

Supplementary table 2. Differentially methylated CpG in knee articular cartilage from normal and osteoarthritis patients.

llumina probe ID	Associated gene symbol	Genomic position	Position relative to CpG island	Enhancer	$\Delta\beta$ (Normal-OA)	P-value	Corrected P-value
cg02812487	AACS	Body		Yes	0.189988083	2.46413E-05	0.016080201
cg22081096	ABCA6	1stExon	N_Shelf	No	0.192614651	3.68917E-05	0.018873951
cg06675705	ABI3BP	Body	N_Shelf	No	0.247425321	2.48847E-05	0.016109121
cg06539091	ABLIM1	Body		No	0.18518902	1.73495E-06	0.005105095
cg01881265	ABR	Body		No	0.160469337	0.000192899	0.040897315
cg03131556	ABR	Body		No	0.215899852	1.01787E-06	0.004223814
cg12175311	ADAMTS17	Body		No	0.225098638	5.39116E-05	0.022144443
cg21838773	ADAMTS17	Body		No	-0.20415955	4.02357E-05	0.019692436
cg08266286	ADCY3	5'UTR		No	0.275756818	2.16225E-06	0.005554493
cg23257225	ADORA1	Body	Island	Yes	0.180603859	0.000104529	0.030813628
cg20048434	AFAP1L2	Body		Yes	0.159128422	1.70926E-05	0.013559932
cg11453400	AFAP1L2	TSS1500;TSS1500		No	0.197249171	0.000125407	0.033769549
cg22938837	AFF3	Body		No	0.240298811	0.000040468	0.019726619
cg26649904	AGAP1	Body	N_Shore	No	0.179912247	1.33436E-05	0.011952895
cg11480534	AHNAK	Body	N_Shore	Yes	0.176192417	0.000156774	0.037184096
cg02396253	ALDH8A1	1stExon	N_Shore	No	0.191080081	2.34E-04	0.044822563
cg13306478	ALOX5AP	Body		Yes	0.162987697	0.000252986	0.046702629
cg21926782	AMT	Body		Yes	0.171320136	0.000115109	0.032360692
cg08521995	ANK1	Body		No	0.198412123	5.59267E-06	0.007825092
cg08067983	ANKRD10	Body		Yes	0.157401492	6.57674E-05	0.024562203
cg09420319	ANKRD11	5'UTR	N_Shore	Yes	0.188590758	0.000239213	0.045314425
cg09486407	ANKRD11	5'UTR		Yes	0.202459198	6.61329E-05	0.024604056
cg26340149	ANO1	Body		Yes	0.173261156	0.000113912	0.032267085
cg05768047	AP2A2	Body		No	0.196812381	3.50397E-05	0.018572253
cg23877017	APBB2	Body		Yes	0.189132939	0.000137609	0.035182133
cg05020685	APBB2	Body		No	0.163000945	9.84127E-05	0.029956466
cg07011168	ARHGAP22	Body		Yes	0.208663647	0.000224673	0.04384305
cg09259595	ARHGEF10	5'UTR		No	0.154243166	2.54433E-06	0.00577244
cg03705571	ARHGEF10	Body		No	0.263195823	8.26E-06	0.009349508
cg11229273	ARHGEF3	Body		Yes	0.209974582	6.89594E-05	0.025211318
cg03561416	ARID1B	Body		Yes	0.175373095	5.38037E-06	0.007638105
cg08782899	ARL16	TSS1500		No	0.173188657	0.000104823	0.030881456
cg24435571	ARL3	3'UTR		Yes	-0.2461412	4.20116E-06	0.006799053
cg00900933	ARL5C	1stExon		No	0.167360731	0.000081112	0.027423978
cg01446731	ARNT2	Body		No	0.171663851	9.11588E-05	0.028946183
cg09376835	ASAP1	Body		Yes	0.198324486	3.07961E-07	0.002491976
cg00013804	ASAP2	Body	N_Shelf	Yes	0.153993492	0.000002628	0.00590706
cg24654025	ASB13	Body	N_Shore	No	0.1951749	1.02748E-06	0.004192045
cg14742445	ASCC2	Body		Yes	0.194688398	1.68219E-05	0.013521924

cg12374579	ASPSCR1	Body		No	0.247036264	0.000155893	0.037083849
cg14419393	ASPSCR1	Body		No	0.298339531	9.20238E-05	0.028974493
cg20839205	ATOH8	Body		Yes	0.252112595	3.63835E-07	0.00267646
cg05883442	ATP6V0D1	Body		Yes	0.15640753	9.77875E-07	0.004201503
cg10575219	ATXN7L1	Body	S_Shore	Yes	0.22260133	5.74129E-05	0.022904402
cg07005067	B3GALTL	Body		Yes	0.237048858	0.000110756	0.031818426
cg15380603	BACH2	TSS1500	Island	Yes	0.17999624	1.02404E-05	0.010423133
cg09790829	BACH2	TSS1500	Island	Yes	0.187075117	0.000171992	0.038803092
cg10454937	BARX1	Body	N_Shore	Yes	0.185960241	1.88789E-05	0.014344197
cg13773631	BARX1	Body		No	0.194175828	0.000196332	0.041069158
cg00927495	BARX1	Body		No	0.201569978	1.35318E-05	0.012054817
cg06071058	BARX1	Body		No	0.235214772	0.000247718	0.046151283
cg05891572	BBS9	Body		Yes	0.175584587	0.000164088	0.038026949
cg24965479	BCAS3	Body		Yes	0.185976221	0.000175286	0.038966789
cg09800500	BCAT1	Body		Yes	0.249943287	1.65769E-05	0.013347074
cg06070445	BCL6	5'UTR		No	0.184022732	4.20673E-08	0.001021209
cg05663031	BCL6	5'UTR		No	0.181300674	3.03905E-06	0.005997954
cg21739584	BCL6	5'UTR		No	0.158024283	0.000177034	0.039158135
cg09970511	BEND6	5'UTR		No	0.177036744	7.67192E-05	0.026720312
cg18025275	BIN3	Body		Yes	0.162394059	0.00008263	0.027572404
cg14579118	BLVRA	TSS1500		Yes	0.197522918	0.000124641	0.033619158
cg02858625	BOC	5'UTR		No	0.186209318	3.43505E-06	0.006154094
cg05122957	BOC	Body		Yes	0.19102665	0.000009695	0.01012266
cg26534847	BPI	TSS200		No	0.228072169	5.99529E-06	0.008018688
cg01294253	BRD3	Body		No	0.158294383	6.63942E-06	0.008460683
cg08458711	BSND	Body		Yes	0.221551221	1.58957E-05	0.013014392
cg20092122	BST2	TSS1500		Yes	-0.39614794	1.25613E-06	0.004419322
cg01686739	BTBD11	Body		Yes	0.188307096	1.42287E-06	0.004636392
cg24280832	C10orf11	Body		Yes	0.159932315	7.50403E-05	0.026400702
cg04850999	C10orf11	Body		Yes	0.165174335	4.52805E-05	0.020818415
cg26819718	C10orf11	Body		Yes	0.315325473	7.99289E-05	0.027232593
cg00780666	C14orf179	TSS1500		No	0.200031494	8.59846E-06	0.009531179
cg23484159	C14orf43	3'UTR		Yes	0.167777929	0.000058646	0.02320564
cg01020484	C14orf43	3'UTR		Yes	0.203317515	6.10394E-05	0.02370827
cg18591945	C14orf80	Body		No	0.163678847	3.99145E-05	0.019594493
cg00443981	C17orf64	TSS200		Yes	0.18403178	0.000108573	0.031470804
cg02172058	C17orf64	1stExon		No	0.15022592	2.47848E-05	0.016108833
cg04246167	C3orf67	5'UTR		Yes	0.179493195	2.35493E-05	0.015662307
cg08866794	C6orf132	Body		Yes	0.168426666	2.14639E-05	0.01492978
cg15947176	C8orf46	3'UTR		No	0.186688705	0.000261861	0.047510041
cg02923831	C8orf86	TSS1500		Yes	0.173216019	4.731E-07	0.00319022
cg24909309	C8orf86	TSS1500		No	0.24056952	0.000146978	0.036223203
cg13525835	CABLES1	Body		Yes	0.186769922	0.000173619	0.038863225
cg16728539	CACNA1C	Body		Yes	0.170818809	0.000067183	0.024861412
cg17574877	CACNA1C	Body		Yes	-0.15567398	0.00021499	0.043061115

