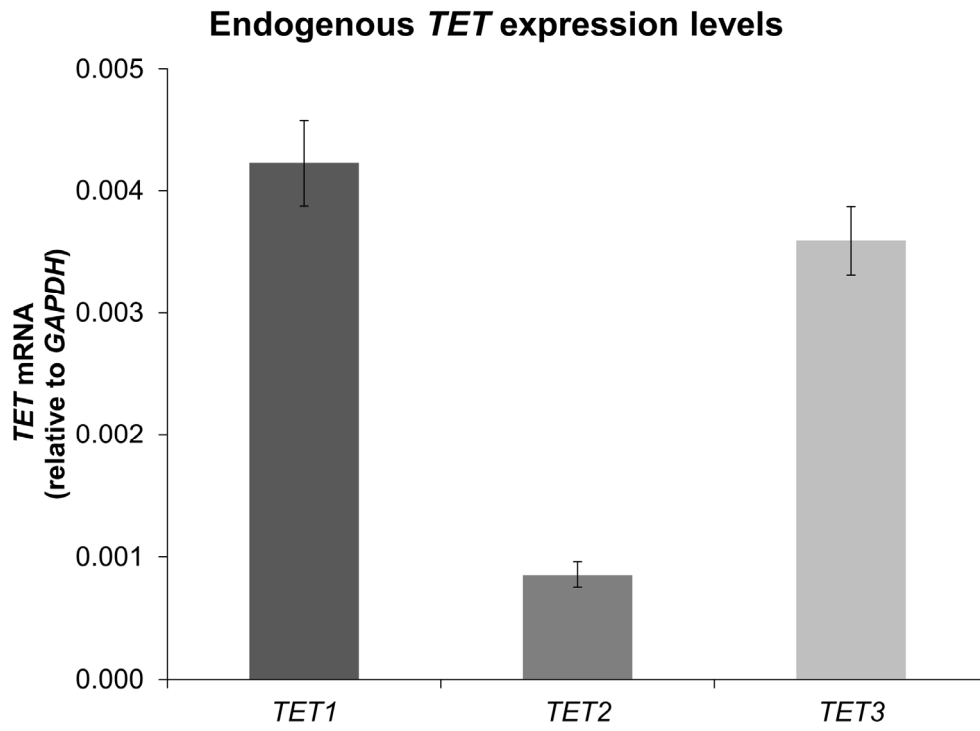


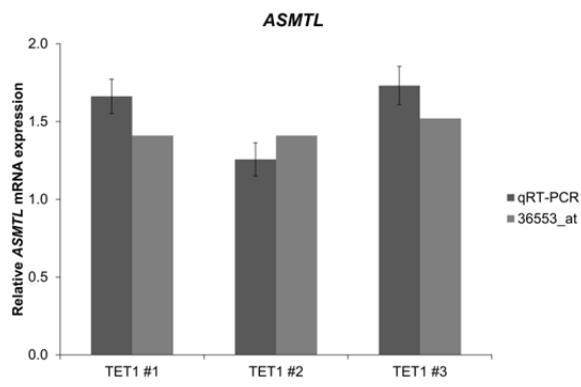
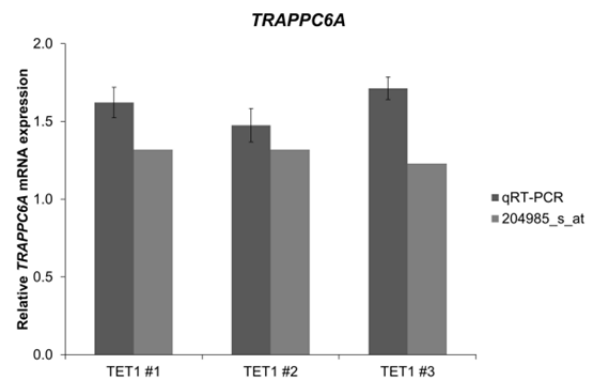
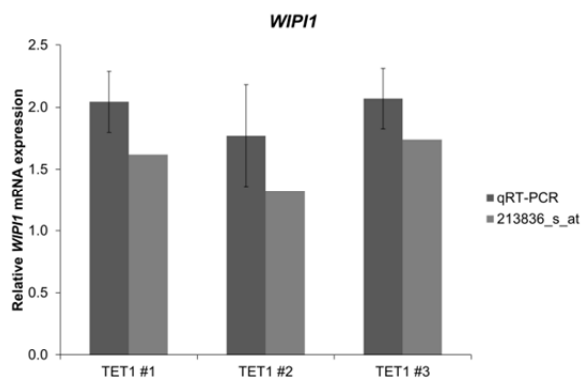
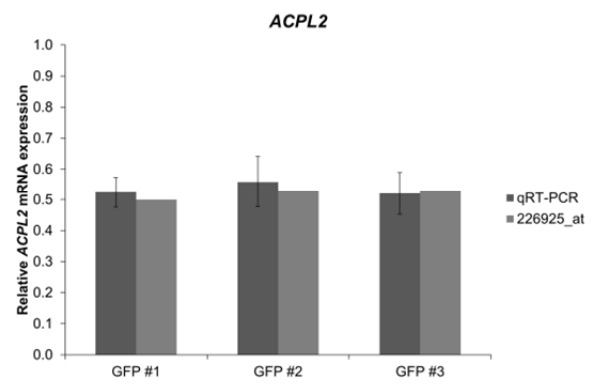
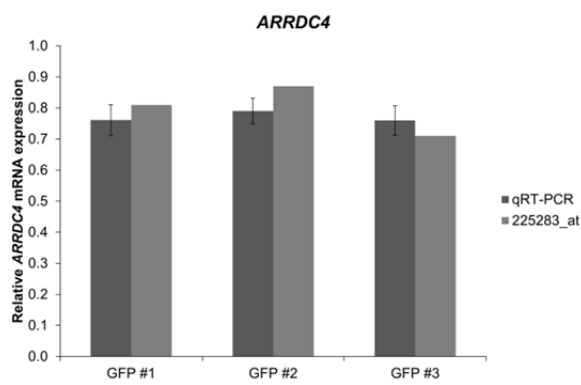
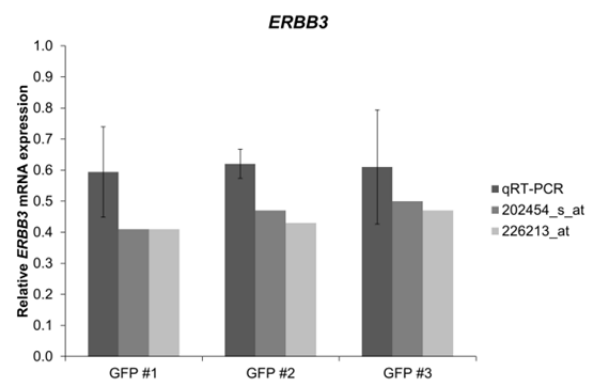
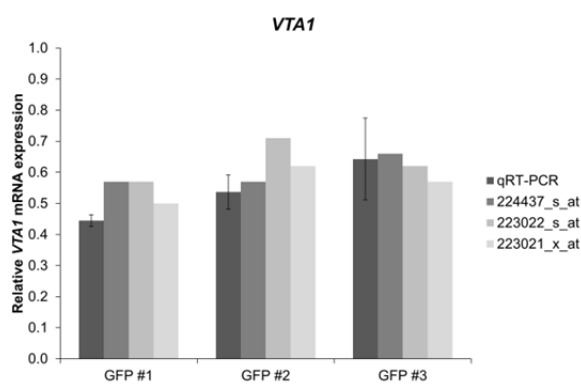
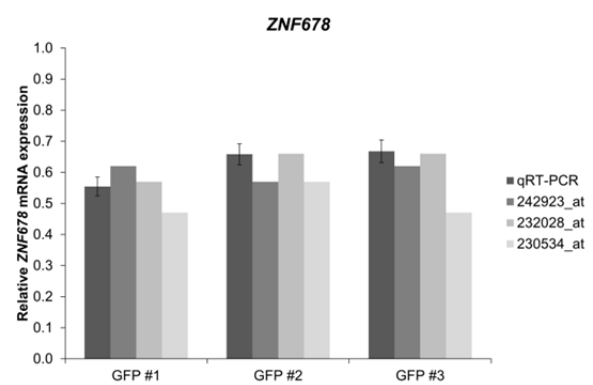
# Supplementary Data

## **Altering TET dioxygenase levels within physiological range affects DNA methylation dynamics of HEK293 cells**

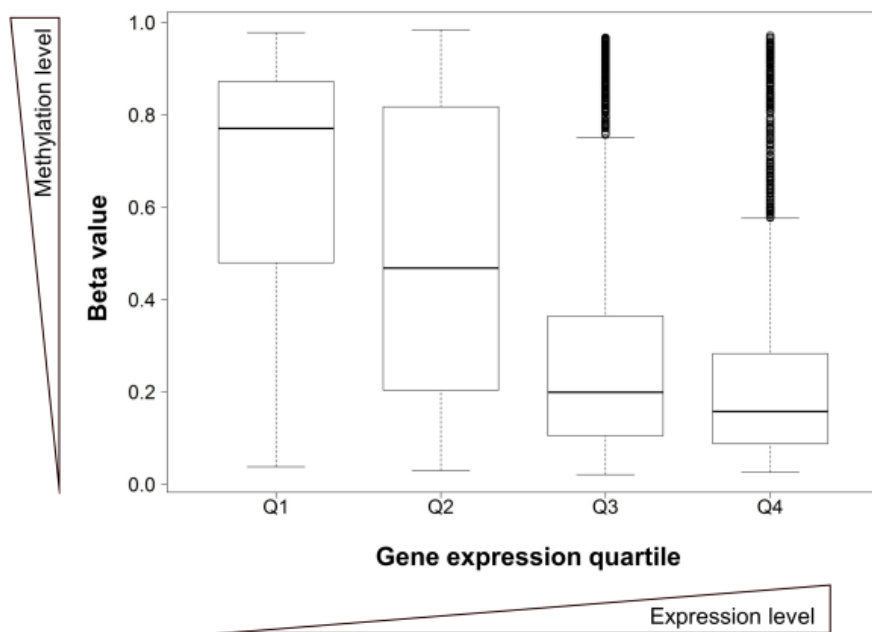
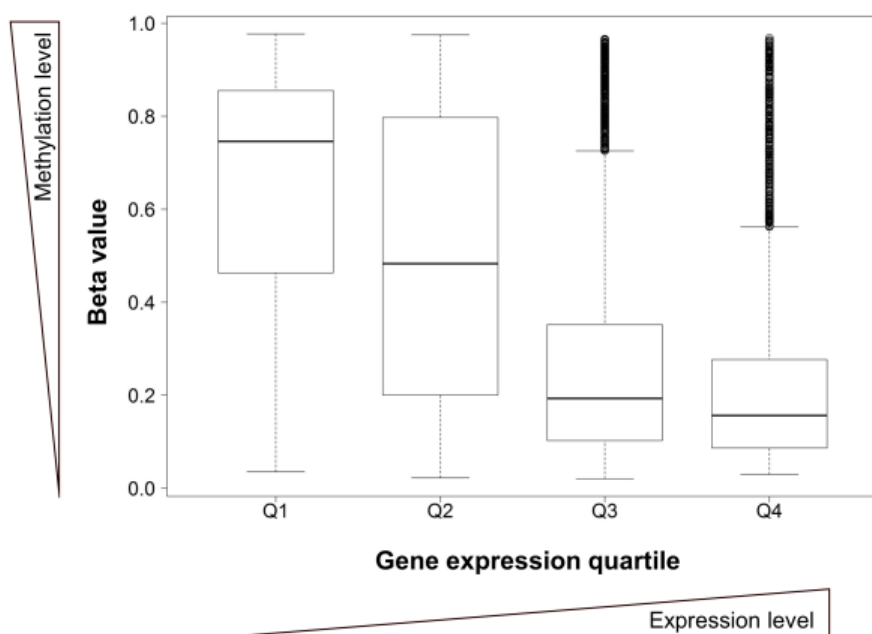
Christian Grosser, Nicholas Wagner, Katrin Grothaus, Bernhard Horsthemke



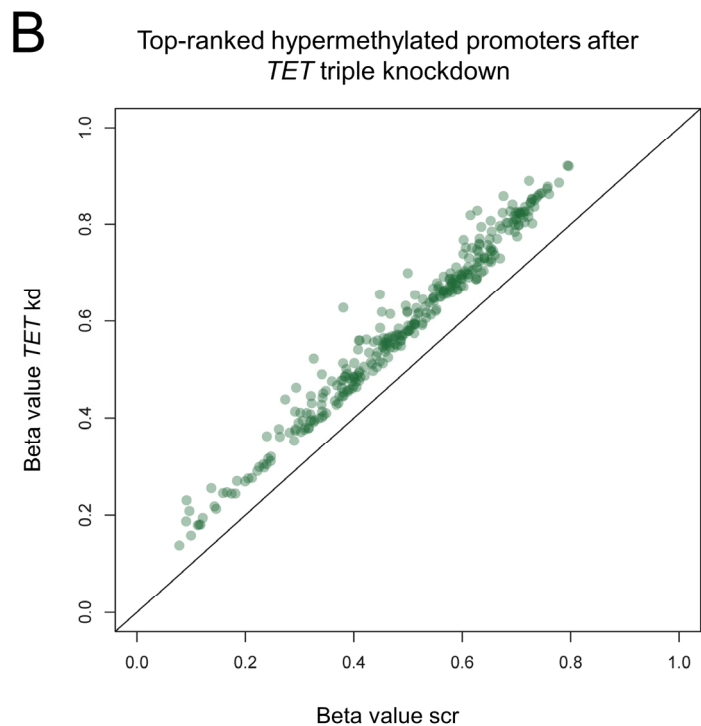
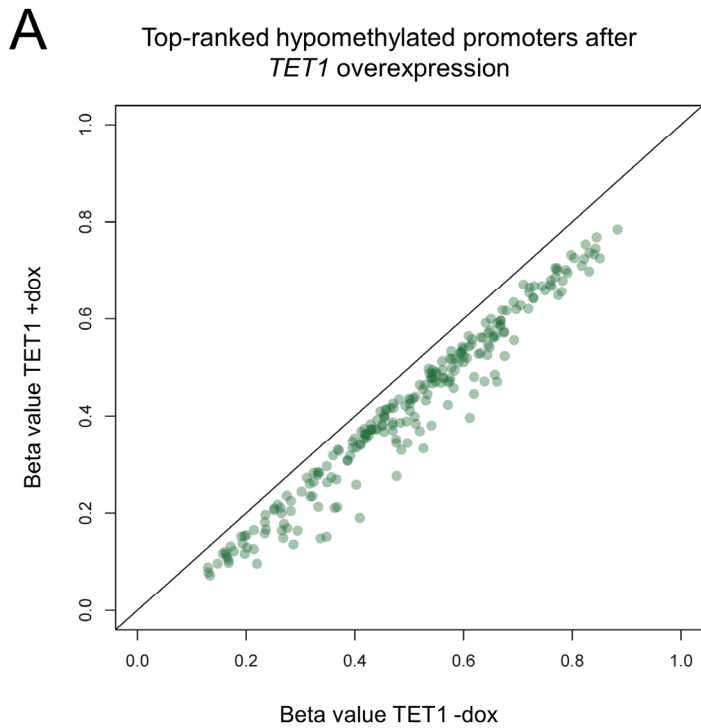
**Figure S1.** HEK293 cells show low endogenous *TET* expression levels. Quantitative real-time RT-PCR demonstrates low basal *TET* transcript levels in T-REx-293-GFP cell lines treated with scrambled control siRNAs. Measurements were performed in triplicates for the T-REx-293-GFP cell lines #1-3 and presented as mean  $\pm$  SD.

**A****B****C****D****E****F****G****H**

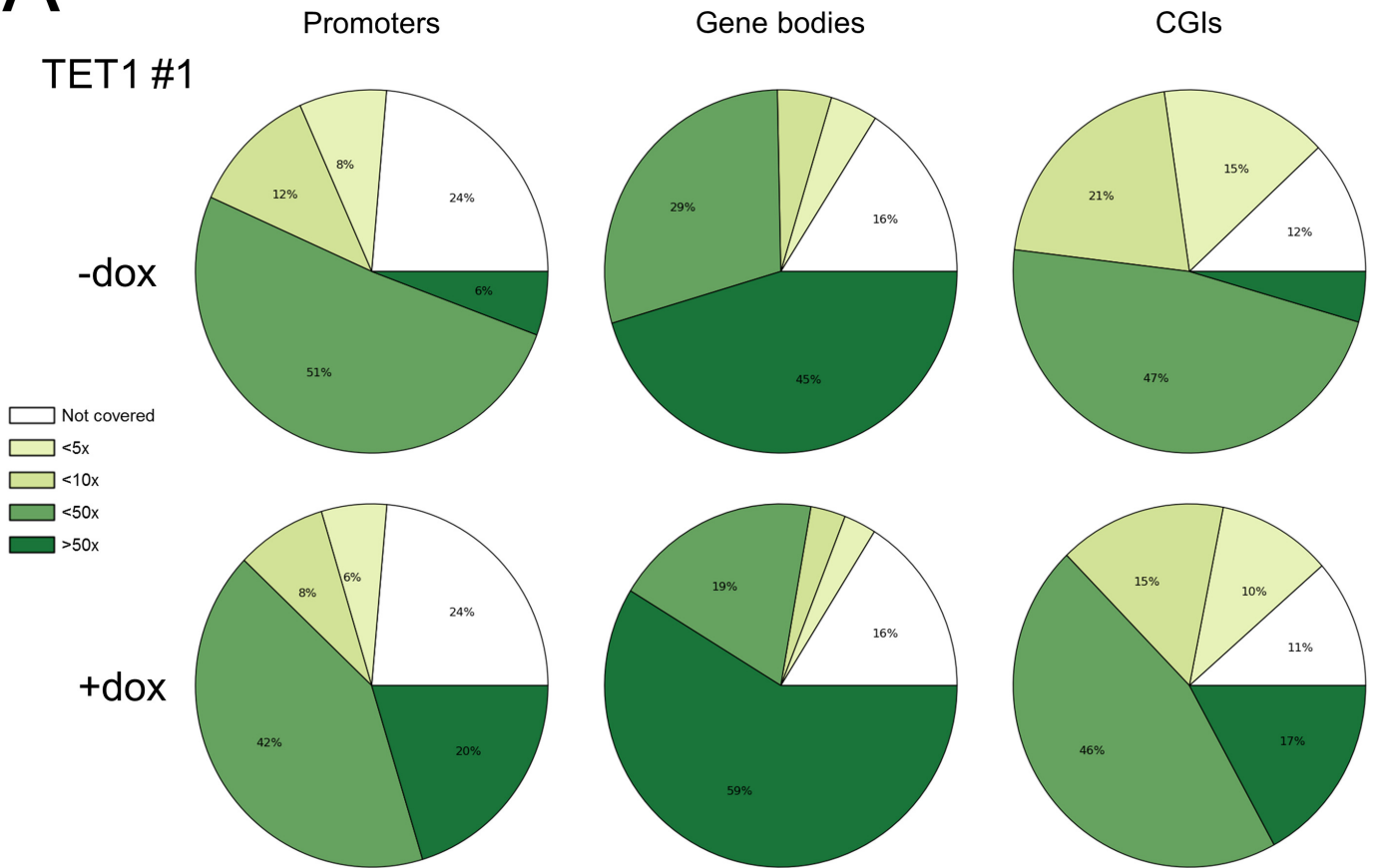
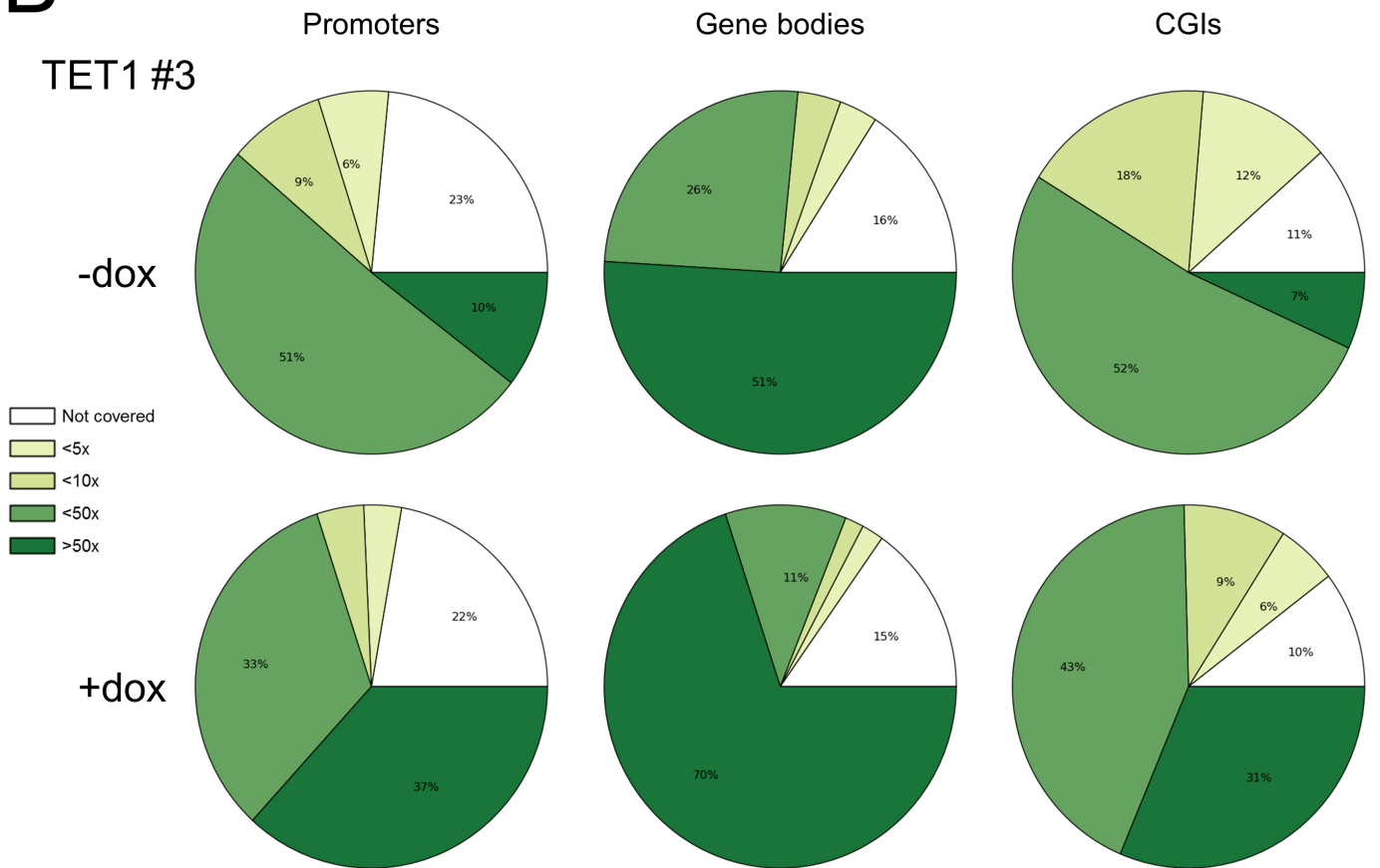
**Figure S2.** Exemplary verification of microarray gene expression data by quantitative real-time RT-PCR. Expression of upregulated genes upon *TET1* overexpression (**A-C**) and downregulated genes upon *TET* triple knockdown (**D-H**) normalized to *GAPDH* expression and relative to uninduced or scrambled controls, respectively. Microarray expression data is shown by Affymetrix probe set IDs. Quantitative real-time RT-PCR measurements (qRT-PCR) were performed in quadruplicates and presented as mean  $\pm$  SD.

**A****Promoters (TET1 -dox)****B****Promoters (scr)**

**Figure S3.** Promoter methylation levels and gene expression intensities are negatively correlated. Microarray gene expression data of the control cell lines from the *TET1* overexpression (**A**) and *TET* triple knockdown studies (**B**) were stratified into quartiles of expression and compared to respective promoter methylation levels determined by Infinium HumanMethylation450 BeadChips. Boxes mark the interquartile range with whiskers indicating the 1.5x interquartile range. Outliers beyond the whiskers are plotted. Q1 – Q4: gene expression quartiles ranging from lowest to highest expression levels.



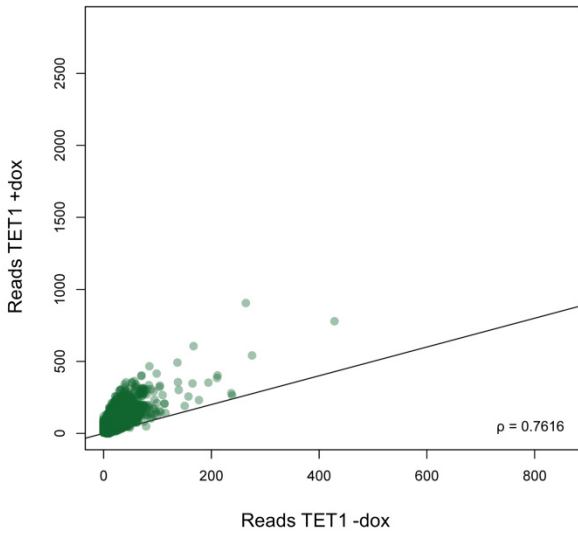
**Figure S4.** Preservation of methylation patterns among top-ranked differentially methylated promoters. After filtering for identical gene symbols between the methylation and gene expression data sets, the top-ranked differentially methylated gene promoters that showed a methylation decrease after *TET1* overexpression (**A**) or a methylation increase upon *TET* knockdown (**B**) had preserved their distribution patterns. Shown are comparisons of mean methylation beta values after induced overexpression of *TET1* (*TET1* +dox) and triple knockdown of the TET enzymes (*TET* kd) compared to the respective uninduced (*TET1* -dox) or scrambled controls (scr). The black line illustrates a perfect positive correlation. *TET1* overexpression:  $n = 234$ , *TET* triple knockdown:  $n = 322$

**A****B**

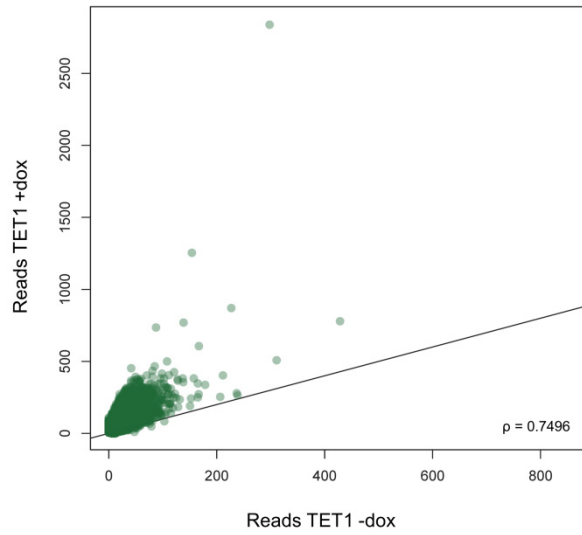
**Figure S5.** *TET1* overexpression leads to a strong increase of 5hmC-dense promoters, gene bodies and CGIs. Shown are coverage pie charts of the 5hmC DNA modification as determined by RRHP for the TET1 #1 (**A**) and TET1 #3 (**B**) T-REx-293-TET1 cell lines in uninduced (-dox) and induced state (+dox). Annotations were obtained from RefSeq and CpG island lists downloaded from the UCSC website. Promoters are defined as the regions spanning from 1 kb upstream to 1 kb downstream of transcription start sites.



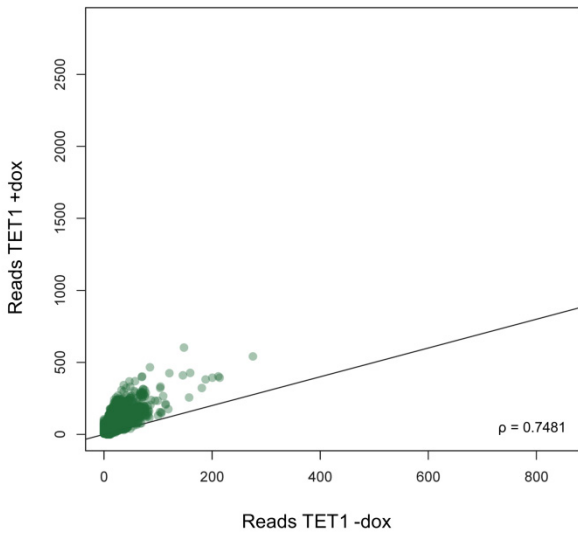
Promoter sites ( $n = 78,636$ )



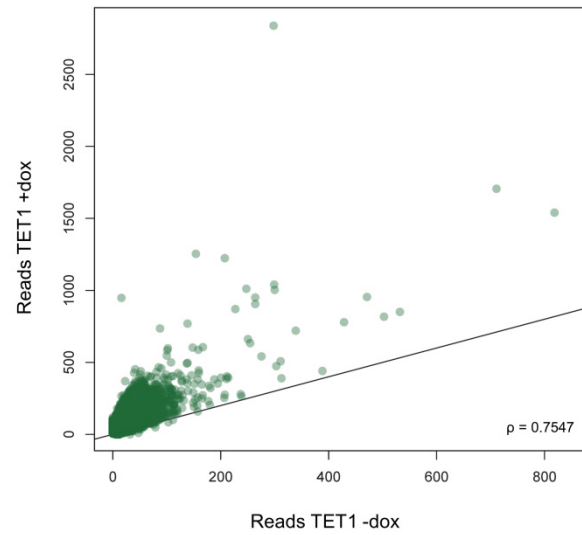
Gene body sites ( $n = 517,536$ )



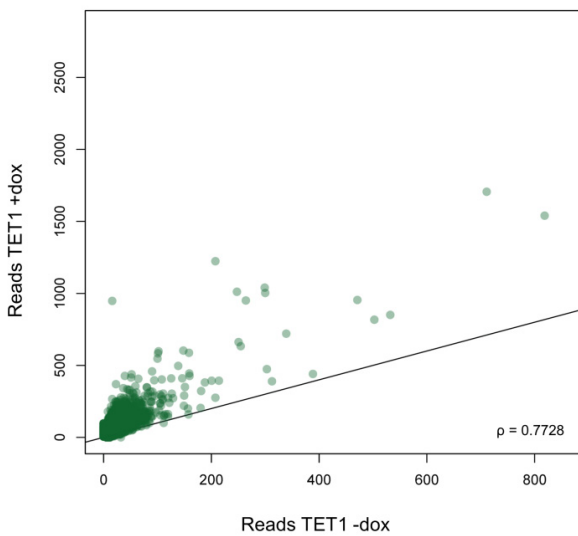
CGI sites ( $n = 64,373$ )



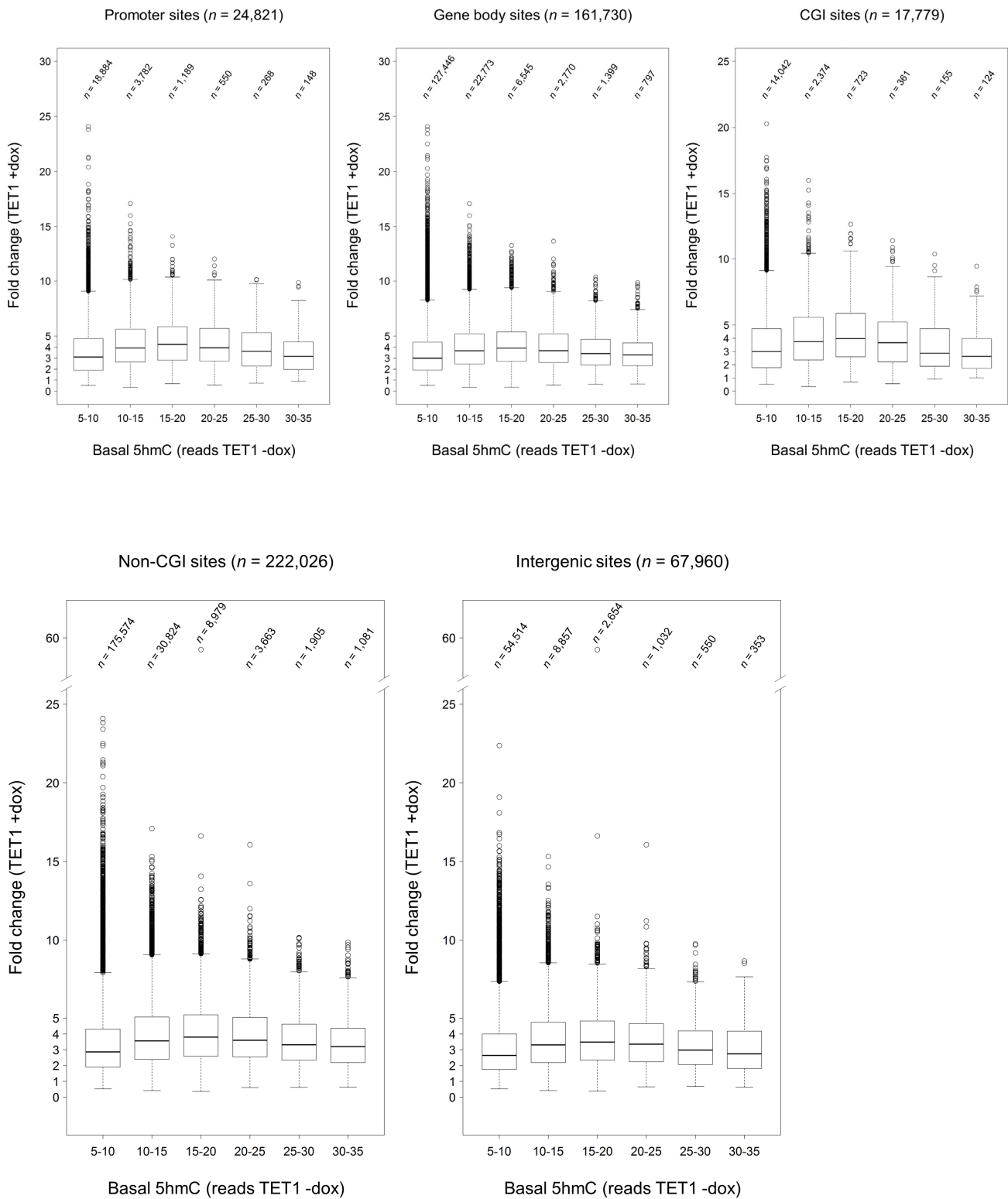
Non-CGI sites ( $n = 713,959$ )



Intergenic sites ( $n = 230,055$ )



**Figure S6.** *TET1* overexpression leads to increased 5hmC levels in all genomic regions analyzed. Two T-REx-293-TET1 cell lines in uninduced and induced state were subjected to RRHP. Shown are averaged read counts reflecting 5hmC abundance in *TET1*-overexpressing (TET1 +dox) and control cells (TET1 -dox). CpG sites with less than five reads were considered zero. The black line illustrates a perfect positive correlation.  $\rho$ = Pearson correlation coefficient



**Figure S7.** TET1-mediated 5mC oxidation is associated with endogenous 5hmC levels in various genomic regions. Endogenous 5hmC read levels in control cells (reads TET1 -dox) are compared to the fold changes of 5hmC that occurred after *TET1* overexpression (TET1 +dox). Sites with basal 5hmC levels corresponding to 15-20 reads showed the highest increase. Only CpG sites with five or more reads in *TET1*-overexpressing and control cells were considered. Boxes mark the interquartile range with whiskers indicating the 1.5x interquartile range. Outliers beyond the whiskers are plotted.

