0.000728
cg03775246	5	1.11E+08	orf13;C5orf1	Body;Body;TSS1500	-0.0114	0.00333	0.000728
cg25978487	6	32157150	PBX2	Body	0.00659	0.00193	0.00073
cg12901283	17	53045974	OX11;COX11	dy;1stExon;1stExon;TS	0.00368	0.00108	0.00073
cg04696274	20	43977531	SDC4	TSS1500	-0.00299	0.000877	0.000731
cg03468945	10	1.26E+08	OAT	TSS200	-0.00499	0.00146	0.000732
cg22310628	6	29692995	A-F;HLA-F;HLA	dy;Body;Body	-0.0112	0.00329	0.000733
cg07216529	10	90712739	ACTA2;ACTA2	SS200;5UTR	-0.00456	0.00134	0.000737
cg21168914	9	35848961	EM8B;TMEM	Body;Body	-0.00484	0.00142	0.000737
cg15076481	7	73664568	RFC2;RFC2	Body;Body	-0.00641	0.00188	0.000738
cg14667769	10	1.35E+08			-0.0133	0.00389	0.000739
cg16603064	15	69829848			-0.00629	0.00185	0.000741
cg00999988	2	1.67E+08	GALNT3	5UTR	0.0104	0.00304	0.000742
cg21284400	1	1.5E+08	OTUD7B	5UTR	-0.0135	0.00397	0.000743
cg09511815	13	73211779			-0.0159	0.00467	0.000746
cg11229273	3	57015101	ARHGEF3	Body	0.0123	0.0036	0.000748

cg03834031	22	46465717			-0.011	0.00323	0.000749
cg20405893	10	50822158	IAT;CHAT;CH;TR;5UTR;1stExon;5UTR		0.013	0.00383	0.000749
cg13361798	22	41460015			-0.00671	0.00197	0.000751
cg06363968	16	84629008	COTL1	Body	-0.0231	0.00678	0.000751
cg00262280	7	1.38E+08	CREB3L2	TSS1500	0.00418	0.00123	0.000751
cg11022791	12	68051679	DYRK2;DYRK2	Body;Body	-0.00545	0.0016	0.000752
cg10430444	15	76137847	BE2Q2;UBE2C	Body;Body	0.00919	0.0027	0.000753
cg18565717	12	1.33E+08			0.0278	0.00817	0.000754
cg11377484	7	1.29E+08	5;IRF5;IRF5;IF0;5UTR;5UTR;5UTR;5U		-0.00684	0.00201	0.000755
cg07098752	10	1.2E+08	PRLHR	5UTR	0.0265	0.00778	0.000756
cg12558966	4	4866946			0.00744	0.00219	0.000757
cg05260466	3	27756661			-0.0114	0.00336	0.00076
cg03432151	15	89745000	ABHD2;ABHD2	3UTR;3UTR	0.0103	0.00303	0.000762
cg13039585	5	1162588			0.0128	0.00378	0.000764
cg18517055	17	80581701	WDR45L	Body	0.0188	0.00554	0.000764
cg17582444	3	1.79E+08	MFN1	3UTR	-0.0106	0.00312	0.000767
cg03606176	5	1.18E+08	DMXL1	TSS1500	0.00267	0.000787	0.000768
cg13474083	9	1.36E+08			0.00992	0.00292	0.000771
cg04396462	3	63082613			-0.00691	0.00203	0.000771
cg16442226	22	29702854	1;GAS2L1;G#0;TSS200;TSS200		0.00384	0.00113	0.000771
cg03994820	3	350682	CHL1	5UTR	-0.031	0.00914	0.000773
cg27020216	3	1.54E+08	SGEF	Body	-0.00828	0.00244	0.000774
cg07083806	2	16083276	MYCN;MYCN	Body;TSS1500	-0.00847	0.0025	0.000774
cg04813697	10	22920025	PIP4K2A	Body	-0.0215	0.00634	0.000774
cg26279025	19	55882154	IL11	TSS1500	0.0224	0.0066	0.000775
cg06035456	10	71560212	L13A1;COL13;1500;TSS1500;TSS1500		0.0173	0.00508	0.000776
cg13548265	11	67889607	CHKA;CHKA	1500;TSS1500	-0.00682	0.00201	0.000777
cg25383568	19	39217721	ACTN4	Body	-0.0142	0.00418	0.000777