cg12273284	CAMK1D	Body	No	- 0.291847811	2.72678E-05	0.016527922
cg00426668	CAPN6	TSS1500	No	0.194898996	2.59386E-05	0.016145523
cg06360604	CAPZB	Body	Yes	- 0.167023435	3.1817E-06	0.006034198
cg11303839	CCL26	5'UTR	No	- 0.152588151	3.74555E-06	0.006541393
cg03744842	CCM2	Body	Yes	- 0.288549018	3.31E-06	0.006090967
cg16707506	CCM2	Body	Yes	- 0.257999187	1.04368E-05	0.01049113
cg07248223	CCR7	Body	No	- 0.153853715	4.27221E-06	0.006823062
cg18599081	CCRL2	TSS1500	No	- 0.172144248	1.07192E-05	0.010599405
cg01606773	CD109	Body	Yes	- 0.234734136	4.33871E-05	0.020411761
cg21108085	CD82	5'UTR	Yes	-0.26491421	1.39486E-08	0.000615655
cg04715649	CDC42BPB	Body	Yes	0.151489863	0.000186834	0.040351528
cg12830671	CDH23	Body	Yes	0.158731599	2.71111E-05	0.016515406
cg05650674	CDH3	TSS200	No	0.150686877	1.69225E-05	0.01355785
cg06726231	CECR1	Body	Yes	- 0.151037673	3.94381E-05	0.019498641
cg25198049	CGN	Body	No	- 0.169185531	8.08265E-05	0.027422932
cg16767221	CGNL1	Body	Yes	0.230640699	6.13872E-05	0.023786305
cg26537335	CHST11	Body	Yes	0.206723916	5.19E-07	0.003190194
cg05080940	CLEC16A	Body	Yes	0.164180569	7.51E-05	0.026407379
cg06636831	CLEC3B	Body	Yes	0.151545982	4.03302E-05	0.019718845
cg00865429	CLNK	Body	Yes	- 0.222664268	2.80423E-06	0.005893881
cg19533977	CLTC	Body	Yes	- 0.192771684	5.63495E-05	0.022685213
cg01425762	CMIP	Body	No	- 0.205268567	2.01E-04	0.04149007
cg16175941	CNKSR3	Body	Yes	0.173912731	0.000187749	0.040441091
cg11671265	CNOT6L	Body	Yes	0.153301627	2.11667E-06	0.00549556
cg26322749	COL11A2	Body	No	0.16099284	0.00012964	0.034356765
cg20436086	COL13A1	Body	Yes	0.249743961	0.000022284	0.015216791
cg20503329	COL15A1	TSS1500	No	0.189019559	9.31009E-05	0.029181149
cg13327911	COL21A1	Body	Yes	- 0.244975641	3.10426E-05	0.017648166
cg10275917	COL28A1	Body	Yes	-0.21335951	5.18285E-05	0.02184321
cg24888814	COPZ1	Body	Yes	0.15881195	5.37385E-05	0.022148278
cg12449974	CORO2B	Body	Yes	0.163248476	9.14992E-05	0.028884234
cg09069446	CORO7	Body	No	0.220126426	1.2003E-06	0.004316742
cg07809027	CPEB2	Body	No	- 0.173353688	2.87531E-07	0.002585182
cg19464524	CPEB3	Body	Yes	- 0.197260883	2.40432E-06	0.005585301
cg06880930	CPNE2	Body	No	- 0.343318285	3.05677E-06	0.006008504
cg00233633	CPVL	Body	Yes	- 0.184946004	2.18133E-06	0.005487376
cg09709565	CREB3L1	Body	No	- 0.186209149	4.64519E-06	0.007069888
cg09450153	CREB5	Body	Yes	0.153866747	7.38357E-06	0.008873296
cg10031769	CREM	Body	Yes	0.218733509	3.78261E-05	0.019050854
cg19421526	CRTAC1	Body	Yes	0.196656785	2.48E-04	0.046220192
cg03073714	CRY1	Body	No	0.185842809	3.64E-05	0.018844158
cg17879636	CRYGS	TSS200	No	-0.17115279	3.52464E-05	0.018620857
cg06271067	CUL3	Body	Yes	- 0.174153399	0.000214055	0.042980274

cg23167035	CXXC5	5'UTR	Yes	0.211526861	0.000175374	0.038932811
cg01959421	CYP26B1	Body	No	0.21745902	1.09694E-05	0.010715855
cg14447606	CYP26B1	Body	Yes	0.234411571	0.000214374	0.042990913
cg18455390	CYTH1	Body	Yes	0.202130403	4.86529E-05	0.021357675
cg27351239	DAAM2	5'UTR	Yes	0.177973735	6.15929E-07	0.003286165
cg05609656	DAAM2	5'UTR	No	0.230063639	3.52115E-07	0.002630096
cg02100497	DAPK1	Body	No	0.173308423	0.000133449	0.034684822
cg11775215	DAPK2	Body	Yes	0.150013694	9.10507E-05	0.028930776
cg11151251	DCAF5	Body	No	0.195684719	8.50985E-06	0.009476228
cg15591803	DENND2D	Body	No	0.308396577	1.32043E-07	0.00200339
cg21442881	DENND3	Body	No	0.221718565	0.0001773	0.039181313
cg02920600	DGKI	Body	Yes	0.179703721	0.00025318	0.046720675
cg09802018	DGKZ	Body	No	0.183649919	2.38368E-06	0.005617984
cg06033579	DHRS3	Body	Yes	0.244987263	1.25073E-05	0.01154461
cg13624631	DHRS7	Body	Yes	0.181247357	8.13599E-05	0.027450454
cg06115576	DIP2C	Body	Yes	0.167774142	3.54999E-05	0.018653302
cg09874796	DIP2C	Body	Yes	0.150452376	0.000203075	0.041724606
cg26511507	DIP2C	Body	Yes	0.227110604	6.32807E-07	0.00326846
cg06492521	DIP2C	Body	No	0.243170947	0.000108779	0.031492738
cg17905091	DIP2C	Body	No	0.257807707	1.86942E-06	0.00521625
cg14712202	DISP1	5'UTR	No	0.227983282	1.88782E-05	0.014366147
cg10942056	DISP1	1stExon	No	0.16544491	0.000220177	0.043507683
cg26446832	DKK3	Body	Yes	0.178808716	4.83895E-06	0.007251133
cg27395342	DLC1	Body	Yes	0.177793158	8.22124E-05	0.027527654
cg11070059	DLX6AS	Body	No	0.165066936	4.80294E-05	0.021276324
cg13209441	DLX6AS	Body	No	0.197478086	0.000281133	0.049275553
cg08442052	DNAH5	Body	Yes	0.165659134	6.34348E-06	0.008346444
cg13718827	DNM1	TSS1500	No	0.151597881	1.01E-04	0.030385789
cg01818776	DOCK5	Body	Yes	0.198975673	1.01E-06	0.004216604
cg21409833	DOCK7	Body	No	0.179227989	8.00309E-05	0.027248231
cg20236089	DTNBP1	Body	Yes	0.170781076	2.79963E-05	0.016718965
cg12561125	DTX3	3'UTR	No	0.161875071	8.59722E-07	0.003937785
cg12127149	DYNC1H1	Body	Yes	0.244289118	9.48343E-06	0.009987676
cg12245706	DYSF	Body	No	0.242836984	8.38755E-05	0.027702427
cg14196395	DYSF	Body	No	0.326885841	1.93703E-05	0.014468514
cg21005416	ECE1	TSS1500	No	0.208063351	0.000145292	0.035971872
cg13447099	ECE1	Body	Yes	0.156737329	0.000178203	0.039309219
cg01815263	EDEM1	Body	Yes	0.183714208	3.69201E-07	0.002675396
cg00483217	EFR3B	Body	Yes	0.158767736	7.06288E-05	0.025609501
cg15994604	EHF	Body	Yes	0.188002001	2.01888E-06	0.005475934
cg17363943	ELOVL6	Body	Yes	0.222639382	2.23084E-08	0.000722065
cg01303236	ENC1	5'UTR	No	0.216920559	1.12914E-06	0.004282895
cg14173476	EPN2	5'UTR	Yes	0.161894532	7.32498E-06	0.008868743
cg26108843	ERG	TSS1500	No	0.155687552	4.90872E-05	0.021355226