**Supplementary Table S1. List of the 1,000 top-ranked, differentially methylated promoters after induced overexpression of *TET1*.**This table is related to **Fig. 2A**. "NA" : No gene symbol provided.

gene_symbol	chromosome	start	end	beta.TET1+Dox	beta.TET1-Dox	difference	num.sites	rank
IFI44	chr1	79113981	79115980	0.190210932	0.409157366	-0.218946433	1	1
TRGV3	chr7	38398264	38400263	0.155041443	0.367268093	-0.21222665	2	2
NA	chr1	78693783	78695782	0.295133638	0.544241361	-0.249107723	2	3
NA	chr16	21636563	21638562	0.386915096	0.641065122	-0.254150026	1	4
PRC1	chr15	91538360	91540359	0.212478088	0.36766959	-0.155191503	1	5
ZNF726	chr19	24096178	24098177	0.141953305	0.327020175	-0.18506687	1	6
CLEC5A	chr7	141646308	141648307	0.332514009	0.526198143	-0.193684134	1	7
PRKRIRP7	chr8	79674167	79676166	0.339430918	0.145788105	0.193642813	1	8
GLIS2	chr16	4363262	4365261	0.136088356	0.28710581	-0.151017454	4	9
KRTAP19-6	chr21	31913684	31915683	0.335823175	0.488154289	-0.152331113	2	10
RNA5SP42	chr1	34577050	34579049	0.391115907	0.588939481	-0.197823575	1	11
SPRR2G	chr1	153122846	153124845	0.148150654	0.336810049	-0.188659395	2	12
NA	chr3	110611824	110613823	0.361018596	0.539879881	-0.178861285	1	13
TRGV10	chr7	38339424	38341423	0.331477967	0.487728367	-0.1562504	1	14
TRBVB	chr7	142417712	142419711	0.502936609	0.329692569	0.17324404	1	15
NA	chr2	64870246	64872245	0.182429882	0.313444564	-0.131014682	1	16
LINC00504	chr4	14889294	14891293	0.320456569	0.467990765	-0.147534196	1	17
NA	chr5	2183324	2185323	0.239658326	0.36770856	-0.128050234	1	18
MIR550A1	chr7	30327910	30329909	0.287333918	0.424083114	-0.136749196	1	19
NA	chr5	22141078	22143077	0.471654419	0.638563701	-0.166909282	2	20
PMCHL1	chr5	22140961	22142960	0.471654419	0.638563701	-0.166909282	2	21
ZNF510	chr9	99539912	99541911	0.096527523	0.220102259	-0.123574736	4	22
MIR320D2	chrX	140007885	140009884	0.217399129	0.348950725	-0.131551596	3	23
NA	chr16	24681884	24683883	0.159635977	0.282687984	-0.123052006	2	24
MIR509-2	chrX	146339869	146341868	0.128498339	0.25125834	-0.122760001	1	25
C1orf68	chr1	152690498	152692497	0.329523184	0.48564099	-0.156117807	2	26
NA	chr2	4703306	4705305	0.278170485	0.405671808	-0.127501324	4	27
GFRAL	chr6	55190767	55192766	0.515688989	0.680968349	-0.165279361	2	28
NA	chr5	157600904	157602903	0.45661821	0.645226633	-0.188608423	1	29
CASP5	chr11	104893396	104895395	0.344211792	0.496909229	-0.152697437	2	30
NA	chr1	147760558	147762557	0.627048846	0.447501728	0.179547118	1	31
NA	chr15	96589660	96591659	0.392306614	0.568765589	-0.176458975	1	32
TSPY13P	chrY	9745249	9747248	0.396539801	0.281606303	0.114933498	1	33
BBS2	chr16	56553696	56555695	0.213021516	0.332673888	-0.119652371	7	34
NA	chr5	18745783	18747782	0.588806554	0.470120524	0.11868603	2	35
NA	chr10	10099185	10101184	0.514088933	0.664274589	-0.150185656	2	36
NA	chr4	17187183	17189182	0.251582015	0.523275334	-0.271693319	2	37
OR7G1	chr19	9225940	9227939	0.536857222	0.741637839	-0.204780617	1	38
NA	chr1	234699544	234701543	0.404213163	0.5587646	-0.154551437	1	39
NA	chr11	66032638	66034637	0.595370637	0.816795348	-0.221424711	1	40
NA	chr17	27076598	27078597	0.418464333	0.295876691	0.122587642	1	41
NA	chr17	40424202	40426201	0.79823675	0.582505651	0.215731099	1	42
RPA3	chr7	7757739	7759738	0.532911849	0.388233086	0.144678762	1	43
NUDT21	chr16	56485612	56487611	0.169161709	0.275703275	-0.106541566	3	44
NA	chr17	18226036	18228035	0.523888046	0.714679455	-0.190791409	1	45
SLC9A7P1	chr12	98850424	98852423	0.131880689	0.245959396	-0.114078707	5	46
UBQLN4P2	chr2	153731834	153733833	0.305332155	0.533824311	-0.228492156	1	47
SUB1	chr5	32530239	32532238	0.485288944	0.657497376	-0.172208432	1	48
TMEM114	chr16	8621805	8623804	0.457937341	0.581749361	-0.12381202	4	49
NA	chr1	71471686	71473685	0.469832767	0.324119644	0.145713123	1	50
SNCAIP	chr5	121645549	121647548	0.469767788	0.571696277	-0.101928489	5	51
NPNT	chr4	106814432	106816431	0.163756406	0.294740012	-0.130983605	3	52
NA	chr16	47998083	48000082	0.402225074	0.19581744	0.206407634	1	53
TTLL11-IT1	chr9	124725499	124727498	0.274095062	0.475529329	-0.201434266	1	54
RNU6-173P	chr4	189042289	189044288	0.297431615	0.412957275	-0.11552566	1	55
KLHL3	chr5	137071280	137073279	0.573589662	0.674707154	-0.101117492	6	56
NA	chr6	112555460	112557459	0.531875805	0.710190202	-0.178314397	1	57
LZTR1	chr22	21332251	21334250	0.63685967	0.524073375	0.112786296	2	58
TXNDC9	chr2	99956666	99958665	0.151712672	0.347951342	-0.19623867	1	59
B3GALT1	chr2	168673682	168675681	0.471104625	0.661815844	-0.190711219	5	60
UGT2B10	chr4	69680211	69682210	0.216353361	0.373730151	-0.15737679	1	61
HNRNPDP2	chr6	65341076	65343075	0.56156639	0.756302233	-0.194735843	1	62
FHL5	chr6	97008924	97010923	0.432453672	0.53066199	-0.098208318	4	63
CAMK1G	chr1	209755562	209757561	0.480512586	0.619588523	-0.139075937	3	64
CDH18	chr5	20575483	20577482	0.269086826	0.36588223	-0.096795403	1	65

MIR100	chr11	122022517	122024516	0.359345118	0.562352862	-0.203007743	2	66
RNU6-502P	chr6	26519187	26521186	0.366474216	0.246830172	0.119644045	3	67
IGHV1OR15-1	chr15	22448320	22450319	0.474835213	0.626281196	-0.151445983	1	68
NA	chr19	53638076	53640075	0.241277551	0.443468976	-0.202191425	1	69
NA	chr7	155753826	155755825	0.3950931	0.520857662	-0.125764563	1	70
RNU6-698P	chr19	54155439	54157438	0.480655679	0.303703464	0.176952215	1	71
SNORD58C	chr18	47015179	47017178	0.407991238	0.537533859	-0.12954262	4	72
NA	chr14	74100145	74102144	0.232718561	0.325841814	-0.093123252	4	73
OR6C6	chr12	55688517	55690516	0.279596516	0.459161158	-0.179564642	1	74
NA	chrX	3761399	3763398	0.362531616	0.215805495	0.146726121	1	75
KRTAP6-2	chr21	31970720	31972719	0.336285428	0.442847064	-0.106561636	5	76
NA	chr2	238342966	238344965	0.4018355	0.507239347	-0.105403847	2	77
TNFSF11	chr13	43135372	43137371	0.368692218	0.519482974	-0.150790756	3	78
NA	chr18	77904307	77906306	0.465082461	0.587303642	-0.122221181	12	79
NA	chr1	229576268	229578267	0.375915941	0.490159375	-0.114243434	1	80
SNORD115-25	chr15	25459188	25461187	0.275049149	0.384284904	-0.109235755	4	81
NA	chr3	55395358	55397357	0.702949948	0.497428555	0.205521393	1	82
ALDOC	chr17	26903783	26905782	0.38594715	0.483622594	-0.097675444	11	83
NA	chr8	102218876	102220875	0.184429134	0.302868804	-0.11843967	1	84
GIMAP4	chr7	150262865	150264864	0.384214325	0.512232689	-0.128018364	6	85
CYP4F22	chr19	15617804	15619803	0.511350166	0.600366895	-0.089016729	7	86
NA	chr2	740988	742987	0.513415027	0.602221754	-0.088806727	2	87
NA	chr5	33969468	33971467	0.553880299	0.716126542	-0.162246243	1	88
NA	chr19	22806274	22808273	0.36983669	0.475921573	-0.106084882	3	89
NA	chr14	21341252	21343251	0.325291702	0.444915447	-0.119623745	2	90
NA	chr11	11590131	11592130	0.576985588	0.769863262	-0.192877674	1	91
NA	chr14	59259872	59261871	0.624617672	0.804906948	-0.180289276	1	92
RNU6-275P	chr12	8635842	8637841	0.555654188	0.715863427	-0.16020924	1	93
CARD6	chr5	40839786	40841785	0.178236875	0.269541553	-0.091304678	5	94
NA	chr12	90339970	90341969	0.291570682	0.378136954	-0.086566271	1	95
NRBP1	chr2	27649157	27651156	0.362882049	0.222314341	0.140567708	2	96
NA	chr6	142958527	142960526	0.54289428	0.456985179	0.085909101	2	97
NA	chr12	68736944	68738943	0.502478432	0.370437893	0.132040539	1	98
GUCY2C	chr12	14849020	14851019	0.527747665	0.627481811	-0.099734147	4	99
LINC00968	chr8	57471883	57473882	0.226120527	0.310657409	-0.084536882	2	100
SMARCD3	chr7	150974483	150976482	0.411091042	0.31552861	0.095562432	1	101
OR1E2	chr17	3336636	3338635	0.328927903	0.41279812	-0.083870217	6	102
NBPF22P	chr5	85576778	85578777	0.591395224	0.746016801	-0.154621576	2	103
NA	chr3	108895713	108897712	0.595310732	0.757763635	-0.162452904	3	104
LINC00488	chr3	108895512	108897511	0.595310732	0.757763635	-0.162452904	3	105
NA	chr20	37852892	37854891	0.684248552	0.565064368	0.119184184	3	106
NA	chr1	34333054	34335053	0.556035338	0.69192777	-0.135892433	2	107
NA	chr5	166720779	166722778	0.452100154	0.25704739	0.195052764	1	108
NA	chr4	92033442	92035441	0.808893952	0.638613114	0.170280838	1	109
NA	chr7	53879125	53881124	0.513448487	0.631145314	-0.117696828	4	110
BCMO1	chr16	81270553	81272552	0.23445121	0.322102145	-0.087650935	5	111
OR52E6	chr11	5862683	5864682	0.484743546	0.787624802	-0.302881256	1	112
NA	chr10	92212427	92214426	0.590807767	0.691873977	-0.10106621	2	113
NA	chr6	134757354	134759353	0.451960203	0.589824288	-0.137864085	2	114
ST6GALNAC2	chr17	74582539	74584538	0.399030109	0.509828026	-0.110797917	2	115
NA	chr18	73966670	73968669	0.395404218	0.498963689	-0.103559471	1	116
LHFPL3-AS1	chr7	104444055	104446054	0.534945616	0.6784219	-0.143476284	4	117
NA	chr11	119579130	119581129	0.29977871	0.380302678	-0.080523968	1	118
NAV2-IT1	chr11	19400531	19402530	0.647664357	0.814213954	-0.166549597	1	119
NA	chr2	47571714	47573713	0.12534668	0.292926715	-0.167580035	1	120
NA	chr3	193963937	193965936	0.573846687	0.792766527	-0.21891984	1	121
PF4V1	chr4	74717406	74719405	0.423134404	0.571165595	-0.148031191	6	122
NA	chr12	124996268	124998267	0.296256908	0.375466386	-0.079209478	1	123
NA	chr3	61724404	61726403	0.437069778	0.5491264	-0.112056621	1	124
NA	chr12	124490273	124492272	0.565520557	0.447614916	0.11790564	1	125
LY6H	chr8	144241629	144243628	0.470070525	0.382065371	0.088005154	7	126
RNU6-1309P	chr1	150784675	150786674	0.272085197	0.364069083	-0.091983886	1	127
MAPK15	chr8	144796929	144798928	0.522963163	0.600589664	-0.077626502	14	128
NA	chr17	32581807	32583806	0.365834258	0.445321932	-0.079487674	6	129
NA	chr1	68507513	68509512	0.574180225	0.710126159	-0.135945934	2	130
NA	chr16	68679572	68681571	0.62531044	0.721635912	-0.096325472	3	131
LCE4A	chr1	152679136	152681135	0.397084391	0.494880264	-0.097795873	2	132
OR52K2	chr11	4469025	4471024	0.295143496	0.411961143	-0.116817647	3	133

NA	chr3	150620682	150622681	0.335654734	0.476261103	-0.140606369	1	134
OR4N5	chr14	20610395	20612394	0.431979611	0.609457279	-0.177477667	3	135
RNA5SP107	chr2	155445419	155447418	0.301175913	0.553285895	-0.252109982	1	136
SPANXA1	chrX	140672634	140674633	0.377170654	0.604684169	-0.227513514	1	137
NA	chr15	92715167	92717166	0.793757859	0.639101865	0.154655994	1	138
MIR526A1	chr19	54208006	54210005	0.164730672	0.265655612	-0.10092494	4	139
NA	chr3	196261903	196263902	0.366378213	0.454533684	-0.088155471	1	140
RAB39B	chrX	154493375	154495374	0.478239724	0.563470944	-0.08523122	5	141
KIAA0947	chr5	5419277	5421276	0.642408992	0.728985494	-0.086576503	2	142
RPSAP52	chr12	66220255	66222254	0.397475453	0.494113445	-0.096637992	3	143
NA	chr8	39770248	39772247	0.51776983	0.606930985	-0.089161154	2	144
HSD11B2	chr16	67463055	67465054	0.233430853	0.160971697	0.072459156	8	145
NA	chr9	15053555	15055554	0.407961836	0.504051365	-0.096089528	1	146
KRTAP10-8	chr21	46030496	46032495	0.526353136	0.610052923	-0.083699786	4	147
NA	chr14	91162177	91164176	0.117602702	0.231472622	-0.113869921	1	148
NA	chr16	33298061	33300060	0.541401916	0.66738507	-0.125983154	1	149
TNFAIP8L2	chr1	151127605	151129604	0.596380946	0.668133561	-0.071752616	6	150
SCNM1	chr1	151127640	151129639	0.596380946	0.668133561	-0.071752616	6	151
TRIML1	chr4	189059073	189061072	0.38867281	0.494914802	-0.106241992	6	152
CNN3P1	chr6	6533430	6535429	0.54740114	0.621201095	-0.073799954	2	153
NA	chr13	61489676	61491675	0.463872997	0.563193854	-0.099320857	3	154
NA	chr8	74268197	74270196	0.451013456	0.57271908	-0.121705624	1	155
FAM27E2	chr9	45732059	45734058	0.586671306	0.47688265	0.109788656	1	156
HBG2	chr11	5666520	5668519	0.534077221	0.330402253	0.203674969	2	157
MAGEB3	chrX	30247053	30249052	0.344510353	0.476251332	-0.131740979	5	158
OR2L3	chr1	248222484	248224483	0.30883153	0.47607148	-0.16723995	1	159
NA	chr6	73971231	73973230	0.127003522	0.224609323	-0.0976058	10	160
NA	chr6	73971438	73973437	0.127003522	0.224609323	-0.0976058	10	161
RNU6-835P	chr14	88462293	88464292	0.434682969	0.636897619	-0.20221465	1	162
PRAMEF11	chr1	12890765	12892764	0.317562739	0.391446633	-0.073883894	2	163
NA	chr12	97669488	97671487	0.381783129	0.186852783	0.194930346	1	164
SNORD87	chr8	67834287	67836286	0.561956039	0.662640791	-0.100684752	5	165
CRYAB	chr11	111793947	111795946	0.525569409	0.643700683	-0.118131274	1	166
NA	chr2	91923252	91925251	0.524326125	0.651842633	-0.127516508	1	167
TJAP1	chr6	43443761	43445760	0.098272765	0.16791979	-0.069647025	4	168
LAYN	chr11	111409505	111411504	0.561955928	0.631484298	-0.06952837	10	169
NA	chr14	99727785	99729784	0.120390299	0.189737891	-0.069347592	3	170
MTND1P28	chr2	117779994	117781993	0.449262381	0.560858029	-0.111595648	1	171
MIR550A3	chr7	29719945	29721944	0.424072643	0.539143825	-0.115071182	1	172
OLFML2A	chr9	127537937	127539936	0.574841387	0.493986622	0.080854765	3	173
S100A7L2	chr1	153411926	153413925	0.351121089	0.419650669	-0.06852958	2	174
KRT38	chr17	39596674	39598673	0.529833647	0.631351503	-0.101517856	5	175
OR1J4	chr9	125279920	125281919	0.116809372	0.197422216	-0.080612844	1	176
BZW1	chr2	201673817	201675816	0.411285719	0.501285554	-0.089999834	1	177
NA	chr6	73972420	73974419	0.200775067	0.292923026	-0.092147959	10	178
OR2W1	chr6	29012518	29014517	0.51956738	0.606199244	-0.086631863	4	179
SNX2P2	chr7	31979374	31981373	0.19160047	0.37951284	-0.18791237	1	180
TRIML2	chr4	189030258	189032257	0.21059265	0.362910086	-0.152317436	1	181
STAC2	chr17	37381626	37383625	0.372307758	0.439943887	-0.06763613	10	182
GLIS1	chr1	54199378	54201377	0.560007379	0.654659916	-0.094652537	6	183
DLGAP2	chr8	1448032	1450031	0.57100093	0.674274685	-0.103273755	11	184
CCL2	chr17	32580804	32582803	0.517518218	0.584865139	-0.067346921	9	185
SNORD115-41	chr15	25489125	25491124	0.497072971	0.584169963	-0.087096992	6	186
MIR514A1	chrX	146360363	146362362	0.739708236	0.896984396	-0.15727616	1	187
TRIM77	chr11	89441967	89443966	0.582454464	0.694532002	-0.112077538	2	188
NTF6A	chr19	49528778	49530777	0.633939102	0.52279486	0.111144241	1	189
NA	chr6	30482543	30484542	0.749004622	0.653440992	0.09556363	12	190
RGS6	chr14	72397656	72399655	0.201144765	0.123447644	0.077697121	5	191
MID2	chrX	107067485	107069484	0.425783003	0.501172508	-0.075389505	7	192
KRTAP19-3	chr21	31863776	31865775	0.472173592	0.574395157	-0.102221565	4	193
NA	chr5	138610369	138612368	0.254901348	0.320940363	-0.066039015	1	194
PSMA2P2	chr8	94954606	94956605	0.669153193	0.809669149	-0.140515957	1	195
NA	chr2	216409750	216411749	0.895167921	0.740566051	0.15460187	1	196
RXRG	chr1	165413934	165415933	0.38700662	0.469583711	-0.082577091	13	197
NA	chr4	49550373	49552372	0.671856203	0.555620547	0.116235656	1	198
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NA	chr4	49550549	49552548	0.671856203	0.555620547	0.116235656	1	200
NA	chr19	52021485	52023484	0.186372343	0.283805902	-0.097433559	1	201

NA	chr5	75372991	75374990	0.673719178	0.501292151	0.172427027	1	202
IL7R	chr5	35851297	35853296	0.396545246	0.611473914	-0.214928669	1	203
NA	chr1	209539507	209541506	0.648006348	0.781803948	-0.1337976	1	204
COX6B2	chr19	55865683	55867682	0.381588895	0.450391158	-0.068802263	13	205
POU6F2-AS2	chr7	39052652	39054651	0.771956951	0.594183307	0.177773644	1	206
NA	chr12	76422774	76424773	0.340432535	0.439844637	-0.099412102	2	207
NA	chr2	155314869	155316868	0.651488072	0.785467989	-0.133979917	1	208
NA	chr2	75749694	75751693	0.729920964	0.879153479	-0.149232516	1	209
NA	chr1	9262179	9264178	0.215133823	0.14830183	0.066831993	1	210
NA	chr16	34258122	34260121	0.220976969	0.285325425	-0.064348456	1	211
ENOSF1	chr18	712177	714176	0.37310646	0.437333395	-0.064226936	7	212
IGHV3-21	chr14	106691704	106693703	0.321339923	0.488395218	-0.167055295	1	213
NA	chr5	944930	946929	0.253019273	0.188874776	0.064144497	1	214
PRSS58	chr7	141957379	141959378	0.658132872	0.791294098	-0.133161226	1	215
ACTL6B	chr7	100253585	100255584	0.532172313	0.595977399	-0.063805086	8	216
SDR16C6P	chr8	57307425	57309424	0.32265367	0.462957688	-0.140304018	4	217
ARHGAP40	chr20	37229077	37231076	0.388537505	0.461640204	-0.073102699	9	218
ALDH1L1-AS2	chr3	125897408	125899407	0.114298562	0.177956109	-0.063657547	7	219
LPCAT2	chr16	55541410	55543409	0.43626969	0.499875416	-0.063605726	9	220
RN7SL805P	chr17	61915843	61917842	0.39323438	0.476962616	-0.083728237	1	221
KRTAP23-1	chr21	31720425	31722424	0.318169033	0.385543908	-0.067374874	3	222
C1orf172	chr1	27286398	27288397	0.530252016	0.593764694	-0.063512678	10	223
GIMAP2	chr7	150381285	150383284	0.494302348	0.583772445	-0.089470098	2	224
MROH9	chr1	170903112	170905111	0.606929122	0.729308445	-0.122379323	1	225
C4orf26	chr4	76479758	76481757	0.695820291	0.791414858	-0.095594566	6	226
OR1A1	chr17	3117415	3119414	0.369884524	0.469793677	-0.099909154	5	227
FAM120C	chrX	54209215	54211214	0.444878669	0.533663667	-0.088784998	8	228
NA	chr12	130905065	130907064	0.538013708	0.630860031	-0.092846323	4	229
ESM1	chr5	54318000	54319999	0.696307032	0.596487744	0.099819288	2	230
GZMK	chr5	54318581	54320580	0.696307032	0.596487744	0.099819288	2	231
OR11H12	chr14	19376022	19378021	0.236788232	0.299572596	-0.062784364	1	232
OR4K5	chr14	20387241	20389240	0.365631083	0.444603992	-0.07897291	2	233
NA	chr1	13838215	13840214	0.405768223	0.46803731	-0.062269087	4	234
NA	chr11	131532978	131534977	0.760888747	0.910511657	-0.14962291	1	235
LINC00442	chr13	19580899	19582898	0.561441974	0.647638732	-0.086196758	2	236
NA	chr16	10671541	10673540	0.628418114	0.70507028	-0.076652166	2	237
CACNA1A	chr19	13734305	13736304	0.686744069	0.768971884	-0.082227814	3	238
NA	chr16	75549679	75551678	0.219326276	0.281240177	-0.0619139	6	239
NA	chr2	105029967	105031966	0.183824633	0.24539149	-0.061566857	1	240
NA	chr1	170252850	170254849	0.686607306	0.770279105	-0.0836718	5	241
SYCP2	chr20	58508211	58510210	0.51725544	0.578784299	-0.061528859	7	242
NA	chr10	91598592	91600591	0.653627222	0.780599912	-0.12697269	1	243
LRAT	chr4	155546597	155548596	0.538414712	0.599761928	-0.061347216	8	244
KIR2DL3	chr19	55248480	55250479	0.439492439	0.511319747	-0.071827307	5	245
NA	chrX	45710421	45712420	0.268681836	0.356985477	-0.088303641	3	246
SNTN	chr3	63636844	63638843	0.710474923	0.817284063	-0.10680914	4	247
HEMGN	chr9	100706639	100708638	0.648951115	0.773909001	-0.124957885	1	248
PGM5P2	chr9	69147355	69149354	0.527603808	0.625501695	-0.097897887	2	249
NA	chr5	139535404	139537403	0.58467599	0.49020418	0.094471811	2	250
NA	chr12	62995032	62997031	0.494048499	0.389068601	0.104979898	2	251
SNORD115-19	chr15	25448004	25450003	0.374580346	0.470931523	-0.096351176	9	252
CLK4	chr5	178057117	178059116	0.299650968	0.224587279	0.075063689	1	253
ACPL2	chr3	140946068	140948067	0.698353668	0.831102413	-0.132748744	1	254
FAM131B	chr7	143059364	143061363	0.479457892	0.539345983	-0.059888091	6	255
NA	chr19	46266543	46268542	0.718217405	0.603301164	0.114916242	1	256
GGCT	chr7	30590596	30592595	0.468707162	0.558132768	-0.089425606	1	257
NA	chr7	30589898	30591897	0.468707162	0.558132768	-0.089425606	1	258
NA	chr7	67554710	67556709	0.526028419	0.634705261	-0.108676842	1	259
NA	chrX	27763513	27765512	0.357621881	0.422180904	-0.064559023	5	260
CCIN	chr9	36167889	36169888	0.73420641	0.84019418	-0.10598777	2	261
LINC00152	chr2	87753387	87755386	0.090986619	0.149973451	-0.058986831	1	262
SIN3B	chr19	16938711	16940710	0.104315301	0.167682949	-0.063367648	4	263
NA	chr16	58314093	58316092	0.749038203	0.610472609	0.138565594	1	264
OR6B1	chr7	143699522	143701521	0.478277757	0.541852251	-0.063574493	6	265
RPS26P49	chr14	105297009	105299008	0.300035372	0.192829986	0.107205386	1	266
NA	chr4	189026212	189028211	0.673309039	0.784854978	-0.111545939	6	267
SCG2	chr2	224466722	224468721	0.158936307	0.234421385	-0.075485077	4	268
CC2D2A	chr4	15469989	15471988	0.307482056	0.386375768	-0.078893712	6	269

NA	chr17	21363028	21365027	0.384901372	0.456811877	-0.071910506	1	270
MYD88	chr3	38178469	38180468	0.367254643	0.453860153	-0.086605511	14	271
RN7SKP54	chr7	100700080	100702079	0.193211559	0.312862128	-0.119650569	1	272
NA	chr5	70739943	70741942	0.102323942	0.160289687	-0.057965745	1	273
ARMCX2	chrX	100914377	100916376	0.557731594	0.615563041	-0.057831447	10	274
SNORD115-36	chr15	25479732	25481731	0.217189478	0.336824622	-0.119635144	6	275
RETNLB	chr3	108475732	108477731	0.498784852	0.577811597	-0.079026746	6	276
OXCT1-AS1	chr5	41868632	41870631	0.348685933	0.429851088	-0.081165155	4	277
NA	chr20	61989840	61991839	0.805772744	0.68118748	0.124585264	1	278
MAPK3	chr16	30134328	30136327	0.224722753	0.282391534	-0.057668781	6	279
TMEM31	chrX	102964337	102966336	0.584487021	0.667176434	-0.082689412	2	280
SNORD93	chr7	22894732	22896731	0.518907631	0.576423	-0.057515369	5	281
RASSF10	chr11	13029196	13031195	0.541423792	0.647643909	-0.106220117	11	282
NA	chr16	63762681	63764680	0.315174906	0.373263635	-0.058088729	1	283
MPZL2	chr11	118134752	118136751	0.259888659	0.317055753	-0.057167094	11	284
SNORD115-44	chr15	25494506	25496505	0.239841659	0.317842466	-0.078000807	3	285
NA	chr3	158498836	158500835	0.307859169	0.412842982	-0.104983813	1	286
ALDH1L2	chr12	105477856	105479855	0.64340531	0.728004041	-0.084598731	11	287
NA	chr2	217214626	217216625	0.576822621	0.681022936	-0.104200315	1	288
SERPINA6	chr14	94789232	94791231	0.620981829	0.719315361	-0.098333532	5	289
IDO2	chr8	39790633	39792632	0.361175552	0.426137822	-0.06496227	4	290
PATE3	chr11	125656506	125658505	0.332331022	0.426877376	-0.094546355	5	291
NA	chr10	91716631	91718630	0.347718068	0.471689283	-0.123971215	1	292
CIRH1A	chr16	69163694	69165693	0.546355042	0.644709125	-0.098354082	1	293
LDB2	chr4	16899933	16901932	0.382025856	0.469240415	-0.087214559	5	294
LCE6A	chr1	152813844	152815843	0.345066455	0.424753912	-0.079687457	7	295
NA	chr14	23024034	23026033	0.092776749	0.149016142	-0.056239393	1	296
MTND1P4	chr7	57251995	57253994	0.155132398	0.230511268	-0.07537887	1	297
SNORD109A	chr15	25285565	25287564	0.451932416	0.377178802	0.074753614	3	298
CYB5AP5	chr14	26675742	26677741	0.297339023	0.428474543	-0.131135521	1	299
BCKDHA	chr19	41855258	41857257	0.398388059	0.454334366	-0.055946307	2	300
TMEM91	chr19	41855316	41857315	0.398388059	0.454334366	-0.055946307	2	301
HERC3	chr4	89440699	89442698	0.848015819	0.732757	0.115258819	2	302
KRTAP19-1	chr21	31852164	31854163	0.234555907	0.31766796	-0.083112054	2	303
ADH7	chr4	100356395	100358394	0.275630772	0.476977231	-0.201346459	2	304
NA	chr1	204098690	204100689	0.439462819	0.517885296	-0.078422477	1	305
CREB3L3	chr19	4152098	4154097	0.380620681	0.450885244	-0.070264563	7	306
ELP3	chr8	27945690	27947689	0.862795063	0.733560987	0.129234076	1	307
SMIM20	chr4	25861952	25863951	0.121255356	0.176853773	-0.055598417	1	308
CREB5	chr7	28337440	28339439	0.487486998	0.550131926	-0.062644928	6	309
TRPV6	chr7	142583008	142585007	0.563999375	0.654997344	-0.090997969	6	310
LINC00922	chr16	65609704	65611703	0.278601913	0.391365621	-0.112763708	3	311
EEF1G	chr11	62341902	62343901	0.455468399	0.525494553	-0.070026154	5	312
NA	chr14	58095059	58097058	0.69671555	0.818784611	-0.12206906	1	313
CDA	chr1	20913941	20915940	0.565380711	0.659538893	-0.094158182	4	314
RN7SKP78	chr10	6190086	6192085	0.538118805	0.632576045	-0.09445724	1	315
OR1E1	chr17	3301205	3303204	0.109574644	0.164699192	-0.055124548	2	316
SPTBN1	chr2	54681922	54683921	0.122203665	0.177279257	-0.055075593	10	317
DOK7	chr4	3463533	3465532	0.471055401	0.548305757	-0.077250356	11	318
NA	chr22	40354901	40356900	0.70609774	0.828935736	-0.122837996	1	319
NA	chr7	57895458	57897457	0.321915644	0.426776967	-0.104861323	1	320
MX1	chr21	42790731	42792730	0.421464493	0.493044114	-0.071579621	8	321
SNORD115-40	chr15	25487261	25489260	0.256848449	0.358167395	-0.101318946	6	322
MYADM	chr19	54367977	54369976	0.542498667	0.59733302	-0.054834354	11	323
TMEM151A	chr11	66057841	66059840	0.363077204	0.417892711	-0.054815506	7	324
REGG	chr12	15501110	15503109	0.725548271	0.850688987	-0.125140716	1	325
MIR301A	chr17	57228083	57230082	0.453667949	0.514855719	-0.06118777	4	326
NA	chr19	51842449	51844448	0.335617341	0.229142858	0.106474483	2	327
CCK	chr3	42307200	42309199	0.70524136	0.768785288	-0.063543928	4	328
NA	chr5	38782182	38784181	0.280479647	0.368830628	-0.088350981	1	329
INPP1	chr2	191206696	191208695	0.620170888	0.696936298	-0.076765409	8	330
NA	chr1	3999173	4001172	0.286685454	0.3787972	-0.092111746	3	331
NA	chr19	46733146	46735145	0.660803758	0.574130607	0.086673151	2	332
GNAO1	chr16	56223802	56225801	0.129344631	0.201925312	-0.072580681	9	333
NA	chr1	115640793	115642792	0.31045916	0.395473583	-0.085014423	1	334
FAM84A	chr2	14771310	14773309	0.458735639	0.390440343	0.068295295	9	335
RAB3IP	chr12	70130961	70132960	0.277869549	0.331965929	-0.05409638	5	336
ZFH3	chr16	73093098	73095097	0.263440585	0.324009146	-0.060568561	2	337



NA	chr16	73092869	73094868	0.263440585	0.324009146	-0.060568561	2	338
NA	chr7	3125556	3127555	0.796625879	0.932022829	-0.13539695	1	339
ACTBL2	chr5	56778137	56780136	0.754172834	0.659901514	0.09427132	3	340
MIR720	chr3	164057629	164059628	0.654922097	0.741405866	-0.086483769	3	341
MORF4L2	chrX	102942587	102944586	0.433627443	0.502277229	-0.068649786	3	342
KRT18P42	chr5	108922539	108924538	0.661753511	0.774130354	-0.112376843	1	343
GPR22	chr7	107108963	107110962	0.656727872	0.780296505	-0.123568633	1	344
NA	chr2	170645103	170647102	0.053027699	0.168807713	-0.115780014	1	345
SERPINA12	chr14	94983682	94985681	0.670929013	0.759312621	-0.088383608	5	346
NA	chr3	47291617	47293616	0.507231353	0.338504711	0.168726641	1	347
RNU6-871P	chr12	59844054	59846053	0.291973039	0.345505494	-0.053532455	1	348
ASAP1	chr8	131455407	131457406	0.181190958	0.234711813	-0.053520854	3	349
NA	chr4	147925144	147927143	0.769763106	0.899185024	-0.129421918	1	350
MIR147A	chr9	123006829	123008828	0.314952359	0.465040388	-0.150088029	2	351
OR1S2	chr11	57971154	57973153	0.417016468	0.533060398	-0.11604393	3	352
NA	chr1	48152635	48154634	0.520623692	0.608466096	-0.087842404	1	353
NA	chr11	67140556	67142555	0.344514652	0.397781875	-0.053267222	14	354
GPX1P2	chr21	28515769	28517768	0.424179201	0.506073885	-0.081894684	3	355
NA	chr9	68725129	68727128	0.289773257	0.354112594	-0.064339337	1	356
NA	chrX	153746456	153748455	0.94150185	0.806857407	0.134644443	1	357
NA	chr3	158288356	158290355	0.221468722	0.168453094	0.053015627	12	358
MLF1	chr3	158287452	158289451	0.221468722	0.168453094	0.053015627	12	359
SEPT10P1	chr8	57390047	57392046	0.483497753	0.634491479	-0.150993726	1	360
KNG1	chr3	186433565	186435564	0.713800356	0.652376227	0.061424129	3	361
NA	chr2	239627465	239629464	0.316757052	0.239427537	0.077329514	2	362
KCNK3	chr2	26914119	26916118	0.353196969	0.42100341	-0.067806441	5	363
HIATL1	chr9	97135333	97137332	0.126050476	0.214182462	-0.088131986	3	364
SNORD115-18	chr15	25446874	25448873	0.297636202	0.402758196	-0.105121994	6	365
NA	chr2	105048225	105050224	0.73237729	0.853940704	-0.121563415	1	366
TINAG	chr6	54171157	54173156	0.71859986	0.618917294	0.099682567	3	367
SNORD115-43	chr15	25492845	25494844	0.349936315	0.426304896	-0.076368581	5	368
GPX8	chr5	54454446	54456445	0.295801104	0.348349919	-0.052548815	5	369
SYTL1	chr1	27667013	27669012	0.401682955	0.454068452	-0.052385497	8	370
NA	chr7	113089627	113091626	0.544891649	0.597235032	-0.052343383	2	371
COX20P2	chr2	231820808	231822807	0.142533866	0.218190525	-0.075656658	2	372
OR5P3	chr11	7847020	7849019	0.627863584	0.704830651	-0.076967067	4	373
ZNF208	chr19	22193252	22195251	0.341895693	0.41019319	-0.068297498	7	374
NA	chr3	142677714	142679713	0.808787115	0.940767772	-0.131980657	1	375
PRAMEF12	chr1	12833484	12835483	0.58766173	0.667948341	-0.08028661	3	376
NA	chr4	189658006	189660005	0.701247271	0.810284089	-0.109036818	2	377
FAM225B	chr9	115873281	115875280	0.276173231	0.396963082	-0.120789851	2	378
FAM225A	chr9	115873853	115875852	0.276173231	0.396963082	-0.120789851	2	379
DUXAP3	chr10	43243636	43245635	0.177435547	0.229472795	-0.052037248	1	380
OR52I2	chr11	4606521	4608520	0.565269403	0.618890237	-0.053620835	3	381
NA	chr22	32599602	32601601	0.526461474	0.608432253	-0.081970779	6	382
SLAMF6	chr1	160492553	160494552	0.339901823	0.410275279	-0.070373456	2	383
POU5F1P6	chr3	128395349	128397348	0.63566149	0.739191406	-0.103529916	1	384
PSMD2	chr3	184014997	184016996	0.078716033	0.130606806	-0.051890773	5	385
CLK2	chr1	155247783	155249782	0.364268005	0.421237979	-0.056969973	2	386
SNORD16	chr15	66794749	66796748	0.478243712	0.55105549	-0.072811778	6	387
NA	chr4	158125508	158127507	0.321638915	0.373187351	-0.051548437	3	388
NA	chr1	157893355	157895354	0.631370094	0.732989705	-0.101619611	1	389
LPAL2	chr6	160931657	160933656	0.149021982	0.268396538	-0.119374557	2	390
NA	chr6	19752845	19754844	0.394018468	0.475150125	-0.081131657	1	391
NA	chr1	11839177	11841176	0.740311514	0.858815449	-0.118503935	1	392
NA	chr6	159585441	159587440	0.825257525	0.711396925	0.1138606	1	393
NA	chr2	20355319	20357318	0.268560714	0.369063605	-0.100502892	1	394
MS4A6A	chr11	59951640	59953639	0.351054254	0.475774906	-0.124720652	4	395
DEFB133	chr6	49916658	49918657	0.356318778	0.430890827	-0.074572048	6	396
NA	chr8	143328728	143330727	0.785501876	0.910159974	-0.124658098	1	397
DISC1FP1	chr11	89982900	89984899	0.765695246	0.660623534	0.105071713	1	398
NA	chr1	3584837	3586836	0.545332301	0.611382634	-0.066050333	2	399
BTLA	chr3	112217909	112219908	0.805509707	0.706624081	0.098885626	3	400
C4orf50	chr4	5991046	5993045	0.811258733	0.700638669	0.110620065	1	401
MMP24	chr20	33812957	33814956	0.641425436	0.528285375	0.113140062	2	402
ERI1	chr8	8858157	8860156	0.827534763	0.73636696	0.091167803	4	403
UGT3A1	chr5	36000631	36002630	0.510870244	0.590731031	-0.079860787	3	404
NA	chr2	220223206	220225205	0.22182366	0.311963666	-0.090140006	3	405