cg13846358	9	1.35E+08	NTNG2	Body	-0.00767	0.00226	0.000778
cg07323350	11	1.24E+08	1A;VWA5A;VW0;TSS200;TSS200		-0.0048	0.00142	0.000779
cg10985970	11	1.3E+08			0.00889	0.00262	0.000781
cg11382394	1	2564504	MMEL1	TSS200	0.0108	0.00319	0.000781
cg10149976	14	52535953	NID2	TSS200	-0.00668	0.00197	0.000782
cg14213992	19	40503358	ZNF546	5UTR	-0.00577	0.0017	0.000783
cg08707078	7	23720292	6;C7orf46;C7orf46	Body;Body	-0.00956	0.00282	0.000784
cg04118190	2	96812528	DUSP2	TSS1500	-0.0104	0.00306	0.000784
cg25214158	10	1.01E+08			-0.0167	0.00494	0.000785
cg06114363	1	26699448	VF683;ZNF683	S200;TSS200	0.00914	0.00269	0.000786
cg18998543	7	2769865	GNA12	3UTR	0.00663	0.00196	0.000787
cg07645542	19	19972043			0.0103	0.00302	0.000789
cg14169823	9	35560087	RUSC2;RUSC2	Body;Body	0.00752	0.00222	0.00079
cg06821959	9	95571711	ANKRD19	TSS200	0.0108	0.00319	0.00079
cg26253663	22	25799504			-0.022	0.00647	0.000792
cg11934419	6	1.13E+08	14;LAMA4;LA0;TSS200;TSS200;TSS200		-0.0126	0.00371	0.000792
cg08015278	3	73976278			0.0302	0.00892	0.000792
cg10275272	7	4784769	FOXK1	Body	0.00397	0.00117	0.000793
cg24501230	1	9212754	MIR34A	TSS1500	-0.00924	0.00273	0.000794

cg15209710	1	1.83E+08			0.0113	0.00333	0.000797
cg04640796	11	71791545	T;LRTOMT;LR200;TSS200;1stExon;5U		-0.00154	0.000456	0.000797
cg03152353	9	1.39E+08	NOTCH1	Body	-0.0112	0.00331	0.000798
cg08955995	19	42503412	GRIK5	Body	0.0251	0.0074	0.000803
cg05507832	12	56727806	N2;PAN2;PAI500;5UTR;5UTR;1stExc		-0.0112	0.0033	0.000803
cg06422693	4	48833587	CIAD1;OCIAD5UTR;5UTR;5UTR;5UTF		0.00216	0.000638	0.000804
cg24804782	6	1.64E+08			-0.012	0.00356	0.000806
cg01024444	19	52222446	HAS1	Body	0.0376	0.0111	0.000807
cg11809342	2	1.6E+08	TANC1;TANC1	Body;Body	-0.00774	0.00229	0.000809
cg12344862	2	87019846	;CD8A;CD8A;500;TSS1500;TSS1500		-0.0108	0.00319	0.000814
cg19472759	11	69456837	CCND1	Body	-0.00274	0.000809	0.000815
cg14963217	19	313076	MIER2	Body	-0.0066	0.00195	0.000815
cg20525037	3	64203257	PRICKLE2	5UTR	0.0106	0.00314	0.000819
cg02493846	1	1.52E+08	OC10013211.	TSS1500	0.0137	0.00406	0.000824
cg18943812	2	1682348	PXDN	Body	0.00568	0.00168	0.000827
cg01933079	5	65929713	MAST4;MAST4	Body;Body	0.0175	0.00517	0.000827
cg04155862	3	1.28E+08	MLL;MGLL;MCR;5UTR;1stExon		-0.00805	0.00238	0.000827
cg08450404	19	58326441	ZNF552	TSS200	-0.00832	0.00247	0.00083
cg05038977	17	7476167	EIF4A1	1stExon	0.00343	0.00102	0.00083
cg09406795	11	64019655	PLCB3	Body	-0.0122	0.00362	0.000831
cg01199327	11	44626750	CD82;CD82	Body;Body	0.0139	0.00411	0.000833
cg13248574	14	77504561			0.0105	0.0031	0.000835
cg26819783	2	2.41E+08			0.00684	0.00203	0.000835
cg19260237	7	1282067			0.0156	0.00461	0.000835