cg15858679	ERP27	3'UTR	No	0.152592231	1.37303E-05	0.012054695
cg06159484	ERRFI1	TSS1500	No	-	7.08394E-05	0.025590319
cg22190721	ESRP2	Body	No	0.221388819	1.65E-04	0.038057216
cg04395788	EXT1	Body	Yes	0.166510125	1.20367E-06	0.004297048
cg05712979	FAM101A	5'UTR	No	0.25610679	0.00019078	0.040822428
cg06547285	FAM113B	3'UTR	No	-	0.000121965	0.03322986
cg12771178	FAM170B	TSS200	No	0.179112462	6.74639E-05	0.024908399
cg16512990	FAM170B	TSS200	No	0.160466485	2.83873E-06	0.00581535
cg27406618	FAM170B	1stExon	No	0.220849406	2.18E-06	0.005461583
cg05368724	FAM178B	5'UTR	No	0.177171334	2.62E-05	0.016278165
cg13665684	FAM188B	Body	No	0.176463798	1.40749E-06	0.004617261
cg05949640	FAM193A	TSS200	No	-	0.000257259	0.016737737
cg25790133	FAM193A	TSS200	No	0.232472823	5.31823E-07	0.003148861
cg24170465	FAM198B	TSS200	No	0.276980515	0.000171357	0.038731774
cg01699600	FAM38A	Body	Yes	0.176592949	0.047115169	0.047115169
cg04463607	FAM55B	TSS200	No	-0.17228976	8.33301E-05	0.027653974
cg00831735	FAM83A	Body	No	-0.24100197	7.75582E-05	0.026801017
cg18880986	FBXL18	Body	Yes	0.172803942	9.3581E-07	0.004093216
cg22108567	FBXL18	TSS200	No	0.186784133	0.000142851	0.03584283
cg10523001	FBXW11	Body	Yes	-	0.00020896	0.042324891
cg21115691	FCAMR	Body	No	0.151031026	2.1317E-08	0.000739263
cg20806175	FCER1G	Body	Yes	0.230904339	1.72955E-06	0.005120213
cg13724550	FGF1	5'UTR	No	0.181188788	3.50281E-05	0.018606738
cg27653103	FGFR1	Body	No	0.165470046	4.57934E-05	0.02085668
cg12226006	FGFR2	Body	Yes	0.157113897	1.65735E-05	0.013366464
cg21311834	FGFR3	3'UTR	No	0.200668645	2.26374E-05	0.015328746
cg08521859	FGFRL1	Body	Yes	0.240767401	1.12259E-05	0.010835638
cg16185996	FGFRL1	Body	No	0.175069211	8.33352E-05	0.027636768
cg04145890	FGFRL1	Body	No	0.178474527	5.38627E-05	0.022143092
cg18699025	FGFRL1	Body	No	0.181531619	1.07127E-05	0.010614596
cg07727358	FGFRL1	Body	No	0.214847505	1.86119E-05	0.01429792
cg08715862	FHOD1	Body	Yes	0.28733245	5.65027E-05	0.022671683
cg25114611	FKBP5	TSS1500	No	0.179511274	3.50366E-05	0.018590905
cg04807669	FLI1	Body	Yes	0.151130529	9.01762E-06	0.009794552
cg01048349	FLJ10357	Body	No	0.186038199	6.20123E-05	0.023914003
cg22800743	FLJ22536	Body	Yes	0.178018669	0.000131952	0.034666907
cg14773858	FLNA	TSS1500	No	0.17926853	8.86798E-05	0.028684295
cg05116002	FLNB	Body	Yes	0.203365363	8.01749E-05	0.027239945
cg12508639	FLNB	3'UTR	No	0.172524257	8.81539E-05	0.028571272
cg06343233	FMNL2	Body	Yes	0.174363361	0.000222564	0.043624293
cg26207245	FMNL2	Body	Yes	0.191041945	2.96175E-05	0.017283215
cg17803993	FOXP1	5'UTR	No	0.202568189	1.69815E-05	0.013515956
cg13492245	FPGS	Body	No	-	9.12634E-05	0.028941514
cg13087761	FSCN1	3'UTR	No	0.186204323	6.58073E-05	0.024558223
cg04952186	FSCN1	3'UTR	No	0.152467787	4.09534E-05	0.019804132

cg13300301	FUT4	1stExon	Yes	0.152413516	7.83407E-06	0.009143111
cg14738670	FXYP1	Body	No	0.217936435	0.000238964	0.04530259
cg17453767	GAB1	Body	Yes	0.156794001	0.000220997	0.043510367
cg03761923	GAB3	Body	No	0.192487383	7.33223E-05	0.026060665
cg06325515	GABARAPL2	Body	Yes	0.187627631	2.50887E-05	0.016154992
cg05527856	GALNTL4	Body	Yes	0.187132195	7.72829E-05	0.026801285
cg24844449	GAS2L1	Body	No	0.195273696	0.000179562	0.039519201
cg17479840	GAS7	Body	No	0.159056978	8.97711E-05	0.028826022
cg23833461	GAS7	1stExon	Yes	0.270653495	9.44397E-07	0.004093893
cg16874185	GDPD5	5'UTR	Yes	0.155289035	3.69716E-07	0.00263973
cg19822309	GIPR	Body	No	0.187551707	0.000019619	0.014498082
cg10271058	GLB1L3	Body	No	0.178805936	6.20151E-05	0.023896088
cg26247087	GLIS1	5'UTR	Yes	0.199153142	9.29744E-06	0.009877503
cg16677191	GLRX	TSS1500	Yes	0.183204005	0.000173061	0.038881595
cg11294750	GPC6	Body	Yes	0.195018972	0.000250382	0.046504856
cg21221690	GPR177	Body	Yes	0.212215598	7.83032E-06	0.009160758
cg05875421	GPR68	5'UTR	Yes	0.194782612	1.45567E-05	0.012377352
cg18421360	GPR98	Body	Yes	0.201015879	4.83E-05	0.021329584
cg14213590	GPSM1	Body	Yes	0.166748067	1.57933E-05	0.012952437
cg14471064	GPSM1	Body	No	0.213779395	0.000019758	0.014490525
cg14040131	GPSM1	Body	No	0.188107084	0.000143473	0.035869113
cg26572973	GPT	TSS1500	No	0.151352959	0.000191048	0.040825853
cg07658280	GPT	TSS1500	No	0.181130716	5.78464E-05	0.023020578
cg13651876	GRHPR	Body	Yes	0.234262685	2.01758E-05	0.014555101
cg03206445	GRIN1	3'UTR	No	0.150483936	3.35021E-05	0.018255498
cg26759179	GRK5	Body	Yes	0.184407182	0.000104424	0.030801434
cg00522048	GRK5	Body	Yes	0.26605071	1.60E-05	0.013022738
cg23537932	GRK5	Body	Yes	0.276863537	1.38888E-06	0.004650459
cg03598457	GTF3C1	Body	Yes	0.155159085	8.54598E-05	0.028034967
cg08252871	GXYLT1	Body	No	0.160842599	0.000055867	0.022565791
cg11611244	HCCA2	Body	No	0.173386964	8.58881E-06	0.009542266
cg06568490	HDAC11	Body	No	0.189019945	2.51739E-05	0.01608191
cg11707035	HDAC4	Body	No	0.1775369	0.000113661	0.032233487
cg19770748	HDAC4	Body	Yes	0.22528116	4.22175E-06	0.006809672
cg04869380	HDAC4	Body	Yes	0.230593381	4.44162E-06	0.006845905
cg01641368	HDAC4	Body	Yes	0.245913622	3.29038E-05	0.018071498
cg18736431	HDAC4	Body	No	0.27751036	1.00508E-05	0.010360515
cg08140114	HECA	Body	Yes	0.154771603	0.000208271	0.042238165
cg23786580	HECW1	5'UTR	Yes	0.229099413	0.000162466	0.037886194
cg16395183	HHAT	Body	Yes	0.182968299	4.85109E-06	0.007246962
cg10203922	HHIP	TSS1500	No	0.237507815	5.06686E-05	0.021598079
cg04705318	HHIPL1	Body	Yes	0.190125035	6.68568E-05	0.024778441
cg02025034	HIP1R	3'UTR	No	0.163751624	0.000110801	0.031812782
cg05519606	HIVEP2	5'UTR	Yes	0.225155688	4.16595E-07	0.002889456
cg03221073	HMCN1	Body	Yes	0.219972235	3.32826E-05	0.018176712