HNRNPCL1	chr1	12908079	12910078	0.569883056	0.627057451	-0.057174395	5	406
OXCT1	chr5	41870122	41872121	0.437022727	0.50771127	-0.070688543	11	407
TMEM202	chr15	72689114	72691113	0.624312997	0.677328549	-0.053015553	2	408
NA	chr1	149604140	149606139	0.239121685	0.350729923	-0.111608239	1	409
DUSP26	chr8	33457125	33459124	0.528877195	0.595269906	-0.066392711	9	410
RN7SL718P	chr19	41696635	41698634	0.614410101	0.710849891	-0.09643979	1	411
GPR62	chr3	51987830	51989829	0.724576193	0.822070389	-0.097494196	4	412
TRAV16	chr14	22457235	22459234	0.547292508	0.597150971	-0.049858464	2	413
NA	chr12	81155433	81157432	0.673574943	0.778897148	-0.105322205	1	414
TGFBR3L	chr19	7979530	7981529	0.45352614	0.503323177	-0.049797037	4	415
NA	chr11	13030207	13032206	0.531703886	0.63101263	-0.099308745	11	416
NA	chr16	48525913	48527912	0.744378681	0.594219433	0.150159248	1	417
NA	chr6	155701818	155703817	0.593404909	0.710898626	-0.117493717	1	418
SCARF2	chr22	20791647	20793646	0.273210582	0.357018311	-0.083807729	10	419
CHIA	chr1	111831984	111833983	0.634567783	0.692137932	-0.057570148	5	420
OR4N4	chr15	22380882	22382881	0.440058134	0.508546208	-0.068488073	1	421
FTLP17	chr1	104695953	104697952	0.51814528	0.598423032	-0.080277752	1	422
HIST1H2APS6	chr13	37064079	37066078	0.51977818	0.449910136	0.069868045	1	423
LCE1E	chr1	152757190	152759189	0.464425375	0.519649852	-0.055224477	4	424
RASGEF1A	chr10	43761868	43763867	0.557951656	0.508652318	0.049299337	3	425
RPL4P5	chr9	7477821	7479820	0.615307968	0.69565618	-0.080348212	2	426
NA	chr1	89724765	89726764	0.615381426	0.709933518	-0.094552092	1	427
RNF166	chr16	88772330	88774329	0.165043301	0.214183279	-0.049139978	8	428
SUMO2P6	chr5	173987279	173989278	0.644989824	0.743875575	-0.098885751	1	429
LPAR3	chr1	85358397	85360396	0.346739699	0.395798313	-0.049058614	7	430
NA	chr3	106044641	106046640	0.780526659	0.662362743	0.118163916	1	431
LG11	chr10	95516066	95518065	0.488506103	0.537507268	-0.049001166	10	432
NA	chrX	51138815	51140814	0.245371921	0.327919409	-0.082547487	5	433
IGHV3-37	chr14	106852527	106854526	0.268202852	0.317092728	-0.048889876	3	434
NA	chr7	126853681	126855680	0.651775174	0.751013843	-0.09923867	1	435
TNR-IT1	chr1	175525455	175527454	0.414300235	0.541687169	-0.127386935	1	436
OR2S2	chr9	35957652	35959651	0.67908555	0.782355926	-0.103270377	1	437
NA	chr5	1966769	1968768	0.468492212	0.633709359	-0.165217148	1	438
NA	chr5	1966708	1968707	0.468492212	0.633709359	-0.165217148	1	439
FAM57B	chr16	30063800	30065799	0.309577052	0.255467686	0.054109366	4	440
KRTAP19-2	chr21	31859256	31861255	0.291578749	0.379785487	-0.088206737	1	441
CTBP2P4	chr5	97910545	97912544	0.576320432	0.672338971	-0.096018539	2	442
OR10H5	chr19	15903261	15905260	0.521190183	0.569403902	-0.048213719	3	443
NA	chr4	189320390	189322389	0.382802667	0.455859119	-0.073056452	3	444
MIR5701-1;MIR5701-2	chr15	21144081	21146080	0.716715331	0.798541049	-0.081825718	6	445
CT60	chr15	21144267	21146266	0.716715331	0.798541049	-0.081825718	6	446
ATP1A1OS	chr1	116960698	116962697	0.283737133	0.331714572	-0.047977439	11	447
NA	chr7	47088777	47090776	0.552805934	0.646933099	-0.094127165	2	448
NA	chr9	99486672	99488671	0.574672114	0.674405884	-0.09973377	1	449
OR52A5	chr11	5153373	5155372	0.793693803	0.690734105	0.102959698	1	450
PTP4A2P1	chr17	40684050	40686049	0.084815991	0.132685376	-0.047869385	2	451
CLCF1	chr11	67141149	67143148	0.49492381	0.54273789	-0.04781408	13	452
OR13C4	chr9	107288991	107290990	0.445526586	0.619164069	-0.173637483	1	453
ITLN1	chr1	160854461	160856460	0.664699915	0.565880466	0.098819448	5	454
MARCH10	chr17	60885206	60887205	0.701235651	0.788278026	-0.087042375	9	455
NA	chr17	60884361	60886360	0.701235651	0.788278026	-0.087042375	9	456
LELP1	chr1	153174419	153176418	0.308074097	0.387121549	-0.079047451	6	457
MIR148B	chr12	54729500	54731499	0.586555024	0.654931358	-0.068376334	4	458
BBS10	chr12	76741723	76743722	0.241064635	0.131405949	0.109658686	13	459
NA	chr2	25919558	25921557	0.32403528	0.399267803	-0.075232523	1	460
CLUU1OS	chr12	92821425	92823424	0.682151127	0.756167513	-0.074016385	2	461
NA	chr15	50790442	50792441	0.45489783	0.522334463	-0.067436633	1	462
PLXNB1	chr3	48471095	48473094	0.312566962	0.259929936	0.052637026	8	463
SYT3	chr19	51171152	51173151	0.464084667	0.52910856	-0.065023893	6	464
CABS1	chr4	71199198	71201197	0.483377459	0.545131394	-0.061753934	3	465
ACTG1P4	chr1	104110675	104112674	0.751769834	0.681804771	0.069965063	2	466
OR2A2	chr7	143805107	143807106	0.466598734	0.562201349	-0.095602615	3	467
PCDH15	chr10	57387203	57389202	0.282742289	0.334431375	-0.051689086	9	468
MND1	chr4	154264301	154266300	0.116295594	0.060928264	0.05536733	8	469
MUC16	chr19	9091519	9093518	0.380792325	0.540941445	-0.16014912	4	470
NA	chr11	64412371	64414370	0.81520568	0.711541233	0.103664447	1	471
MIR105-2	chrX	151562465	151564464	0.218162876	0.301904841	-0.083741965	2	472
CPT1A	chr11	68611379	68613378	0.556098075	0.693028314	-0.136930239	3	473

ANKRD20A5P	chr18	14177596	14179595	0.282132617	0.329070596	-0.046937979	3	474
NA	chr12	56493615	56495614	0.883375476	0.77162053	0.111754946	1	475
NA	chr5	86041135	86043134	0.507675915	0.56119954	-0.053523625	2	476
F2RL2	chr5	75918760	75920759	0.512491607	0.560572309	-0.048080702	5	477
WDR86	chr7	151107314	151109313	0.41709132	0.46556177	-0.048470451	5	478
SNORD115-42	chr15	25490992	25492991	0.475671862	0.541195125	-0.065523263	10	479
TRAV8-5	chr14	22369757	22371756	0.27917838	0.327653481	-0.048475101	2	480
SYBU	chr8	110703521	110705520	0.434826763	0.481356049	-0.046529286	9	481
ATCAY	chr19	3878362	3880361	0.745533335	0.842734247	-0.097200912	3	482
IGFBP7	chr4	57976052	57978051	0.164716418	0.265689493	-0.100973075	9	483
PTPN3	chr9	112260091	112262090	0.495022979	0.561012018	-0.065989039	3	484
BDH2	chr4	104020541	104022540	0.392034078	0.441296105	-0.049262027	5	485
CPZ	chr4	8592887	8594886	0.530963413	0.57741693	-0.046453517	10	486
TRGV7	chr7	38374616	38376615	0.318490996	0.389720797	-0.0712298	2	487
CYP4A22	chr1	47601607	47603606	0.467276449	0.542546126	-0.075269677	2	488
TTI1	chr20	36661371	36663370	0.343867312	0.297428204	0.046439108	9	489
SNORD115-35	chr15	25477894	25479893	0.403663344	0.479761138	-0.076097794	6	490
NA	chr11	92669107	92671106	0.852660772	0.745806914	0.106853858	1	491
NA	chr11	89517613	89519612	0.655579255	0.57588275	0.079696504	2	492
GPR82	chrX	41581908	41583907	0.666904448	0.762376992	-0.095472544	1	493
RARRES2P7	chr16	34648619	34650618	0.625781039	0.704643756	-0.078862717	3	494
NA	chr1	30181895	30183894	0.905591671	0.792577798	0.113013873	1	495
WDR45B	chr17	80605930	80607929	0.421223983	0.375128988	0.046094996	4	496
SEMA4C	chr2	97535995	97537994	0.366808358	0.318532672	0.048275686	3	497
MPZL1	chr1	167688929	167690928	0.48792985	0.5422939	-0.05436405	5	498
ACAA1	chr3	38178234	38180233	0.33402133	0.402702498	-0.068681167	13	499
NA	chr16	60392246	60394245	0.597769068	0.68251828	-0.084749212	1	500
OR6C3	chr12	55723985	55725984	0.199349334	0.322278375	-0.122929041	1	501
RIN3	chr14	92978618	92980617	0.383206393	0.428877811	-0.045671418	9	502
FAM170A	chr5	118963754	118965753	0.667929133	0.744259852	-0.076330719	8	503
FGG	chr4	155533620	155535619	0.714681034	0.625362558	0.089318476	4	504
NA	chr15	100345728	100347727	0.270339159	0.224746932	0.045592227	1	505
MAGEA2	chrX	151921865	151923864	0.597574235	0.523757361	0.073816874	1	506
CSAG2	chrX	151920945	151922944	0.597574235	0.523757361	0.073816874	1	507
TRBV27	chr7	142421673	142423672	0.353965751	0.399426683	-0.045460931	3	508
GABRA6	chr5	160972569	160974568	0.154859929	0.200308798	-0.045448869	8	509
WNT7B	chr22	46372510	46374509	0.205962257	0.251346089	-0.045383832	5	510
IGFBP2	chr2	217496051	217498050	0.137785002	0.193463468	-0.055678466	5	511
NA	chr12	131141218	131143217	0.728534086	0.810538416	-0.08200433	5	512
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SLC26A4-AS1	chr7	107302097	107304096	0.194576724	0.239754454	-0.04517773	8	514
SNX10	chr7	26330041	26332040	0.072053352	0.133642872	-0.06158952	9	515
GZMA	chr5	54396976	54398975	0.811172034	0.726738032	0.084434002	4	516
NA	chr3	186193016	186195015	0.700608631	0.7976785	-0.097069869	1	517
OR52H1	chr11	5566280	5568279	0.247810412	0.354983158	-0.107172746	3	518
NA	chr11	128394537	128396536	0.42397758	0.510735134	-0.086757554	1	519
CRK	chr17	1365957	1367956	0.67395123	0.598618494	0.075332736	4	520
NA	chrX	135567951	135569950	0.796400663	0.714442438	0.081958225	2	521
SNORD62A	chr9	134359552	134361551	0.833029228	0.947634725	-0.114605497	1	522
PDE6H	chr12	15124456	15126455	0.768606322	0.844718512	-0.07611219	6	523
NA	chr19	58174148	58176147	0.171120725	0.22715392	-0.056033195	4	524
IGFL1	chr19	46731509	46733508	0.564634124	0.6093643	-0.044730176	5	525
NA	chr12	119631155	119633154	0.678886001	0.753292653	-0.074406652	3	526
ZDHHC18	chr1	27151701	27153700	0.46800552	0.423293764	0.044711756	6	527
NA	chr8	72744424	72746423	0.467438874	0.40118316	0.066255713	1	528
NA	chr10	91458929	91460928	0.759688487	0.863465657	-0.10377717	1	529
RNU6-560P	chr11	85862769	85864768	0.376182093	0.45732797	-0.081145877	1	530
NA	chr1	190448009	190450008	0.427048731	0.375127102	0.051921629	1	531
NA	chr2	38742383	38744382	0.661585982	0.739379456	-0.077793475	4	532
ARMCX6	chrX	100872492	100874491	0.204246765	0.282291302	-0.078044537	8	533
NA	chr16	86468991	86470990	0.721536511	0.820031188	-0.098494677	1	534
NA	chr4	120725171	120727170	0.309586648	0.413764847	-0.1041782	1	535
PDYN	chr20	1974233	1976232	0.617032757	0.678948042	-0.061915286	7	536
NA	chr3	98342389	98344388	0.754172837	0.845783915	-0.091611078	2	537
RNU6-813P	chr6	151936515	151938514	0.772750983	0.680347951	0.092403032	1	538
GPR42	chr19	35860331	35862330	0.638921488	0.725448658	-0.086527169	1	539
IFNA7	chr9	21201705	21203704	0.650890332	0.568735697	0.082154635	1	540
PKMP3	chr6	86369825	86371824	0.757422894	0.859635635	-0.102212741	1	541

KRT34	chr17	39538156	39540155	0.726279563	0.80367993	-0.077400367	4	542
TMEM54	chr1	33366540	33368539	0.564479975	0.520285255	0.04419472	5	543
ZCCHC18	chrX	103355322	103357321	0.373801152	0.41769003	-0.043888878	5	544
ZNF786	chr7	148787375	148789374	0.152984666	0.196840251	-0.043855585	7	545
NA	chr16	58229516	58231515	0.646458828	0.733565152	-0.087106324	1	546
TAS2R38	chr7	141673074	141675073	0.705690724	0.771916277	-0.066225553	6	547
FAM19A1	chr3	68051859	68053858	0.368223896	0.412008588	-0.043784693	3	548
AFG3L2	chr18	12376814	12378813	0.210553582	0.263441626	-0.052888044	10	549
NA	chr15	66585196	66587195	0.118842813	0.16587846	-0.047035647	8	550
PRELP	chr1	203443456	203445455	0.700118772	0.772741792	-0.072623021	4	551
KRTAP20-4	chr21	31991446	31993445	0.485371413	0.586545979	-0.101174566	1	552
AKR1C4	chr10	5235925	5237924	0.659467281	0.749883168	-0.090415887	3	553
PRSS29P	chr16	1313347	1315346	0.418842046	0.536189649	-0.117347603	1	554
NA	chr2	71220073	71222072	0.20963973	0.252965733	-0.043326003	3	555
NA	chr2	151476082	151478081	0.712866468	0.807965324	-0.095098856	1	556
OR6W1P	chr7	142760236	142762235	0.478504213	0.562258176	-0.083753964	2	557
NA	chr4	137316127	137318126	0.575092838	0.656614792	-0.081521954	2	558
SPANXC	chrX	140336130	140338129	0.477245908	0.544062292	-0.066816384	2	559
NA	chr22	24404205	24406204	0.741857155	0.840531253	-0.098674098	1	560
ZNF853	chr7	6653748	6655747	0.501850553	0.448826387	0.053024166	5	561
LINC00696	chr3	52097068	52099067	0.731171727	0.659887476	0.071284251	2	562
NA	chr10	103467659	103469658	0.305496205	0.34851097	-0.043014765	1	563
OR9I1	chr11	57886417	57888416	0.306180419	0.426326382	-0.120145963	2	564
BHLHE23	chr20	61637888	61639887	0.561227896	0.63558759	-0.074359695	9	565
CHRN2	chr1	154538757	154540756	0.518247484	0.574896918	-0.056649434	10	566
NA	chr2	106577963	106579962	0.713465455	0.806993203	-0.093527748	1	567
FBXO27	chr19	39522926	39524925	0.533474916	0.577362341	-0.043887425	7	568
SOX6	chr11	16760639	16762638	0.414388792	0.456861199	-0.042472406	5	569
SYNPR	chr3	63212491	63214490	0.523637609	0.675715687	-0.152078078	1	570
NA	chr12	79187395	79189394	0.715884701	0.79072138	-0.074836679	3	571
NA	chr11	4206870	4208869	0.105632317	0.148008141	-0.042375824	3	572
COX4I1	chr16	85830739	85832738	0.209419242	0.251764245	-0.042345002	6	573
MIR3663	chr10	118926786	118928785	0.7116284	0.636355755	0.075272645	5	574
ZNF597	chr16	3493043	3495042	0.543079797	0.609847164	-0.066767366	12	575
NA	chr10	104884674	104886673	0.902028279	0.806523249	0.095505031	2	576
NA	chr9	29826210	29828209	0.605175118	0.67490027	-0.069725152	2	577
SHISA5	chr3	48541760	48543759	0.734637015	0.649913597	0.084723418	3	578
NA	chr11	119193620	119195619	0.493098355	0.436024254	0.057074101	1	579
NA	chr11	131121817	131123816	0.316317349	0.382037188	-0.065719838	1	580
GXYLT2	chr3	72935724	72937723	0.282071756	0.324148456	-0.0420767	2	581
PCDHA13	chr5	140260293	140262292	0.686967359	0.737144529	-0.05017717	10	582
SPATA6L	chr9	4666175	4668174	0.116446054	0.177798413	-0.061352358	4	583
TMC4	chr19	54676445	54678444	0.393436399	0.338323451	0.055112948	6	584
TMSB15B	chrX	103171979	103173978	0.333691731	0.396247878	-0.062556147	3	585
TP53I11	chr11	44972341	44974340	0.618144429	0.671764527	-0.053620097	11	586
TRAC	chr14	23014947	23016946	0.736527245	0.831545822	-0.095018577	1	587
CHST4	chr16	71557636	71559635	0.903250681	0.807931397	0.095319283	3	588
PRPH	chr12	49685535	49687534	0.571061496	0.644979254	-0.073917758	1	589
ATP6V1G1	chr9	117348526	117350525	0.318098627	0.359974905	-0.041876278	7	590
OVCH2	chr11	7727469	7729468	0.384932659	0.444463803	-0.059531143	4	591
ZNF619	chr3	40517104	40519103	0.328104223	0.370794843	-0.042690621	8	592
NTAN1P3	chr12	67818267	67820266	0.525931884	0.421038107	0.104893777	1	593
PPIAP17	chr20	16204681	16206680	0.587054757	0.730415787	-0.14336103	1	594
NA	chr10	23631386	23633385	0.13376116	0.19600375	-0.06224259	4	595
OR2AT4	chr11	74800300	74802299	0.614289018	0.557583575	0.056705442	4	596
NA	chr15	78236425	78238424	0.340623188	0.382293672	-0.041670484	4	597
NA	chr1	27020123	27022122	0.317954448	0.359620912	-0.041666464	6	598
NA	chr5	7306206	7308205	0.642554341	0.724990992	-0.082436651	1	599
C20orf166	chr20	61146160	61148159	0.690536245	0.632534949	0.058001297	9	600
NA	chr15	42873187	42875186	0.08672454	0.156017308	-0.069292767	5	601
PTGES3P1	chr1	89569951	89571950	0.798023823	0.899894362	-0.101870539	1	602
TRPS1	chr8	116821400	116823399	0.417414709	0.471221882	-0.053807173	1	603
LINC00507	chr12	128398417	128400416	0.279807869	0.39196523	-0.112157361	1	604
SPINT4	chr20	44349490	44351489	0.318588208	0.478298833	-0.159710625	2	605
CHIAP2	chr1	111821181	111823180	0.411260268	0.493045485	-0.081785217	4	606
PACSIN2	chr22	43410652	43412651	0.088660465	0.129857903	-0.041197438	6	607
CA2	chr8	86374581	86376580	0.096817819	0.14767996	-0.050862141	7	608
KPRP	chr1	152729006	152731005	0.515417324	0.556534247	-0.041116923	6	609

NA	chr12	17140560	17142559	0.711225592	0.801543092	-0.090317499	1	610
KRTAP10-9	chr21	46045540	46047539	0.66157182	0.717998919	-0.056427099	4	611
NA	chr5	172183729	172185728	0.727469193	0.819764751	-0.092295558	1	612
DCTD	chr4	183838590	183840589	0.360202695	0.419592269	-0.059389574	9	613
TCHH	chr1	152086057	152088056	0.665060574	0.72121275	-0.056152176	6	614
NA	chr9	69064155	69066154	0.422492824	0.476505169	-0.054012345	1	615
MIR515-1	chr19	54180757	54182756	0.28401822	0.392156128	-0.108137908	4	616
MIR527	chr19	54255772	54257771	0.736273729	0.828472924	-0.092199195	3	617
NA	chr3	108854061	108856060	0.566808991	0.620650489	-0.053841498	3	618
C22orf26	chr22	46449525	46451524	0.243838289	0.30195202	-0.058113731	11	619
MIR520E	chr19	54177465	54179464	0.546087476	0.599366333	-0.053278857	2	620
NAB1	chr2	191509972	191511971	0.784569459	0.883251935	-0.098682476	1	621
NA	chr8	49501461	49503460	0.472456157	0.513408073	-0.040951916	2	622
NA	chr16	33815798	33817797	0.54283702	0.607268233	-0.064431213	3	623
NA	chr15	83382279	83384278	0.843977978	0.759838899	0.084139079	2	624
OR52M1	chr11	4564921	4566920	0.557589776	0.63194514	-0.074355364	5	625
NA	chr12	11708273	11710272	0.710880049	0.79987815	-0.088998101	1	626
FAM217B	chr20	58507319	58509318	0.657330459	0.697719158	-0.040388699	8	627
NA	chr4	144619910	144621909	0.50941624	0.560979872	-0.051563632	4	628
TFAP2D	chr6	50680041	50682040	0.131532158	0.171829341	-0.040297183	5	629
NLRP9	chr19	56249269	56251268	0.668193371	0.730050388	-0.061857017	5	630
NA	chr11	44488514	44490513	0.39465475	0.444441753	-0.049787003	1	631
NA	chr16	73092644	73094643	0.232925309	0.279311362	-0.046386053	3	632
AGGF1P2	chr10	135454090	135456089	0.597794401	0.672546858	-0.074752457	1	633
SLC2A3	chr12	8088372	8090371	0.591014614	0.662066054	-0.07105144	7	634
NA	chr8	21888361	21890360	0.27915665	0.336835979	-0.057679329	1	635
PNPLA4	chrX	7895281	7897280	0.37528996	0.30819025	0.067099711	15	636
IRX6	chr16	55356172	55358171	0.397537103	0.437598235	-0.040061131	4	637
NA	chr12	123233634	123235633	0.832205179	0.93558559	-0.103380411	1	638
NA	chr20	10152668	10154667	0.166278861	0.126223989	0.040054872	4	639
KRTAP6-3	chr21	31963259	31965258	0.612991839	0.694983736	-0.081991897	5	640
NA	chr21	31963286	31965285	0.612991839	0.694983736	-0.081991897	5	641
NA	chr2	214148430	214150429	0.147336127	0.188029142	-0.040693015	11	642
C10orf131	chr10	97665860	97667859	0.241258899	0.173890368	0.067368531	11	643
RN7SL526P	chr19	58579838	58581837	0.197099968	0.290591158	-0.093491191	1	644
NA	chr3	154957234	154959233	0.784906465	0.712617073	0.072289392	4	645
KRTAP19-4	chr21	31868952	31870951	0.199877309	0.290357872	-0.090480564	2	646
NA	chrX	111623120	111625119	0.585006621	0.642283731	-0.05727711	4	647
PRKRIRP2	chr3	86060211	86062210	0.450817708	0.505277435	-0.054459726	2	648
NQO1	chr16	69760355	69762354	0.117283628	0.157101141	-0.039817513	8	649
NA	chr2	105373678	105375677	0.662887502	0.744818518	-0.081931017	1	650
SNRPD2P1	chr10	91736974	91738973	0.7848898	0.852492221	-0.067602421	5	651
NA	chr3	133127299	133129298	0.687052087	0.771532636	-0.084480549	1	652
RFPL2	chr22	32600219	32602218	0.5474095	0.614791422	-0.067381922	5	653
SCUBE2	chr11	9159162	9161161	0.351918533	0.416013446	-0.064094912	2	654
FAM47A	chrX	34149948	34151947	0.600166948	0.650338281	-0.050171333	6	655
OLFM4	chr13	53601394	53603393	0.732474465	0.797862143	-0.065387677	6	656
CCNYL3	chr16	34261256	34263255	0.22782681	0.296009115	-0.068182304	1	657
TCEAL6	chrX	101397443	101399442	0.513147954	0.561464992	-0.048317038	4	658
CYP11B1	chr8	143960763	143962762	0.491275045	0.549272259	-0.057997214	6	659
LCE2A	chr1	152669340	152671339	0.162113783	0.254806961	-0.092693178	4	660
FCRL3	chr1	157670148	157672147	0.272299636	0.311783807	-0.039484171	8	661
SPANXD	chrX	140786397	140788396	0.595866154	0.640403813	-0.044537659	2	662
SNORD18B	chr15	66793930	66795929	0.566348703	0.625063485	-0.058714781	8	663
MIR767	chrX	151561502	151563501	0.164615486	0.229211463	-0.064595977	3	664
MIR498	chr19	54175951	54177950	0.432751229	0.500459313	-0.067708085	5	665
DNAJB14	chr4	100867384	100869383	0.120837163	0.161560554	-0.040723391	7	666
FAM122A	chr9	71393464	71395463	0.235431315	0.274791109	-0.039359794	5	667
NA	chr6	154869151	154871150	0.401318341	0.4816488	-0.080330459	1	668
FTH1P19	chrX	37349774	37351773	0.791999344	0.860862473	-0.068863128	5	669
SNORD115-20	chr15	25449909	25451908	0.389042346	0.45710888	-0.068066534	5	670
NA	chr20	39958263	39960262	0.614386794	0.745808959	-0.131422165	1	671
ANKRD20A14P	chr1	142802032	142804031	0.418272768	0.469375869	-0.051103102	2	672
NA	chr7	5598874	5600873	0.710262959	0.816240563	-0.105977604	1	673
SPAG16	chr2	214147613	214149612	0.151978098	0.191234251	-0.039256153	11	674
NA	chr14	106444734	106446733	0.696733945	0.777634165	-0.08090022	3	675
NA	chr14	54080245	54082244	0.437841805	0.540479497	-0.102637692	1	676
UBQLNL	chr11	5537436	5539435	0.257735609	0.402688267	-0.144952658	3	677

OR6X1	chr11	123624754	123626753	0.481834453	0.530977922	-0.04914347	5	678
RARRES2P9	chr16	34578431	34580430	0.376391238	0.29120189	0.085189348	2	679
WFDC8	chr20	44207466	44209465	0.772132405	0.692024425	0.080107979	2	680
BCL9	chr1	147011682	147013681	0.11522003	0.163585988	-0.048365957	6	681
CDHR2	chr5	175968012	175970011	0.612269525	0.546250657	0.066018867	1	682
FLG2	chr1	152331983	152333982	0.680019506	0.760756797	-0.080737292	3	683
CETN2	chrX	151998822	152000821	0.413048297	0.458144505	-0.045096208	14	684
LINC00703	chr10	4424938	4426937	0.736577625	0.824955334	-0.088377709	1	685
NA	chr19	1746555	1748554	0.4317327	0.471896724	-0.040164025	2	686
NA	chr8	124192266	124194265	0.912290096	0.814687686	0.09760241	1	687
LDHD	chr16	75150170	75152169	0.579114379	0.513392309	0.06572207	8	688
GPR183	chr13	99959160	99961159	0.671471885	0.71026817	-0.038796285	4	689
C1QTNF4	chr11	47615712	47617711	0.654737713	0.720644388	-0.065906675	5	690
KCTD1	chr18	24236866	24238865	0.196629657	0.235419571	-0.038789914	4	691
RFC5	chr12	118449893	118451892	0.550469317	0.420590751	0.129878566	1	692
ITPKB	chr1	226926525	226928524	0.371086143	0.428941797	-0.057855654	9	693
NA	chr12	102328494	102330493	0.764679522	0.683028064	0.081651457	1	694
NA	chr10	52827814	52829813	0.655686533	0.585553979	0.070132555	1	695
TRBJ2-1	chr7	142492549	142494548	0.618552685	0.673999622	-0.055446938	8	696
ARHGAP32	chr11	129148720	129150719	0.346457174	0.275748508	0.070708666	6	697
RNU6-1061P	chr16	71596932	71598931	0.051845171	0.090412349	-0.038567178	3	698
RDH8	chr19	10122425	10124424	0.576190123	0.649119278	-0.072929155	4	699
NA	chr22	48025923	48027922	0.811488534	0.892128743	-0.080640208	5	700
NA	chr3	170458655	170460654	0.726156479	0.620364739	0.105791739	1	701
HCRTR2	chr6	55037550	55039549	0.330023002	0.36853257	-0.038509568	6	702
TAS2R40	chr7	142917630	142919629	0.591638135	0.640873986	-0.049235851	4	703
NA	chr20	5094230	5096229	0.447729133	0.36494064	0.082788493	1	704
NAA60	chr16	3492111	3494110	0.569726458	0.628856609	-0.059130151	12	705
NA	chr11	126521247	126523246	0.334894154	0.421186719	-0.086292565	2	706
MIR4270	chr3	15537316	15539315	0.845412011	0.75580502	0.089606991	1	707
NA	chr1	142714106	142716105	0.536824544	0.600756471	-0.063931926	1	708
NA	chr2	108158606	108160605	0.532831264	0.346871491	0.185959773	1	709
DUSP23	chr1	159749222	159751221	0.49763749	0.535914687	-0.038277197	7	710
CPQ	chr8	97655955	97657954	0.321350615	0.361370538	-0.040019923	14	711
SRSF10	chr1	24306918	24308917	0.742436514	0.687022484	0.055414029	5	712
NA	chr6	106867081	106869080	0.798890267	0.714566201	0.084324066	1	713
ATE1	chr10	123687817	123689816	0.082943102	0.044825903	0.038117199	3	714
NA	chr10	78905910	78907909	0.793314736	0.709709324	0.083605412	1	715
NA	chr5	1003654	1005653	0.310126539	0.353264373	-0.043137834	6	716
NA	chr7	62516331	62518330	0.112176062	0.17358215	-0.061406088	1	717
OR7E155P	chr13	42014536	42016535	0.753731675	0.824505682	-0.070774007	2	718
OR7E37P	chr13	42015406	42017405	0.753731675	0.824505682	-0.070774007	2	719
EBP	chrX	48378046	48380045	0.166562261	0.236727638	-0.070165377	3	720
NA	chr12	60811264	60813263	0.473745339	0.581219757	-0.107474418	2	721
METTL21A	chr2	208490153	208492152	0.416876715	0.363769164	0.053107551	5	722
NA	chr3	121963113	121965112	0.276574199	0.325143754	-0.048569555	1	723
PRPS2	chrX	12807974	12809973	0.26259044	0.349054627	-0.086464187	10	724
NA	chr17	36755802	36757801	0.758137582	0.679027663	0.079109918	1	725
NA	chr15	20482257	20484256	0.321238536	0.359213926	-0.03797539	1	726
KCNJ3	chr2	155553311	155555310	0.312118968	0.265612017	0.046506951	10	727
NA	chr12	130529002	130531001	0.285196799	0.337251554	-0.052054755	9	728
MIR500A	chrX	49771539	49773538	0.745985247	0.701766665	0.044218582	5	729
NA	chr3	81041519	81043518	0.649667785	0.581947603	0.067720182	1	730
TBC1D3P7	chr17	39478179	39480178	0.66414846	0.749873068	-0.085724608	2	731
NA	chr20	1537800	1539799	0.654239578	0.697146816	-0.042907238	5	732
PCDHB1	chr5	140429479	140431478	0.409644058	0.44713151	-0.037487453	9	733
HMGN2P6	chr14	25736043	25738042	0.604136772	0.666463186	-0.062326413	2	734
NA	chr11	89598219	89600218	0.364874724	0.425850204	-0.060975481	1	735
DAP	chr5	10760885	10762884	0.304525623	0.267067209	0.037458414	5	736
TRIM29	chr11	120055738	120057737	0.911406232	0.817150221	0.094256012	1	737
RPRD1B	chr20	36660448	36662447	0.278761511	0.241361536	0.037399975	8	738
MIR520C	chr19	54209207	54211206	0.201418376	0.271487318	-0.070068943	4	739
SNORD115-23	chr15	25455443	25457442	0.276135075	0.343208994	-0.067073919	8	740
NA	chr2	171551385	171553384	0.598295686	0.645874081	-0.047578395	3	741
PDZD11	chrX	69509865	69511864	0.425801434	0.470218293	-0.044416859	5	742
PPFIBP1	chr12	27674864	27676863	0.20861876	0.162247083	0.046371677	3	743
MIR518F	chr19	54201769	54203768	0.372663973	0.409916199	-0.037252226	5	744
ADH1B	chr4	100242059	100244058	0.199405308	0.265180106	-0.065774798	3	745

NA	chr2	3626660	3628659	0.80992601	0.90287432	-0.09294831	1	746
PRAMEF21	chr1	13514566	13516565	0.701093451	0.77631784	-0.075224389	2	747
PRR5	chr22	45063093	45065092	0.375819589	0.298825267	0.076994323	6	748
NA	chr14	58566203	58568202	0.787112414	0.878569506	-0.091457093	1	749
NA	chr10	74035239	74037238	0.299345174	0.355653388	-0.056308214	2	750
TRIM34	chr11	5639494	5641493	0.856666979	0.775075918	0.081591061	3	751
PPP1R17	chr7	31724829	31726828	0.578006383	0.661339844	-0.08333346	7	752
NA	chr8	1250330	1252329	0.553083888	0.61352598	-0.060442092	3	753
ZNF75D	chrX	134477513	134479512	0.373004067	0.430938494	-0.057934427	16	754
ZNF449	chrX	134477221	134479220	0.373004067	0.430938494	-0.057934427	16	755
MTHFSD	chr16	86588342	86590341	0.216887957	0.2579791	-0.041091143	15	756
MAGED1	chrX	51544603	51546602	0.477973891	0.575669497	-0.097695606	5	757
RNA5SP359	chr12	38556818	38558817	0.707466165	0.758295881	-0.050829716	5	758
LRFN5	chr14	42075273	42077272	0.301631331	0.358646939	-0.057015609	12	759
SLCO1B1	chr12	21282636	21284635	0.291275661	0.337783201	-0.04650754	1	760
OR1N1	chr9	125289073	125291072	0.449686991	0.532856085	-0.083169094	2	761
WFDC12	chr20	43752607	43754606	0.880173163	0.825287379	0.054885785	6	762
NA	chr7	41744434	41746433	0.617367711	0.654186914	-0.036819203	8	763
SLCO1B3	chr12	20962136	20964135	0.681638954	0.611825028	0.069813927	1	764
RIMS4	chr20	43438480	43440479	0.182054419	0.242385278	-0.060330859	6	765
NA	chr10	38463096	38465095	0.147533248	0.260966522	-0.113433274	1	766
NA	chr2	105318716	105320715	0.195576504	0.271265488	-0.075688984	1	767
NA	chr8	62822862	62824861	0.575141185	0.681519265	-0.10637808	3	768
TAGLN	chr11	117068537	117070536	0.421326769	0.482635172	-0.061308403	9	769
NA	chr9	139980622	139982621	0.259376006	0.222770756	0.03660525	5	770
MCCC1	chr3	182833364	182835363	0.498925267	0.448901222	0.050024046	3	771
LINC00967	chr8	67102828	67104827	0.619446495	0.689665994	-0.070219499	1	772
C19orf24	chr19	1273526	1275525	0.145150087	0.181708833	-0.036558746	8	773
NA	chr17	53628511	53630510	0.629945339	0.70132531	-0.071379971	1	774
RNU6-1249P	chr17	53627671	53629670	0.629945339	0.70132531	-0.071379971	1	775
MIR519B	chr19	54196967	54198966	0.273228523	0.354741336	-0.081512814	4	776
TRBV28	chr7	142426984	142428983	0.56786015	0.624291577	-0.056431427	4	777
MIR4269	chr2	240225657	240227656	0.455653269	0.405113021	0.050540248	1	778
KRTAP10-5	chr21	45999982	46001981	0.520330962	0.483876438	0.036454523	2	779
NA	chr2	64368873	64370872	0.114157492	0.150537413	-0.036379921	1	780
OR56A3	chr11	5967070	5969069	0.281720466	0.360275787	-0.078555321	2	781
COL24A1	chr1	86622127	86624126	0.218213815	0.254580919	-0.036367104	7	782
RBP7	chr1	10055764	10057763	0.597746496	0.658390683	-0.060644187	11	783
NA	chr14	79219722	79221721	0.307279228	0.426118257	-0.11883903	1	784
TENC1	chr12	53439253	53441252	0.415024621	0.451332471	-0.03630785	4	785
HTR3B	chr11	113773899	113775898	0.864350974	0.781617717	0.082733258	3	786
OR4C3	chr11	48344972	48346971	0.15501351	0.220869689	-0.065856179	2	787
C14orf164	chr14	23653025	23655024	0.556025099	0.592282794	-0.036257695	2	788
ATG4C	chr1	63248306	63250305	0.249505277	0.316496762	-0.066991485	10	789
TMPRSS11D	chr4	68749251	68751250	0.776434387	0.863125989	-0.086691602	1	790
FAM19A4	chr3	68981262	68983261	0.199433847	0.235560312	-0.036126465	10	791
SNORD115-24	chr15	25457295	25459294	0.237211557	0.310868181	-0.073656624	3	792
SNORD115-34	chr15	25476034	25478033	0.381016687	0.465564772	-0.084548085	4	793
SNORD115-39	chr15	25485393	25487392	0.250232064	0.286335405	-0.036103341	5	794
HNMT	chr2	138720090	138722089	0.798715851	0.731218501	0.06749735	4	795
OR2T3	chr1	248635127	248637126	0.352766274	0.481542879	-0.128776605	2	796
SIRPG	chr20	1637926	1639925	0.400002733	0.329841789	0.070160944	4	797
NA	chr1	181204024	181206023	0.804786277	0.893289967	-0.088503689	2	798
NA	chr9	68297299	68299298	0.555595499	0.605112996	-0.049517497	4	799
OR5A1	chr11	59209117	59211116	0.52824638	0.572311816	-0.044065436	4	800
OR9A4	chr7	141617117	141619116	0.460144352	0.507033413	-0.046889062	3	801
ZER1	chr9	131534194	131536193	0.277306668	0.313252333	-0.035945665	4	802
NA	chr3	67703621	67705620	0.177839121	0.223990714	-0.046151593	9	803
NA	chr15	93965306	93967305	0.775948452	0.851880405	-0.075931953	2	804
GNAT1	chr3	50227545	50229544	0.873937991	0.818293728	0.055644263	5	805
TRAPPC9	chr8	141468179	141470178	0.756076697	0.810026545	-0.053949848	8	806
SLC9A9	chr3	143566874	143568873	0.578738111	0.483799732	0.094938378	2	807
NA	chr22	37621536	37623535	0.701047313	0.778497222	-0.07744991	1	808
NA	chr1	181142120	181144119	0.695096598	0.639451205	0.055645393	2	809
RNA5SP354	chr12	26526167	26528166	0.663228134	0.597104959	0.066123175	1	810
STK19	chr6	31937368	31939367	0.606450907	0.654726863	-0.048275956	39	811
RNU6-951P	chr2	38373057	38375056	0.384348234	0.488598427	-0.104250194	1	812
LMO1	chr11	8289764	8291763	0.533863584	0.585844855	-0.051981271	9	813