cg11438134	21	46269016			0.0162	0.00479	0.000835
cg09844399	14	25526434			-0.00902	0.00267	0.000836
cg16738940	10	92575878	TR7;HTR7;HTI	dy;Body;Body	-0.0079	0.00234	0.000842
cg27283345	6	10416531	TFAP2A;TFAP2	ody;TSS1500	-0.0119	0.00354	0.000842
cg03732014	21	30676184	H1;BACH1;BAR;	TSS1500;5UTR	-0.0112	0.00333	0.000844
cg03464560	2	2.19E+08	CXCR2;CXCR2;	1500;TSS1500	-0.0102	0.00304	0.000845
cg16160720	5	86563744	RASA1;RASA1;	1500;TSS1500	0.00239	0.000709	0.000846
cg01870519	6	693728	EXOC2	TSS1500	-0.0119	0.00353	0.000848
cg09270346	19	18060024			-0.0096	0.00285	0.000848
cg05519436	8	1.34E+08	PHF20L1	3UTR	0.00856	0.00254	0.00085
cg21105227	19	35633669	D7;FXYP1;FX	500;3UTR;3UTR	-0.00508	0.00151	0.000853
cg00218103	22	46465977			-0.008	0.00238	0.000855
cg16182465	11	76371946	RRC32;LRR3	Body;Body	0.00692	0.00206	0.000856
cg13875287	2	64683186	HSPC159	Body	-0.0176	0.00522	0.000857
cg04347414	1	2084519	CZ;PRKCZ;PR	dy;Body;Body	0.024	0.00713	0.000858
cg19101326	8	1.06E+08	FPM2;ZFPM;	UTR;1stExon	-0.0103	0.00307	0.000859
cg11445760	11	64546351	F1;SF1;SF1;SF	S200;TSS200;TSS200	-0.00211	0.000628	0.000861
cg23227621	5	1.35E+08			-0.00655	0.00195	0.000866
cg22336034	22	30821633	MTP18;MTP1;	S200;TSS200	-0.0032	0.000951	0.000866
cg13466917	17	57116416	RIM37;TRIM3	Body;Body	0.01	0.00299	0.000866
cg14042308	11	66104468	RIN1	TSS1500	-0.0112	0.00334	0.000867
cg21189321	3	9970062	RC;IL17RC;IL1	dy;Body;Body	-0.00457	0.00136	0.00087
cg12839593	14	61116227	SIX1	TSS200	0.00751	0.00224	0.000872

cg14647287	4	6927183	<i>CD14;TBC1D</i>	Body;Body	-0.00769	0.00229	0.000873
cg05393741	12	1.07E+08	<i>RFX4</i>	Body	0.0207	0.00615	0.000874
cg11900742	8	1.14E+08	<i>CSMD3;CSMD3</i>	Body;Body	-0.0144	0.0043	0.000874
cg09873933	5	1.35E+08	<i>TGFBI</i>	TSS200	-0.021	0.00625	0.000874
cg04857792	3	1.19E+08	<i>UPK1B</i>	5UTR	-0.0145	0.00432	0.000875
cg23570810	11	315102	<i>IFITM1</i>	Body	-0.0385	0.0115	0.000875
cg16018302	10	1.28E+08	<i>AM12;ADAM</i>	Body;Body	-0.00809	0.00241	0.000876
cg07806361	3	54331304	<i>CACNA2D3</i>	Body	-0.02	0.00596	0.000877
cg02699834	12	53039430	<i>KRT2</i>	Body	0.0122	0.00363	0.000879
cg13554849	9	96271203	<i>FAM120A</i>	Body	-0.00851	0.00253	0.000882
cg15883382	10	1.35E+08			-0.0046	0.00137	0.000883
cg00215133	18	76616808			0.0128	0.00381	0.000885
cg12218991	4	1.52E+08	<i>SH3D19;SH3D19</i>	3UTR;3UTR	0.0141	0.00421	0.000885
cg15182790	17	79318146			0.0113	0.00336	0.000885
cg22127703	7	91570873	<i>AKAP9;AKAP9</i>	Body;Body	0.00477	0.00142	0.000885
cg11769382	17	73851439	<i>WBP2;WBP2</i>	UTR;1stExon	-0.00432	0.00129	0.000886
cg26351104	1	51796558	<i>TTC39A</i>	Body	-0.00884	0.00264	0.000889