cg23146197	HMGA2	Body	Yes	0.174544538	5.42052E-05	0.022189925
cg05349837	HOXC4	5'UTR	No	0.210343848	0.000227053	0.044130065
cg11702866	HRH1	5'UTR	Yes	-	6.86499E-05	0.025136
cg03140421	HSF4	Body	Yes	0.221778769	2.28606E-05	0.015394044
cg21945949	HSPC159	Body	No	0.157895019	4.64642E-05	0.020926626
cg26579713	IGDCC4	Body	Yes	-0.17071991	3.98E-06	0.006669713
cg17665927	IGF2	Body	No	0.198305749	0.000149054	0.036438843
cg00273464	IGF2	Body	No	0.23447653	5.50625E-05	0.022333749
cg25135018	IL6R	Body	Yes	-	0.000230161	0.04443176
cg05756780	IL6R	Body	No	0.169374936	2.46832E-05	0.016085924
cg11854227	ILDR1	Body	No	-	6.15988E-07	0.003250758
cg00694560	ILDR1	3'UTR	No	-0.27074742	3.87479E-10	6.27085E-05
cg18542639	INO80	Body	No	-	2.34E-04	0.044835773
cg09784347	IQCJ	TSS200	No	0.156333905	3.27E-06	0.006113369
cg24380053	IQSEC1	Body	Yes	0.219312313	6.21E-05	0.02390139
cg17554647	IQSEC1	Body	Yes	0.166910983	3.68498E-05	0.018892326
cg00321056	IQSEC2	Body	Yes	0.161483809	9.98516E-05	0.030205082
cg24530074	ITGA6	Body	Yes	-	1.17012E-06	0.004336689
cg26689077	ITGB7	5'UTR	Yes	-	3.62526E-05	0.018844828
cg05306109	ITPKB	Body	No	0.163287362	1.07208E-06	0.00419766
cg01675238	JMJD7	Body	No	-	4.34113E-06	0.00688781
cg03252829	KCNK17	1stExon	No	0.206889488	3.07759E-05	0.017641178
cg11624345	KCNN4	Body	Yes	0.22129417	1.12E-06	0.004312373
cg26504422	KCNN4	Body	No	0.226302418	1.08587E-05	0.010672161
cg23750514	KCNQ1	Body	Yes	-0.15912558	5.71977E-06	0.007934329
cg09173378	KCNT2	Body	Yes	-	4.27649E-05	0.020415812
cg17150663	KCP	TSS1500	No	0.168697694	2.67939E-06	0.005859798
cg22079102	KDM4B	Body	No	0.299413798	2.89515E-06	0.005832481
cg03358468	KDM4B	Body	No	0.437121977	3.2197E-07	0.002562628
cg21491107	KIAA0182	5'UTR	Yes	0.15560926	4.52985E-05	0.020806981
cg26657404	KIAA0182	Body	No	0.192909723	6.87606E-05	0.025157581
cg09250149	KIAA0182	Body	Yes	0.201758201	5.04115E-06	0.007394372
cg13432241	KIAA0922	Body	No	0.215367487	9.13749E-05	0.028901363
cg08908131	KIAA1598	Body	Yes	-	1.41039E-05	0.012227851
cg18586886	KIAA1949	Body	No	-	0.000220457	0.043527726
cg00278359	KIAA1949	Body	No	-	8.50281E-06	0.009490154
cg27309702	KIFC3	3'UTR	Yes	0.150694459	4.72254E-05	0.021132246
cg16353632	KRT5	TSS200	No	0.166621149	0.000195537	0.041044257
cg20324165	KRT8	TSS1500	No	0.150908795	2.03482E-05	0.014592776
cg07925587	KRT80	Body	Yes	-	0.000194107	0.040956582
cg07168232	LAMB3	Body	Yes	-	8.71076E-06	0.009589979
cg19919590	LAPTM5	Body	Yes	-	9.11158E-06	0.009808833
cg05380759	LARS2	Body	Yes	0.199167472	0.000265876	0.047880565
cg12410310	LGALS12	1stExon	No	0.171454952	0.000245172	0.045958977
cg23586835	LGR4	Body	Yes	0.173213145	7.61E-08	0.001421983