B3GALT2	chr1	193155285	193157284	0.427478419	0.485134147	-0.057655728	3	814
NA	chr7	45000009	45002008	0.94145772	0.848386077	0.093071643	1	815
MAGEE2	chrX	75004580	75006579	0.397211375	0.36034909	0.036862285	10	816
NA	chr17	48238138	48240137	0.307082202	0.271419519	0.035662683	5	817
SPATS2	chr12	49758867	49760866	0.107363626	0.14463213	-0.037268504	5	818
NA	chr19	15869685	15871684	0.285813644	0.328884457	-0.043070813	4	819
MIR16-1	chr13	50622698	50624697	0.462498798	0.513600962	-0.051102164	1	820
NA	chr7	57711081	57713080	0.562320835	0.619705799	-0.057384964	5	821
OR2C1	chr16	3404389	3406388	0.894008103	0.835732587	0.058275516	5	822
NA	chr9	132645950	132647949	0.444537157	0.501699626	-0.057162469	3	823
NA	chr17	37235818	37237817	0.505234242	0.44647394	0.058760302	1	824
CCDC149	chr4	24981327	24983326	0.508055008	0.461861989	0.046193019	8	825
NA	chr7	62807739	62809738	0.639080846	0.553230797	0.085850049	3	826
NA	chr2	89165154	89167153	0.355801952	0.265054099	0.090747853	1	827
TESPA1	chr12	55378031	55380030	0.660289812	0.706695497	-0.046405685	7	828
NA	chr9	137417528	137419527	0.340663628	0.407291189	-0.066627561	1	829
NA	chr8	89337565	89339564	0.130794347	0.166269439	-0.035475092	3	830
NA	chr5	111962633	111964632	0.650692039	0.721768967	-0.071076928	1	831
NA	chr5	132153193	132155192	0.759325475	0.841942482	-0.082617007	1	832
NA	chr6	34662594	34664593	0.332697548	0.379463837	-0.046766289	6	833
NA	chr4	7939228	7941227	0.454750834	0.531554184	-0.07680335	7	834
LINC00698	chr3	62934605	62936604	0.227450623	0.290920245	-0.063469622	3	835
ARHGEF6	chrX	135863748	135865747	0.537203921	0.480823609	0.056380312	2	836
GABBR2	chr9	101470980	101472979	0.537924278	0.484594007	0.053330271	4	837
NA	chr9	41953080	41955079	0.178167342	0.21353484	-0.035367498	2	838
OR1L3	chr9	125435815	125437814	0.343015085	0.401181109	-0.058166024	3	839
LINC00635	chr3	107596441	107598440	0.814841535	0.904075066	-0.089233531	3	840
NA	chr2	10856399	10858398	0.612605441	0.718340758	-0.105735317	1	841
NA	chr12	53551870	53553869	0.633727954	0.681309585	-0.047581631	2	842
SMIM17	chr19	57153013	57155012	0.711482079	0.645457465	0.066024613	4	843
NA	chr2	226262926	226264925	0.469660337	0.526526919	-0.056866581	2	844
PCDHGA2	chr5	140717039	140719038	0.543939818	0.588657352	-0.044717534	8	845
SNORA10	chr16	2011968	2013967	0.291872472	0.357878113	-0.066005642	7	846
AMBN	chr4	71456473	71458472	0.531619479	0.586467979	-0.0548485	3	847
DPPA4	chr3	109055920	109057919	0.658529512	0.742447822	-0.08391831	6	848
KRTAP20-2	chr21	32006055	32008054	0.235916202	0.289445211	-0.053529009	1	849
NA	chr8	21154217	21156216	0.817265917	0.901965094	-0.084699177	2	850
SLC36A4	chr11	92930631	92932630	0.165026014	0.210651999	-0.045625985	10	851
DEFB112	chr6	50015865	50017864	0.732234475	0.648911736	0.083322739	1	852
NA	chr17	43325704	43327703	0.461959294	0.416558682	0.045400612	1	853
OR7D2	chr19	9294779	9296778	0.323679301	0.23104323	0.092636071	1	854
EPPIN-WFDC6	chr20	44175566	44177565	0.537027793	0.572139823	-0.03511203	5	855
EPPIN	chr20	44175892	44177891	0.537027793	0.572139823	-0.03511203	5	856
MAPK8IP2	chr22	51037614	51039613	0.303277695	0.338373328	-0.035095633	6	857
MPP4	chr2	202562918	202564917	0.715438535	0.792940933	-0.077502398	4	858
NA	chr14	80440013	80442012	0.657262071	0.728191588	-0.070929517	1	859
IL8	chr4	74604723	74606722	0.453908562	0.386414822	0.067493741	1	860
NA	chr13	88462988	88464987	0.319669599	0.392829746	-0.073160147	1	861
ZEB1	chr10	31605924	31607923	0.090199967	0.130861714	-0.040661746	11	862
TRBV2	chr7	141999247	142001246	0.707804835	0.785353285	-0.07754845	2	863
MMGT1	chrX	135055723	135057722	0.447408514	0.505693214	-0.0582847	5	864
ETFA	chr15	76603314	76605313	0.1994936	0.164553499	0.034940101	9	865
TSPO	chr22	43546020	43548019	0.509096592	0.558912725	-0.049816133	10	866
ZNF696	chr8	144370346	144372345	0.429896263	0.479463604	-0.049567341	5	867
NA	chr16	34714353	34716352	0.657140043	0.593404539	0.063735503	1	868
KRTAP19-5	chr21	31873936	31875935	0.439648157	0.500522311	-0.060874154	5	869
TUSC7	chr3	116426753	116428752	0.520747842	0.593381108	-0.072633266	3	870
KALRN	chr3	123797370	123799369	0.603696152	0.554735905	0.048960246	2	871
NA	chr4	189064034	189066033	0.744002337	0.823295931	-0.079293594	1	872
PALM2-AKAP2	chr9	112541089	112543088	0.237915982	0.203166071	0.034749911	3	873
AKAP2	chr9	112541269	112543268	0.237915982	0.203166071	0.034749911	3	874
OR4K13	chr14	20502420	20504419	0.789506427	0.873544859	-0.084038432	1	875
NA	chr9	66342622	66344621	0.661741033	0.597937399	0.063803634	1	876
RNU7-76P	chr7	46014538	46016537	0.292978969	0.400073319	-0.107094351	1	877
SCNN1G	chr16	23192536	23194535	0.107464327	0.142033329	-0.034569002	8	878
NA	chr8	1712169	1714168	0.098063601	0.134733562	-0.036669961	4	879
AKR1C2	chr10	5059724	5061723	0.428081463	0.506035303	-0.07795384	5	880
CAPN1	chr11	64946537	64948536	0.769672362	0.695898781	0.073773581	1	881



NA	chr6	41884765	41886764	0.759778712	0.840162848	-0.080384137	1	882
ADAL	chr15	43621372	43623371	0.099572288	0.137922639	-0.038350351	16	883
LY6K	chr8	143780029	143782028	0.556088443	0.590585225	-0.034496781	9	884
SLC9A3P3	chr10	51786624	51788623	0.785668489	0.710551369	0.07511712	1	885
CAPS2	chr12	75784209	75786208	0.163731114	0.201179289	-0.037448175	11	886
DBNDD1	chr16	90086037	90088036	0.155443518	0.189932863	-0.034489344	4	887
PDE2A	chr11	72385136	72387135	0.694061545	0.638137289	0.055924256	5	888
EGFL7	chr9	139551808	139553807	0.580496491	0.543864732	0.036631759	3	889
MAGI2-AS1	chr7	78567666	78569665	0.731918469	0.661978186	0.069940283	1	890
NA	chr1	222627548	222629547	0.211422974	0.25188821	-0.040465236	3	891
ZNHIT3	chr17	34840973	34842972	0.109793893	0.075426141	0.034367753	14	892
KLK13	chr19	51567872	51569871	0.666913339	0.714638094	-0.047724755	9	893
NA	chr8	38004759	38006758	0.874600934	0.791313943	0.083286991	1	894
CRNN	chr1	152386240	152388239	0.834722947	0.922127537	-0.08740459	2	895
NA	chr16	67465095	67467094	0.460858532	0.518292421	-0.057433888	3	896
NA	chr17	38457957	38459956	0.731143615	0.661384071	0.069759543	1	897
STPG1	chr1	24742925	24744924	0.567187422	0.648588791	-0.081401369	3	898
SBK1	chr16	28302340	28304339	0.140046768	0.174725229	-0.034678461	6	899
KCNC2	chr12	75603149	75605148	0.3818765	0.304137765	0.077738735	6	900
PTMS	chr12	6873182	6875181	0.336582215	0.409234843	-0.072652629	2	901
NA	chr10	20016980	20018979	0.589764978	0.651887292	-0.062122314	1	902
NA	chr14	60386558	60388557	0.08312484	0.117295621	-0.034170781	2	903
MTM1	chrX	149735569	149737568	0.573672538	0.621348035	-0.047675497	9	904
LINC00494	chr20	46987193	46989192	0.673010429	0.722916274	-0.049905845	4	905
BAALC	chr8	104151438	104153437	0.561640588	0.614496868	-0.05285628	6	906
PXT1	chr6	36410167	36412166	0.098067479	0.132112856	-0.034045377	14	907
CDH17	chr8	95229032	95231031	0.823082726	0.738693011	0.084389715	5	908
RAB40A	chrX	102773918	102775917	0.50382673	0.537834687	-0.034007957	3	909
PXMP4	chr20	32307626	32309625	0.369808498	0.470225838	-0.10041734	11	910
ANKRD60	chr20	56803210	56805209	0.782118167	0.71217013	0.069948038	7	911
HOTTIP	chr7	27236694	27238693	0.097923101	0.131870448	-0.033947347	4	912
NA	chr17	21934222	21936221	0.636609353	0.693723351	-0.057113998	5	913
NA	chr17	21933219	21935218	0.636609353	0.693723351	-0.057113998	5	914
NA	chr17	21933458	21935457	0.636609353	0.693723351	-0.057113998	5	915
TEX22	chr14	105863416	105865415	0.426585029	0.392689151	0.033895878	7	916
ZNF880	chr19	52871670	52873669	0.37413992	0.315534396	0.058605524	10	917
KCTD20	chr6	36409044	36411043	0.118089391	0.151980643	-0.033891251	14	918
PKIG	chr20	43158926	43160925	0.628069323	0.695526473	-0.06745715	8	919
EHMT1	chr9	140511944	140513943	0.125569397	0.169254204	-0.043684807	5	920
PRDM5	chr4	121843526	121845525	0.226700904	0.192850721	0.033850182	9	921
KRTAP4-9	chr17	39260084	39262083	0.689020433	0.75374386	-0.064723427	2	922
OR5AK2	chr11	56754847	56756846	0.234688985	0.320201414	-0.085512428	1	923
OR4X2	chr11	48265108	48267107	0.558089881	0.383374686	0.174715195	1	924
RN7SKP122	chr5	107144830	107146829	0.409123078	0.451763919	-0.04264084	1	925
NA	chr12	42325895	42327894	0.474252504	0.542160965	-0.067908461	3	926
FBXO6	chr1	11722681	11724680	0.551398517	0.598883525	-0.047485008	8	927
DCAF10	chr9	37798999	37800998	0.12352421	0.157178957	-0.033654747	3	928
MIR518C	chr19	54210489	54212488	0.457068069	0.491912917	-0.034844848	2	929
HIST1H2AL	chr6	27831534	27833533	0.481795148	0.562391828	-0.08059668	15	930
NA	chrX	70885104	70887103	0.520339349	0.581173312	-0.060833963	2	931
MIR889	chr14	101512738	101514737	0.644502273	0.701035555	-0.056533282	7	932
ZNF200	chr16	3285722	3287721	0.817419017	0.741432834	0.075986183	1	933
SH3D19	chr4	152246285	152248284	0.098811068	0.168266432	-0.069455364	4	934
NA	chr4	189079719	189081718	0.764510879	0.820574638	-0.056063759	4	935
NA	chr7	73398822	73400821	0.928395972	0.842316626	0.086079346	1	936
EOGT	chr3	69062613	69064612	0.124786491	0.15854756	-0.033761069	8	937
KRTAP13-1	chr21	31766892	31768891	0.293329385	0.326718525	-0.03338914	6	938
EFR3A	chr8	132914835	132916834	0.427383862	0.514756583	-0.087372721	10	939
NA	chr16	1522186	1524185	0.963297713	0.874100513	0.0891972	1	940
EEF1A1P25	chr3	138542405	138544404	0.587818741	0.513295035	0.074523706	1	941
MYCNOS	chr2	16081872	16083871	0.36623181	0.316734754	0.049497056	7	942
GPLD1	chr6	24494934	24496933	0.202910267	0.236274355	-0.033364088	7	943
NAP1L6	chrX	72347420	72349419	0.49786668	0.428906303	0.068960378	3	944
KRTAP22-1	chr21	31971914	31973913	0.314647822	0.359942711	-0.045294889	4	945
LCMT2	chr15	43622304	43624303	0.061964282	0.115558525	-0.053594243	14	946
NA	chr6	161350612	161352611	0.368712981	0.42559454	-0.05688156	3	947
LRRCL15	chr3	194089973	194091972	0.572258247	0.538944337	0.03331391	8	948
C12orf54	chr12	48874786	48876785	0.666916902	0.726651857	-0.059734955	4	949

LINC00682	chr4	41884129	41886128	0.483615596	0.543989656	-0.06037406	5	950
MIR323B	chr14	101521056	101523055	0.711996707	0.769717684	-0.057720977	13	951
EML6	chr2	54949136	54951135	0.171665003	0.208783223	-0.037118221	8	952
ZNF592	chr15	85290366	85292365	0.210618069	0.246813355	-0.036195286	6	953
KIR3DX1	chr19	55042409	55044408	0.413918261	0.486307086	-0.072388825	6	954
ZNF131	chr5	43063778	43065777	0.080051606	0.113256278	-0.033204672	3	955
PTPRT	chr20	41818111	41820110	0.461247745	0.506849712	-0.045601968	8	956
TRIM9	chr14	51562280	51564279	0.172613487	0.231297565	-0.058684078	7	957
FABP2	chr4	120243046	120245045	0.457263301	0.521749826	-0.064486525	3	958
MAGEF1	chr3	184429337	184431336	0.155514032	0.204425199	-0.048911167	9	959
NA	chr2	16245464	16247463	0.932442221	0.846865821	0.085576401	1	960
MIR137HG	chr1	98514920	98516919	0.236110696	0.196338059	0.039772637	4	961
TACR3	chr4	104640474	104642473	0.310786014	0.343794033	-0.033008019	12	962
TPD52	chr8	81142968	81144967	0.49108507	0.455966839	0.035118232	3	963
SSTR3	chr22	37607863	37609862	0.777614512	0.850897776	-0.073283265	4	964
KIAA1211L	chr2	99552223	99554222	0.394722628	0.427644168	-0.03292154	11	965
NA	chr8	120886229	120888228	0.070317175	0.106004032	-0.035686857	5	966
NA	chr4	13548926	13550925	0.146874565	0.179741676	-0.032867111	11	967
NA	chr15	101400548	101402547	0.682965297	0.637141933	0.045823364	2	968
ALDH1A3	chr15	101400629	101402628	0.682965297	0.637141933	0.045823364	2	969
SLC27A4	chr9	131101425	131103424	0.137525804	0.177201103	-0.039675299	4	970
NA	chr5	169756933	169758932	0.695833345	0.731543344	-0.03571	6	971
CYP4A11	chr1	47406657	47408656	0.324153213	0.386336862	-0.062183649	3	972
F13A1	chr6	6320747	6322746	0.473262706	0.514059702	-0.040796996	7	973
CAMSAP3	chr19	7659288	7661287	0.081354537	0.114129861	-0.032775324	6	974
EBNA1BP2	chr1	43736108	43738107	0.798765198	0.711398869	0.087366328	3	975
UNKL	chr16	1464253	1466252	0.245498865	0.278267528	-0.032768663	8	976
NA	chr12	7283295	7285294	0.141910957	0.10915937	0.032751587	1	977
CSN2	chr4	70826226	70828225	0.453134466	0.499002171	-0.045867705	1	978
SMN2	chr5	69343850	69345849	0.288851124	0.33989268	-0.051041556	1	979
NA	chr20	39807596	39809595	0.784837228	0.713235496	0.071601732	1	980
UBE2A	chrX	118707001	118709000	0.518509376	0.565881749	-0.047372373	13	981
HMGXB4	chr22	35651945	35653944	0.220332031	0.1836741	0.036657931	9	982
NTRK3-AS1	chr15	88794461	88796460	0.769293336	0.846138229	-0.076844893	1	983
DENND3	chr8	142125877	142127876	0.827466741	0.909974878	-0.082508136	1	984
NA	chr6	169562520	169564519	0.831595473	0.914463375	-0.082867902	1	985
SLC6A1	chr3	11032910	11034909	0.164281449	0.196870604	-0.032589155	11	986
BMP2	chr20	6746811	6748810	0.32392275	0.380660589	-0.056737839	6	987
NA	chr12	131830515	131832514	0.776733879	0.838814764	-0.062080884	2	988
HOXB-AS1	chr17	46619413	46621412	0.164529827	0.198961632	-0.034431805	9	989
ALDOA	chr16	30062911	30064910	0.516307017	0.479463067	0.03684395	6	990
SOST	chr17	41835657	41837656	0.702407202	0.756455664	-0.054048462	6	991
NA	chr6	135795248	135797247	0.607619133	0.727542524	-0.119923391	1	992
PCDHB16	chr5	140559480	140561479	0.45191135	0.495810218	-0.043898869	3	993
NA	chr8	123705846	123707845	0.726079961	0.798277387	-0.072197426	1	994
ASCL1	chr12	103349964	103351963	0.281574104	0.233768898	0.047805206	10	995
C10orf91	chr10	134256331	134258330	0.615026922	0.674993715	-0.059966793	2	996
ZNF329	chr19	58665978	58667977	0.398093403	0.448979693	-0.050886291	5	997
SPRR4	chr1	152941642	152943641	0.459014722	0.555266233	-0.096251511	8	998
NSDHL	chrX	151998011	152000010	0.476261098	0.508665547	-0.032404449	14	999
TRBV23-1	chr7	142351968	142353967	0.706566593	0.738948336	-0.032381743	4	1000

**Supplementary Table S2. List of the 1,000 top-ranked, differentially methylated gene bodies after induced overexpression of *TET1* .**This table is related to **Fig. 2B**. "NA" : No gene symbol provided.

gene_symbol	chromosome	start	end	beta.TET1+Dox	beta.TET1-Dox	difference	num.sites	rank
NA	chr5	121646992	121647368	0.215583301	0.471543758	-0.255960458	2	1
LINC00424	chr13	22446909	22449705	0.336338211	0.660893691	-0.324555479	1	2
NA	chr1	27995979	27996787	0.343914965	0.59769997	-0.253785004	1	3
NA	chr1	13108842	13112679	0.270814596	0.509846635	-0.239032039	1	4
MIR100	chr11	122022937	122023016	0.356190771	0.723647342	-0.36745657	1	5
NA	chr16	21638063	21638723	0.386915096	0.641065122	-0.254150026	1	6
USP12-AS1	chr13	27736992	27743272	0.39039492	0.64608486	-0.25568994	1	7
NA	chr4	147162958	147164821	0.233784628	0.480026372	-0.246241744	2	8
ZNF726	chr19	24097678	24127961	0.141953305	0.327020175	-0.18506687	1	9
PRKRIRP7	chr8	79672377	79674666	0.339430918	0.145788105	0.193642813	1	10
DEFB133	chr6	49913814	49917157	0.225037558	0.39363274	-0.168595181	2	11
AKR1C6P	chr10	4914093	4934167	0.197497691	0.396302977	-0.198805287	1	12
NA	chr5	164647583	164668758	0.110214984	0.262008239	-0.151793255	1	13
RNA5SP42	chr1	34578550	34578664	0.391115907	0.588939481	-0.197823575	1	14
NA	chr2	155292365	155313950	0.161543093	0.307589903	-0.14604681	1	15
NA	chr7	104944724	104947089	0.16700273	0.312822558	-0.145819827	1	16
NA	chr8	134783652	134826780	0.167340383	0.372539408	-0.205199025	1	17
MROH9	chr1	170904612	171033906	0.522698559	0.666302755	-0.143604196	2	18
SNORD109A	chr15	25287065	25287575	0.567836579	0.36022288	0.207613698	1	19
CABS1	chr4	71200698	71202833	0.159029591	0.387320059	-0.228290468	1	20
NA	chr16	33815861	33816297	0.143021156	0.339614572	-0.196593415	1	21
MIR647	chr20	62573984	62574079	0.238631499	0.374134489	-0.13550299	1	22
SNTN	chr3	63638344	63664696	0.406437567	0.673327653	-0.266890086	1	23
NA	chr9	80071211	80141613	0.461798427	0.589837932	-0.128039506	2	24
KRTAP4-12	chr17	39279343	39280419	0.378210321	0.56732251	-0.189112189	1	25
NA	chr5	157600609	157603430	0.45661821	0.645226633	-0.188608423	1	26
NA	chr5	157602404	157627024	0.45661821	0.645226633	-0.188608423	1	27
NA	chr3	161144215	161166030	0.349217038	0.51329982	-0.164082781	1	28
NA	chr9	132645972	132646449	0.414503255	0.584954954	-0.170451699	1	29
NA	chr14	27244701	27291313	0.415607977	0.680297149	-0.264689173	1	30
LCE1E	chr1	152758690	152760902	0.249351773	0.375327023	-0.12597525	3	31
NA	chr3	158263009	158288855	0.544423573	0.426866084	0.11755749	5	32
NA	chr5	18704542	18746282	0.588806554	0.470120524	0.11868603	2	33
TSPY13P	chrY	9743204	9745748	0.396539801	0.281606303	0.114933498	1	34
OR1E2	chr17	3336164	3337135	0.269000307	0.382761544	-0.113761237	2	35
ALDOC	chr17	26900133	26904282	0.268593441	0.386073075	-0.117479634	9	36
NA	chr11	66032248	66033137	0.595370637	0.816795348	-0.221424711	1	37
NA	chr17	40422535	40424701	0.79823675	0.582505651	0.215731099	1	38
NA	chr5	44753051	44765846	0.246521466	0.502847677	-0.256326211	1	39
IFI44	chr1	79115481	79129763	0.550823843	0.749275687	-0.198451845	1	40
NA	chr7	46184535	46185286	0.326214308	0.513224345	-0.187010037	1	41
OR4K5	chr14	20388741	20389818	0.383070536	0.520239508	-0.137168972	1	42
NA	chr12	79187306	79187894	0.372455367	0.563176391	-0.190721023	1	43
MIR485	chr14	101521738	101521848	0.544979723	0.734636336	-0.189656613	1	44
NA	chr6	19290550	19321252	0.490711364	0.665983263	-0.175271899	2	45
NA	chr6	30484043	30486994	0.68864214	0.509350108	0.179292032	5	46
ANKRD18EP	chr6	39078097	39080728	0.211236362	0.315042136	-0.103805774	1	47
OR11H6	chr14	20691791	20692964	0.444258517	0.599321031	-0.155062515	1	48
NA	chr2	214141276	214148929	0.296860189	0.400373382	-0.103513193	4	49
RNU6-173P	chr4	189042685	189042788	0.297431615	0.412957275	-0.11552566	1	50
NA	chr19	57828576	57828930	0.320001486	0.193963198	0.126038288	1	51
MIR518E	chr19	54233092	54233179	0.295502857	0.405080921	-0.109578064	1	52
ADH7	chr4	100333418	100356894	0.162191641	0.442765495	-0.280573855	1	53
NA	chr6	112555366	112555959	0.531875805	0.710190202	-0.178314397	1	54
CNTN4-AS1	chr3	3080717	3102829	0.722850149	0.589800326	0.133049823	3	55
TRAT1	chr3	108541545	108573852	0.197950643	0.34080076	-0.142850118	1	56
MYO16-AS1	chr13	109816250	109853831	0.351806686	0.470191047	-0.118384361	1	57
UGT2B10	chr4	69681711	69696914	0.216353361	0.373730151	-0.15737679	1	58
HNRNPDP2	chr6	65341098	65341575	0.56156639	0.756302233	-0.194735843	1	59
LCE4A	chr1	152680636	152681967	0.357710668	0.460057716	-0.102347048	4	60
OR6V1	chr7	142749417	142750444	0.282512275	0.383046151	-0.100533877	1	61

OR1E1	chr17	3300398	3301704	0.158426608	0.258677758	-0.10025115	1	62
WFDC12	chr20	43752066	43753106	0.784002164	0.654596938	0.129405226	2	63
NA	chr11	94773575	94774735	0.907797198	0.687238407	0.22055879	1	64
SNORD12B	chr20	47896856	47896946	0.321547336	0.483299672	-0.161752336	1	65
NA	chr17	50939481	50976948	0.478662512	0.577236965	-0.098574453	2	66
NA	chr15	42873354	42873686	0.141199497	0.314547774	-0.173348277	2	67
NA	chr8	65713793	65730130	0.795250211	0.605454622	0.189795589	1	68
TNFAIP8L2	chr1	151129105	151132225	0.756095827	0.852981672	-0.096885845	4	69
NA	chr17	48235694	48238637	0.694013599	0.597767423	0.096246176	2	70
NA	chr11	116644105	116644921	0.172102452	0.077498442	0.094604011	1	71
KRTAP6-2	chr21	31970909	31971219	0.3746847	0.490658355	-0.115973655	3	72
OR6C72P	chr12	55677534	55706860	0.279596516	0.459161158	-0.179564642	1	73
OR6C6	chr12	55688072	55689016	0.279596516	0.459161158	-0.179564642	1	74
MBOAT4	chr8	29989340	30002202	0.681341303	0.466859742	0.214481562	1	75
KRTAP23-1	chr21	31720717	31720924	0.338477903	0.441357645	-0.102879742	1	76
LCE1B	chr1	152784447	152785585	0.46301964	0.57139399	-0.10837435	2	77
NA	chr1	28843988	28844087	0.440127723	0.226502611	0.213625112	1	78
NA	chr3	55394471	55395857	0.702949948	0.497428555	0.205521393	1	79
KRTAP27-1	chr21	31709331	31710012	0.425307907	0.605389265	-0.180081358	1	80
NA	chr7	126855181	126869975	0.188931626	0.32123062	-0.132298994	1	81
NA	chr1	83439565	83451891	0.52901897	0.283819059	0.245199911	1	82
NA	chrX	70882845	70885603	0.23354824	0.352471232	-0.118922991	1	83
NA	chr2	75751194	75769832	0.559674527	0.768224588	-0.20855006	2	84
NA	chr14	52577840	52596343	0.674800529	0.869774027	-0.194973498	1	85
PPP2R2B-IT1	chr5	146293770	146299069	0.139926348	0.28262042	-0.142694072	1	86
NA	chr6	73972731	73972807	0.069409384	0.214850359	-0.145440974	1	87
NA	chr3	137490791	137499720	0.438882174	0.535474871	-0.096592697	7	88
ZNF32	chr10	44139307	44144304	0.383227417	0.486865848	-0.103638431	4	89
NA	chr15	21941147	21968151	0.530961335	0.634632483	-0.103671148	3	90
NA	chr12	90341470	90343503	0.291570682	0.378136954	-0.086566271	1	91
NA	chr21	46798116	46799550	0.591202142	0.677207556	-0.086005415	2	92
HULC	chr6	8652370	8654079	0.564264647	0.742375296	-0.178110649	1	93
NA	chr1	209541007	209553035	0.545289249	0.687778386	-0.142489137	2	94
NA	chr17	31438876	31458761	0.279631754	0.364718719	-0.085086966	1	95
PRKRIRP2	chr3	86061711	86064270	0.410442286	0.521528804	-0.111086519	1	96
NA	chr14	76702160	76729817	0.264886844	0.366422633	-0.101535789	1	97
NA	chr8	49502961	49507181	0.342282791	0.47816275	-0.135879959	1	98
TAS2R38	chr7	141672431	141673573	0.568370974	0.65879565	-0.090424676	2	99
NA	chr12	116248164	116323942	0.847193086	0.668270679	0.178922407	1	100
LCE1C	chr1	152777311	152779107	0.390379191	0.537884484	-0.147505293	2	101
NA	chr16	64398684	64634150	0.186877698	0.290222735	-0.103345036	2	102
NA	chr3	108895285	108896212	0.623272215	0.788322711	-0.165050497	1	103
NA	chr16	28873487	28874661	0.237937145	0.338171621	-0.100234475	1	104
LARP1BP1	chr4	64215832	64217190	0.476326614	0.588592322	-0.112265708	2	105
NA	chr2	234602080	234617345	0.600722502	0.767944882	-0.16722238	2	106
MAST4-AS1	chr5	66297211	66299781	0.15643913	0.260674784	-0.104235654	1	107
LINC00898	chr22	48016792	48027318	0.748081029	0.909072878	-0.160991849	2	108
SNORA69	chrX	118921316	118921447	0.178096415	0.344683956	-0.166587541	1	109
NA	chr10	92162278	92300562	0.590807767	0.691873977	-0.10106621	2	110
LPAL2	chr6	160874460	160932156	0.484751706	0.572546526	-0.08779482	4	111
NA	chr3	71634094	71636560	0.578330294	0.72979373	-0.151463436	1	112
PF4V1	chr4	74718906	74719872	0.433144261	0.582972533	-0.149828272	6	113
ABCA10	chr17	67143355	67240987	0.535260991	0.671412314	-0.136151323	2	114
NA	chr9	107753077	107754062	0.087906528	0.169391382	-0.081484854	1	115
OR52E6	chr11	5862158	5863182	0.484743546	0.787624802	-0.302881256	1	116
NAV2-IT1	chr11	19402031	19406561	0.647664357	0.814213954	-0.166549597	1	117
NA	chr12	50302665	50305646	0.552945571	0.694109867	-0.141164297	1	118
NA	chr7	53723202	53879624	0.488034533	0.601545765	-0.113511232	4	119
TRAV12-3	chr14	22433680	22434290	0.557900442	0.758800636	-0.200900194	1	120
NA	chr16	56126899	56225006	0.33093208	0.425468101	-0.094536021	7	121
OSBPL10-AS1	chr3	31745550	31763144	0.609447448	0.760969267	-0.151521818	1	122
NA	chr12	114676775	114679575	0.471950903	0.589780375	-0.117829472	1	123
NA	chr10	120968043	120971272	0.277260822	0.360549316	-0.083288495	3	124
MIR105-2	chrX	151562884	151562964	0.165779905	0.243066791	-0.077286886	1	125
NA	chr15	69884468	69988089	0.395883277	0.49313114	-0.097247863	1	126

NA	chr19	32516768	32547771	0.074159729	0.151077058	-0.076917328	3	127
NA	chr4	66868999	66882510	0.20210199	0.303893692	-0.101791702	1	128
NA	chr17	32581900	32582306	0.145680557	0.23780805	-0.092127492	3	129
OR1I1	chr19	15197791	15199032	0.741208022	0.919279972	-0.178071951	1	130
SPANXA2-OT1	chrX	140590843	140738057	0.377170654	0.604684169	-0.227513514	1	131
NA	chr16	9535151	9538842	0.863746166	0.69777231	0.165973856	1	132
TAS2R8	chr12	10958650	10959892	0.579226431	0.467330028	0.111896402	1	133
NA	chr3	196263403	196263573	0.366378213	0.454533684	-0.088155471	1	134
KRTAP19-3	chr21	31863782	31864275	0.40119424	0.510765429	-0.109571189	2	135
NA	chr5	4866634	4874872	0.301797877	0.377221485	-0.075423608	2	136
NA	chr14	90095265	90109015	0.797077731	0.644223477	0.152854254	1	137
NA	chr4	150587209	150632301	0.34995631	0.43403251	-0.0840762	1	138
NA	chr4	158125614	158126007	0.12942643	0.204561265	-0.075134835	2	139
KRTAP19-6	chr21	31913854	31914183	0.451327871	0.564224864	-0.112896993	1	140
KCNH1-IT1	chr1	211305930	211306716	0.83028015	0.672647505	0.157632645	1	141
EIF3CL	chr16	28390900	28415200	0.315597366	0.240940121	0.074657245	1	142
STC1	chr8	23699428	23712320	0.347515227	0.421856996	-0.074341769	3	143
LDLRAD1	chr1	54474412	54483856	0.631102819	0.743444966	-0.112342146	3	144
NLRP5	chr19	56511092	56573179	0.215878098	0.347588996	-0.131710898	2	145
GPX8	chr5	54455946	54462899	0.362530153	0.436037237	-0.073507084	2	146
NA	chr14	91163677	91165718	0.117602702	0.231472622	-0.113869921	1	147
NA	chr16	24672743	24682383	0.155622355	0.229102428	-0.073480074	1	148
OR1N1	chr9	125288637	125289572	0.120742614	0.267759916	-0.147017302	1	149
DEFA10P	chr8	6825663	6826635	0.484154935	0.595003224	-0.110848289	1	150
SNORD115-23	chr15	25456943	25457024	0.365640832	0.449663449	-0.084022617	1	151
CARD6	chr5	40841286	40860275	0.269699454	0.348539727	-0.078840272	6	152
NA	chr19	51891543	51893828	0.728441846	0.632167654	0.096274192	2	153
RARRES2P9	chr16	34578462	34578930	0.575452245	0.430186482	0.145265763	1	154
NA	chr11	5265784	5266777	0.650214535	0.46443616	0.185778375	1	155
C4orf6	chr4	5526296	5529528	0.472210988	0.584982334	-0.112771346	5	156
NA	chr12	81156933	81164496	0.875974761	0.718108473	0.157866289	1	157
NA	chr11	96461317	96584822	0.327870754	0.444845897	-0.116975143	2	158
NA	chr15	93960079	93965805	0.197925957	0.315086813	-0.117160856	1	159
OXCT1-AS1	chr5	41870132	41871059	0.326376411	0.412767809	-0.086391398	9	160
MROH2B	chr5	40998119	41071444	0.143516061	0.260862324	-0.117346263	2	161
CLEC5A	chr7	141627157	141646807	0.6628762	0.749968477	-0.087092278	5	162
MIR514A1	chrX	146360765	146360862	0.739708236	0.896984396	-0.15727616	1	163
NTF6A	chr19	49528718	49529277	0.633939102	0.52279486	0.111144241	1	164
OR5A1	chr11	59210617	59211667	0.444983101	0.537408523	-0.092425422	3	165
NA	chr12	92860227	92885867	0.343045219	0.45629318	-0.113247961	2	166
CYP4F22	chr19	15619304	15663127	0.50461871	0.572836352	-0.068217642	9	167
NA	chr4	49550935	49551452	0.671856203	0.555620547	0.116235656	1	168
NA	chr1	78695283	78835149	0.623078044	0.72918174	-0.106103697	5	169
SNORA48	chr17	7478031	7478165	0.367344505	0.444421802	-0.077077297	1	170
NA	chr3	2004065	2029154	0.348359249	0.546953981	-0.198594731	1	171
PASD1	chrX	150732094	150845211	0.428102427	0.514869978	-0.086767551	3	172
NA	chr20	5451853	5455828	0.685948395	0.54139119	0.144557205	1	173
MYD88	chr3	38179969	38184513	0.504316129	0.619999181	-0.115683052	8	174
NA	chr1	147249700	147261065	0.111769713	0.178893041	-0.067123328	1	175
NA	chr19	53426635	53427328	0.35675883	0.430453965	-0.073695135	1	176
CMA1	chr14	24974559	24977471	0.513299606	0.618339963	-0.105040357	1	177
NA	chr19	52022985	52023514	0.186372343	0.283805902	-0.097433559	1	178
CTSG	chr14	25042728	25045466	0.436620273	0.505156846	-0.068536573	5	179
RDH8	chr19	10123925	10132955	0.568015727	0.681806697	-0.11379097	4	180
SMCP	chr1	152850793	152857523	0.51762225	0.626787949	-0.109165699	5	181
NA	chr5	23303674	23305252	0.59261103	0.681334725	-0.088723695	4	182
ISX	chr22	35462129	35483380	0.561319509	0.664716802	-0.103397293	3	183
NA	chr1	2257640	2258132	0.711831623	0.854280962	-0.142449339	1	184
NA	chr9	76089294	76090989	0.577460753	0.737273073	-0.15981232	1	185
NA	chr7	150725868	150726841	0.639746127	0.767686782	-0.127940655	1	186
IFI16	chr1	158969758	159024945	0.275237999	0.346274315	-0.071036317	9	187
IGHV3-21	chr14	106691673	106692203	0.321339923	0.488395218	-0.167055295	1	188
GATSL2	chr7	74807499	74867509	0.173141094	0.274325096	-0.101184003	1	189
NA	chr14	24970800	24977894	0.302637439	0.367116202	-0.064478762	2	190
MMP8	chr11	102582526	102597781	0.811605298	0.703131496	0.108473802	2	191