ch.16.1357280F	16	61883344	<i>CDH8</i>	Body	0.00302	0.000899	0.000889
cg02335185	20	60491905	<i>CDH4</i>	Body	0.0109	0.00325	0.000891
cg09580859	8	1.45E+08	<i>ZC3H3</i>	Body	-0.00367	0.00109	0.000893
cg00435616	7	1080473	<i>C7orf50</i>	Body	-0.0167	0.00499	0.000894
cg12573499	14	1.02E+08	<i>MIR134</i>	TSS1500;	0.00592	0.00177	0.000903
cg14663264	1	91192798			-0.011	0.00328	0.000903
cg20972294	11	1.33E+08	<i>OPCML</i>	Body	-0.014	0.00417	0.000904
cg13484901	12	14607340	<i>ATF7IP</i>	Body	0.0111	0.00331	0.000904
cg24060683	19	57755024	<i>VF805;ZNF80</i>	Body;5UTR	0.00655	0.00196	0.000906
cg24702826	6	86171768	<i>NT5E</i>	Body	0.0174	0.00518	0.000906
cg24807354	19	10629035	<i>S1PR5;S1PR5</i>	1500;TSS1500	0.00465	0.00139	0.000907
cg09996325	13	74599636	<i>KLF12</i>	5UTR	-0.0107	0.0032	0.000912
cg24158160	1	1.52E+08	<i>C1orf230</i>	TSS1500	-0.012	0.00358	0.000913
cg16137949	2	945423	<i>SNTG2</i>	TSS1500	-0.0103	0.00308	0.000915
cg25472458	7	50800607	<i>GRB10;GRB10</i>	5UTR	0.0126	0.00377	0.000915
cg12629349	2	54953117	<i>EML6</i>	Body	-0.00815	0.00244	0.000917
cg07048044	7	23470153	<i>IGF2BP3</i>	Body	0.0173	0.00516	0.00092
cg24957628	11	78664909	<i>ODZ4</i>	Body	-0.0117	0.00349	0.000921
cg05409693	12	78680140			-0.0203	0.00606	0.000921
cg07150062	14	1.05E+08	<i>ASPG</i>	TSS200	-0.0391	0.0117	0.000923
cg01080902	19	44039870	<i>ZNF575</i>	3UTR	0.0164	0.00491	0.000924
cg05775067	7	30602982			-0.00715	0.00214	0.000925
cg16000989	4	41983716	<i>AF4L1;DCAF4</i>	UTR;1stExon	0.0193	0.00578	0.000927
cg00361495	7	28995458	<i>TRIL</i>	1stExon	0.00667	0.00199	0.000931
cg23348789	17	28092503	<i>SSH2</i>	Body	-0.00777	0.00233	0.000933
cg21971621	11	65600773	<i>SNX32</i>	TSS1500	-0.00888	0.00266	0.000933
cg08365738	3	1.12E+08	<i>DC80;CCDC8</i>	Body;Body	0.0171	0.00511	0.000935
cg16363586	19	17516329	<i>BST2</i>	1stExon	-0.0106	0.00316	0.000939
cg01289541	3	1.7E+08	<i>SLC7A14</i>	5UTR	0.014	0.0042	0.00094
cg25003777	6	2841626	<i>SERPINB1</i>	5UTR	0.00305	0.000912	0.000941

cg22853371	10	54068630			-0.00553	0.00165	0.000941
cg24283836	13	1.11E+08	COL4A2	Body	0.011	0.0033	0.000942
cg21742975	15	39169233			-0.0105	0.00315	0.000943
cg23641672	1	1.74E+08	RABGAP1L	Body	0.00449	0.00134	0.000945
cg07147449	12	1.15E+08			0.00799	0.00239	0.000946
cg05626226	4	1.07E+08	FLJ20184	Body	0.0208	0.00622	0.000946
cg20716058	7	1.51E+08	2;PRKAG2;Ply;TSS1500;Body		-0.00403	0.00121	0.000946
cg21366673	6	30459512	HLA-E	Body	-0.0157	0.00469	0.000947
cg08894020	5	1.55E+08			-0.0235	0.00705	0.000948
cg01797727	2	2.2E+08	CYP27A1	TSS1500	-0.012	0.00361	0.00095
cg00537351	5	14339109	TRIO	Body	-0.0105	0.00315	0.000952
cg04872399	1	2.01E+08	TNNT2;TNNT2;on;1stExon;1stExon;5L		-0.0131	0.00393	0.000953