cg03985801	LGR6	TSS1500	No	0.157763885	1.13088E-05	0.010893956
cg17830682	LGR6	TSS1500	No	0.167147527	0.000264381	0.047753107
cg16326367	LHFPL2	TSS1500	No	-	1.95842E-05	0.014494491
cg00225067	LIMD1	Body	No	0.177544593	0.000274518	0.048696379
cg01942372	LIMS1	TSS1500	Yes	0.172120796	0.000161563	0.037839347
cg01761729	LIMS2	Body	Yes	0.162261163	0.00005054	0.021600169
cg17408637	LMO2	Body	Yes	0.165627868	0.00021904	0.043442179
cg22714290	LOC148696	Body	No	-	5.8599E-06	0.007902923
cg01291474	LOC390595	Body	No	0.301788536	2.27843E-05	0.015363952
cg22648815	LOC440839	Body	Yes	0.166183156	0.000160012	0.037657688
cg16314851	LOC723809	TSS1500	No	0.198380563	3.17941E-05	0.017824984
cg18005280	LRIG1	Body	Yes	-	0.000174513	0.038883926
cg18160691	LRP5	Body	Yes	0.196387157	2.19908E-05	0.015122952
cg20278269	LRP5	Body	No	0.159421794	0.000024522	0.016045451
cg16414472	LRP5	Body	Yes	0.189677176	4.32705E-05	0.02047599
cg25781963	LRP5	Body	Yes	0.191657147	0.000286704	0.049802624
cg05984508	LRP5	Body	Yes	0.211913963	2.86984E-07	0.002628944
cg16409259	LRP5	Body	No	0.241673842	8.55004E-07	0.003953474
cg13738327	LRP5	Body	No	0.262083101	6.44276E-05	0.024342721
cg17031967	LRRC16A	Body	No	0.299315505	1.74903E-05	0.013718537
cg09670263	LRRC2	3'UTR	Yes	0.152889135	9.80637E-07	0.004176413
cg21846949	LTBP1	Body	Yes	-	0.000273725	0.048608982
cg02357637	LYSMD4	3'UTR	No	0.183517735	3.11999E-05	0.017696197
cg27109748	MAD1L1	Body	No	0.184114979	5.43772E-07	0.003180817
cg17498476	MAD1L1	Body	Yes	0.156777238	0.000109338	0.031598019
cg26038465	MAFF	Body	Yes	0.165333148	0.000200636	0.041433953
cg01174843	MAGI2	Body	No	0.221017288	9.05216E-06	0.009788267
cg16836311	MAN1C1	1stExon	Yes	0.161564021	8.68699E-07	0.003941715
cg14622443	MARCH10	TSS1500	No	0.223201223	0.000288901	0.049934177
cg13963033	MARCH3	Body	No	0.185571083	7.62721E-07	0.003740508
cg10689689	MARK2	3'UTR	Yes	0.184241362	4.46755E-05	0.020637947
cg24769295	MARK2	Body	No	0.185573263	0.000277827	0.04901459
cg21609804	MARK2	3'UTR	No	0.19252117	5.01679E-06	0.007403376
cg22571654	MED12L	Body	No	0.221777102	4.50447E-05	0.020749271
cg15412772	MED24	3'UTR	No	0.160682971	3.31048E-05	0.018120394
cg15825417	MEIS3P1	TSS1500	Yes	0.186774981	3.58563E-05	0.018759356
cg12817352	METRNL	Body	No	0.180643946	7.07792E-05	0.025606661
cg10435609	MGC27382	Body	No	0.175697166	1.25035E-05	0.011563054
cg03821121	MICAL2	5'UTR	Yes	0.200939603	4.29752E-08	0.000993571
cg18151262	MIDN	Body	Yes	0.231282672	0.000241529	0.045539955
cg04955683	MRPS6	TSS1500	No	0.230224297	1.07E-05	0.010593884
cg00510149	MRVI1	5'UTR	No	0.189929571	0.000062324	0.023901309
cg02857325	MTHFSD	3'UTR	No	0.190294012	3.55741E-05	0.018672035
cg13189020	MYBBP1A	Body	Yes	0.154492882	0.000074602	0.026303695
cg09127607	MYPN	Body	No	0.160356816	2.09E-05	0.014777389

cg18700744	NAA25	Body	Yes	0.194278031	0.000116919	0.032623876
cg18052274	NAV2	TSS1500	Yes	0.197614762	2.31E-05	0.015435968
cg03611487	NAV2	TSS1500	Yes	0.186914301	1.71674E-05	0.013574923
cg14534803	NAV2	Body	Yes	0.159140084	0.000164406	0.038082672
cg06218688	NAV2	Body	No	0.166029078	8.57561E-05	0.028094207
cg23371436	NAV2	Body	Yes	0.175973485	0.000148058	0.036250209
cg10849160	NCOR2	Body	No	0.180115348	5.45615E-05	0.022260723
cg03406367	NCOR2	Body	Yes	0.198647812	0.000187103	0.040355825
cg19341309	NCOR2	Body	Yes	0.232587202	2.25716E-06	0.005425151
cg20494738	NCOR2	5'UTR	Yes	0.237087137	0.0002328	0.044745548
cg05109049	NF1	Body	No	0.160511326	2.42858E-05	0.015933865
cg17102627	NFATC1	Body	No	0.232699337	0.000151966	0.036634276
cg16182267	NFATC1	Body	No	0.241089995	1.99486E-05	0.01456435
cg16536399	NFATC1	Body	No	0.28349175	2.99368E-05	0.017365227
cg15517343	NFATC1	Body	No	0.338547108	2.78784E-07	0.00260294
cg02736255	NFATC1	Body	No	0.195048834	9.07197E-05	0.028901259
cg05356319	NFIX	Body	No	0.174784679	5.63557E-05	0.022668924
cg11127915	NFIX	Body	No	0.195616376	0.000103263	0.030739119
cg21863110	NHLH2	3'UTR	No	0.156272027	9.27575E-05	0.029129923
cg01827248	NKD1	Body	No	0.229397666	3.12215E-05	0.01768774
cg00174992	NOSTRIN	5'UTR	Yes	0.159352055	0.000127554	0.033989553
cg26647771	NPR3	Body	Yes	0.180665089	8.57491E-05	0.028110885
cg26422981	NRP2	Body	Yes	0.170830905	3.84089E-05	0.019204907
cg08623810	NRXN2	Body	Yes	-0.1649816	8.64554E-05	0.028266081
cg07114544	NTN1	Body	Yes	0.21834524	0.000184709	0.040088784
cg23768572	NXN	Body	No	0.161317549	5.24349E-06	0.007554234
cg09966895	ODZ4	Body	Yes	0.301330495	6.12616E-07	0.003304806
cg12494545	OPA3	Body	Yes	0.165700699	1.15584E-05	0.010981892
cg27391679	OPA3;OPA3	Body	Yes	0.17606519	1.87618E-05	0.014299961
cg04256834	OPCML	Body	Yes	0.177118549	7.11047E-06	0.008761971
cg10521706	OSR1	5'UTR	No	0.160316847	4.96629E-05	0.021528497
cg08477106	PARM1	Body	No	0.158287871	0.000217153	0.043280203
cg13518121	PARVA	Body	Yes	0.15705042	5.28792E-05	0.021980732
cg25758828	PAX8	3'UTR	Yes	0.258253177	5.12082E-05	0.021732678
cg14566959	PCDHGA4	Body	No	0.150206283	0.000285734	0.049687431
cg14205864	PCID2	Body	Yes	0.192584444	3.2861E-06	0.006089466
cg06160606	PDE4B	Body	Yes	0.174186007	4.19676E-05	0.020214038
cg11304682	PDZRN3	Body	Yes	0.156627843	1.02023E-06	0.004197764
cg09026722	PEAR1	5'UTR	Yes	0.164917277	0.000235286	0.04493876
cg25392325	PEMT	Body	Yes	0.208473459	1.29058E-05	0.011755919
cg17545652	PFKFB3	Body	No	0.175596883	0.000118677	0.032887596
cg24691891	PHC2	Body	Yes	0.184322223	8.19309E-05	0.027528341
cg24200175	PICALM	3'UTR	No	0.150940841	0.000184126	0.040087718
cg17725019	PIK3IP1	3'UTR	No	0.172835251	0.000159187	0.037572869
cg14062643	PIP5KL1	Body	No	-	6.04829E-05	0.023605437