STAU2-AS1	chr8	74332239	74353761	0.236357758	0.333395451	-0.097037693	5	192
HIST1H2AL	chr6	27833034	27833606	0.489764861	0.591924222	-0.102159361	7	193
RELN	chr7	103112231	103629963	0.49287631	0.556829789	-0.063953479	14	194
MIR648	chr22	18463634	18463727	0.374557592	0.50826036	-0.133702768	1	195
CD163	chr12	7623409	7656489	0.649384596	0.544308805	0.105075791	1	196
LSMEM1	chr7	112120908	112131117	0.650865576	0.751565647	-0.100700071	5	197
NA	chr11	28700730	28705016	0.673394262	0.479415716	0.193978547	1	198
NA	chr7	46930223	47089276	0.663436772	0.740337899	-0.076901127	6	199
NA	chrX	36975986	36976212	0.434431446	0.531108517	-0.096677071	3	200
NA	chr1	71172136	71252151	0.671010496	0.798269521	-0.127259025	1	201
NA	chr16	10670356	10672040	0.628418114	0.70507028	-0.076652166	2	202
NA	chr7	30589833	30591185	0.468707162	0.558132768	-0.089425606	1	203
TRBV23-1	chr7	142353468	142353964	0.529455117	0.602115284	-0.072660166	2	204
SLAMF6	chr1	160454820	160493052	0.396947995	0.459970769	-0.063022774	3	205
NA	chr5	7290936	7296458	0.49903577	0.593814159	-0.094778389	1	206
OR1A1	chr17	3118915	3119844	0.277491325	0.376928972	-0.099437646	1	207
PPP1R17	chr7	31726329	31748069	0.609734619	0.67603798	-0.066303361	9	208
MIR376C	chr14	101506017	101506102	0.544638171	0.647309795	-0.102671624	1	209
OR9I1	chr11	57885972	57886916	0.428015041	0.593717001	-0.16570196	1	210
MIR105-1	chrX	151560691	151560771	0.287074852	0.374566884	-0.087492031	1	211
CSTF2	chrX	100075384	100095921	0.509157264	0.579668423	-0.070511159	3	212
ZFP42	chr4	188916925	188926204	0.630739268	0.754043413	-0.123304145	10	213
NA	chr2	105027659	105032070	0.183824633	0.24539149	-0.061566857	1	214
SNORD115-33	chr15	25475985	25476066	0.318028299	0.410073089	-0.09204479	1	215
TBC1D26	chr17	15635561	15649476	0.659150722	0.532495124	0.126655598	2	216
KERA	chr12	91444268	91451760	0.396694858	0.53871267	-0.142017812	1	217
OR4N5	chr14	20611895	20612821	0.262734705	0.42565986	-0.162925154	1	218
XG	chrX	2670091	2734539	0.371529099	0.432378222	-0.060849123	4	219
NA	chr22	27299255	27316574	0.558974134	0.498236927	0.060737207	2	220
CCDC129	chr7	31553704	31698334	0.493418234	0.574737893	-0.081319659	10	221
NA	chr17	15179879	15182794	0.789157121	0.931805909	-0.142648788	1	222
NA	chr16	8947169	8948204	0.861357437	0.729985056	0.131372381	1	223
NA	chr16	27078249	27079179	0.307385292	0.381258041	-0.073872748	1	224
NA	chr4	40318502	40332436	0.236915647	0.147298023	0.089617624	3	225
RPS26P49	chr14	105297175	105297508	0.300035372	0.192829986	0.107205386	1	226
PTCHD3P3	chr6	109609774	109611706	0.619005525	0.687315496	-0.068309971	2	227
MIR130B	chr22	22007593	22007674	0.762996969	0.899292269	-0.1362953	1	228
NA	chr11	111322064	111328876	0.281931664	0.364578767	-0.082647103	1	229
NA	chr12	14818589	14910897	0.618487657	0.692094263	-0.073606607	8	230
NA	chr1	204100190	204101094	0.439462819	0.517885296	-0.078422477	1	231
EPGN	chr4	75174190	75181024	0.684264433	0.804793618	-0.120529186	1	232
GIMAP4	chr7	150264365	150271041	0.486431313	0.544998073	-0.05856676	4	233
CTAGE14P	chr2	168570173	168572575	0.609000347	0.669721849	-0.060721503	3	234
NA	chrX	122867024	122868144	0.381521124	0.482638127	-0.101117003	1	235
IGFL1	chr19	46733009	46734500	0.722117696	0.618978303	0.103139393	3	236
NA	chr3	158500336	158500913	0.307859169	0.412842982	-0.104983813	1	237
NA	chr8	39761294	39852767	0.447416215	0.513445733	-0.066029518	18	238
FAM92A1P2	chr4	183958818	183961272	0.685211825	0.80513095	-0.119919125	1	239
MAGEB3	chrX	30248553	30255607	0.318720413	0.426332431	-0.107612018	5	240
NA	chr8	42560726	42577089	0.251830646	0.368613976	-0.11678333	1	241
MIR518C	chr19	54211989	54212089	0.108387866	0.16645225	-0.058064384	1	242
NA	chr5	70741443	70742396	0.102323942	0.160289687	-0.057965745	1	243
NA	chr11	117704434	117709657	0.734023915	0.624876364	0.109147551	1	244
GATSL3	chr22	30681106	30685616	0.267012567	0.324901243	-0.057888676	4	245
NA	chr15	87482028	87531657	0.343330619	0.460466341	-0.117135721	1	246
NA	chr1	69521581	69650686	0.452244253	0.526708144	-0.074463892	4	247
KLK13	chr19	51559463	51568371	0.49768579	0.579023488	-0.081337698	5	248
NA	chr16	83754724	83806541	0.720860456	0.844577577	-0.123717122	1	249
HTN1	chr4	70916119	70924562	0.380824458	0.448671878	-0.06784742	2	250
NA	chr12	65996649	66006777	0.267856882	0.395410786	-0.127553905	1	251
SIGLEC14	chr19	52145806	52150054	0.374835061	0.508266654	-0.133431593	2	252
KRTAP19-1	chr21	31852018	31852663	0.254471977	0.328563691	-0.074091714	1	253
DPPA2	chr3	109012635	109035364	0.764863451	0.895260048	-0.130396597	3	254
NA	chrX	28589649	28604512	0.504416203	0.628737472	-0.124321269	1	255
GCG	chr2	162999392	163008914	0.619589166	0.724282336	-0.10469317	2	256

KRT18P42	chr5	108924039	108925293	0.661753511	0.774130354	-0.112376843	1	257
NA	chr14	104603487	104604235	0.170608868	0.226814562	-0.056205693	2	258
SLC2A3	chr12	8071826	8088871	0.3552381	0.438416279	-0.083178179	3	259
NA	chr1	24393264	24410055	0.54018714	0.631749026	-0.091561886	1	260
NA	chr11	19732480	19734165	0.277961335	0.363663547	-0.085702212	4	261
TRIML2	chr4	189012427	189030757	0.567805835	0.677696299	-0.109890463	10	262
NA	chr7	49269733	49294412	0.689121938	0.551428213	0.137693725	1	263
GPX1P2	chr21	28515663	28516268	0.424179201	0.506073885	-0.081894684	3	264
OGFOD1	chr16	56485402	56513012	0.120316508	0.175529063	-0.055212554	7	265
TAF13	chr1	109605108	109618624	0.275417801	0.330484084	-0.055066283	4	266
NA	chr12	70107413	70132348	0.451620841	0.506623091	-0.055002249	5	267
KIAA0125	chr14	106383838	106391825	0.185505799	0.261840107	-0.076334308	1	268
NA	chr16	34711785	34714852	0.617515058	0.719892288	-0.10237723	1	269
NA	chr16	60393746	60476149	0.354324161	0.426071962	-0.0717478	3	270
MIR2117	chr17	41522075	41528568	0.575917559	0.385876223	0.190041336	1	271
NA	chr1	61125303	61291256	0.627606978	0.731560559	-0.10395358	1	272
NA	chr6	19690056	19753344	0.71861205	0.810647506	-0.092035456	9	273
NA	chr1	43820355	43824329	0.257913077	0.316773054	-0.058859978	3	274
SERPINB2	chr18	61538926	61571124	0.7499493	0.815824618	-0.065875318	5	275
NA	chr16	32019759	32096106	0.502196487	0.609182573	-0.106986086	3	276
PRAMEF12	chr1	12834984	12838049	0.45753836	0.529516651	-0.071978291	2	277
NA	chr4	189659506	189660648	0.701247271	0.810284089	-0.109036818	2	278
NA	chr6	114844615	114857039	0.595188828	0.733638833	-0.138450005	1	279
POU5F1P6	chr3	128393578	128395848	0.63566149	0.739191406	-0.103529916	1	280
KRTAP5-9	chr11	71259466	71260653	0.735854032	0.825600988	-0.089746955	2	281
NA	chr17	21760934	21792968	0.65752792	0.763533769	-0.10600585	1	282
NA	chr7	57888037	57896752	0.587144113	0.650380538	-0.063236425	2	283
SPZ1	chr5	79615444	79617661	0.768904016	0.686929066	0.08197495	2	284
NA	chr3	82035289	82512826	0.458095815	0.522773811	-0.064677996	6	285
NA	chr6	75239964	75443995	0.184842861	0.241558	-0.056715139	2	286
NA	chr21	46222492	46224632	0.633761107	0.734966049	-0.101204942	1	287
NA	chr8	32623643	32625477	0.338045915	0.412539274	-0.07449336	1	288
SNORD114-9	chr14	101432366	101432437	0.604533226	0.460715424	0.143817802	1	289
SNORD71	chr16	71792305	71792390	0.716107333	0.829818133	-0.1137108	1	290
PGM5P1	chr9	68741234	68809906	0.455858489	0.551602669	-0.09574418	1	291
MIR29A	chr7	130561495	130561580	0.822554057	0.710184485	0.112369572	1	292
NA	chr17	8261731	8263538	0.693619981	0.803396768	-0.109776787	1	293
PDE6H	chr12	15125956	15134799	0.770099565	0.872614997	-0.102515432	2	294
NA	chr11	105028654	105402424	0.375864108	0.429329319	-0.053465212	3	295
RXRG	chr1	165370159	165414433	0.331174487	0.398457337	-0.06728285	4	296
ZNF510	chr9	99518147	99540411	0.550938055	0.60257112	-0.051633065	5	297
GZMB	chr14	25100160	25103473	0.578885307	0.660240842	-0.081355534	2	298
NA	chr15	39048755	39051614	0.523259845	0.396470902	0.126788943	1	299
NA	chr12	56032696	56053579	0.418935182	0.490767171	-0.071831989	8	300
RAB39B	chrX	154487526	154493874	0.58950132	0.644202938	-0.054701618	7	301
NA	chr9	38360424	38376427	0.526278926	0.390022538	0.136256387	1	302
NA	chr13	113663985	113664633	0.60391255	0.697573849	-0.093661299	1	303
NA	chr2	177494317	177502659	0.601153384	0.658962639	-0.057809255	3	304
MAGEB6	chrX	26210557	26213763	0.615590665	0.70287404	-0.087283375	4	305
NA	chr7	141811549	141922124	0.540923004	0.614776424	-0.07385342	4	306
RPL4P5	chr9	7477045	7478320	0.615307968	0.69565618	-0.080348212	2	307
SSMEM1	chr7	129847700	129856683	0.735856773	0.684907626	0.050949147	3	308
NA	chr12	54148142	54155888	0.435313885	0.50490399	-0.069590105	2	309
HAUS6P1	chr7	53255081	53256631	0.460432783	0.544058012	-0.083625229	2	310
TTLL11-IT1	chr9	124646915	124725998	0.739076871	0.835673957	-0.096597086	3	311
SLC9A7P1	chr12	98847613	98850923	0.597310009	0.657081606	-0.059771597	7	312
IDO1	chr8	39759794	39785963	0.47832874	0.55205555	-0.073726809	3	313
NA	chr8	40227547	40259367	0.206712395	0.341104268	-0.134391873	3	314
CD200R1	chr3	112640056	112693969	0.57503324	0.635405603	-0.060372363	4	315
NA	chr1	27852316	27857072	0.385322269	0.334631746	0.050690523	8	316
C20orf203	chr20	31220661	31239680	0.909440068	0.790813619	0.118626449	1	317
NA	chr4	68926312	68929015	0.765400082	0.682972423	0.08242766	2	318
NA	chr8	38401170	38410198	0.274468222	0.33527994	-0.060811719	1	319
NA	chr5	1963723	1967268	0.468492212	0.633709359	-0.165217148	1	320
NA	chr8	134898739	134914650	0.693510503	0.564173721	0.129336782	1	321

RPTN	chr1	152126071	152131704	0.570188352	0.671115534	-0.100927182	3	322
NA	chrX	131234662	131261900	0.557680801	0.641153341	-0.08347254	1	323
OR52A5	chr11	5152922	5153872	0.793693803	0.690734105	0.102959698	1	324
NA	chr5	17654482	17654752	0.745585269	0.648840192	0.096745077	1	325
HIGD1AP5	chr11	18128130	18128388	0.895983769	0.780060491	0.115923277	1	326
SNORD18A	chr15	66795581	66795652	0.222696228	0.275164907	-0.052468679	1	327
PRAMEF11	chr1	12884468	12891264	0.503418719	0.588813548	-0.08539483	3	328
CDH9	chr5	26880709	27121257	0.471668592	0.532811554	-0.061142961	14	329
MIR425	chr3	49057581	49057667	0.739501801	0.849203519	-0.109701718	1	330
LPA	chr6	160952515	161087407	0.492996339	0.424342827	0.068653512	4	331
NA	chr16	32896515	32900195	0.53318694	0.612637559	-0.079450619	1	332
FRMPD1	chr9	37650997	37746901	0.438596034	0.488059488	-0.049463454	6	333
NA	chr17	21908843	21909413	0.675578651	0.768242523	-0.092663873	2	334
MS4A12	chr11	60260251	60274903	0.179947226	0.322585064	-0.142637838	1	335
NA	chr12	77718421	77966055	0.343714924	0.398841939	-0.055127015	12	336
KRTAP19-2	chr21	31859362	31859755	0.291578749	0.379785487	-0.088206737	1	337
NMS	chr2	101086944	101099742	0.51282128	0.600441236	-0.087619956	2	338
TSPY11P	chrY	6134634	6137316	0.208383156	0.257553544	-0.049170388	1	339
MIR1208	chr8	129162362	129162434	0.592941651	0.680128386	-0.087186735	1	340
NA	chr5	58335588	58359330	0.371640257	0.306305902	0.065334356	4	341
VN1R5	chr1	247419374	247420445	0.354813549	0.507161707	-0.152348158	1	342
SMCO1	chr3	196233748	196242237	0.648911821	0.705711492	-0.056799672	3	343
OR13C4	chr9	107288534	107289490	0.445526586	0.619164069	-0.173637483	1	344
NA	chr7	127116937	127125858	0.442691479	0.547582185	-0.104890706	1	345
FBXO36-IT1	chr2	230807444	230809853	0.624493678	0.715268054	-0.090774376	1	346
NA	chr5	1004302	1004392	0.170473806	0.243655288	-0.073181482	1	347
ABCD1P3	chr16	32486372	32489571	0.51562126	0.590629696	-0.075008436	1	348
S100A7A	chr1	153389000	153395701	0.249663709	0.329440379	-0.07977667	4	349
MIR520F	chr19	54185413	54185499	0.60236469	0.707418883	-0.105054193	1	350
SH2D1B	chr1	162365056	162381928	0.588298656	0.662289944	-0.073991288	3	351
TMEM158	chr3	45265958	45267770	0.161701286	0.276520805	-0.114819519	2	352
NA	chr11	65265481	65265876	0.129027578	0.177001764	-0.047974186	1	353
PRAME	chr22	22890123	22901768	0.533750785	0.618100398	-0.084349614	8	354
ABCF3	chr3	183903811	183911800	0.337122297	0.385011619	-0.047889322	6	355
GP2	chr16	20320894	20339130	0.3367388	0.384556448	-0.047817648	4	356
NA	chr14	25064929	25126980	0.439968388	0.496079729	-0.05611134	7	357
NA	chr1	30181698	30182394	0.905591671	0.792577798	0.113013873	1	358
CTU2	chr16	88772871	88781794	0.598135569	0.645634802	-0.047499234	8	359
NAV3	chr12	78224685	78606790	0.472483323	0.536204313	-0.06372099	14	360
NA	chr3	178244293	178578193	0.472339537	0.542008622	-0.069669084	18	361
NA	chr6	161352112	161390803	0.705728113	0.753018163	-0.04729005	4	362
SNORD35B	chr19	50000977	50001063	0.65630181	0.565033053	0.091268756	1	363
NA	chr21	23582258	23793139	0.527171129	0.461780929	0.065390201	1	364
NA	chr17	73679623	73680879	0.781160374	0.890787484	-0.10962711	1	365
NA	chr1	68509013	68509916	0.66383475	0.757055477	-0.093220727	1	366
MAGEA2	chrX	151918387	151922364	0.597574235	0.523757361	0.073816874	1	367
DCAF8L2	chrX	27608499	27766908	0.338095296	0.40195021	-0.063854914	6	368
OR4A5	chr11	51411378	51412448	0.123270026	0.18379361	-0.060523584	1	369
FCRL3	chr1	157644111	157670647	0.330709255	0.377672689	-0.046963434	5	370
NA	chr12	130904080	130905564	0.367559684	0.417648858	-0.050089174	2	371
OR6Y1	chr1	158516918	158517895	0.391994676	0.304039145	0.087955532	2	372
CLLU1	chr12	92815307	92824778	0.719025067	0.807681829	-0.088656762	6	373
C12orf50	chr12	88373816	88427814	0.476954383	0.398335145	0.078619238	4	374
FAM47A	chrX	34147869	34150447	0.677625955	0.742607115	-0.06498116	10	375
RERGL	chr12	18233803	18473041	0.72407417	0.815286161	-0.091211991	7	376
ACTL6B	chr7	100240720	100254084	0.529516429	0.582866644	-0.053350216	6	377
KRTAP13-1	chr21	31768392	31769136	0.223531846	0.285136406	-0.06160456	1	378
IDO2	chr8	39792133	39873910	0.454416057	0.51433919	-0.059923132	15	379
SNORD37	chr19	3982505	3982570	0.879981181	0.773053516	0.106927665	1	380
NA	chr2	103583866	103600887	0.307537034	0.354005285	-0.046468251	1	381
NA	chr7	46009256	46019790	0.356941303	0.432673375	-0.075732072	4	382
SERPINB3	chr18	61322431	61329197	0.57288825	0.684606742	-0.111718492	2	383
NA	chr20	47657000	47662581	0.449949765	0.509742105	-0.05979234	3	384
NA	chr8	38558144	38562373	0.712153809	0.625675354	0.086478454	1	385
NA	chr3	34244736	34310303	0.791893396	0.695868909	0.096024486	1	386



LRR55	chr11	56949221	56959191	0.577937543	0.632171275	-0.054233732	5	387
NA	chr14	89816629	89831043	0.54365548	0.693259688	-0.149604208	1	388
SCG2	chr2	224461658	224467221	0.293446724	0.350761348	-0.057314624	5	389
SSX6	chrX	47967365	47980073	0.708776545	0.805925415	-0.09714887	1	390
BCMO1	chr16	81272053	81324747	0.517319629	0.57423541	-0.056915781	7	391
NA	chr1	190447681	190449865	0.427048731	0.375127102	0.051921629	1	392
NA	chr20	41818862	41830011	0.39509768	0.441197842	-0.046100163	4	393
NA	chr14	29406095	29497969	0.47984595	0.545800165	-0.065954215	1	394
NA	chr14	29445042	29448130	0.47984595	0.545800165	-0.065954215	1	395
MIR4724	chr17	29861901	29861989	0.352491041	0.519825852	-0.167334811	1	396
DNAJB5	chr9	34989638	34998897	0.84238854	0.741433059	0.100955481	1	397
NA	chr19	22715428	22716296	0.297959049	0.233414837	0.064544212	2	398
NA	chr5	21616371	21779631	0.413830109	0.470729218	-0.056899109	1	399
NA	chr16	34213746	34213986	0.45607814	0.618650339	-0.162572199	1	400
GPR42	chr19	35861831	35863855	0.638921488	0.725448658	-0.086527169	1	401
CSN2	chr4	70820974	70826725	0.38570222	0.436323858	-0.050621638	2	402
PYDC2	chr3	191178952	191179245	0.722972528	0.820646963	-0.097674435	1	403
PKMP3	chr6	86369610	86370324	0.757422894	0.859635635	-0.102212741	1	404
NA	chr18	15196998	15197774	0.188439287	0.252261017	-0.06382173	1	405
STX18-IT1	chr4	4477848	4483427	0.738726511	0.824704287	-0.085977777	2	406
NA	chr5	151329132	151650009	0.486964721	0.540686654	-0.053721933	7	407
NA	chr1	83368866	83632498	0.705311312	0.579276558	0.126034754	2	408
NA	chrX	107965300	107975917	0.634958366	0.72023249	-0.085274124	1	409
LAYN	chr11	111411005	111432264	0.586681888	0.631906081	-0.045224193	15	410
NA	chr10	5237847	5237936	0.659467281	0.749883168	-0.090415887	3	411
NBPF22P	chr5	85578278	85592281	0.437819753	0.496727094	-0.058907341	1	412
NA	chr7	46300662	46334067	0.124902662	0.169956603	-0.045053941	1	413
DEFB126	chr20	123010	126392	0.454398048	0.393148466	0.061249582	2	414
NA	chr4	178650792	178829090	0.618405226	0.69793766	-0.079532434	3	415
NA	chr19	46732221	46733645	0.568946394	0.613868453	-0.044922059	4	416
OR1L3	chr9	125437315	125438432	0.298414059	0.362415386	-0.064001327	3	417
PSG9	chr19	43715943	43773682	0.400524181	0.450716622	-0.050192441	2	418
NA	chr17	14198829	14200917	0.566509765	0.611254735	-0.04474497	3	419
KIR3DL2	chr19	55361898	55378662	0.711487796	0.767861889	-0.056374093	5	420
NA	chr11	13022637	13030706	0.632345108	0.709735499	-0.077390391	10	421
GPR112	chrX	135383122	135519215	0.425510218	0.495628046	-0.070117828	2	422
GPAA1	chr8	145137493	145141119	0.344677642	0.293242178	0.051435464	4	423
OR7E37P	chr13	42016906	42017786	0.726365435	0.642006245	0.084359189	1	424
NA	chr2	106575540	106578462	0.713465455	0.806993203	-0.093527748	1	425
PTGR1	chr9	114312002	114362135	0.520547184	0.606669851	-0.086122667	4	426
NA	chr3	112115494	112127981	0.731048839	0.646365947	0.084682892	1	427
ALDH1L1-AS2	chr3	125898908	125929012	0.517690001	0.573749368	-0.056059367	21	428
DEFB104A	chr8	7693993	7698764	0.535418488	0.607709825	-0.072291337	1	429
NA	chr9	109040673	109367076	0.816912318	0.72299303	0.093919288	1	430
SPRR2E	chr1	153065611	153078660	0.311703307	0.387054496	-0.075351189	3	431
SOX11	chr2	5832799	5841516	0.397813886	0.441753559	-0.043939673	21	432
NA	chr3	158519046	158519724	0.460873613	0.506727226	-0.045853613	7	433
NA	chr2	43902292	43903461	0.670145335	0.563988595	0.10615674	1	434
DIAPH2-AS1	chrX	96686257	96897588	0.382844294	0.441810283	-0.058965989	2	435
OR4D5	chr11	123810250	123811344	0.536221977	0.677359359	-0.141137382	1	436
CDH12	chr5	21750782	22853731	0.359369704	0.406493792	-0.047124088	15	437
MAFB	chr20	39314488	39317880	0.409298645	0.453556431	-0.044257786	9	438
MIR519C	chr19	54189723	54189809	0.548027816	0.618466956	-0.07043914	1	439
RPL35	chr9	127620159	127624260	0.295803311	0.355771493	-0.059968181	3	440
USP30-AS1	chr12	109490155	109491757	0.067779972	0.111108049	-0.043328076	7	441
ARHGAP31-AS1	chr3	119033140	119041607	0.41066884	0.453971879	-0.043303039	5	442
MPL	chr1	43803478	43818443	0.574475135	0.622617573	-0.048142438	11	443
KRTAP5-3	chr11	1628795	1629693	0.54779983	0.611560473	-0.063760644	2	444
NA	chr11	49875632	49880954	0.266791103	0.370450251	-0.103659148	1	445
PTPRQ	chr12	80799774	81074013	0.60914392	0.675877271	-0.066733352	11	446
NA	chr1	55353236	55354523	0.329007576	0.392745666	-0.063738091	2	447
NA	chr8	145634876	145635360	0.205218585	0.162057598	0.043160988	2	448
NA	chr1	18493423	18505840	0.71030774	0.788955242	-0.078647503	2	449
MC3R	chr20	54823788	54824871	0.428849802	0.482317939	-0.053468137	6	450
NA	chr8	144683416	144685394	0.861144783	0.764225653	0.09691913	1	451

SRPX2	chrX	99899215	99926296	0.77024526	0.700778975	0.069466284	4	452
NA	chr5	139536904	139552636	0.70033075	0.635062616	0.065268134	3	453
PVRL3-AS1	chr3	110612555	110790400	0.495047606	0.544815936	-0.04976833	8	454
NA	chr1	1252961	1254069	0.200712483	0.243491133	-0.04277865	1	455
NA	chr17	77910551	77910992	0.547898496	0.486183114	0.061715382	1	456
NA	chr22	46449585	46453090	0.255671162	0.316702537	-0.061031375	10	457
POLR2K	chr8	101162812	101166230	0.253295214	0.295977067	-0.042681853	2	458
ACSS3	chr12	81331594	81650533	0.481426277	0.524104328	-0.042678051	32	459
CCL8	chr17	32646055	32648421	0.759711522	0.835377091	-0.075665569	2	460
NA	chr14	104162690	104163500	0.221609592	0.289830902	-0.06822131	1	461
NA	chrX	103172005	103174131	0.333691731	0.396247878	-0.062556147	3	462
NA	chr6	161293920	161339681	0.567680622	0.638924635	-0.071244013	1	463
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MIR516A1	chr19	54259995	54260084	0.181847454	0.249920325	-0.068072871	1	465
NA	chr11	7726835	7731064	0.384932659	0.444463803	-0.059531143	4	466
NF1P1	chr15	21122015	21140987	0.370794718	0.442770126	-0.071975408	3	467
AKR1CL1	chr10	5196335	5244449	0.59926826	0.671249473	-0.071981213	9	468
NA	chr15	33595858	33602860	0.403311712	0.473388974	-0.070077263	6	469
NA	chr2	234647598	234650603	0.801887597	0.901683636	-0.099796038	1	470
FAM120C	chrX	54094757	54209714	0.510645419	0.569633988	-0.058988569	7	471
PLA2G2D	chr1	20438432	20446050	0.692402835	0.780581077	-0.088178242	3	472
RBM8B	chr14	60864475	60864999	0.786456049	0.649412935	0.137043114	1	473
ZNF658	chr9	40760700	40836415	0.273522024	0.35716955	-0.083647526	3	474
NA	chr19	58175648	58176407	0.300326836	0.349726499	-0.049399664	4	475
CADM2-AS1	chr3	86041333	86077157	0.450817708	0.505277435	-0.054459726	2	476
GPX3	chr5	150400124	150408554	0.500529629	0.542306197	-0.041776568	8	477
LINC00899	chr22	46436146	46440733	0.858042099	0.772358343	0.085683755	4	478
NA	chr4	14384747	14410702	0.672984146	0.756197816	-0.08321367	1	479
LINC00442	chr13	19582399	19586699	0.6423449	0.705263958	-0.062919058	2	480
PPRC1	chr10	103892787	103910082	0.279856653	0.321976813	-0.04212016	7	481
SUCLA2-AS1	chr13	48575525	48576688	0.23194086	0.274499604	-0.042558744	8	482
SPIN4	chrX	62567107	62571223	0.389882789	0.469304617	-0.079421828	3	483
PLA2G2A	chr1	20301925	20306932	0.795686649	0.745911079	0.049775571	4	484
PNPLA4	chrX	7866288	7895780	0.444095975	0.378720719	0.065375256	13	485
C4orf26	chr4	76481258	76491095	0.780879738	0.845589221	-0.064709483	3	486
MIR206	chr6	52009147	52009232	0.383301845	0.252851298	0.130450548	1	487
TMCC3	chr12	94960900	95044338	0.573808221	0.61624776	-0.042439539	18	488
NPPB	chr1	11917521	11918988	0.496025856	0.537088857	-0.041063	4	489
PRSS58	chr7	141951963	141957878	0.743673689	0.82881581	-0.085142121	2	490
NA	chr2	5836352	5848227	0.556121651	0.598055398	-0.041933748	15	491
CLCA2	chr1	86889769	86922241	0.759137866	0.682834258	0.076303608	3	492
BBC3	chr19	47724081	47736023	0.338474002	0.379360668	-0.040886666	18	493
NA	chr20	31802726	31804873	0.617484998	0.545399167	0.072085831	2	494
GOLGA6L1	chr15	22736246	22746002	0.618642966	0.693087781	-0.074444815	1	495
ENDOG	chr9	131580753	131584956	0.597341651	0.64928922	-0.051947568	3	496
KCNA4	chr11	30031288	30038570	0.463660098	0.504455634	-0.040795536	11	497
NA	chr17	42015731	42016327	0.657316074	0.59906907	0.058247005	2	498
NA	chr1	74807263	74844486	0.165818377	0.27184111	-0.106022732	1	499
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NA	chr12	102329994	102330452	0.764679522	0.683028064	0.081651457	1	501
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TRPV5	chr7	142605267	142630905	0.728818337	0.795173485	-0.066355147	2	503
KMO	chr1	241695434	241758944	0.634481975	0.694060136	-0.059578162	4	504
NSDHL	chrX	151999511	152038273	0.566647391	0.607303606	-0.040656215	11	505
NA	chr22	20194100	20194706	0.535038101	0.599182809	-0.064144708	1	506
C10orf67	chr10	23556124	23633774	0.294876867	0.341075747	-0.04619888	9	507
NA	chr10	32636325	32663416	0.299291156	0.339918786	-0.040627629	6	508
OCRL	chrX	128673826	128726538	0.521287192	0.56420218	-0.042914988	13	509
NA	chr3	182501024	182511182	0.391671012	0.336466705	0.055204307	7	510
SLC18A1	chr8	20002366	20040717	0.601676049	0.642285831	-0.040609782	8	511
NA	chr2	223182994	223217708	0.329875969	0.370346888	-0.040470919	9	512
DNM1P50	chr15	30860025	30863292	0.398751655	0.532782057	-0.134030402	1	513
OR4D6	chr11	59224411	59225464	0.806687314	0.902159457	-0.095472143	1	514
VAMP8	chr2	85788685	85809154	0.407185008	0.447597337	-0.040412329	16	515
RHO	chr3	129247483	129254012	0.815169911	0.85844933	-0.04327942	5	516

NA	chr7	62809532	62810437	0.721648188	0.645275145	0.076373043	1	517
KRTAP1-3	chr17	39190142	39191107	0.783952173	0.88561266	-0.101660487	1	518
BIRC8	chr19	53792856	53794875	0.709394549	0.662484995	0.046909554	5	519
SLAMF9	chr1	159921282	159924044	0.733581559	0.693243857	0.040337702	4	520
NA	chr8	2350992	2369693	0.666912139	0.554421923	0.112490216	3	521
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ZNF597	chr16	3486104	3493542	0.611742957	0.665626381	-0.053883424	8	523
NA	chr8	38409766	38416538	0.661903026	0.716574226	-0.0546712	4	524
SSX5	chrX	48045656	48056199	0.742755509	0.680733056	0.062022453	3	525
DSG3	chr18	29027758	29058665	0.7402548	0.66266242	0.07759238	1	526
NA	chr16	73265954	73267869	0.531481263	0.634193148	-0.102711884	5	527
ZNF675	chr19	23708433	23870022	0.185642227	0.225760244	-0.040118017	2	528
NA	chr9	69146939	69149621	0.627795827	0.687608076	-0.05981225	3	529
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MIR3678	chr17	73402150	73402243	0.181013651	0.303421423	-0.122407772	1	531
ENOPH1	chr4	83351715	83382244	0.353222873	0.406310955	-0.053088082	8	532
ANKRD20A12P	chr1	142697653	142729971	0.536824544	0.600756471	-0.063931926	1	533
GPR183	chr13	99946784	99959659	0.659712158	0.699612663	-0.039900504	3	534
OR56A4	chr11	6023216	6024424	0.15052527	0.190424455	-0.039899185	1	535
NA	chr14	54066550	54080744	0.437841805	0.540479497	-0.102637692	1	536
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STRADBP1	chr7	150209647	150210927	0.618522646	0.699097284	-0.080574638	2	539
NA	chr10	120001076	120027222	0.518782838	0.55864586	-0.039863023	6	540
HCRTR2	chr6	55039050	55147418	0.466560341	0.508260183	-0.041699842	10	541
CEACAM3	chr19	42300369	42315591	0.673046791	0.76523615	-0.092189359	2	542
OR4F5	chr1	69091	70008	0.631094079	0.704142746	-0.073048667	1	543
UQCR10	chr22	30163358	30166402	0.364165107	0.403891087	-0.03972598	3	544
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KIF4A	chrX	69509879	69640682	0.425801434	0.470218293	-0.044416859	5	546
PLSCR5	chr3	146294342	146324003	0.420171082	0.470258695	-0.050087613	2	547
PRR21	chr2	240981230	240982399	0.734227229	0.818692471	-0.084465242	1	548
ZNF619	chr3	40518604	40531727	0.467897022	0.508572727	-0.040675705	8	549
TMEM202	chr15	72690614	72700370	0.709623323	0.755521608	-0.045898284	3	550
TMEM248	chr7	66386212	66423538	0.380856669	0.445444953	-0.064588284	8	551
NA	chr19	55236001	55309738	0.51419251	0.554149608	-0.039957099	18	552
CD99L2	chrX	149934810	150067289	0.37674444	0.416229122	-0.039484683	9	553
PSG7	chr19	43428286	43441330	0.40934747	0.456809424	-0.047461953	1	554
OR2AJ1	chr1	248097071	248098057	0.68689128	0.638453711	0.048437569	2	555
NA	chr3	170458140	170459154	0.726156479	0.620364739	0.105791739	1	556
PTH2	chr19	49925671	49926698	0.366912842	0.406296446	-0.039383604	6	557
F2RL2	chr5	75911307	75919259	0.616232726	0.662707233	-0.046474507	4	558
MIR519B	chr19	54198467	54198547	0.537895771	0.599437828	-0.061542057	1	559
RNASE6	chr14	21249210	21250626	0.645825714	0.710266452	-0.064440738	3	560
OR2W5	chr1	247654370	247655710	0.781080476	0.929005385	-0.147924909	1	561
MIR522	chr19	54254465	54254551	0.483317937	0.629341688	-0.146023751	1	562
NA	chr3	186435038	186477057	0.757162612	0.70790065	0.049261962	5	563
AKR1C2	chr10	5029967	5060223	0.609334265	0.67391628	-0.064582015	5	564
MAGEC1	chrX	140991680	140997174	0.424878869	0.464467691	-0.039588822	4	565
HOTAIRM1	chr7	27135266	27139884	0.202848528	0.249941923	-0.047093395	18	566
NA	chr17	53628292	53629010	0.629945339	0.70132531	-0.071379971	1	567
IGHEP2	chr9	5113549	5114804	0.892567681	0.80202891	0.090538772	1	568
ECM2	chr9	95256365	95298937	0.568164078	0.626150277	-0.057986199	4	569
OR10G7	chr11	123908773	123909717	0.39512658	0.513105142	-0.117978562	1	570
DCAF16	chr4	17802278	17812381	0.258789028	0.297627886	-0.038838857	7	571
NA	chr4	119990479	119991452	0.301202239	0.387175583	-0.085973344	1	572
ALOX12P2	chr17	6756895	6857426	0.870896154	0.802031483	0.068864671	15	573
SEPHS1	chr10	13359424	13390297	0.587632768	0.635129699	-0.047496931	12	574
NA	chr7	62517831	62520462	0.112176062	0.17358215	-0.061406088	1	575
ACKR4	chr3	132316081	132337811	0.67026073	0.779432789	-0.109172059	2	576
NA	chr17	4469047	4475055	0.741734391	0.852450493	-0.110716102	2	577
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ERP27	chr12	15066969	15092016	0.720815417	0.770940125	-0.050124708	6	579
RGS18	chr1	192127587	192154945	0.404857111	0.453350911	-0.0484938	2	580
SDR16C5	chr8	57212569	57233335	0.670701232	0.718599869	-0.047898637	10	581