cg02510297	12	1.17E+08	00173;NCRN;Body;Body		-0.0117	0.00351	0.000954
cg09121720	5	1.41E+08	FCHSD1	Body	-0.0042	0.00126	0.000955
cg07784872	16	85687041	40182;KIAA0	Body;Body	-0.0177	0.00531	0.000959
cg05862039	2	1.74E+08	9GEF4;RAPGE	Body;Body	0.0149	0.00446	0.000959
cg13968390	2	1.09E+08	LT1C2;SULT1;1500;TSS1500		0.0433	0.013	0.000964
cg19446350	13	44004267	NOX1;ENOX;5UTR;5UTR		0.00748	0.00225	0.000966
cg01730534	1	1.75E+08	4CYBP;CACYBS1500;TSS200		0.00399	0.0012	0.000966
cg06424550	10	12808422	MK1D;CAMK	Body;Body	-0.00594	0.00178	0.000967
cg04125962	16	27476250	GTF3C1	Body	0.0112	0.00338	0.000968
cg06213287	5	96478495	LIX1;LIX1	stExon;5UTR	-0.0147	0.00441	0.000969
cg11931501	11	2309109			-0.0118	0.00354	0.000969
cg16508603	11	6633496	TAF10	TSS200	-0.00398	0.0012	0.000971
cg16962558	6	13512880			0.00943	0.00283	0.000974
cg22772747	7	27164285	HOXA3	5UTR	-0.00574	0.00172	0.000976
cg26370729	5	76115672	F2RL1	Body	-0.0129	0.00387	0.000978
cg02047889	14	35452176	SRP54;SRP54;TR;1stExon;1stExon		0.00188	0.000564	0.000979
cg01076485	3	1.72E+08			-0.00352	0.00106	0.000982
cg07667161	6	42847125	RPL7L1	TSS1500	-0.0058	0.00174	0.000984
cg15043057	1	41444788	CTPS	TSS1500	-0.0102	0.00307	0.000984
cg00319168	2	1.77E+08	HOXD13	1stExon	0.00766	0.0023	0.000985
cg19045191	11	34167855	VAT10;NAT1C3UTR;3UTR		0.0066	0.00198	0.000985
cg09901201	1	53515142	1;SCP2;SCP2;5;Body;Body;Body		0.00683	0.00205	0.000986
cg03000848	16	396164	AXIN1;AXIN1	Body;Body	0.0171	0.00513	0.000988
cg01709766	11	5640318	6-TRIM34;TR	ody;TSS1500	0.0131	0.00393	0.000989
cg05129050	1	7178026	CAMTA1	Body	-0.019	0.00572	0.000991
cg22752023	10	1E+08	OXD2;PYRO	UTR;1stExon	0.00846	0.00254	0.000991
cg07525313	6	1.16E+08	FRK	3UTR	0.0703	0.0212	0.000992
cg10126234	14	1.04E+08	ZFYVE21	Body	0.00785	0.00236	0.000992
cg24941681	20	33759921	PROCR;PROCF	UTR;1stExon	-0.00756	0.00227	0.000993
cg21240441	9	1.4E+08	PTGDS	Body	-0.00892	0.00268	0.000993
cg22485171	5	1.69E+08	CCDC99	TSS200	0.00311	0.000936	0.000995
cg04574090	11	74178749	KCNE3	TSS200	-0.00837	0.00252	0.000996
cg23795217	12	54812000	ITGA5	Body	0.00916	0.00276	0.000996
cg04143750	2	2.33E+08	EFHD1;EFHD1	SS1500;Body	0.00905	0.00272	0.000996

**Supplementary Table 3** Demographic and clinical variables in a testing sample set (N=238)

<u>Variable</u>	<u>Mean ± SD</u>	<u>N (%)</u>
Age	49.08 ± 8.05	
HIV-positive		238 (100)
Sex (male)		230 (96.6)
Race	EA	58 (24.4)
	AA	152 (63.9)
	Other	28 (11.8)
Smoker		134 (56.3)
AUDI-C	3.76 ± 3.15	
IDU+/HCV+		46 (19.3)
CD4+	434 ± 300	
log10 VL	2.59 ± 1.18	
CD8+	0.17 ± 0.08	
natural killer cells	0.07 ± 0.06	
B cell	0.08 ± 0.05	
Monocyte	0.12 ± 0.04	
Granulocytes	0.54 ± 0.13	