0.216064809

cg06144905	PIPOX	TSS200	No	0.2490987	0.000019166	0.014404513
cg05915139	PITPNM2	5'UTR	Yes	0.162875845	9.78088E-05	0.029960461
cg05399718	PITPNM2	5'UTR	Yes	0.170809192	0.000283975	0.049559075
cg12673103	PITX1	Body	No	0.174320999	0.00012156	0.033175191
cg18606375	PITX1	Body	No	0.177928348	7.52092E-05	0.026383649
cg26509691	PITX1	3'UTR	Yes	0.207904558	0.000129814	0.034384125
cg22827250	PITX1	3'UTR	Yes	0.211753276	9.09583E-05	0.028939293
cg25291978	PLAGL1	TSS1500	No	0.150439789	8.34276E-05	0.027629657
cg09920804	PLAT	5'UTR	Yes	0.154587848	2.40714E-06	0.005565224
cg06539629	PLCE1	TSS1500	No	0.175483493	0.000220412	0.043536529
cg07079828	PLCL2	TSS1500	No	0.153178293	0.000152579	0.036727356
cg02861056	PLEK	1stExon	No	0.165032976	0.000229671	0.044425472
cg12063688	PLEKHG3	5'UTR	Yes	0.159268385	4.97E-05	0.021498364
cg11546777	PLXDC2	Body	Yes	0.230588346	7.18E-07	0.003593822
cg27206976	PLXNB2	5'UTR	Yes	0.230841686	0.000236536	0.045106458
cg27018309	PMM2	3'UTR	Yes	0.247036732	1.89021E-06	0.005244122
cg05234415	PPP1R14A	Body	Yes	0.181641568	8.75303E-05	0.028388101
cg03478610	PPP2R3A	5'UTR	Yes	0.159441329	0.000164536	0.038058268
cg12417775	PPP2R5A	Body	No	0.195353921	4.04645E-06	0.006705117
cg22731637	PRDM11	Body	Yes	0.164949294	2.78329E-05	0.016662398
cg13448468	PRDM11	Body	Yes	0.207640195	5.03001E-06	0.007400391
cg07857469	PRDM8	5'UTR	No	0.162584084	0.000170235	0.038658133
cg14197071	PRDM8	5'UTR	No	0.221163527	6.48765E-06	0.008377219
cg04858148	PRDM8	5'UTR	No	0.233250591	2.1848E-06	0.005439723
cg09595050	PRDM8	5'UTR	No	0.259540112	5.26074E-06	0.007556661
cg06440348	PRDM8	5'UTR	No	0.29379489	1.61179E-06	0.004952817
cg03311556	PRDM8	5'UTR	No	0.300789429	3.07E-06	0.005983571
cg01789499	PRDM8	5'UTR	No	0.326589547	9.44951E-06	0.009995321
cg26299084	PRDM8	5'UTR	No	0.156295522	0.000145153	0.035974349
cg02941135	PRDM8	Body	No	0.182734526	2.51149E-05	0.016150412
cg02458885	PRDM8	5'UTR	No	0.187636854	0.000116393	0.032533141
cg11388320	PRDM8	5'UTR	No	0.222607215	1.76374E-06	0.005158531
cg06373870	PRDM8	TSS1500	Yes	0.232077475	2.52884E-06	0.00579143
cg10880006	PRDM8	Body	No	0.238359919	4.88075E-05	0.021329118
cg03463411	PRDM8	TSS1500	No	0.246087543	4.64E-06	0.007084237
cg05522011	PRDM8	Body	No	0.262618697	5.72456E-06	0.007918354
cg00138041	PRDM8	TSS1500	Yes	0.272767012	4.91908E-07	0.003184364
cg05452645	PRDM8	TSS1500	Yes	0.276524793	2.24934E-07	0.002275168
cg02732915	PRDM8	5'UTR	No	0.279713634	4.55608E-06	0.007000105
cg22902505	PRDM8	5'UTR	No	0.289697499	1.15472E-06	0.00431253
cg10432662	PREX1	Body	No	0.235110013	9.72614E-05	0.029830424
cg14714222	PREX1	Body	No	0.234879581	3.99114E-06	0.006658916
cg08930413	PRKAG2	Body	No	0.176225812	2.85621E-05	0.016890698
cg03719152	PRKAR1B	Body	No	0.179005493	0.000121321	0.033165972
cg10460643	PRKCD	5'UTR	Yes	0.217907571	0.000151655	0.036686775

cg04286737	PRNP	TSS1500	No	0.189545095	2.9438E-07	0.002552234
cg14055655	PRR12	Body	Yes	0.190293041	3.00748E-05	0.017382927
cg10546065	PRR5	Body	Yes	0.189651954	7.9379E-06	0.009197958
cg06706550	PRR5	Body	Yes	0.254560543	1.42294E-07	0.001919034
cg14288424	PRRX2	Body	No	0.163563871	0.000070679	0.025608567
cg00702561	PRRX2	Body	Yes	0.183557424	3.17987E-06	0.006054368
cg17598552	PSORS1C1	5'UTR	No	0.188262967	0.000232916	0.044750077
cg10307345	PTPN5	Body	Yes	0.206884856	2.80467E-06	0.005869399
cg25719851	PTPN6	TSS1500	No	0.158247717	4.08E-05	0.019783454
cg13896328	PTPRU	3'UTR	No	0.154337302	3.11912E-05	0.017711949
cg11855524	PXMP2	Body	No	0.161693533	1.97E-05	0.014501627
cg02893348	RAD51L1	Body	Yes	0.160509941	3.47627E-05	0.018587775
cg03461781	RAGE	Body	Yes	0.246647983	0.00012153	0.033185838
cg24136700	RAI1	5'UTR	Yes	0.163208631	0.000244158	0.045893064
cg14986890	RARRES1	Body	Yes	0.163520346	4.39292E-05	0.02046847
cg08667600	RBMS3	Body	Yes	0.19471481	0.000115751	0.032484757
cg18210365	RBPM52	Body	No	0.170226692	2.64E-04	0.047742065
cg19400316	RERE	5'UTR	Yes	0.173496139	0.000126704	0.033968223
cg13455960	RGMA	1stExon	No	0.165948749	4.16431E-06	0.006853642
cg17400113	RGMA	1stExon	No	0.183412046	6.62105E-06	0.008481789
cg00179196	RHBDF1	5'UTR	Yes	0.157621468	2.66477E-05	0.016418492
cg07405083	RHBDF1	5'UTR	No	0.183121307	3.11228E-06	0.005972521
cg03302951	RHOF	Body	No	0.176661583	1.86204E-05	0.014281897
cg09973105	RNF175	TSS200	No	0.188352491	0.000220992	0.043527148
cg06100161	RORA	Body	Yes	0.172835096	0.000289601	0.049966161
cg06191571	RPL21P44	TSS1500	No	0.182887799	0.000148789	0.036392355
cg09516200	RPTOR	Body	Yes	0.157030501	0.000236546	0.045090615
cg11499091	RPTOR	Body	Yes	0.151386831	0.000193351	0.040921731
cg12132508	RRP15	Body	Yes	0.191174039	1.89735E-05	0.014371046
cg24249648	RSPH3	Body	No	0.157719153	5.01339E-05	0.021578565
cg01694400	RSPO3	Body	Yes	0.160297341	4.33742E-05	0.020445326
cg22791545	RTN4RL1	Body	No	0.231583285	4.61281E-05	0.020833266
cg06875832	RUFY1	Body	No	0.193709072	0.000136881	0.03506987
cg08254842	RUNDC2C	Body	No	0.256392399	7.10799E-06	0.008781205
cg04194479	RUNDC2C	Body	No	0.256934975	8.72613E-06	0.009585161
cg05973398	RUNX1	Body	Yes	0.220842646	0.000072414	0.025908509
cg13030790	RUNX1	5'UTR	No	0.331185291	2.34814E-05	0.015638525
cg04915566	RUNX1	5'UTR	No	-0.2288687	4.34273E-06	0.006867914
cg01519261	RUNX1	5'UTR	No	0.201522345	5.8293E-06	0.007883557
cg14121282	RXRA	Body	Yes	0.15694891	0.000184603	0.040101616
cg24164254	RXRA	3'UTR	No	0.197179	0.000153352	0.036840407
cg14344989	RXRA	3'UTR	No	0.213990784	0.000157646	0.037354225
cg13305246	SAMD13	5'UTR	No	0.176540557	7.40569E-05	0.026168485
cg05374982	SDC3	Body	Yes	0.189928127	4.55647E-06	0.006978616