LETM1P2	chr19	58555960	58558137	0.822288864	0.751171136	0.071117728	4	582
NA	chr5	180211782	180214869	0.85103517	0.76594208	0.08509309	1	583
ADNP2	chr18	77866915	77905406	0.623936026	0.688201946	-0.06426592	9	584
NA	chr7	19958604	20180076	0.689518263	0.740316835	-0.050798572	10	585
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ACSL4	chrX	108872579	108976632	0.417871514	0.478377003	-0.060505489	5	587
NA	chr8	37278859	37411701	0.53882824	0.585176433	-0.046348194	15	588
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NA	chr22	37621304	37622035	0.701047313	0.778497222	-0.07744991	1	590
NA	chr20	44521333	44522058	0.899015196	0.809728713	0.089286483	1	591
LINC00841	chr10	44434451	44439914	0.830760509	0.748204251	0.082556258	1	592
PFKFB1	chrX	54959394	55024967	0.595044008	0.652532445	-0.057488436	11	593
NA	chr22	37099963	37117517	0.626231967	0.696817762	-0.070585795	1	594
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NA	chr7	56943078	56949839	0.456844896	0.507382697	-0.050537801	1	596
HIST1H2AI	chr6	27775899	27776429	0.290981254	0.329098503	-0.03811725	4	597
KRTAP12-2	chr21	46086106	46086844	0.576696874	0.519428825	0.057268049	1	598
MT1JP	chr16	56669651	56670998	0.850590861	0.768394763	0.082196098	3	599
MIR196A2	chr12	54385522	54385631	0.392542562	0.469538254	-0.076995692	2	600
CLUU1OS	chr12	92813870	92821924	0.745108206	0.821366553	-0.076258347	7	601
CCL2	chr17	32582304	32584222	0.585987959	0.652835814	-0.066847855	3	602
NA	chr10	38453576	38466958	0.147533248	0.260966522	-0.113433274	1	603
GABRG3	chr15	27216429	27778373	0.581660986	0.645493315	-0.063832329	31	604
DUSP9	chrX	152907946	152916781	0.567547444	0.613905518	-0.046358074	19	605
SIRPD	chr20	1514897	1539489	0.572121888	0.609997209	-0.037875321	5	606
PRAMEF6	chr1	12998181	13117751	0.520209575	0.579466221	-0.059256645	4	607
NA	chr5	132152940	132153692	0.759325475	0.841942482	-0.082617007	1	608
INSL4	chr9	5231419	5235304	0.812336778	0.738333437	0.074003341	2	609
OR2W3	chr1	248031277	248060449	0.751414371	0.684527795	0.066886576	4	610
NOVA1-AS1	chr14	27067618	27275673	0.337835345	0.405816181	-0.067980836	9	611
DUSP26	chr8	33448856	33457624	0.627180164	0.674729867	-0.047549703	11	612
NA	chr22	29909878	29931379	0.743918959	0.824539685	-0.080620725	1	613
OR4S2	chr11	55418380	55419315	0.295539077	0.392350061	-0.096810984	1	614
NA	chr10	54210634	54230293	0.511281267	0.580363555	-0.069082288	4	615
MPP1	chrX	154006959	154049282	0.488847896	0.534372433	-0.045524537	15	616
FATE1	chrX	150884507	150891666	0.325457529	0.36283683	-0.037379301	3	617
NA	chr6	47444979	47445308	0.359409928	0.432140887	-0.072730959	2	618
POTEA	chr8	43147626	43218661	0.637624206	0.696431379	-0.058807173	3	619
SUB1P2	chr14	74772128	74772766	0.620222406	0.686863421	-0.066641016	1	620
OR5H2	chr3	98001732	98002676	0.266859535	0.384096761	-0.117237226	1	621
RPS6KA6	chrX	83318984	83442933	0.449149306	0.488735114	-0.039585808	3	622
OR4K13	chr14	20502003	20502919	0.789506427	0.873544859	-0.084038432	1	623
OR52I2	chr11	4608021	4609135	0.592624723	0.655808255	-0.063183533	1	624
GRM1	chr6	146348782	146758734	0.498048822	0.554274663	-0.056225841	27	625
OR52K2	chr11	4470525	4471591	0.671289002	0.742681764	-0.071392762	1	626
NA	chr3	32634464	32634804	0.610524498	0.675473378	-0.06494888	1	627
CYP7A1	chr8	59402737	59412795	0.619134352	0.52864613	0.090488222	1	628
NA	chr12	128884523	128889359	0.091461375	0.144653655	-0.053192281	1	629
NA	chr7	62787052	62814704	0.639080846	0.553230797	0.085850049	3	630
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BBS10	chr12	76738254	76742222	0.27946302	0.189214732	0.090248288	6	632
TIPARP-AS1	chr3	156389651	156392167	0.280377561	0.349495248	-0.069117687	3	633
SOWAHC	chr2	110371911	110376563	0.517416082	0.557751073	-0.040334991	6	634
MAGI2-AS1	chr7	78569166	78570211	0.731918469	0.661978186	0.069940283	1	635
AKR1C4	chr10	5237425	5260912	0.474413919	0.544872443	-0.070458523	6	636
NLRP8	chr19	56459198	56499995	0.359678319	0.408072477	-0.048394157	3	637
NA	chr7	130121332	130124233	0.828852712	0.749830837	0.079021875	1	638
SNORA10	chr16	2012335	2012467	0.460292972	0.562231006	-0.101938034	2	639
TUBB8P9	chr1	227693883	227695993	0.477809657	0.542452902	-0.064643246	1	640
PSG10P	chr19	43343520	43359870	0.32351412	0.361838744	-0.038324624	1	641
THAP11	chr16	67876213	67878097	0.124357531	0.087971783	0.036385748	7	642
NA	chr21	43290742	43292163	0.662557644	0.587898398	0.074659247	1	643
OR5P3	chr11	7846584	7847519	0.779777421	0.861366626	-0.081589204	1	644
NA	chr14	56981049	57018027	0.930585466	0.842534014	0.088051452	1	645
MIR1468	chrX	63005882	63005967	0.492812135	0.545379462	-0.052567327	1	646

ACOT2	chr14	74034324	74042357	0.363183038	0.410779018	-0.04759598	10	647
NA	chr7	47009300	47067079	0.824381717	0.910475769	-0.086094051	1	648
UGT3A1	chr5	35951112	36001130	0.521180781	0.55735816	-0.036177378	9	649
RHOT1P2	chr21	15309314	15309646	0.651137259	0.589422372	0.061714887	1	650
SEMG1	chr20	43835638	43838413	0.403546055	0.439680378	-0.036134323	3	651
NA	chr12	15933002	15935054	0.29994718	0.375966334	-0.076019154	1	652
KRTAP20-2	chr21	32007555	32007938	0.235916202	0.289445211	-0.053529009	1	653
NA	chr4	16402053	16513810	0.640992092	0.714845611	-0.07385352	4	654
CRABP2	chr1	156669398	156675608	0.356154978	0.392227979	-0.036073	11	655
NA	chr6	14394557	14404520	0.533134577	0.729441045	-0.196306468	1	656
NA	chr16	20451588	20458322	0.255166623	0.358987321	-0.103820699	1	657
NA	chr1	9732484	9747613	0.395238008	0.479487922	-0.084249915	1	658
CYP2C8	chr10	96796530	96829254	0.940078332	0.851944284	0.088134048	1	659
OR2Z1	chr19	8841316	8842371	0.422322881	0.288112126	0.134210754	1	660
C6orf223	chr6	43968317	43973695	0.395805289	0.446678675	-0.050873386	7	661
NA	chr10	59866184	59866640	0.669200578	0.726686178	-0.0574856	2	662
LINC00158	chr21	26758133	26804013	0.210668283	0.28351808	-0.072849797	1	663
BATF2	chr11	64755415	64764517	0.67223457	0.586563532	0.085671038	4	664
NA	chr4	55702327	55711568	0.924203203	0.837725976	0.086477226	1	665
NA	chr8	48100928	48101183	0.433236344	0.333617177	0.099619167	1	666
NA	chr5	54317127	54330098	0.80044213	0.744308788	0.056133342	4	667
IGJ	chr4	71521258	71547534	0.782495126	0.710025093	0.072470034	2	668
NA	chr3	26660821	26664181	0.556971871	0.497271858	0.059700012	8	669
MAOA	chrX	43515467	43606068	0.487754368	0.412964744	0.074789623	4	670
LINC00968	chr8	57408805	57472382	0.517289513	0.570783773	-0.05349426	1	671
SNORD3D	chr17	19015313	19015949	0.161783585	0.202076184	-0.040292599	2	672
NA	chr1	248902716	248903150	0.841789942	0.923107442	-0.081317501	2	673
BEST3	chr12	70037140	70093256	0.644380387	0.680011099	-0.035630712	9	674
LCE6A	chr1	152815344	152816459	0.411053951	0.474081686	-0.063027735	3	675
PLXDC2	chr10	20105168	20569286	0.363397148	0.434721673	-0.071324525	28	676
OR8K1	chr11	56113421	56114507	0.312537547	0.397539368	-0.085001822	2	677
HSD17B4	chr5	118788138	118972894	0.515158623	0.558464076	-0.043305454	24	678
NA	chr7	73400322	73403097	0.928395972	0.842316626	0.086079346	1	679
RLBP1	chr15	89753100	89764982	0.832608221	0.875006318	-0.042398097	5	680
NA	chr11	12052422	12083332	0.579381433	0.531487083	0.04789435	2	681
NA	chr14	106444607	106445233	0.700604187	0.770935907	-0.07033172	5	682
SERPINB11	chr18	61314813	61391127	0.401960608	0.497303294	-0.095342686	8	683
NA	chr5	179720245	179722253	0.481588038	0.569046295	-0.087458257	1	684
NA	chr19	8646044	8647599	0.713923649	0.786773272	-0.072849624	1	685
SCARNA13	chr14	95999692	95999966	0.172146583	0.20755082	-0.035404237	1	686
TBC1D21	chr15	74165949	74181555	0.598676359	0.540536805	0.058139554	3	687
NA	chr10	65424424	65750328	0.601090293	0.650232495	-0.049142202	24	688
NA	chr6	157097494	157098211	0.086790716	0.122063106	-0.03527239	2	689
TTPA	chr8	63961112	63998612	0.203192707	0.284111348	-0.08091864	5	690
IL10RB-AS1	chr21	34636178	34638565	0.73149031	0.696301369	0.03518894	5	691
NA	chr1	161110998	161111126	0.306371606	0.3414797	-0.035108094	1	692
RIMBP2	chr12	130880682	131200826	0.599934036	0.641089782	-0.041155746	206	693
NA	chrX	82766304	82767135	0.603978983	0.665228242	-0.061249259	1	694
MSC	chr8	72753784	72756703	0.588412823	0.623487568	-0.035074745	13	695
HHLA1	chr8	133073733	133123406	0.470902974	0.538711364	-0.06780839	6	696
SPATA12	chr3	57094469	57109460	0.817378784	0.88234273	-0.064963946	5	697
FLNA	chrX	153576892	153603006	0.553027053	0.593551512	-0.040524459	21	698
OR10A7	chr12	55614809	55615759	0.453344732	0.617006849	-0.163662117	1	699
CPA3	chr3	148583043	148614983	0.660021129	0.70766515	-0.047644021	3	700
NA	chr16	67572460	67574009	0.674988722	0.758296051	-0.083307329	2	701
LINC00615	chr12	91311800	91342446	0.781193465	0.85975942	-0.078565955	1	702
ALDH1L1	chr3	125822412	125916837	0.604106758	0.646161451	-0.042054692	32	703
KRTAP1-5	chr17	39182278	39183454	0.50685421	0.558149943	-0.051295733	1	704
LINC00941	chr12	30947977	30955645	0.267873592	0.302725622	-0.034852031	13	705
USP27X	chrX	49644470	49647166	0.377423528	0.415201876	-0.037778348	4	706
NA	chr5	153281019	153282783	0.829256671	0.753931185	0.075325487	1	707
NA	chr7	69060944	69062434	0.385624799	0.461101327	-0.075476528	1	708
NA	chr11	48366900	48373999	0.331944482	0.375917976	-0.043973494	1	709
MID1	chrX	10413350	10851773	0.428918375	0.469594112	-0.040675738	21	710
OR5AK2	chr11	56756347	56757342	0.234688985	0.320201414	-0.085512428	1	711

NA	chr7	142573589	142590199	0.654174364	0.712041177	-0.057866813	14	712
OR4X2	chr11	48266608	48267622	0.558089881	0.383374686	0.174715195	1	713
MIR1306	chr22	20073581	20073665	0.758924661	0.834618663	-0.075694001	1	714
NA	chr2	10223908	10226228	0.536382709	0.44918363	0.087199079	1	715
NA	chr20	3868886	3869515	0.4615902	0.512115739	-0.05052554	3	716
NA	chr18	29265618	29266786	0.55245982	0.649765993	-0.097306174	2	717
NA	chr19	9904297	9912977	0.184990429	0.219508852	-0.034518423	1	718
NA	chr1	185527511	185534763	0.817423665	0.898526921	-0.081103256	1	719
NA	chr2	105979495	105995296	0.691635433	0.657125696	0.034509737	5	720
NA	chr2	146358475	146360991	0.385931029	0.455491436	-0.069560407	1	721
NA	chr10	127407340	127407934	0.218964445	0.253465626	-0.034501181	4	722
C12orf68	chr12	48577366	48579709	0.691910113	0.65741391	0.034496203	7	723
NA	chr5	26669820	26670098	0.512651829	0.563769018	-0.05111719	1	724
MIR517A	chr19	54215522	54215608	0.36859812	0.419971917	-0.051373796	1	725
MORF4L2-AS1	chrX	102942212	102946700	0.545449252	0.587135589	-0.041686337	5	726
ARRB2	chr17	4613784	4624794	0.608569227	0.553584159	0.054985068	11	727
C6orf164	chr6	88106840	88109467	0.618121124	0.679469908	-0.061348784	1	728
NUP62CL	chrX	106366657	106449670	0.599127082	0.633576508	-0.034449426	7	729
DEFB119	chr20	29964967	29978406	0.274009297	0.35667852	-0.082669223	3	730
GRIA1	chr5	152869175	153193429	0.221384687	0.278000031	-0.056615344	12	731
MS4A6A	chr11	59939081	59952139	0.325667159	0.403920213	-0.078253054	9	732
FUNDC1	chrX	44382885	44402247	0.070508551	0.104892225	-0.034383675	2	733
ARMCX6	chrX	100870110	100872991	0.338133827	0.378697555	-0.040563728	5	734
OR2T33	chr1	248436073	248437138	0.387786961	0.426518361	-0.0387314	1	735
NA	chr2	129999746	130031421	0.579290588	0.658068276	-0.078777688	2	736
NANOS2	chr19	46416475	46418036	0.855633341	0.8120662	0.043567141	6	737
ATP6V1G1P2	chr8	48105625	48105970	0.678198175	0.744982839	-0.066784664	1	738
NA	chr6	134142285	134172938	0.482502025	0.535783352	-0.053281327	9	739
LGALS9B	chr17	20352708	20370852	0.520307606	0.473404187	0.046903419	1	740
NA	chr4	62937470	63031272	0.509097992	0.559435201	-0.050337209	1	741
CRBN	chr3	3190676	3221394	0.247502337	0.281669246	-0.03416691	6	742
NA	chr16	18027046	18245452	0.178110035	0.246593164	-0.068483129	5	743
MPZL2	chr11	118124118	118135251	0.239310163	0.273462693	-0.03415253	10	744
HYAL4	chr7	123469037	123517532	0.677594363	0.711709204	-0.034114841	8	745
OR3A2	chr17	3181193	3182268	0.305426255	0.375045042	-0.069618787	2	746
SEPW1	chr19	48281829	48287943	0.431375889	0.46541712	-0.034041231	8	747
LDOC1	chrX	140269934	140271310	0.505161461	0.541619608	-0.036458147	4	748
PEX6	chr6	42931608	42946958	0.299675621	0.342481491	-0.04280587	7	749
NA	chr14	45552248	45553180	0.448378302	0.493729625	-0.045351323	4	750
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NA	chr11	1784239	1784979	0.705154931	0.773915995	-0.068761064	1	752
PSG8	chr19	43256838	43359843	0.528874302	0.573758218	-0.044883916	8	753
MLLT11	chr1	151030234	151040970	0.275362483	0.30929243	-0.033929947	21	754
NA	chr1	205060291	205061074	0.785973622	0.862367877	-0.076394255	1	755
LINC00525	chr7	47801074	47806370	0.427171501	0.296143754	0.131027747	1	756
NA	chr12	312808	314189	0.107689024	0.141540195	-0.033851171	1	757
SLC10A2	chr13	103696350	103719196	0.198201215	0.291809454	-0.093608239	3	758
NA	chr4	19457059	19911315	0.632905126	0.700735313	-0.067830187	5	759
ZBP1	chr20	56178902	56195632	0.853588133	0.789845692	0.063742442	3	760
FAM83C-AS1	chr20	33873054	33873559	0.706983934	0.757903427	-0.050919494	2	761
NA	chr12	48276432	48295308	0.800646299	0.870574793	-0.069928494	3	762
CCR2	chr3	46395225	46402419	0.588662252	0.55184708	0.036815172	4	763
AGAP2-AS1	chr12	58120054	58122139	0.630028371	0.663726958	-0.033698587	4	764
NA	chr6	73919469	73972919	0.632138561	0.665828451	-0.03368989	15	765
SNHG6	chr8	67833919	67838633	0.435589795	0.492897944	-0.057308148	10	766
HTATSF1	chrX	135579238	135594505	0.480153142	0.526423748	-0.046270606	12	767
NA	chr9	119266562	119324572	0.2174557	0.285142776	-0.067687075	1	768
ZNF66	chr19	20959110	20991922	0.268521463	0.23486394	0.033657524	1	769
NA	chr11	76511408	76515599	0.913765047	0.833513407	0.08025164	1	770
KIR2DS4	chr19	55344131	55360024	0.28266861	0.325790443	-0.043121833	2	771
DMD-AS2	chrX	31279225	31341747	0.491897559	0.525323573	-0.033426014	16	772
NA	chr19	22605315	22608847	0.418870473	0.49454372	-0.075673248	2	773
CYP4F24P	chr19	15870144	15890797	0.298212506	0.331627604	-0.033415097	6	774
KRTAP12-4	chr21	46074130	46074576	0.529963233	0.581149239	-0.051186006	1	775
LINC00395	chr13	64241814	64312151	0.706135139	0.755673569	-0.04953843	2	776

NA	chr5	43874469	43886730	0.855091666	0.780227504	0.074864162	1	777
NBPF4	chr1	108765087	108786689	0.637462883	0.581435774	0.056027109	1	778
NA	chr7	84161792	84213638	0.649760637	0.573834121	0.075926517	1	779
CLEC7A	chr12	10269376	10282857	0.745550291	0.819952469	-0.074402177	3	780
PCDHB11	chr5	140579183	140582618	0.480882037	0.546745738	-0.065863701	7	781
NA	chr19	33790840	33792074	0.563376935	0.617549601	-0.054172666	1	782
OR4F15	chr15	102358366	102359350	0.828926124	0.908138132	-0.079212007	1	783
NA	chr16	80099733	80201474	0.649851678	0.567068417	0.082783262	2	784
AMELX	chrX	11311533	11318881	0.533401013	0.390676011	0.142725002	1	785
NA	chr14	19562689	19566731	0.256632792	0.223500983	0.033131809	1	786
NA	chr11	69831982	69861921	0.802905025	0.726830481	0.076074544	5	787
NA	chr5	3417266	3536208	0.506744977	0.543244763	-0.036499786	19	788
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ADAL	chr15	43622872	43646096	0.37566881	0.447868147	-0.072199336	11	790
SCML2P1	chr18	6926943	6928209	0.830772298	0.909653654	-0.078881356	1	791
MYH4	chr17	10346607	10372876	0.573235468	0.622921285	-0.049685816	3	792
FAM9A	chrX	8758836	8769424	0.896829427	0.828038395	0.068791031	7	793
TPTEP1	chr22	17082777	17179521	0.59907224	0.64378102	-0.044708779	19	794
EFCAB6-AS1	chr22	43912134	43932747	0.672118499	0.735683243	-0.063564744	1	795
LINC00928	chr15	90048508	90067265	0.795394285	0.870400673	-0.075006387	1	796
OPN1MW	chrX	153448107	153461633	0.640821123	0.701414415	-0.060593292	1	797
G6PD	chrX	153759606	153775787	0.558072819	0.604789157	-0.046716338	19	798
NA	chr2	124774435	124782750	0.653366733	0.695210561	-0.041843828	6	799
NA	chr15	22278010	22413497	0.392681414	0.439235386	-0.046553972	5	800
NA	chr1	67131547	67142710	0.863452388	0.789344729	0.074107659	1	801
OR2T27	chr1	248813232	248814185	0.459985374	0.515989605	-0.056004231	2	802
NA	chr14	71165415	71178870	0.689850842	0.751542184	-0.061691343	2	803
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NA	chr9	126772809	126773393	0.735923186	0.804978507	-0.069055321	1	805
TLL13	chr15	90792762	90808199	0.402617232	0.369987512	0.03262972	4	806
NA	chr19	23386812	23387358	0.891520865	0.818099289	0.073421575	3	807
FLG2	chr1	152321211	152332482	0.761316735	0.831080578	-0.069763843	3	808
NA	chr3	109128837	109214014	0.545364647	0.634626657	-0.089262011	5	809
AK3	chr9	4711155	4742043	0.291155177	0.323629195	-0.032474018	5	810
NA	chr5	44388834	44414091	0.185932063	0.153482433	0.032449631	10	811
NA	chr18	34853669	34856535	0.773276394	0.712698447	0.060577948	7	812
F2RL1	chr5	76114758	76131140	0.262953612	0.295292474	-0.032338861	13	813
APCDD1L-AS1	chr20	57090435	57194944	0.827233137	0.756819102	0.070414035	2	814
NA	chr14	97925153	98047938	0.650624923	0.682919698	-0.032294775	7	815
NA	chr15	59693420	59694203	0.613224809	0.670504381	-0.057279572	1	816
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SDC4P	chr22	30877298	30877898	0.725687942	0.663786077	0.061901865	1	818
NA	chr19	22798359	22806773	0.565775562	0.598044717	-0.032269155	10	819
NA	chr1	193273875	193335083	0.689621918	0.797023482	-0.107401563	1	820
NA	chr19	14141667	14142369	0.772485953	0.831414374	-0.058928421	4	821
CXorf64	chrX	125953747	125955769	0.181194454	0.244998839	-0.063804384	2	822
NA	chr16	2506253	2509980	0.486573449	0.454407554	0.032165895	4	823
NA	chr9	33503653	33510709	0.364094962	0.400645066	-0.036550104	1	824
CT47B1	chrX	120006457	120009779	0.634549951	0.685137809	-0.050587858	5	825
CALR4P	chr1	52027538	52060569	0.775283746	0.829236572	-0.053952826	5	826
PTPRT	chr20	40701392	41818610	0.354176518	0.38630149	-0.032124972	9	827
NA	chr1	167789644	167790462	0.125850955	0.198171182	-0.072320227	1	828
ATP6AP1	chrX	153656978	153664862	0.594936203	0.634344442	-0.039408239	9	829
CADM3	chr1	159141399	159173103	0.307116372	0.341087709	-0.033971338	15	830
YIPF6	chrX	67718165	67757127	0.527458633	0.571440759	-0.043982126	13	831
NA	chr11	131532025	131533477	0.849571994	0.923287041	-0.073715047	2	832
MIR4710	chr14	105144031	105144086	0.351035927	0.399263277	-0.048227349	1	833
MIR135A1	chr3	52328235	52328324	0.892741924	0.817220807	0.075521118	1	834
OLFM4	chr13	53602894	53626192	0.846081958	0.92330961	-0.077227652	4	835
NA	chr12	130554870	130557230	0.366420446	0.410934798	-0.044514353	3	836
CYSLTR2	chr13	49280951	49283498	0.645010818	0.697153444	-0.052142626	2	837
ZNF208	chr19	22115760	22193751	0.350199806	0.394017807	-0.043818001	12	838
LINC00659	chr20	61405480	61406764	0.736536115	0.659456222	0.077079893	1	839
KCNMB2	chr3	177990720	178562217	0.481026652	0.535151031	-0.054124379	21	840
NA	chr19	54357835	54372361	0.346981165	0.378917358	-0.031936194	23	841

CENPVP3	chrX	51360961	51361446	0.672642071	0.615895896	0.056746175	1	842
PATE4	chr11	125703211	125709964	0.257767742	0.318746226	-0.060978484	2	843
SENP7	chr3	101043049	101232085	0.364030979	0.415962083	-0.051931105	8	844
GLRA4	chrX	102962152	102983583	0.689435834	0.736930829	-0.047494995	6	845
PGR	chr11	100900355	101001255	0.401552712	0.433388527	-0.031835815	17	846
SGCG	chr13	23755091	23899304	0.791826438	0.836779624	-0.044953187	4	847
SNORA70	chrX	153628622	153628756	0.70797132	0.772860372	-0.064889052	1	848
NA	chr12	54350318	54352745	0.613417619	0.545159223	0.068258395	1	849
DGAT2L6	chrX	69397333	69425395	0.613386783	0.672090117	-0.058703334	3	850
NA	chr18	68696006	68700292	0.303904934	0.441228339	-0.137323405	1	851
NA	chr18	73966247	73967169	0.499810634	0.535143385	-0.035332751	2	852
DNAJC5B	chr8	66933795	67012751	0.585283823	0.646436801	-0.061152978	4	853
GAL	chr11	68451247	68458643	0.798627162	0.741649328	0.056977834	13	854
NA	chr12	65277174	65371302	0.823878143	0.893786677	-0.069908534	3	855
NA	chr7	44998598	45000508	0.890442863	0.815739606	0.074703257	1	856
KRTAP3-3	chr17	39149686	39150385	0.620842932	0.573471158	0.047371775	2	857
NA	chr7	95225994	95243031	0.340308899	0.308765427	0.031543472	7	858
NA	chr12	65860600	66036152	0.682248917	0.719307279	-0.037058362	16	859
NA	chr2	130750175	130750678	0.39595998	0.432358398	-0.036398418	1	860
GJA10	chr6	90604188	90605839	0.684797897	0.796037485	-0.111239588	1	861
NA	chr4	66864564	67015730	0.478092181	0.524625584	-0.046533403	3	862
CST9L	chr20	23545369	23549386	0.654980552	0.599977077	0.055003475	3	863
NA	chr8	62697606	62856739	0.769109325	0.832273547	-0.063164223	10	864
WBP1L	chr10	104503727	104576021	0.592572363	0.631064079	-0.038491717	24	865
MGAM	chr7	141607613	141806547	0.658847645	0.699165724	-0.040318078	26	866
NA	chr1	192216635	192217077	0.316531738	0.409628825	-0.093097087	1	867
NA	chr7	150130742	150145228	0.863466901	0.931431737	-0.067964836	3	868
IMPDH1P11	chr16	10205239	10206742	0.599325969	0.676596885	-0.077270916	2	869
HNRNPABP1	chr12	10264337	10265070	0.737015156	0.78639969	-0.049384534	2	870
PVRL3	chr3	110788918	110994410	0.301971979	0.342156948	-0.040184969	20	871
MIR374A	chrX	73507121	73507192	0.853485856	0.783092518	0.070393338	1	872
NA	chr12	15154767	15159617	0.411218931	0.485341347	-0.074122416	1	873
OR2B11	chr1	247614255	247615308	0.801238697	0.838495575	-0.037256878	5	874
TAGLN	chr11	117070037	117075498	0.786778177	0.817957326	-0.031179148	4	875
HEPHL1	chr11	93754527	93846917	0.804587047	0.849026303	-0.044439256	9	876
NA	chrX	40691097	40691815	0.825094151	0.757212713	0.067881439	1	877
MIR449A	chr5	54466360	54466450	0.844333539	0.774935909	0.06939763	1	878
NA	chr12	27699983	27705706	0.276011591	0.363142589	-0.087130998	2	879
NA	chrX	71352000	71354556	0.33930993	0.381964807	-0.042654877	3	880
DCC	chr18	49866542	51057784	0.391834273	0.42286835	-0.031034077	17	881
NA	chr19	36279778	36288787	0.808033332	0.741735162	0.06629817	1	882
HMG2P41	chr16	35037240	35037651	0.495873152	0.578294224	-0.082421072	1	883
NA	chr9	67017400	67032072	0.734872126	0.80039681	-0.065524684	1	884
OR56A3	chr11	5968570	5969591	0.318154925	0.381346792	-0.063191867	1	885
NA	chr19	55863669	55870884	0.506258996	0.537167405	-0.030908409	25	886
PZP	chr12	9301436	9360966	0.836378868	0.892551455	-0.056172587	4	887
TRA2B	chr3	185633694	185655924	0.220341884	0.255886358	-0.035544474	10	888
TRIM77	chr11	89443467	89451040	0.478998606	0.551409396	-0.07241079	2	889
C12orf36	chr12	13524023	13540101	0.535796885	0.571800159	-0.036003274	4	890
OR8Q1P	chr11	124471480	124472134	0.664016111	0.570516377	0.093499734	1	891
CRNN	chr1	152381719	152386739	0.736882214	0.8056401	-0.068757886	2	892
PRKY	chrY	7142013	7249589	0.408849176	0.371051347	0.037797829	2	893
NA	chr7	65584590	65629998	0.837317325	0.906042326	-0.068725001	3	894
MTERFD1	chr8	97251626	97273838	0.378286354	0.421124048	-0.042837694	5	895
NA	chr2	131588551	131594567	0.689455074	0.760296891	-0.070841818	3	896
ASF1A	chr6	119215384	119230332	0.654439455	0.702589694	-0.048150239	5	897
NA	chr17	21934958	21935393	0.640966594	0.734905683	-0.093939089	1	898
MUC17	chr7	100663353	100702020	0.545655795	0.609913608	-0.064257813	2	899
NA	chr16	17228361	17232593	0.710415585	0.773181113	-0.062765528	2	900
NA	chr2	168149681	168414843	0.556435533	0.597085236	-0.040649704	16	901
NA	chr16	732416	732870	0.266203933	0.348017489	-0.081813556	1	902
P2RX3	chr11	57105848	57138073	0.673812519	0.711493139	-0.03768062	10	903
NA	chr17	61044178	61045910	0.183583212	0.153071929	0.030511283	1	904
LINC00608	chr2	219840321	219844382	0.900690146	0.839916342	0.060773804	5	905
AHSG	chr3	186330712	186339107	0.567708695	0.614531535	-0.04682284	9	906



PNMA6A	chrX	152240839	152340864	0.715603383	0.778393221	-0.062789838	1	907
NA	chr4	137039830	137316626	0.614074068	0.664079951	-0.050005884	7	908
OR51G1	chr11	4944531	4945637	0.368125424	0.28962993	0.078495493	1	909
NA	chr5	7363092	7364644	0.626420804	0.54523358	0.081187224	1	910
NA	chr17	1923246	1926958	0.81816115	0.752062207	0.066098943	2	911
XPOT	chr12	64798130	64844907	0.266419754	0.296842293	-0.03042254	6	912
NA	chr5	58037408	58112926	0.826453471	0.879492974	-0.053039502	3	913
TAZ	chrX	153639854	153650065	0.532669102	0.579063687	-0.046394585	12	914
NA	chr11	5959981	5966214	0.804618175	0.863353468	-0.058735293	3	915
NA	chr17	70017992	70030233	0.113587294	0.143962495	-0.0303752	1	916
NA	chr17	70026432	70034889	0.113587294	0.143962495	-0.0303752	1	917
IGFBP2	chr2	217497551	217529159	0.503741241	0.538954962	-0.035213721	21	918
STX16	chr20	57226328	57254582	0.233253086	0.263623388	-0.030370302	5	919
IQCF3	chr3	51851620	51864876	0.695553107	0.728063072	-0.032509964	7	920
TUSC7	chr3	116428253	116442428	0.502006442	0.564660589	-0.062654146	4	921
NA	chr17	43985036	43988145	0.630737605	0.579915169	0.050822436	1	922
PHLDA2	chr11	2949503	2950685	0.229255316	0.259588147	-0.030332831	8	923
NLRP3	chr1	247579458	247612410	0.650119955	0.680428932	-0.030308977	16	924
NA	chr1	202968866	202969480	0.794584553	0.864700352	-0.070115799	1	925
IFI27L1	chr14	94547628	94570192	0.360658546	0.406943813	-0.046285266	9	926
NA	chr4	105828514	106041157	0.221603605	0.175865212	0.045738392	2	927
NA	chr10	123687827	123711480	0.418353242	0.388182081	0.030171161	5	928
SNORD115-40	chr15	25488761	25488842	0.191574873	0.265642979	-0.074068106	1	929
NA	chrX	119866948	119867250	0.787113324	0.855492627	-0.068379303	1	930
LRRRC10	chr12	70002351	70004942	0.741899887	0.812693247	-0.070793361	3	931
SBF1P1	chr8	56362069	56367699	0.65902642	0.704579995	-0.045553575	8	932
RAC2	chr22	37621301	37640488	0.572683664	0.541860536	0.030823128	6	933
MIR301B	chr22	22007270	22007347	0.345627995	0.307811633	0.037816363	1	934
NA	chr1	177320722	177335408	0.196332365	0.1433986	0.052933765	1	935
LINC00639	chr14	39218545	39417477	0.812430395	0.865454896	-0.053024501	3	936
NA	chr2	945320	945960	0.37175681	0.30514901	0.0666078	2	937
NA	chr8	86354080	86377144	0.191931483	0.22790399	-0.035972508	9	938
NA	chr1	152346430	152417932	0.777781657	0.847150148	-0.069368491	3	939
DDX60L	chr4	169277886	169458937	0.434602086	0.468862253	-0.034260167	18	940
NA	chr8	109907258	110075646	0.354235311	0.429041733	-0.074806422	2	941
NA	chrX	145701115	145702102	0.569088104	0.600876416	-0.031788313	4	942
NA	chr12	131112861	131200826	0.663435839	0.707069159	-0.043633321	69	943
FEM1B	chr15	68570141	68588203	0.157695404	0.195473967	-0.037778563	7	944
NA	chr11	57154838	57191532	0.622945761	0.652924408	-0.029978647	11	945
SLC26A4	chr7	107301080	107358254	0.479634587	0.509602311	-0.029967724	16	946
APOC2	chr19	45450460	45452822	0.839825636	0.780171518	0.059654118	2	947
SCGN	chr6	25652464	25702011	0.361994366	0.396200599	-0.034206233	7	948
NA	chr16	34740963	34741541	0.776591388	0.827505523	-0.050914135	3	949
PID1	chr2	229715242	230136001	0.391274791	0.447649554	-0.056374764	14	950
DDX58	chr9	32455300	32526322	0.829406862	0.883705087	-0.054298226	4	951
SLC13A1	chr7	122753585	122840040	0.545084049	0.515218815	0.029865234	2	952
AKAP5	chr14	64932217	64936425	0.204461402	0.234316668	-0.029855266	6	953
BCAS1	chr20	52553316	52687304	0.761164353	0.805954356	-0.044790003	3	954
NA	chr4	56686169	56703548	0.743282393	0.806978707	-0.063696313	1	955
EXOC8	chr1	231468480	231473598	0.198546592	0.228367009	-0.029820417	16	956
LRRRC38	chr1	13801445	13840543	0.676067382	0.70588341	-0.029816028	13	957
TRIM34	chr11	5640994	5665628	0.731400498	0.777255623	-0.045855125	15	958
NA	chr2	63849309	63849965	0.71065854	0.77381973	-0.06316119	2	959
KIR3DL1	chr19	55235969	55378448	0.55711052	0.587053331	-0.029942811	51	960
NA	chr6	19535175	19839311	0.457471143	0.493642243	-0.036171101	39	961
NA	chr5	179286013	179288283	0.251189286	0.291991435	-0.04080215	4	962
NA	chr9	125372194	125401964	0.345495299	0.439311068	-0.093815769	6	963
WNK3	chrX	54219256	54385075	0.499318865	0.539944518	-0.040625653	6	964
NA	chr2	199747297	199936514	0.381172118	0.414110456	-0.032938338	1	965
S100A7	chr1	153430220	153433177	0.254384604	0.299061012	-0.044676408	3	966
NA	chr8	42409933	42410336	0.591897232	0.536022362	0.05587487	1	967
GK2	chr4	80327508	80329372	0.74863732	0.791741237	-0.043103917	3	968
SUN3	chr7	48026745	48068716	0.712679527	0.661288071	0.051391456	9	969
NA	chr15	63967345	64005957	0.812503115	0.881461864	-0.068958748	1	970
NA	chr14	51555675	51558006	0.860142431	0.792911442	0.067230988	1	971

NA	chr12	119210837	119212942	0.528025357	0.47972353	0.048301827	5	972
NA	chr5	97745939	97747496	0.625262348	0.675907713	-0.050645366	2	973
ENDOD1	chr11	94822974	94865809	0.502729097	0.539091202	-0.036362105	9	974
CXCL9	chr4	76922428	76928641	0.894847595	0.830103652	0.064743944	2	975
NA	chr8	128098508	128099755	0.501275323	0.555600148	-0.054324825	1	976
NA	chr4	11742572	11771092	0.713017175	0.55506793	0.157949245	1	977
NA	chr5	149987990	149994916	0.908235829	0.837520873	0.070714957	1	978
LINC00923	chr15	98285448	98417780	0.817090083	0.882745052	-0.065654969	2	979
NA	chrX	51099796	51139314	0.396008263	0.447714515	-0.051706252	8	980
NA	chr16	18096663	18266920	0.187450006	0.244968927	-0.057518921	3	981
ZBED2	chr3	111311747	111314290	0.625090641	0.663300432	-0.038209791	4	982
NA	chr7	22893875	22901021	0.373194181	0.402728395	-0.029534215	10	983
DLST	chr14	75348594	75370448	0.281623129	0.328102413	-0.046479284	5	984
OR5AN1	chr11	59131885	59132921	0.132873193	0.233296946	-0.100423754	1	985
C14orf64	chr14	98391947	98444461	0.422982708	0.452497984	-0.029515276	3	986
PIK3CA	chr3	178865902	178957881	0.291960861	0.321470082	-0.02950922	11	987
NA	chr4	157555646	157563606	0.840887627	0.775679217	0.06520841	1	988
FABP2	chr4	120238405	120243545	0.636380496	0.693846595	-0.057466099	3	989
KRT33B	chr17	39519746	39526052	0.781811231	0.819795372	-0.037984141	4	990
AIF1L	chr9	133971863	133998539	0.54250323	0.580889676	-0.038386446	5	991
RPLP0P2	chr11	61382508	61406921	0.737428346	0.769192471	-0.031764126	3	992
TAS2R40	chr7	142919130	142920162	0.662003374	0.702057007	-0.040053633	2	993
NA	chr1	61005921	61106163	0.387242786	0.416579698	-0.029336913	3	994
NA	chr6	134749378	134841723	0.734163391	0.784947006	-0.050783615	5	995
CDC42SE1	chr1	151023447	151042801	0.316907774	0.346227268	-0.029319494	24	996
WDR5B	chr3	122130715	122134882	0.085517738	0.114821063	-0.029303326	3	997
IMPA1P	chr8	82517804	82543369	0.811709639	0.761215989	0.05049365	7	998
NA	chr2	6636135	6643938	0.615313461	0.677529165	-0.062215704	7	999
ENO2	chr12	7022909	7032861	0.538329714	0.49797063	0.040359084	15	1000

**Supplementary Table S3. List of the 1,000 top-ranked, differentially methylated CGIs after induced overexpression of *TET1*.**

This table is related to Fig. 2C.

CGI	chromosome	start	end	beta.TET1+Dox	beta.TET1-Dox	difference	num.sites	rank
chr1:158119489-158119704	chr1	158119489	158119704	0.083231257	0.266035827	-0.18280457	4	1
chr19:15619224-15619613	chr19	15619224	15619613	0.165546679	0.352916775	-0.187370096	3	2
chr9:99540026-99540472	chr9	99540026	99540472	0.057398485	0.196285722	-0.138887237	3	3
chr2:88650248-88650686	chr2	88650248	88650686	0.258580389	0.426194027	-0.167613638	4	4
chr3:72788073-72788416	chr3	72788073	72788416	0.239107279	0.444377539	-0.205270261	3	5
chr20:4152867-4153398	chr20	4152867	4153398	0.106261466	0.241809836	-0.135548371	3	6
chr9:112262011-112262317	chr9	112262011	112262317	0.263175696	0.474672877	-0.211497181	1	7
chr16:67208068-67208678	chr16	67208068	67208678	0.31323473	0.435778555	-0.122543825	3	8
chr3:125898663-125899568	chr3	125898663	125899568	0.087088685	0.246835842	-0.159747157	9	9
chr12:186864-187610	chr12	186864	187610	0.400301438	0.539151779	-0.138850341	3	10
chr8:37557928-37558887	chr8	37557928	37558887	0.195238965	0.344873549	-0.149634583	2	11
chr12:132990778-132990987	chr12	132990778	132990987	0.208831816	0.363535841	-0.154704025	3	12
chr1:45082740-45083285	chr1	45082740	45083285	0.321843876	0.502992355	-0.181148479	6	13
chr16:4363936-4364151	chr16	4363936	4364151	0.14092594	0.251360407	-0.110434468	3	14
chr11:47615711-47616055	chr11	47615711	47616055	0.173370704	0.377760502	-0.204389798	1	15
chr7:19145873-19146256	chr7	19145873	19146256	0.150071951	0.372057135	-0.221985185	2	16
chr12:98850691-98851002	chr12	98850691	98851002	0.116047161	0.241776758	-0.125729597	4	17
chr4:8594413-8594777	chr4	8594413	8594777	0.258169775	0.398254677	-0.140084903	4	18
chr19:18319146-18319363	chr19	18319146	18319363	0.138805497	0.244914913	-0.106109417	2	19
chr5:72746990-72747587	chr5	72746990	72747587	0.314632117	0.429370621	-0.114738504	3	20
chr19:15662114-15662358	chr19	15662114	15662358	0.227209994	0.328967577	-0.101757583	2	21
chr17:60885409-60885857	chr17	60885409	60885857	0.413090469	0.604865998	-0.191775528	4	22
chrX:129118346-129118690	chrX	129118346	129118690	0.177589113	0.363192929	-0.185603816	1	23
chr7:100253783-100254150	chr7	100253783	100254150	0.360889263	0.489823234	-0.128933971	5	24
chr9:77111779-77112042	chr9	77111779	77112042	0.171967229	0.266203405	-0.094236176	1	25
chr9:16828936-16829169	chr9	16828936	16829169	0.183215258	0.381984702	-0.198769444	1	26
chr5:139076543-139077179	chr5	139076543	139077179	0.202190646	0.297694396	-0.09550375	5	27
chr6:73972820-73973027	chr6	73972820	73973027	0.058056631	0.176190202	-0.118133571	3	28
chr19:3687787-3688262	chr19	3687787	3688262	0.287700849	0.164730195	0.122970654	4	29
chr18:77905298-77905566	chr18	77905298	77905566	0.385183209	0.528703148	-0.143519939	5	30
chr4:74719088-74719339	chr4	74719088	74719339	0.329761906	0.50218856	-0.172426654	3	31
chr9:71650647-71651176	chr9	71650647	71651176	0.072242007	0.16402858	-0.091786573	2	32
chr10:112431836-112432426	chr10	112431836	112432426	0.183934701	0.272102573	-0.088167872	7	33
chr7:1265112-1265379	chr7	1265112	1265379	0.122597066	0.232472743	-0.109875677	3	34
chr12:109729573-109729826	chr12	109729573	109729826	0.303954679	0.42912124	-0.125166561	3	35
chr7:150652808-150653080	chr7	150652808	150653080	0.433954052	0.518967285	-0.085013233	5	36
chr19:41732007-41732556	chr19	41732007	41732556	0.13308835	0.227159268	-0.094070918	3	37
chr10:133058339-133058609	chr10	133058339	133058609	0.29893558	0.405565443	-0.106629863	2	38
chr13:113656117-113656379	chr13	113656117	113656379	0.283157134	0.392325158	-0.109168023	2	39
chr1:27286066-27287101	chr1	27286066	27287101	0.189491181	0.312946393	-0.123455212	6	40
chr7:157690560-157690770	chr7	157690560	157690770	0.431724584	0.537017146	-0.105292561	4	41
chr19:31210518-31210884	chr19	31210518	31210884	0.20950321	0.291776521	-0.082273311	3	42
chr12:131303094-131303836	chr12	131303094	131303836	0.173767293	0.284457887	-0.110690594	7	43
chr17:34997844-34998760	chr17	34997844	34998760	0.076449118	0.15784926	-0.081400142	2	44
chr14:74100344-74101230	chr14	74100344	74101230	0.232718561	0.325841814	-0.093123252	4	45
chr14:42075859-42076329	chr14	42075859	42076329	0.14457537	0.271883055	-0.127307685	2	46
chr2:242549374-242549995	chr2	242549374	242549995	0.176253851	0.25556502	-0.079311169	4	47
chrX:101397306-101397514	chrX	101397306	101397514	0.249608118	0.336427747	-0.086819629	1	48
chr12:56039989-56040337	chr12	56039989	56040337	0.208683548	0.313736692	-0.105053144	5	49
chr21:42792294-42792704	chr21	42792294	42792704	0.208701646	0.32051079	-0.111809145	5	50
chr1:116961183-116961542	chr1	116961183	116961542	0.070156835	0.146581995	-0.076425161	7	51
chr8:72755784-72756667	chr8	72755784	72756667	0.221311369	0.313174216	-0.091862847	6	52
chr9:127212625-127213064	chr9	127212625	127213064	0.06625163	0.145397006	-0.079145377	1	53
chr9:32572997-32573227	chr9	32572997	32573227	0.07266985	0.147935283	-0.075265433	1	54
chr10:20106644-20106946	chr10	20106644	20106946	0.128640472	0.238486063	-0.109845591	3	55
chr1:43814306-43815277	chr1	43814306	43815277	0.274371037	0.367128258	-0.092757221	5	56
chr4:155547985-155548322	chr4	155547985	155548322	0.289842796	0.39142277	-0.101579974	5	57
chr10:49348138-49348676	chr10	49348138	49348676	0.32913971	0.535995281	-0.206855571	1	58
chr19:55450823-55451128	chr19	55450823	55451128	0.827913353	0.627832545	0.200080807	1	59
chr19:47733885-47734806	chr19	47733885	47734806	0.087577334	0.194006492	-0.106429158	5	60
chr18:712233-713086	chr18	712233	713086	0.275123726	0.349005622	-0.073881896	6	61
chr19:2613933-2614133	chr19	2613933	2614133	0.151279051	0.260485356	-0.109206305	3	62
chr2:220222903-220223854	chr2	220222903	220223854	0.302858409	0.375662287	-0.072803878	5	63
chr16:32252570-32252823	chr16	32252570	32252823	0.530213596	0.692413168	-0.162199572	1	64
chr11:30040073-30040294	chr11	30040073	30040294	0.75994458	0.582077891	0.177866688	2	65
chr22:17090456-17091224	chr22	17090456	17091224	0.429053164	0.541608716	-0.112555552	4	66
chr16:29093366-29093833	chr16	29093366	29093833	0.076665797	0.156252687	-0.07958689	1	67
chr7:149469543-149469748	chr7	149469543	149469748	0.179814275	0.250298784	-0.070484509	1	68
chr12:105478090-105478517	chr12	105478090	105478517	0.511814154	0.643220169	-0.131406015	7	69
chrX:154493304-154493907	chrX	154493304	154493907	0.390252183	0.489136649	-0.098884465	4	70

chr10:31422710-31423316	chr10	31422710	31423316	0.417412862	0.541521967	-0.124109105	3	71
chr16:24267041-24267527	chr16	24267041	24267527	0.12329438	0.198536397	-0.075242017	3	72
chr20:62947649-62948464	chr20	62947649	62948464	0.087877352	0.179149916	-0.091272564	3	73
chr9:129677707-129678009	chr9	129677707	129678009	0.171626484	0.240156164	-0.06852968	2	74
chr11:132952539-132953307	chr11	132952539	132953307	0.124149424	0.223827107	-0.099677684	2	75
chr17:14200580-14200996	chr17	14200580	14200996	0.416190735	0.484131252	-0.067940517	2	76
chr14:24020003-24020251	chr14	24020003	24020251	0.307096299	0.411948781	-0.104852482	3	77
chr19:54369388-54369809	chr19	54369388	54369809	0.455204585	0.522592706	-0.06738812	8	78
chr15:85291080-85291697	chr15	85291080	85291697	0.115069278	0.193685146	-0.078615868	3	79
chr9:35111268-35111504	chr9	35111268	35111504	0.149083957	0.216414274	-0.067330317	1	80
chr13:111719705-111720014	chr13	111719705	111720014	0.368831937	0.467609887	-0.09877795	3	81
chr14:71288404-71288957	chr14	71288404	71288957	0.080048791	0.147358548	-0.067309756	2	82
chr6:55039171-55039392	chr6	55039171	55039392	0.079446285	0.147668657	-0.068222372	4	83
chrX:34148741-34148957	chrX	34148741	34148957	0.506156856	0.622894643	-0.116737787	2	84
chr2:102758807-102759577	chr2	102758807	102759577	0.626507029	0.515093975	0.111413054	3	85
chr11:58873890-58874486	chr11	58873890	58874486	0.106141516	0.174567816	-0.068426299	3	86
chr17:35014273-35014596	chr17	35014273	35014596	0.046234956	0.120812754	-0.074577798	3	87
chr12:54811982-54812202	chr12	54811982	54812202	0.474306653	0.604253639	-0.129946986	2	88
chr16:55542921-55543274	chr16	55542921	55543274	0.060905817	0.149465381	-0.088559564	5	89
chr1:50798668-50799536	chr1	50798668	50799536	0.056353316	0.121282125	-0.064928809	5	90
chr19:46119455-46119815	chr19	46119455	46119815	0.1880379	0.313143817	-0.125105917	2	91
chr13:88326601-88326919	chr13	88326601	88326919	0.568242325	0.441558888	0.126683437	3	92
chr13:108518335-108518633	chr13	108518335	108518633	0.176461309	0.112604507	0.063856803	3	93
chr8:121137100-121137778	chr8	121137100	121137778	0.181024047	0.244850785	-0.063826739	4	94
chr14:72398665-72399554	chr14	72398665	72399554	0.217317601	0.12578557	0.091532031	4	95
chr6:167275721-167276626	chr6	167275721	167276626	0.219647082	0.295924366	-0.076277284	12	96
chr10:74079337-74079861	chr10	74079337	74079861	0.145554531	0.208051535	-0.062497004	4	97
chr14:85996495-85996958	chr14	85996495	85996958	0.339643353	0.24768681	0.091956543	4	98
chrX:103809795-103810167	chrX	103809795	103810167	0.69960913	0.623073764	0.076535366	3	99
chr20:25058289-25058726	chr20	25058289	25058726	0.370442323	0.538676119	-0.168233796	2	100
chr16:75550614-75551426	chr16	75550614	75551426	0.095186043	0.164179305	-0.068993263	3	101
chr1:85358360-85359187	chr1	85358360	85359187	0.12968887	0.189982852	-0.060293982	6	102
chr5:41869664-41870876	chr5	41869664	41870876	0.269529422	0.368284204	-0.098754782	10	103
chr8:33456916-33457515	chr8	33456916	33457515	0.460878488	0.559418338	-0.098539849	6	104
chr17:46697414-46697701	chr17	46697414	46697701	0.427710936	0.542249734	-0.114538798	3	105
chr4:3464800-3465440	chr4	3464800	3465440	0.397006168	0.483601637	-0.086595468	8	106
chr17:46619088-46619314	chr17	46619088	46619314	0.085464266	0.219132203	-0.133667936	2	107
chr20:39316040-39316322	chr20	39316040	39316322	0.550858118	0.661624522	-0.110766404	3	108
chrX:153569548-153571439	chrX	153569548	153571439	0.345497136	0.429611817	-0.084114681	1	109
chr1:15929824-15930289	chr1	15929824	15930289	0.044262682	0.113141225	-0.068878543	4	110
chrX:51138954-51139255	chrX	51138954	51139255	0.269306525	0.371006494	-0.101699969	4	111
chr19:53757820-53758148	chr19	53757820	53758148	0.364580976	0.306093401	0.058487576	3	112
chr7:150942305-150943033	chr7	150942305	150943033	0.205210092	0.303651044	-0.098440953	3	113
chr19:58175624-58176104	chr19	58175624	58176104	0.101819118	0.168739869	-0.066920752	3	114
chr3:11195902-11196552	chr3	11195902	11196552	0.388221251	0.447926907	-0.059705656	2	115
chr19:51568155-51568412	chr19	51568155	51568412	0.286711711	0.377705585	-0.090993874	3	116
chr11:8289533-8290322	chr11	8289533	8290322	0.313681724	0.379591799	-0.065910076	5	117
chr11:111410933-111412199	chr11	111410933	111412199	0.480506034	0.537771278	-0.057265244	11	118
chr1:244213398-244213619	chr1	244213398	244213619	0.219847228	0.293176581	-0.073329352	4	119
chr10:103535637-103536505	chr10	103535637	103536505	0.609857389	0.677484234	-0.067626845	5	120
chr1:110185962-110186164	chr1	110185962	110186164	0.133203766	0.189054217	-0.055850451	4	121
chr4:134071663-134073628	chr4	134071663	134073628	0.363454447	0.419117733	-0.055663286	5	122
chr9:120507228-120507642	chr9	120507228	120507642	0.568190501	0.419185181	0.14900532	2	123
chr15:78236689-78237084	chr15	78236689	78237084	0.136575074	0.192236062	-0.055660988	3	124
chr9:137217063-137218078	chr9	137217063	137218078	0.105942014	0.181737523	-0.075795509	2	125
chr8:1949246-1951390	chr8	1949246	1951390	0.532473478	0.477702523	0.054770955	7	126
chrX:149736721-149737756	chrX	149736721	149737756	0.415758429	0.493323351	-0.077564922	8	127
chr12:118499104-118499473	chr12	118499104	118499473	0.425691407	0.348740892	0.076950515	1	128
chr9:707022-707420	chr9	707022	707420	0.07858401	0.132325974	-0.053741963	3	129
chr16:34295487-34296109	chr16	34295487	34296109	0.377113517	0.43046597	-0.053352453	3	130
chr9:138156711-138156983	chr9	138156711	138156983	0.882406975	0.726715518	0.155691457	1	131
chr5:139492724-139492966	chr5	139492724	139492966	0.153685746	0.214948631	-0.061262885	2	132
chr12:113772634-113772934	chr12	113772634	113772934	0.123285202	0.195587893	-0.07230269	3	133
chr1:201708788-201709429	chr1	201708788	201709429	0.316267154	0.368267212	-0.052000058	7	134
chr19:9517469-9517986	chr19	9517469	9517986	0.449457664	0.371329923	0.078127741	3	135
chr9:117160140-117161064	chr9	117160140	117161064	0.1563382	0.209797333	-0.053459133	2	136
chr14:105332409-105332651	chr14	105332409	105332651	0.215615814	0.287445154	-0.07182934	3	137
chr12:125534061-125534527	chr12	125534061	125534527	0.155473599	0.20688085	-0.05140725	2	138
chr18:47087076-47087446	chr18	47087076	47087446	0.225299632	0.280736084	-0.055436452	3	139
chr8:104152727-104153390	chr8	104152727	104153390	0.387864269	0.46948864	-0.081624371	4	140
chr9:127539240-127540081	chr9	127539240	127540081	0.598971774	0.51417577	0.084796004	4	141
chr11:131560938-131561613	chr11	131560938	131561613	0.704443369	0.770086829	-0.06564346	3	142
chr19:42416993-42417513	chr19	42416993	42417513	0.286974724	0.370337302	-0.083362578	3	143

chr5:52777789-52777996	chr5	52777789	52777996	0.121728969	0.201831578	-0.080102609	2	144
chr16:88803803-88804112	chr16	88803803	88804112	0.088260215	0.138733849	-0.050473634	4	145
chr3:187455331-187455843	chr3	187455331	187455843	0.257818672	0.308256605	-0.050437933	4	146
chr8:1495106-1495333	chr8	1495106	1495333	0.629841384	0.725667827	-0.095826443	4	147
chr10:135450884-135451867	chr10	135450884	135451867	0.295120557	0.35462059	-0.059500033	1	148
chr13:112063570-112064022	chr13	112063570	112064022	0.188871874	0.273336648	-0.084464774	2	149
chr3:38179858-38180689	chr3	38179858	38180689	0.454485186	0.573673809	-0.119188623	10	150
chr8:1327332-1327547	chr8	1327332	1327547	0.661256918	0.750202045	-0.088945127	4	151
chr19:49522774-49523093	chr19	49522774	49523093	0.392482724	0.330977296	0.061505428	3	152
chr17:20811749-20812158	chr17	20811749	20812158	0.247857231	0.368263231	-0.120406	4	153
chr4:2305515-2305793	chr4	2305515	2305793	0.167582553	0.258512759	-0.090930205	1	154
chr3:6904134-6904641	chr3	6904134	6904641	0.319429036	0.384647783	-0.065218747	4	155
chr6:161352085-161352386	chr6	161352085	161352386	0.504251571	0.591513152	-0.087261582	2	156
chr21:46897842-46898158	chr21	46897842	46898158	0.124456512	0.174123823	-0.049667311	2	157
chr2:223183014-223185468	chr2	223183014	223185468	0.157697134	0.208085771	-0.050388637	7	158
chr21:40032244-40033665	chr21	40032244	40033665	0.43434343	0.495268673	-0.060925243	4	159
chr12:119212111-119212393	chr12	119212111	119212393	0.636369136	0.567001526	0.06936761	4	160
chr9:41954479-41954842	chr9	41954479	41954842	0.283315727	0.33901296	-0.055697233	1	161
chr20:10152769-10153193	chr20	10152769	10153193	0.194696315	0.14549643	0.049199885	3	162
chr6:27833121-27833406	chr6	27833121	27833406	0.491216466	0.587251818	-0.096035352	4	163
chr5:2643106-2643309	chr5	2643106	2643309	0.343063372	0.410374179	-0.067310807	3	164
chr17:37380954-37382363	chr17	37380954	37382363	0.410644986	0.458860169	-0.048215183	10	165
chr12:49735720-49736875	chr12	49735720	49736875	0.570901161	0.654514839	-0.083613678	4	166
chr8:65491084-65491319	chr8	65491084	65491319	0.71824629	0.612574091	0.1056722	3	167
chr19:42501262-42501486	chr19	42501262	42501486	0.135328605	0.193110878	-0.057782272	2	168
chr19:11353961-11354362	chr19	11353961	11354362	0.206753693	0.254500095	-0.047746402	4	169
chr1:32713919-32714186	chr1	32713919	32714186	0.371190997	0.424385942	-0.053194945	4	170
chr19:40376868-40377136	chr19	40376868	40377136	0.601118589	0.735430021	-0.134311432	1	171
chrX:39021663-39022131	chrX	39021663	39022131	0.654402341	0.553889346	0.100512996	1	172
chrX:54208940-54209723	chrX	54208940	54209723	0.461319259	0.543734728	-0.082415469	6	173
chr1:17746201-17746547	chr1	17746201	17746547	0.510784577	0.557802569	-0.047017992	5	174
chr6:170921394-170921775	chr6	170921394	170921775	0.26867543	0.221696093	0.046979337	1	175
chr6:154360587-154361008	chr6	154360587	154361008	0.351871161	0.41161459	-0.059743429	4	176
chr19:51843076-51843926	chr19	51843076	51843926	0.335617341	0.229142858	0.106474483	2	177
chr11:47376652-47377236	chr11	47376652	47377236	0.308954286	0.381986122	-0.073031835	3	178
chr9:131965038-131965636	chr9	131965038	131965636	0.281991537	0.2132102	0.068781336	4	179
chr9:114361411-114361760	chr9	114361411	114361760	0.251395894	0.387879648	-0.136483755	1	180
chr1:27854417-27854963	chr1	27854417	27854963	0.183229353	0.136674052	0.0465553	4	181
chr11:49071438-49071764	chr11	49071438	49071764	0.834502146	0.719256812	0.115245334	2	182
chr16:7568196-7568413	chr16	7568196	7568413	0.666834599	0.756834128	-0.089999529	2	183
chr19:42497820-42498560	chr19	42497820	42498560	0.162161247	0.208412916	-0.046251669	3	184
chrY:6134499-6134748	chrY	6134499	6134748	0.208383156	0.257553544	-0.049170388	1	185
chr9:98273679-98273908	chr9	98273679	98273908	0.080915911	0.126786233	-0.045870321	1	186
chr2:11924984-11925253	chr2	11924984	11925253	0.453858439	0.505836991	-0.051978552	3	187
chr9:68726057-68726939	chr9	68726057	68726939	0.289773257	0.354112594	-0.064339337	1	188
chr11:64611715-64612634	chr11	64611715	64612634	0.129478667	0.184396605	-0.054917938	5	189
chr2:231902027-231903122	chr2	231902027	231903122	0.510585742	0.426393678	0.084192064	3	190
chrX:136629545-136630303	chrX	136629545	136630303	0.480330514	0.527126912	-0.046796398	5	191
chr7:138666359-138666972	chr7	138666359	138666972	0.302695218	0.397387429	-0.094692211	2	192
chr4:113445023-113445350	chr4	113445023	113445350	0.093293643	0.224326747	-0.131033105	2	193
chr16:3493099-3493569	chr16	3493099	3493569	0.504377529	0.58435585	-0.079978321	6	194
chr7:6676455-6676785	chr7	6676455	6676785	0.081343113	0.138080344	-0.056737231	2	195
chr21:28515803-28516306	chr21	28515803	28516306	0.424179201	0.506073885	-0.081894684	3	196
chr11:44971049-44972685	chr11	44971049	44972685	0.25007386	0.307241665	-0.057167804	11	197
chr3:87101768-87102008	chr3	87101768	87102008	0.348477253	0.408817766	-0.060340513	2	198
chr2:229045958-229046553	chr2	229045958	229046553	0.262292619	0.320445349	-0.05815273	5	199
chr7:157612037-157612316	chr7	157612037	157612316	0.740968077	0.849095357	-0.10812728	2	200
chr14:107221093-107221298	chr14	107221093	107221298	0.727423318	0.849295885	-0.121872567	2	201
chr1:37783612-37784258	chr1	37783612	37784258	0.601655216	0.649386359	-0.047731143	4	202
chr4:57975861-57976916	chr4	57975861	57976916	0.201570666	0.283743635	-0.082172969	9	203
chr19:49298406-49298745	chr19	49298406	49298745	0.163922505	0.0953555	0.068567005	4	204
chr16:1393574-1393878	chr16	1393574	1393878	0.684970994	0.788328978	-0.103357985	3	205
chr22:45064160-45065092	chr22	45064160	45065092	0.313691527	0.222285982	0.091405545	5	206
chr7:5322681-5323193	chr7	5322681	5323193	0.659192763	0.568201444	0.090991319	2	207
chr4:169401351-169401725	chr4	169401351	169401725	0.087335801	0.142109302	-0.054773501	6	208
chr20:10198136-10198984	chr20	10198136	10198984	0.290967874	0.357805853	-0.066837978	3	209
chr19:48896891-48897199	chr19	48896891	48897199	0.049576153	0.09334316	-0.043767007	5	210
chr3:39851026-39851820	chr3	39851026	39851820	0.130767778	0.206370395	-0.075602617	4	211
chr16:31580560-31581023	chr16	31580560	31581023	0.637491758	0.580281373	0.057210384	5	212
chr11:2154034-2154387	chr11	2154034	2154387	0.693468067	0.634679474	0.058788593	5	213
chr1:149605515-149605903	chr1	149605515	149605903	0.239121685	0.350729923	-0.111608239	1	214
chr18:76693918-76694195	chr18	76693918	76694195	0.757706316	0.844440047	-0.086733731	3	215
chr20:53091734-53092993	chr20	53091734	53092993	0.309919479	0.250505346	0.059414133	10	216

chr7:63498113-63498314	chr7	63498113	63498314	0.403830631	0.447074435	-0.043243804	4	217
chr10:133318029-133318324	chr10	133318029	133318324	0.53429014	0.606439666	-0.072149527	3	218
chr2:79220193-79220592	chr2	79220193	79220592	0.472360002	0.534480277	-0.062120275	4	219
chr2:162270889-162271413	chr2	162270889	162271413	0.228046188	0.287358349	-0.059312161	3	220
chr14:92979727-92981228	chr14	92979727	92981228	0.404452546	0.447575737	-0.043123191	8	221
chr12:128899814-128900065	chr12	128899814	128900065	0.560954392	0.486651561	0.074302831	3	222
chr20:61937483-61937738	chr20	61937483	61937738	0.766719232	0.888534941	-0.121815709	2	223
chr2:45161428-45163058	chr2	45161428	45163058	0.699201659	0.628515741	0.070685918	5	224
chr3:26664105-26664796	chr3	26664105	26664796	0.308625745	0.364232434	-0.055606689	7	225
chr12:13154089-13154866	chr12	13154089	13154866	0.341074019	0.423120696	-0.082046677	6	226
chr19:58666024-58666833	chr19	58666024	58666833	0.276134241	0.33436387	-0.058229629	4	227
chr2:85554135-85555414	chr2	85554135	85555414	0.059777768	0.111688422	-0.051910654	6	228
chr4:170948487-170948908	chr4	170948487	170948908	0.224952419	0.15228856	0.072663859	4	229
chr19:55865825-55866324	chr19	55865825	55866324	0.461052414	0.547565652	-0.086513238	7	230
chr1:7740144-7741117	chr1	7740144	7741117	0.368587243	0.31578629	0.052800952	7	231
chr9:71394794-71395492	chr9	71394794	71395492	0.107691327	0.150027325	-0.042335998	5	232
chr12:76741910-76742286	chr12	76741910	76742286	0.209914991	0.089946095	0.119968897	5	233
chrX:152909014-152909214	chrX	152909014	152909214	0.432842341	0.485460431	-0.052618091	3	234
chr19:54057415-54058254	chr19	54057415	54058254	0.699213352	0.778246109	-0.079032757	3	235
chr11:3224525-3225077	chr11	3224525	3225077	0.268583633	0.319686504	-0.051102871	5	236
chr3:123751655-123753199	chr3	123751655	123753199	0.163514367	0.206969613	-0.043455245	7	237
chr10:13933483-13934184	chr10	13933483	13934184	0.446689684	0.488664444	-0.04197476	3	238
chr3:184016578-184017416	chr3	184016578	184017416	0.079612822	0.121579164	-0.041966342	6	239
chr18:67069934-67070171	chr18	67069934	67070171	0.691347222	0.640499855	0.050847367	4	240
chr11:13030331-13032584	chr11	13030331	13032584	0.531694021	0.631349462	-0.09965544	11	241
chr1:5793558-5793784	chr1	5793558	5793784	0.70178485	0.807298645	-0.105513795	1	242
chr17:72667196-72667710	chr17	72667196	72667710	0.554975709	0.483960601	0.071015108	4	243
chr11:8009048-8009251	chr11	8009048	8009251	0.27724872	0.318904734	-0.041656014	2	244
chr16:84214836-84215036	chr16	84214836	84215036	0.908902674	0.804726373	0.104176301	2	245
chr20:59598844-59599305	chr20	59598844	59599305	0.507830981	0.549604156	-0.041773174	3	246
chr19:46367372-46367808	chr19	46367372	46367808	0.231541692	0.31501333	-0.083471638	3	247
chrY:14107138-14107480	chrY	14107138	14107480	0.765878592	0.596333359	0.169545233	1	248
chr13:102106166-102106488	chr13	102106166	102106488	0.280285047	0.190449392	0.089835655	2	249
chr16:34777875-34778144	chr16	34777875	34778144	0.640769184	0.59691563	0.043853553	3	250
chr22:22901387-22901698	chr22	22901387	22901698	0.324846644	0.454627229	-0.129780585	5	251
chr18:59000684-59001692	chr18	59000684	59001692	0.359592533	0.417527347	-0.057934814	6	252
chr12:131200510-131200726	chr12	131200510	131200726	0.205733707	0.15093952	0.054794186	3	253
chr20:61147458-61147787	chr20	61147458	61147787	0.678448343	0.612454917	0.065993426	6	254
chr13:28540357-28541279	chr13	28540357	28541279	0.587370081	0.690818858	-0.103448777	2	255
chr16:5289583-5290386	chr16	5289583	5290386	0.474432793	0.544013002	-0.069580209	1	256
chr19:12476050-12476372	chr19	12476050	12476372	0.29020586	0.374740499	-0.084534639	3	257
chr19:22805801-22806721	chr19	22805801	22806721	0.627463339	0.671301779	-0.04383844	5	258
chr19:50762343-50762552	chr19	50762343	50762552	0.845577782	0.755312858	0.090264924	2	259
chr8:97657175-97657943	chr8	97657175	97657943	0.242506419	0.295110542	-0.052604123	12	260
chr20:58507756-58509517	chr20	58507756	58509517	0.657330459	0.697719158	-0.040388699	8	261
chr8:56013657-56015761	chr8	56013657	56015761	0.249499232	0.209255389	0.040243843	7	262
chr2:70485232-70485679	chr2	70485232	70485679	0.091531309	0.131762803	-0.040231494	3	263
chr20:33814546-33815131	chr20	33814546	33815131	0.296722003	0.339843758	-0.043121755	1	264
chr22:30116082-30117160	chr22	30116082	30117160	0.407350699	0.366626822	0.040723877	8	265
chr6:36410434-36411139	chr6	36410434	36411139	0.045180325	0.085279927	-0.040099602	12	266
chr18:76150399-76151531	chr18	76150399	76151531	0.67940361	0.78097817	-0.10157456	2	267
chr14:36977519-36977996	chr14	36977519	36977996	0.420785667	0.475185753	-0.054400087	4	268
chr16:1480845-1481045	chr16	1480845	1481045	0.608877759	0.529772649	0.079105111	3	269
chr2:139537693-139538650	chr2	139537693	139538650	0.386416764	0.426324776	-0.039908013	7	270
chr20:54824313-54824584	chr20	54824313	54824584	0.639341173	0.693815901	-0.054474728	3	271
chr7:143058918-143060156	chr7	143058918	143060156	0.225354644	0.2651155	-0.039760856	12	272
chr6:13873766-13874262	chr6	13873766	13874262	0.599314334	0.528079072	0.071235262	4	273
chr18:56934834-56936827	chr18	56934834	56936827	0.64395331	0.705018592	-0.061065282	7	274
chr16:67464389-67465462	chr16	67464389	67465462	0.173199412	0.133564783	0.039634629	9	275
chr1:23945942-23946295	chr1	23945942	23946295	0.047672015	0.087256505	-0.03958449	3	276
chr4:190959045-190960011	chr4	190959045	190960011	0.386922691	0.438802315	-0.051879624	3	277
chr16:21294981-21295414	chr16	21294981	21295414	0.139921906	0.240434659	-0.100512752	2	278
chr16:85269193-85269464	chr16	85269193	85269464	0.677643048	0.594205065	0.083437983	1	279
chrX:144902966-144903167	chrX	144902966	144903167	0.345155761	0.384583379	-0.039427618	3	280
chr4:21950086-21950346	chr4	21950086	21950346	0.12937284	0.204001164	-0.074628324	3	281
chr22:48605158-48605507	chr22	48605158	48605507	0.738394082	0.655159009	0.083235074	3	282
chr3:156008992-156009320	chr3	156008992	156009320	0.536770326	0.594634848	-0.057864521	3	283
chr19:49559223-49560497	chr19	49559223	49560497	0.307967155	0.353320708	-0.045353553	4	284
chrX:31284505-31285019	chrX	31284505	31285019	0.478002823	0.563228841	-0.085226018	4	285
chr17:77715571-77716061	chr17	77715571	77716061	0.264834696	0.328276385	-0.063441689	3	286
chrX:152912492-152913719	chrX	152912492	152913719	0.554486869	0.605449782	-0.050962913	5	287
chr15:20148694-20150115	chr15	20148694	20150115	0.702455396	0.618704525	0.083750871	3	288
chrX:2825439-2825646	chrX	2825439	2825646	0.744878394	0.842696182	-0.097817788	2	289