cg14836522	SDC3	Body	Yes	0.214564978	4.65895E-05	0.020944211
cg00711291	SDK2	Body	Yes	0.230780915	6.92586E-05	0.025282634
cg13699963	SDK2	Body	Yes	0.256932764	6.43E-06	0.008347332
cg27157619	SEMA7A	Body	Yes	0.212819393	6.73483E-05	0.024903578
cg01422249	SEPT8	Body	Yes	0.168579416	2.6624E-06	0.005875588
cg03909356	SEPT9	5'UTR	Yes	-	4.00335E-06	0.006656422
cg20054157	SFTA1P	TSS1500	Yes	0.172462743	-	0.004161572
cg09404376	SGK1	TSS200	No	0.271186725	1.04572E-06	0.037668164
cg01881549	SH3BP4	5'UTR	Yes	0.152350781	0.000159901	0.046073159
cg06888746	SH3PXD2A	Body	Yes	0.150156987	0.000247109	0.021565375
cg07168060	SH3PXD2A	Body	Yes	0.198806125	5.03254E-05	0.004632633
cg19700035	SH3RF3	Body	Yes	0.190671065	1.3931E-06	0.043958224
cg01477861	SHROOM3	Body	Yes	0.205285805	0.000225626	0.042354743
cg06216640	SHROOM3	Body	No	0.154205043	0.000209544	0.006566699
cg15537788	SIPA1L3	3'UTR	Yes	0.247330769	3.80078E-06	0.015258072
cg24579224	SKI	Body	No	0.216590438	2.24701E-05	0.016050912
cg06736312	SKI	3'UTR	No	0.167823623	2.45634E-05	0.04204682
cg07425568	SKI	Body	No	0.201117157	0.000205769	0.003184514
cg13971030	SLC1A2	Body	No	0.215133064	5.50963E-07	0.013538708
cg16547579	SLC23A2	5'UTR	Yes	0.203638033	1.69265E-05	0.03191404
cg14565651	SLC2A5	Body	Yes	-	0.000111746	0.014573788
cg27391816	SLC35E2	5'UTR	Yes	0.159481211	1.99315E-05	0.034114445
cg27406472	SLC38A10	Body	No	0.169415457	0.000128304	0.045913142
cg14621907	SLC38A10	Body	No	-0.16868208	2.45E-04	0.032250375
cg03879320	SLC7A5	Body	Yes	0.156040711	0.000113654	0.043361901
cg07405121	SLC9A3R2	Body	No	-	0.000218188	0.035989349
cg16498391	SLMO1	Body	No	0.228942478	0.00014514	0.033989657
cg23480341	SLPI	TSS1500	No	0.158470344	0.000127484	0.013015904
cg08593157	SMCR5	TSS1500	No	0.186810455	1.60316E-05	0.04650637
cg19628299	SMOC2	TSS1500	No	0.206378594	0.000250486	0.007605398
cg11668917	SNORA80B	Body	No	0.180518505	5.31033E-06	0.012524365
cg03014241	SOCS1	3'UTR	No	0.189141089	1.50E-05	0.004589049
cg17217443	SOCS7	Body	No	0.17943497	1.35163E-06	0.007388636
cg27111150	SORBS1	Body	No	0.163820037	4.99158E-06	0.012378832
cg11606261	SP1	5'UTR	No	0.16450708	0.000014482	0.027093738
cg02882004	SPATS2L	Body	No	-	7.90749E-05	0.04804872
cg00084432	SPG20	TSS200	Yes	0.176236122	0.0002677	0.023885214
cg21056788	SPG20	TSS200	No	0.156190605	6.21345E-05	0.027631424
cg15754752	SPG20	TSS200	Yes	0.207430423	8.32052E-05	0.038868849
cg05635923	SPG20	TSS200	Yes	0.223072287	0.000174525	0.010810267
cg26254045	SPRED3	Body	No	0.270767348	1.11E-05	0.011531217
cg23874437	SPRED3	Body	No	0.221101522	1.26E-05	0.008447601
cg13305415	SPRY4	Body	No	0.279688656	6.57696E-06	0.023060989
cg14619259	SPRY4	TSS1500;TSS1500	Yes	0.164986939	5.79954E-05	0.021123812
cg24023487	SPTLC3	TSS1500	No	0.286925793	4.72935E-05	0.002566198
			No	0.241575481	2.90705E-07	

cg21313830	SQRDL	3'UTR	No	-	0.159369509	0.000240822	0.045459539
cg17342283	SRGN	1stExon	No	-0.15935213	6.3469E-06	0.008328374	
cg22110158	ST14	Body	Yes	-	0.188857243	5.92058E-07	0.00322979
cg02767093	STK24	Body	No	-0.17595973	2.55467E-05	0.01617112	
cg07340007	STK24	3'UTR	Yes	0.164979857	6.07383E-06	0.008101419	
cg04209885	STK32C	Body	No	0.196084877	0.000254827	0.046917507	
cg11787522	STRA6	5'UTR	No	0.209838209	0.000283715	0.049531418	
cg18280125	STX18	Body	Yes	0.156013207	2.42571E-05	0.015936569	
cg02770724	STX1A	Body	No	-	0.201197801	0.000042503	0.020391021
cg10236239	SULT1C4	5'UTR	Yes	0.174613984	8.33789E-05	0.027632404	
cg25743622	SUSD4	Body	Yes	-	0.163405054	5.89437E-06	0.007927393
cg18818498	SVIL	5'UTR	Yes	0.191990857	2.69319E-05	0.016489006	
cg08010619	SWAP70	Body	Yes	0.210880536	3.76154E-06	0.006545786	
cg19987354	SYNE2	5'UTR	Yes	0.162114802	2.78549E-06	0.005879951	
cg11404751	TACC2	Body	No	0.176639895	0.000265995	0.047866454	
cg23304023	TACC2	Body	Yes	-	0.200187901	0.000235969	0.045015958
cg13257421	TAF1B	Body	No	0.150300867	0.000182978	0.039927169	
cg15437231	TBC1D15	Body	Yes	-	0.216782598	2.22817E-06	0.005436193
cg09675820	TBC1D16	5'UTR	No	0.170835055	0.000103561	0.030733565	
cg03970915	TBC1D22A	Body	No	-	0.208860329	5.92314E-05	0.02334219
cg02494945	TBX4	Body	Yes	0.195959895	1.95105E-06	0.005382153	
cg07876611	TBX4	3'UTR	No	0.196854697	5.96502E-05	0.023412185	
cg17975443	TBX4	Body	Yes	0.199177641	9.36103E-05	0.029246413	
cg03222323	TBX4	Body	Yes	0.202700299	3.22772E-06	0.006050576	
cg22110896	TBX4	TSS1500	No	0.205171211	1.18829E-05	0.011224263	
cg07265743	TBX4	Body	Yes	0.205746683	1.49308E-07	0.001907656	
cg03866607	TBX4	TSS1500	No	0.223872966	3.42622E-07	0.002599173	
cg00158789	TBX4	Body	No	0.23381769	1.43311E-06	0.004638602	
cg14011845	TBX4	TSS200	No	0.253545957	2.83493E-06	0.005832166	
cg07389611	TBX4	Body	Yes	0.2569154	6.77877E-06	0.008570769	
cg06365535	TBX4	Body	No	0.295436613	1.19E-07	0.001863844	
cg24274579	TBX4	Body	No	0.303045003	1.35748E-06	0.004576905	
cg18536148	TBX4	5'UTR	No	0.388217014	2.59721E-06	0.005864998	
cg07847030	TCF7L1	Body	No	0.211661156	0.000233851	0.044805555	
cg17484733	TCF7L1	Body	No	0.27368156	2.8546E-06	0.005823286	
cg03683087	TCF7L2	Body	Yes	-	0.201319839	8.27464E-05	0.027592284
cg01093854	TET1	Body	Yes	0.186828835	1.55983E-06	0.004854581	
cg19127638	TET1	5'UTR	No	0.278012763	5.30602E-07	0.003180418	
cg00857921	TGFBR3	Body	Yes	-	0.199338484	0.00015306	0.036806523
cg16805094	THBS2	Body	No	0.161346955	0.000133822	0.034707418	
cg04616566	THSD4	Body	No	0.187956789	1.19223E-05	0.011217833	
cg14837825	TMEM127	3'UTR	Yes	-	0.219110656	5.01752E-05	0.02157721
cg01409343	TMEM49	Body	No	-	0.168562348	2.17121E-06	0.005519093
cg01414407	TMEM51	5'UTR	Yes	-	0.216291499	3.69467E-06	0.006522941
cg20240791	TMEM63A	5'UTR	Yes	0.17635256	3.64151E-05	0.018848576	

cg10054641	TMEM71	TSS200	No	-	0.166475465	0.000138409	0.035238295
cg00153306	TMIE	TSS1500	No	-	0.192457822	6.43181E-06	0.008327255
cg15844374	TMPRSS5	TSS200	No	-	0.151474055	7.62594E-05	0.026636602
cg25460340	TMPRSS5	TSS200	No	-	0.164242721	0.000221752	0.04357082
cg07086380	TNFAIP8	Body	No	-	0.180813678	0.000182101	0.039879241
cg07094298	TNIP2	Body	No	-	0.182947214	2.00E-05	0.014551976
cg00741986	TNIP2	Body	Yes	-	0.150434556	0.000177645	0.039239583
cg18314765	TNP1	1stExon	No	-	0.262231418	1.68E-04	0.038466523
cg03323067	TNS1	5'UTR	Yes	-	0.247167413	4.57924E-05	0.020875838
cg23895495	TNS3	5'UTR	No	-	0.16982464	8.14764E-05	0.027451601
cg27275374	TNS3	5'UTR	No	-	0.234149235	1.63628E-06	0.004934357
cg23462632	TNXB	Body	No	-	0.169189021	1.13992E-05	0.01095932
cg13798746	TNXB	Body	No	-	0.177775602	7.14347E-05	0.025728798
cg21042276	TNXB	Body	No	-	0.179349282	7.35593E-05	0.026049526
cg07518714	TNXB	Body	No	-	0.189381474	6.92347E-05	0.025292926
cg02151997	TNXB	Body	No	-	0.193249673	6.03252E-05	0.023581821
cg20407792	TNXB	Body	No	-	0.215900678	4.33067E-05	0.020433345
cg15745284	TNXB	Body	No	-	0.259837517	5.49235E-05	0.022314649
cg14889653	TOLLIP	3'UTR	No	-	0.1639842	0.000135567	0.034806697
cg25226711	TOLLIP	3'UTR	No	-	0.170963025	0.000119095	0.032872017
cg03376089	TOM1L2	Body	Yes	-	0.153764439	5.09853E-06	0.00741137
cg24388061	TRAPPC9	Body	No	-	0.189795403	0.000225008	0.043890793
cg08504029	TRAPPC9	Body	Yes	-	0.212068498	6.37553E-05	0.024201706
cg20946943	TRAPPC9	Body	No	-	0.221845701	6.13915E-05	0.023768971
cg01505556	TRIM26	5'UTR	No	-	0.182586767	0.000151724	0.036666842
cg14741870	TRIM26	5'UTR	No	-	0.166737229	0.000212921	0.04280564
cg01591152	TRIM29	Body	No	-	0.189185668	4.55092E-05	0.020824948
cg21465150	TRPV3	Body	No	-	0.446652038	1.96E-04	0.041057162
cg07371504	TRPV3	Body	No	-	0.434822612	0.000217848	0.043347392
cg12765716	TRPV4	5'UTR	No	-	0.166892127	0.000277597	0.049009683
cg26358374	TRPV4	5'UTR	No	-	0.19618331	9.66858E-05	0.029729021
cg04610274	TSKU	5'UTR	Yes	-	0.153996911	1.94617E-05	0.01446995
cg12620005	TTC39A	Body	Yes	-	0.207847922	2.00562E-05	0.014555327
cg22788953	TTYH3	Body	Yes	-	0.153390179	2.59E-04	0.047256175
cg10890644	TUBAL3	TSS200	No	-	0.321957307	1.10E-04	0.031613525
cg19851816	TUBGCP6	Body	Yes	-	0.233814922	1.39289E-05	0.012141238
cg16096836	TXN2	3'UTR	No	-	0.187188351	0.000270068	0.048295036
cg24509225	UBAC2	Body	No	-	0.27571593	6.15703E-06	0.008145269
cg05249460	UBE2G1	3'UTR	Yes	-	0.167218664	2.68E-05	0.016440889
cg07507493	UCKL1	Body	No	-	0.196875416	1.77578E-05	0.013838863
cg14440024	UCKL1	Body	No	-	0.223136159	3.66135E-05	0.018870808
cg01637548	UCKL1	Body	No	-	0.250435666	4.18667E-06	0.006821064
cg03357727	ULK4	Body	Yes	-	0.252848028	0.000004422	0.006881195
cg12407791	UNC13D	Body	No	-	0.15379401	1.08636E-05	0.010655381
cg03622431	UOX	TSS1500	No	-	0.2409336	2.10898E-06	0.00553478

cg27049539	USP40	Body	Yes	- 0.236175666	1.95326E-05	0.014500509
cg10098221	USP46	TSS1500	Yes	0.180656243	7.14475E-05	0.025714303
cg00223767	UVRAG	Body	Yes	0.186939198	2.70075E-05	0.016493692
cg05704955	VAC14	Body	Yes	0.184238778	1.77402E-05	0.013847412
cg07671622	VAC14	Body	Yes	0.197172448	1.69387E-05	0.013526197
cg08201451	VAC14	Body	Yes	0.240793682	1.38068E-05	0.012099909
cg01485157	VASN	Body	No	0.254490092	7.65941E-05	0.026715051
cg01851968	VASN	Body	No	0.291676594	9.96969E-05	0.03017708
cg06710195	VAV3	Body	Yes	- 0.178143195	3.57886E-05	0.018744122
cg17599241	VCAN	Body	Yes	0.172333803	0.00019365	0.040913528
cg04322486	VOPP1	Body	Yes	- 0.190200619	9.14027E-05	0.028891335
cg18224970	VPS13B	Body	Yes	0.167565685	1.40E-04	0.035333848
cg11599718	VPS37B	Body	Yes	0.155219491	7.69545E-06	0.009068531
cg17165848	WIPF1	5'UTR	No	-0.16568803	0.00016713	0.038402119
cg10716612	WWC2	Body	No	0.16573438	4.85597E-07	0.003185991
cg18484958	WWTR1	1stExon	Yes	- 0.168572835	3.14785E-05	0.017771143
cg09612099	YAP1	Body	Yes	- 0.187689029	2.19736E-06	0.005443087
cg12026858	ZBTB16	Body	No	0.186094359	6.13E-05	0.02378354
cg07557903	ZC3H3	Body	No	0.197382998	2.54274E-05	0.016137639
cg04920385	ZCCHC24	Body	Yes	0.187817856	7.77883E-07	0.003776715
cg21926603	ZHX2	5'UTR	Yes	0.160209993	0.00028366	0.049539743
cg04716021	ZMIZ1	Body	No	0.158584116	1.21936E-06	0.004321254
cg10812439	ZMIZ1	5'UTR	Yes	0.175457044	4.32989E-05	0.020449552
cg04007726	ZMIZ1	Body	No	0.188587685	2.08159E-05	0.014775392
cg23829949	ZNF238	1stExon	No	-0.19759489	1.50074E-05	0.012540886
cg17199018	ZNF395	Body	No	- 0.179960568	0.000289553	0.049993483
cg10729426	ZNF549	TSS200	No	0.233790735	3.41491E-09	0.000236854
cg06458239	ZNF549	TSS200	No	0.283155463	5.73457E-08	0.001210523
cg24214260	ZNF551	TSS200	No	0.166889935	1.06406E-05	0.010586309
cg06043820	ZNF592	Body	Yes	- 0.175506114	2.54906E-05	0.016156625
cg24078554	ZNF697	5'UTR	Yes	0.183230346	8.03858E-06	0.00929244
cg22866579	ZNF827	Body	Yes	0.177551531	0.000128825	0.03419686
cg13780718	ZSWIM1	3'UTR	No	- 0.164352749	7.07889E-05	0.025591093