chr20:57414596-57414896	chr20	57414596	57414896	0.406402683	0.516694468	-0.110291786	2	290
chr5:127871959-127872263	chr5	127871959	127872263	0.806711289	0.916096213	-0.109384924	3	291
chr13:113540351-113540558	chr13	113540351	113540558	0.496485109	0.576535828	-0.080050719	4	292
chr13:53424942-53425995	chr13	53424942	53425995	0.762207658	0.69522472	0.066982938	5	293
chr5:55776605-55777233	chr5	55776605	55777233	0.040575017	0.0792171	-0.038642083	3	294
chr10:57388069-57388528	chr10	57388069	57388528	0.33118679	0.377625254	-0.046438464	4	295
chr19:6822268-6822604	chr19	6822268	6822604	0.828653316	0.935888463	-0.107235147	2	296
chr4:185089688-185089989	chr4	185089688	185089989	0.17788305	0.121185629	0.056697421	3	297
chrX:39949373-39949976	chrX	39949373	39949976	0.515588965	0.409894202	0.105694763	2	298
chr1:17287291-17287684	chr1	17287291	17287684	0.213709516	0.252053002	-0.038343487	3	299
chrX:3760664-3762210	chrX	3760664	3762210	0.450414676	0.397995845	0.052418831	2	300
chr8:132052204-132054749	chr8	132052204	132054749	0.481743239	0.425159239	0.056584	13	301
chr19:4607080-4607350	chr19	4607080	4607350	0.664322799	0.600097212	0.064225587	4	302
chr16:1047495-1048070	chr16	1047495	1048070	0.527567577	0.479700508	0.047867069	3	303
chr18:75611919-75612142	chr18	75611919	75612142	0.145294544	0.078013498	0.067281046	2	304
chr8:131455249-131456285	chr8	131455249	131456285	0.163854556	0.201762635	-0.037908079	6	305
chr2:219773547-219774103	chr2	219773547	219774103	0.346754248	0.292426694	0.054327555	5	306
chr5:101632050-101632373	chr5	101632050	101632373	0.158952302	0.109300728	0.049651574	9	307
chrX:36975506-36976349	chrX	36975506	36976349	0.527266645	0.603387952	-0.076121307	4	308
chr1:54965024-54965391	chr1	54965024	54965391	0.314038123	0.351845178	-0.037807055	3	309
chr22:20790639-20792665	chr22	20790639	20792665	0.195112866	0.261607206	-0.06649434	16	310
chr17:27949430-27950277	chr17	27949430	27950277	0.12820826	0.165991813	-0.037783554	3	311
chr5:2007316-2007879	chr5	2007316	2007879	0.620537102	0.69338499	-0.072847888	3	312
chr9:114937021-114937824	chr9	114937021	114937824	0.146737695	0.199229416	-0.052491721	4	313
chr10:118927022-118928132	chr10	118927022	118928132	0.7116284	0.636355755	0.075272645	5	314
chr3:98376317-98376542	chr3	98376317	98376542	0.072469006	0.110076445	-0.037607439	3	315
chr12:103350090-103350422	chr12	103350090	103350422	0.441059442	0.370676364	0.070383078	2	316
chr20:34652455-34653500	chr20	34652455	34653500	0.377248889	0.414603303	-0.037354415	4	317
chr9:130374109-130374885	chr9	130374109	130374885	0.300879496	0.379118857	-0.078239361	2	318
chr8:49427075-49427416	chr8	49427075	49427416	0.052446851	0.089608404	-0.037161553	2	319
chr7:121943868-121944538	chr7	121943868	121944538	0.275117708	0.330646688	-0.05552898	5	320
chr22:50982571-50982994	chr22	50982571	50982994	0.618115587	0.698364619	-0.080249032	2	321
chrX:7895078-7895608	chrX	7895078	7895608	0.405110929	0.307046025	0.098064904	9	322
chr10:102778605-102778922	chr10	102778605	102778922	0.324372011	0.361482578	-0.037110566	4	323
chr9:29826527-29826736	chr9	29826527	29826736	0.605175118	0.67490027	-0.069725152	2	324
chr1:181287301-181287873	chr1	181287301	181287873	0.282488398	0.24546074	0.037027658	6	325
chrX:117629131-117629377	chrX	117629131	117629377	0.620700286	0.681412301	-0.060712015	4	326
chrX:106959379-106959914	chrX	106959379	106959914	0.393985086	0.445994985	-0.052009899	4	327
chrX:103173143-103173967	chrX	103173143	103173967	0.333691731	0.396247878	-0.062556147	3	328
chr12:34488611-34489037	chr12	34488611	34489037	0.484202581	0.553548277	-0.069345696	3	329
chr9:69065082-69065964	chr9	69065082	69065964	0.422492824	0.476505169	-0.054012345	1	330
chr19:35633848-35634629	chr19	35633848	35634629	0.269575173	0.318742444	-0.049167271	5	331
chr19:10627981-10628417	chr19	10627981	10628417	0.061442559	0.105423224	-0.043980665	2	332
chr3:26665951-26666164	chr3	26665951	26666164	0.479974518	0.535635815	-0.055661297	2	333
chr16:633868-634143	chr16	633868	634143	0.732591188	0.825746498	-0.09315531	2	334
chr7:65878464-65878977	chr7	65878464	65878977	0.538845262	0.467584493	0.071260769	4	335
chr10:37940423-37940674	chr10	37940423	37940674	0.810937671	0.755854748	0.055082923	3	336
chr2:176952696-176953297	chr2	176952696	176953297	0.706433852	0.770575928	-0.064142076	5	337
chrX:134655875-134656127	chrX	134655875	134656127	0.385273532	0.424866095	-0.039592563	3	338
chr8:81805956-81806327	chr8	81805956	81806327	0.295116877	0.331711191	-0.036595032	4	339
chr5:172665307-172666072	chr5	172665307	172666072	0.189129816	0.238817887	-0.049688071	4	340
chr8:40755165-40755404	chr8	40755165	40755404	0.262868886	0.214462132	0.048406754	4	341
chr22:17083385-17083628	chr22	17083385	17083628	0.432843433	0.497798066	-0.064954633	3	342
chr11:120039602-120040210	chr11	120039602	120040210	0.289684206	0.326164396	-0.036480189	5	343
chr8:15094238-15095168	chr8	15094238	15095168	0.210535904	0.247001524	-0.036465621	3	344
chr3:40518518-40518848	chr3	40518518	40518848	0.118666293	0.186597408	-0.067931115	5	345
chrX:67718428-67719071	chrX	67718428	67719071	0.475756747	0.527622607	-0.05186586	10	346
chr17:38255275-38255896	chr17	38255275	38255896	0.374701292	0.307531126	0.067170166	4	347
chr8:57232371-57232795	chr8	57232371	57232795	0.656856242	0.724444052	-0.06758781	4	348
chr16:34407637-34407919	chr16	34407637	34407919	0.609801639	0.550155768	0.059645871	4	349
chr4:55094322-55094593	chr4	55094322	55094593	0.237562454	0.276934178	-0.039371725	3	350
chr2:210073774-210074294	chr2	210073774	210074294	0.782276748	0.869121629	-0.08684488	2	351
chr19:1324970-1325349	chr19	1324970	1325349	0.138565788	0.216467109	-0.077901321	3	352
chr21:15052411-15052644	chr21	15052411	15052644	0.709981317	0.632640891	0.077340426	1	353
chrX:132547568-132550284	chrX	132547568	132550284	0.389810953	0.435323052	-0.045512098	10	354
chr8:85096760-85097247	chr8	85096760	85097247	0.302741871	0.338620468	-0.035878597	8	355
chr19:22700397-22701261	chr19	22700397	22701261	0.575605804	0.637817127	-0.062211323	3	356
chr9:38392510-38393187	chr9	38392510	38393187	0.169778694	0.110961506	0.058817188	4	357
chr14:65438413-65439363	chr14	65438413	65439363	0.182944472	0.21873376	-0.035789287	8	358
chr10:711897-712395	chr10	711897	712395	0.486728054	0.547172551	-0.060444497	6	359
chr12:48577362-48578574	chr12	48577362	48578574	0.517246969	0.478163231	0.039083738	6	360
chrX:125714891-125715321	chrX	125714891	125715321	0.673654236	0.630647215	0.043007022	2	361
chr5:43000344-43000791	chr5	43000344	43000791	0.714763345	0.799220772	-0.084457428	4	362

chrX:105855029-105855297	chrX	105855029	105855297	0.452462945	0.504623383	-0.052160438	8	363
chr12:121022420-121022704	chr12	121022420	121022704	0.14246925	0.196084156	-0.053614906	3	364
chr2:80529678-80530846	chr2	80529678	80530846	0.285017868	0.201576286	0.083441582	5	365
chr17:29814615-29815662	chr17	29814615	29815662	0.15430298	0.189820941	-0.035517961	2	366
chr19:54040813-54041857	chr19	54040813	54041857	0.461173608	0.508548916	-0.047375307	9	367
chr17:39705046-39705332	chr17	39705046	39705332	0.249393659	0.284840956	-0.035447297	4	368
chr17:42015844-42016069	chr17	42015844	42016069	0.657316074	0.59906907	0.058247005	2	369
chr17:40558006-40558274	chr17	40558006	40558274	0.593341311	0.628731749	-0.035390438	3	370
chr10:3598476-3598930	chr10	3598476	3598930	0.582598139	0.656113742	-0.073515604	2	371
chr2:155554006-155556069	chr2	155554006	155556069	0.406160576	0.369613115	0.036547461	12	372
chr3:172167527-172167866	chr3	172167527	172167866	0.690271563	0.761933475	-0.071661912	4	373
chr17:9018997-9019207	chr17	9018997	9019207	0.096333001	0.13154026	-0.035207259	3	374
chr9:95896008-95897016	chr9	95896008	95897016	0.290154205	0.25424707	0.035907134	5	375
chr2:112895793-112897841	chr2	112895793	112897841	0.331309617	0.411409525	-0.080099908	4	376
chr7:62809610-62809812	chr7	62809610	62809812	0.721648188	0.645275145	0.076373043	1	377
chr7:157937615-157937841	chr7	157937615	157937841	0.462883861	0.517959937	-0.055076076	1	378
chr2:24300061-24300294	chr2	24300061	24300294	0.150433382	0.102888795	0.047544587	3	379
chr12:102036254-102036461	chr12	102036254	102036461	0.570340607	0.638957471	-0.068616864	3	380
chr9:127240132-127240456	chr9	127240132	127240456	0.333754982	0.375833615	-0.042078634	2	381
chr8:117950473-117950717	chr8	117950473	117950717	0.373144361	0.483931839	-0.110787477	2	382
chr17:19483306-19483687	chr17	19483306	19483687	0.852472102	0.764787702	0.087684399	4	383
chr10:42971196-42971834	chr10	42971196	42971834	0.38587795	0.350922052	0.034955898	4	384
chr11:68451360-68452846	chr11	68451360	68452846	0.790290924	0.699856839	0.090434085	10	385
chr16:28303974-28304770	chr16	28303974	28304770	0.159541958	0.194461327	-0.034919369	3	386
chr1:149514272-149514592	chr1	149514272	149514592	0.288461704	0.253546444	0.03491526	2	387
chr3:68980784-68982035	chr3	68980784	68982035	0.24883274	0.283719028	-0.034886289	10	388
chr19:54494609-54494816	chr19	54494609	54494816	0.160926778	0.195800489	-0.03487371	2	389
chr3:11034447-11035384	chr3	11034447	11035384	0.390848869	0.435645186	-0.044796317	6	390
chr9:139734846-139735085	chr9	139734846	139735085	0.822851427	0.737144328	0.085707099	1	391
chr22:18957996-18958721	chr22	18957996	18958721	0.082261777	0.11700959	-0.034747813	3	392
chrX:82765443-82765776	chrX	82765443	82765776	0.712171423	0.648077518	0.064093905	3	393
chr20:32307818-32308120	chr20	32307818	32308120	0.393257871	0.536231452	-0.142973581	4	394
chr14:103557607-103558235	chr14	103557607	103558235	0.430755547	0.396145234	0.034610314	4	395
chr22:43547320-43548169	chr22	43547320	43548169	0.407360363	0.463276602	-0.055916239	7	396
chr15:23157795-23158624	chr15	23157795	23158624	0.506340437	0.559787061	-0.053446624	3	397
chr12:54412991-54413346	chr12	54412991	54413346	0.077073131	0.127796318	-0.050723187	3	398
chrX:54834762-54835010	chrX	54834762	54835010	0.460905366	0.495945892	-0.035040526	2	399
chr1:236304759-236305025	chr1	236304759	236305025	0.519052019	0.464816437	0.054235582	4	400
chr19:52873085-52873572	chr19	52873085	52873572	0.277221626	0.185499113	0.091722513	7	401
chr15:69591247-69591754	chr15	69591247	69591754	0.03848336	0.072842008	-0.034358649	4	402
chr2:74881360-74882019	chr2	74881360	74882019	0.238276985	0.186329486	0.051947499	4	403
chr17:78079569-78079833	chr17	78079569	78079833	0.754300478	0.682851172	0.071449305	5	404
chrX:136651179-136651656	chrX	136651179	136651656	0.38239284	0.41662567	-0.03423283	5	405
chr3:42922220-42922872	chr3	42922220	42922872	0.178393282	0.120302738	0.058090544	4	406
chr16:86528272-86529013	chr16	86528272	86529013	0.827843713	0.751644145	0.076199568	5	407
chr19:58070554-58071273	chr19	58070554	58071273	0.067244261	0.104531253	-0.037286991	4	408
chr22:26565200-26565986	chr22	26565200	26565986	0.156399467	0.190547763	-0.034148296	2	409
chr16:1429051-1430104	chr16	1429051	1430104	0.176582471	0.219715695	-0.043133224	8	410
chr19:58555799-58556614	chr19	58555799	58556614	0.822288864	0.751171136	0.071117728	4	411
chr4:3748225-3748581	chr4	3748225	3748581	0.117889363	0.179487771	-0.061598408	3	412
chr7:27162088-27162426	chr7	27162088	27162426	0.797755751	0.887339922	-0.089584171	3	413
chr12:63025589-63026213	chr12	63025589	63026213	0.1137908	0.151098129	-0.037307329	5	414
chr15:74218697-74220373	chr15	74218697	74220373	0.30610877	0.345950784	-0.039842014	16	415
chr22:46545481-46547412	chr22	46545481	46547412	0.153117113	0.186957705	-0.033840592	4	416
chrX:113816090-113816409	chrX	113816090	113816409	0.510244634	0.46298582	0.047258814	4	417
chr10:134843466-134843776	chr10	134843466	134843776	0.837834916	0.7597561	0.078078816	2	418
chr5:2180252-2180467	chr5	2180252	2180467	0.755815748	0.840607406	-0.084791658	2	419
chr2:191399090-191399742	chr2	191399090	191399742	0.192250623	0.282623755	-0.090373132	3	420
chr19:12163327-12163560	chr19	12163327	12163560	0.200602023	0.1669401	0.033661924	1	421
chr10:63212496-63213009	chr10	63212496	63213009	0.538151432	0.489600415	0.048551016	3	422
chr2:128165849-128166198	chr2	128165849	128166198	0.138468539	0.189591651	-0.051123113	4	423
chr1:33005424-33005739	chr1	33005424	33005739	0.086887505	0.053330453	0.033557053	2	424
chr17:7893331-7893702	chr17	7893331	7893702	0.103081481	0.136632113	-0.033550631	4	425
chr19:41857248-41857586	chr19	41857248	41857586	0.093504179	0.135497588	-0.04199341	3	426
chr11:98891544-98891821	chr11	98891544	98891821	0.157213496	0.190706399	-0.033492903	8	427
chr7:148787422-148788601	chr7	148787422	148788601	0.095259088	0.12868436	-0.033425272	6	428
chr18:14178944-14179710	chr18	14178944	14179710	0.325235239	0.358640666	-0.033405427	3	429
chrX:118708294-118709240	chrX	118708294	118709240	0.51504432	0.569303896	-0.054259576	11	430
chr16:55357522-55359040	chr16	55357522	55359040	0.138413631	0.174831673	-0.036418042	7	431
chr20:33865334-33865563	chr20	33865334	33865563	0.08979777	0.123164648	-0.033366879	2	432
chr19:2428350-2428731	chr19	2428350	2428731	0.697547142	0.776276524	-0.078729382	4	433
chr3:196755678-196757374	chr3	196755678	196757374	0.389403194	0.441540528	-0.052137334	6	434
chr16:25702956-25704631	chr16	25702956	25704631	0.364273291	0.328755962	0.03551733	9	435



chr10:133449493-133449716	chr10	133449493	133449716	0.669627721	0.728151256	-0.058523535	4	436
chr2:51254523-51255498	chr2	51254523	51255498	0.78315637	0.863343692	-0.080187322	4	437
chr10:130339527-130339777	chr10	130339527	130339777	0.6926802	0.768367089	-0.075686889	5	438
chr1:88928284-88928760	chr1	88928284	88928760	0.349833923	0.394803562	-0.044969639	4	439
chr11:113906921-113907332	chr11	113906921	113907332	0.07857456	0.11296653	-0.03439197	3	440
chr18:77309696-77312226	chr18	77309696	77312226	0.72114492	0.799212598	-0.078067678	1	441
chr3:184243086-184243328	chr3	184243086	184243328	0.626773982	0.567881441	0.05889254	3	442
chr7:157455790-157456044	chr7	157455790	157456044	0.874463948	0.792945301	0.081518647	3	443
chr20:690576-691099	chr20	690576	691099	0.459973653	0.512446895	-0.052473243	3	444
chr1:10057122-10058108	chr1	10057122	10058108	0.5325367	0.580391926	-0.047855227	8	445
chr2:16689509-16689822	chr2	16689509	16689822	0.238360851	0.32748139	-0.089120539	2	446
chr1:196577709-196578011	chr1	196577709	196578011	0.29846011	0.228430504	0.070029606	3	447
chr5:76115511-76116089	chr5	76115511	76116089	0.097410383	0.130463238	-0.033052854	5	448
chr12:48153330-48153551	chr12	48153330	48153551	0.136542192	0.10351642	0.033025772	2	449
chr5:140736822-140737058	chr5	140736822	140737058	0.702399057	0.642113458	0.060285599	3	450
chr19:6590341-6591072	chr19	6590341	6591072	0.516485415	0.598266971	-0.081781556	3	451
chr18:6920592-6920874	chr18	6920592	6920874	0.844594197	0.917801238	-0.073207041	3	452
chr2:99552186-99553831	chr2	99552186	99553831	0.394722628	0.427644168	-0.03292154	11	453
chr4:11430236-11431256	chr4	11430236	11431256	0.321453508	0.280230662	0.041222846	10	454
chr9:66343504-66343760	chr9	66343504	66343760	0.661741033	0.597937399	0.063803634	1	455
chr19:3982825-3983190	chr19	3982825	3983190	0.778733353	0.850324465	-0.071591112	4	456
chr19:29218002-29218733	chr19	29218002	29218733	0.333747764	0.376000343	-0.042252579	5	457
chr3:158519510-158520329	chr3	158519510	158520329	0.182128182	0.215574734	-0.033446552	9	458
chr17:47979466-47979740	chr17	47979466	47979740	0.24853076	0.198309502	0.050221259	3	459
chr22:25816913-25817539	chr22	25816913	25817539	0.595279874	0.659506423	-0.064226549	3	460
chr11:132813563-132814395	chr11	132813563	132814395	0.282785923	0.315385568	-0.032599645	4	461
chr4:113626740-113627507	chr4	113626740	113627507	0.320370576	0.355812546	-0.03544197	4	462
chr6:30523287-30523519	chr6	30523287	30523519	0.254962342	0.217186124	0.037776217	9	463
chr21:38362016-38362868	chr21	38362016	38362868	0.296910804	0.262008516	0.034902288	7	464
chr22:29866327-29866652	chr22	29866327	29866652	0.130229963	0.162712274	-0.032482311	2	465
chr18:76765748-76766833	chr18	76765748	76766833	0.810110306	0.844170565	-0.034060258	5	466
chr9:131533780-131534695	chr9	131533780	131534695	0.053936333	0.086390065	-0.032453732	5	467
chr11:64409878-64411253	chr11	64409878	64411253	0.424493692	0.490599692	-0.066105999	3	468
chr9:115708029-115708238	chr9	115708029	115708238	0.673851354	0.595880727	0.077970627	1	469
chr19:1734222-1734627	chr19	1734222	1734627	0.866452323	0.79731261	0.069139713	2	470
chr1:2876546-2876808	chr1	2876546	2876808	0.552836945	0.635936099	-0.083099154	2	471
chr5:134870741-134872051	chr5	134870741	134872051	0.367887422	0.409530039	-0.041642617	17	472
chr9:112542132-112542667	chr9	112542132	112542667	0.060752711	0.093003519	-0.032250808	1	473
chr8:1311388-1311626	chr8	1311388	1311626	0.663042516	0.731038619	-0.067996104	3	474
chr5:2111837-2112484	chr5	2111837	2112484	0.758921616	0.829930857	-0.071009241	7	475
chr12:30948549-30949757	chr12	30948549	30949757	0.149414704	0.181565586	-0.032150882	10	476
chr16:31453944-31454561	chr16	31453944	31454561	0.279924842	0.335812316	-0.055887474	3	477
chr7:948295-949168	chr7	948295	949168	0.389289407	0.353540693	0.035748715	2	478
chr1:13839506-13840613	chr1	13839506	13840613	0.529282757	0.561190358	-0.031907602	7	479
chrX:134655103-134655750	chrX	134655103	134655750	0.158892917	0.244385777	-0.08549286	1	480
chrX:148586553-148586984	chrX	148586553	148586984	0.391809044	0.430126168	-0.038317124	8	481
chr9:108418404-108418934	chr9	108418404	108418934	0.81691469	0.739350197	0.077564493	4	482
chr11:59382688-59382929	chr11	59382688	59382929	0.071380511	0.103141757	-0.031761247	3	483
chr16:71264361-71264659	chr16	71264361	71264659	0.065891017	0.128125655	-0.062234639	4	484
chrX:153094110-153094620	chrX	153094110	153094620	0.49608011	0.539983208	-0.043903097	3	485
chr7:140339998-140341136	chr7	140339998	140341136	0.470343871	0.502359409	-0.032015538	3	486
chr2:158453800-158454111	chr2	158453800	158454111	0.487468439	0.528826192	-0.041357753	4	487
chr16:30905550-30905783	chr16	30905550	30905783	0.116507415	0.151247979	-0.034740564	3	488
chr2:242156852-242157835	chr2	242156852	242157835	0.737184099	0.666727436	0.070456663	2	489
chrX:63614958-63615423	chrX	63614958	63615423	0.465982893	0.503907046	-0.037924153	5	490
chr1:39044060-39044561	chr1	39044060	39044561	0.180064087	0.239891	-0.059826914	5	491
chr9:91605765-91606141	chr9	91605765	91606141	0.84724516	0.773011003	0.074234156	2	492
chr9:137997371-137997588	chr9	137997371	137997588	0.864009622	0.786369698	0.077639924	2	493
chr2:74781495-74782685	chr2	74781495	74782685	0.652039929	0.570105603	0.081934326	4	494
chrX:133507135-133507666	chrX	133507135	133507666	0.382192897	0.419579833	-0.037386937	6	495
chr16:22959427-22959876	chr16	22959427	22959876	0.843348117	0.773394815	0.069953302	5	496
chr19:1725416-1726154	chr19	1725416	1726154	0.199327628	0.230754179	-0.031426552	5	497
chr6:62995856-62996228	chr6	62995856	62996228	0.320317567	0.280999468	0.0393181	8	498
chr9:69147117-69148171	chr9	69147117	69148171	0.629207718	0.672257816	-0.043050097	2	499
chr11:71952113-71952528	chr11	71952113	71952528	0.800272334	0.709738966	0.090533369	3	500
chr8:1105615-1106066	chr8	1105615	1106066	0.808677279	0.881710498	-0.073033219	3	501
chr8:22457124-22457753	chr8	22457124	22457753	0.225016594	0.278311323	-0.053294729	3	502
chrX:133371070-133371718	chrX	133371070	133371718	0.336815643	0.3725965	-0.035780857	5	503
chr1:20692583-20693534	chr1	20692583	20693534	0.564353915	0.624585212	-0.060231297	5	504
chr20:42875765-42876184	chr20	42875765	42876184	0.233721478	0.272813833	-0.039092355	6	505
chr1:2144200-2144497	chr1	2144200	2144497	0.16048266	0.12933367	0.03114899	1	506
chr16:31830661-31831188	chr16	31830661	31831188	0.780007047	0.815511124	-0.035504076	4	507
chr22:40060602-40061031	chr22	40060602	40061031	0.53227024	0.484484733	0.047785506	3	508

chrX:10094051-10094406	chrX	10094051	10094406	0.771345935	0.838643875	-0.067297941	3	509
chr10:118925272-118925529	chr10	118925272	118925529	0.235263505	0.289538303	-0.054274798	3	510
chr2:73495921-73496910	chr2	73495921	73496910	0.531529406	0.581905792	-0.050376386	3	511
chr19:10542663-10543120	chr19	10542663	10543120	0.811757306	0.739935006	0.071822299	2	512
chr5:160974693-160975384	chr5	160974693	160975384	0.086124008	0.129417778	-0.04329377	3	513
chr18:34854248-34855163	chr18	34854248	34855163	0.891224825	0.814738835	0.07648599	4	514
chr1:202678882-202679769	chr1	202678882	202679769	0.124084572	0.155152882	-0.03106831	9	515
chrX:66763685-66764077	chrX	66763685	66764077	0.412234382	0.451543357	-0.039308975	4	516
chr11:66049751-66050229	chr11	66049751	66050229	0.402752967	0.362111991	0.040640976	4	517
chr13:92051154-92051716	chr13	92051154	92051716	0.398359263	0.429309911	-0.030950648	4	518
chr10:42862954-42863216	chr10	42862954	42863216	0.467442615	0.425319021	0.042123595	3	519
chr2:207506775-207507422	chr2	207506775	207507422	0.62392066	0.670078612	-0.046157952	6	520
chr10:44185040-44186132	chr10	44185040	44186132	0.461084457	0.410880007	0.05020445	6	521
chr15:44580805-44581543	chr15	44580805	44581543	0.11767089	0.14844158	-0.03077069	6	522
chr2:71295161-71296002	chr2	71295161	71296002	0.082144289	0.116126175	-0.033981886	12	523
chr11:129148498-129149917	chr11	129148498	129149917	0.145852628	0.094448946	0.051403682	4	524
chr16:56669038-56669727	chr16	56669038	56669727	0.872659958	0.798633773	0.074026184	3	525
chr22:16466478-16467159	chr22	16466478	16467159	0.787889499	0.864095532	-0.076206033	1	526
chr14:75894309-75895469	chr14	75894309	75895469	0.207494628	0.247017889	-0.039523262	7	527
chr16:1098523-1098875	chr16	1098523	1098875	0.587760531	0.669725161	-0.08196463	2	528
chr15:55879793-55881228	chr15	55879793	55881228	0.281621707	0.324970692	-0.043348985	11	529
chr12:132619198-132620960	chr12	132619198	132620960	0.840914439	0.921960484	-0.081046045	1	530
chr3:119041383-119042255	chr3	119041383	119042255	0.097760119	0.128359373	-0.030599254	4	531
chr18:76160174-76160444	chr18	76160174	76160444	0.401023756	0.436158169	-0.035134412	4	532
chr12:131199825-131200157	chr12	131199825	131200157	0.4931699	0.541025866	-0.047855966	3	533
chr16:32264532-32265444	chr16	32264532	32265444	0.642954437	0.704916563	-0.061962126	1	534
chr1:156890244-156890806	chr1	156890244	156890806	0.520928608	0.551388332	-0.030459724	4	535
chr1:99729983-99730335	chr1	99729983	99730335	0.485184912	0.392356849	0.092828063	2	536
chr21:44592720-44593643	chr21	44592720	44593643	0.87052382	0.793588449	0.076935371	2	537
chr17:42072139-42072444	chr17	42072139	42072444	0.323847649	0.366565444	-0.042717795	3	538
chr4:46391904-46392572	chr4	46391904	46392572	0.193647581	0.248330895	-0.054683314	6	539
chr7:73021487-73021720	chr7	73021487	73021720	0.250348242	0.219926774	0.030421468	4	540
chr19:7980971-7982983	chr19	7980971	7982983	0.402009125	0.446965013	-0.044955888	5	541
chr15:66274584-66274838	chr15	66274584	66274838	0.157537294	0.12387654	0.033660754	4	542
chrX:70338281-70338866	chrX	70338281	70338866	0.465273892	0.515319517	-0.050045625	5	543
chr12:56101213-56101600	chr12	56101213	56101600	0.123755434	0.156244354	-0.03248892	4	544
chr4:37978703-37979595	chr4	37978703	37979595	0.104036043	0.141546223	-0.03751018	4	545
chr12:103696091-103696418	chr12	103696091	103696418	0.51175945	0.566173137	-0.054413687	3	546
chr3:128145258-128145656	chr3	128145258	128145656	0.071970366	0.116267635	-0.044297269	2	547
chr10:81966990-81967517	chr10	81966990	81967517	0.555757079	0.608332528	-0.05257545	3	548
chr8:82542799-82543475	chr8	82542799	82543475	0.698334414	0.64161621	0.056718204	6	549
chr12:81471570-81472119	chr12	81471570	81472119	0.424832282	0.455114001	-0.030281719	9	550
chr7:124404175-124404432	chr7	124404175	124404432	0.568294609	0.691306386	-0.123011777	3	551
chr8:1245672-1246464	chr8	1245672	1246464	0.547915078	0.599935798	-0.05202072	5	552
chr17:40714088-40715282	chr17	40714088	40715282	0.320767025	0.393223552	-0.072456527	11	553
chrX:117861215-117862177	chrX	117861215	117862177	0.44107733	0.483811967	-0.042734637	7	554
chr21:10989914-10991413	chr21	10989914	10991413	0.626109192	0.677325369	-0.051216177	6	555
chr8:21966486-21967329	chr8	21966486	21967329	0.156606075	0.122383438	0.034222637	4	556
chr9:4740695-4741868	chr9	4740695	4741868	0.193384665	0.223616518	-0.030231853	4	557
chr9:86237967-86238536	chr9	86237967	86238536	0.24807839	0.306377122	-0.058298732	2	558
chr2:217497812-217498847	chr2	217497812	217498847	0.068812145	0.09886323	-0.030051085	6	559
chr9:134699142-134699523	chr9	134699142	134699523	0.85439956	0.791657595	0.062741966	2	560
chr17:38935800-38936093	chr17	38935800	38936093	0.583543079	0.630136067	-0.046592989	4	561
chr22:43505952-43506167	chr22	43505952	43506167	0.74386045	0.678686741	0.065173709	3	562
chr15:79574831-79575211	chr15	79574831	79575211	0.119065752	0.156737525	-0.037671773	4	563
chr16:10972783-10973305	chr16	10972783	10973305	0.214845264	0.184845699	0.029999566	3	564
chr16:58497034-58498595	chr16	58497034	58498595	0.104486277	0.07449384	0.029992436	14	565
chr22:30642438-30642671	chr22	30642438	30642671	0.119460256	0.08950522	0.029955036	1	566
chr22:44257943-44258612	chr22	44257943	44258612	0.190641049	0.247963657	-0.057322608	6	567
chr7:157503470-157504144	chr7	157503470	157504144	0.755400572	0.826271946	-0.070871374	4	568
chr16:71917739-71918542	chr16	71917739	71918542	0.142049109	0.171934596	-0.029885487	3	569
chr9:132437925-132438156	chr9	132437925	132438156	0.793960364	0.875002636	-0.081042271	1	570
chr19:52954462-52954845	chr19	52954462	52954845	0.692478212	0.577009268	0.115468945	3	571
chr19:9608805-9609343	chr19	9608805	9609343	0.344359633	0.481168533	-0.136808901	5	572
chr11:554714-556560	chr11	554714	556560	0.565025788	0.517367609	0.047658179	5	573
chrX:107334421-107335139	chrX	107334421	107335139	0.257771497	0.287563353	-0.029791856	9	574
chr8:142401534-142402494	chr8	142401534	142402494	0.555819254	0.513650743	0.042168511	4	575
chr9:37800566-37801563	chr9	37800566	37801563	0.100229983	0.129987902	-0.029757919	4	576
chr18:76486314-76486864	chr18	76486314	76486864	0.701024068	0.656128139	0.044895929	3	577
chr19:1591428-1591628	chr19	1591428	1591628	0.118565441	0.088869962	0.029695479	3	578
chr20:58179809-58180787	chr20	58179809	58180787	0.625165465	0.707348286	-0.082182821	5	579
chr4:3873093-3874011	chr4	3873093	3874011	0.469448481	0.43852569	0.030922791	5	580
chr1:156674859-156676654	chr1	156674859	156676654	0.175933109	0.205585822	-0.029652713	12	581

chr16:86588436-86589513	chr16	86588436	86589513	0.163194106	0.198960857	-0.035766751	13	582
chr7:77044841-77045719	chr7	77044841	77045719	0.597453201	0.710984853	-0.113531652	4	583
chr1:201437520-201438648	chr1	201437520	201438648	0.126825721	0.156431092	-0.029605371	7	584
chr1:21948675-21949263	chr1	21948675	21949263	0.451466273	0.516891377	-0.065425104	3	585
chrX:152066197-152066811	chrX	152066197	152066811	0.586133646	0.643091587	-0.056957942	7	586
chr19:59010485-59011011	chr19	59010485	59011011	0.519884371	0.486699584	0.033184786	4	587
chrX:57021592-57022044	chrX	57021592	57022044	0.585322131	0.632142742	-0.046820611	2	588
chr4:183727550-183728353	chr4	183727550	183728353	0.500155413	0.56700712	-0.066851707	4	589
chr7:151106245-151107808	chr7	151106245	151107808	0.311749078	0.345456692	-0.033707614	7	590
chr19:18061196-18061473	chr19	18061196	18061473	0.081653682	0.111184848	-0.029531166	3	591
chr5:140762402-140762768	chr5	140762402	140762768	0.930487231	0.852300636	0.078186595	1	592
chr7:6543796-6544108	chr7	6543796	6544108	0.107050312	0.136576021	-0.029525709	2	593
chr21:34638516-34639075	chr21	34638516	34639075	0.091298668	0.061809167	0.029489501	6	594
chr4:144620823-144622218	chr4	144620823	144622218	0.478542569	0.544275983	-0.065733414	7	595
chr22:43165948-43166287	chr22	43165948	43166287	0.560964248	0.626330895	-0.065366647	2	596
chr3:36805950-36806214	chr3	36805950	36806214	0.710699038	0.65460257	0.056096467	2	597
chr11:64692061-64692496	chr11	64692061	64692496	0.098805058	0.069138471	0.029666586	7	598
chr19:1875633-1877921	chr19	1875633	1877921	0.307491656	0.278091046	0.029400611	5	599
chr10:134016044-134016344	chr10	134016044	134016344	0.918925908	0.849951021	0.068974887	2	600
chr5:178367621-178368725	chr5	178367621	178368725	0.717859042	0.666507361	0.051351681	11	601
chr9:119976798-119977010	chr9	119976798	119977010	0.797666918	0.727827854	0.069839064	1	602
chr2:68870352-68871055	chr2	68870352	68871055	0.129272501	0.212257461	-0.08298496	5	603
chr16:86539119-86539486	chr16	86539119	86539486	0.161717902	0.200274349	-0.038556447	1	604
chr7:50861391-50861638	chr7	50861391	50861638	0.109475562	0.13880753	-0.029331968	9	605
chr1:151300523-151300724	chr1	151300523	151300724	0.489868466	0.545753127	-0.055884661	3	606
chr14:75447512-75447779	chr14	75447512	75447779	0.569730472	0.629469884	-0.059739412	3	607
chr2:31360322-31361821	chr2	31360322	31361821	0.345307324	0.386499463	-0.041192139	12	608
chrX:153193514-153194074	chrX	153193514	153194074	0.224648481	0.253966959	-0.029318478	2	609
chr13:109147799-109149019	chr13	109147799	109149019	0.503828662	0.440008915	0.063819748	3	610
chrX:153745524-153745735	chrX	153745524	153745735	0.748048228	0.814475087	-0.066426859	3	611
chr19:1274470-1276358	chr19	1274470	1276358	0.166837856	0.19601012	-0.029172264	10	612
chr19:53794412-53794732	chr19	53794412	53794732	0.704683235	0.667544717	0.037138518	3	613
chr11:3181575-3182120	chr11	3181575	3182120	0.163333931	0.192489996	-0.029156065	5	614
chr11:50227032-50227326	chr11	50227032	50227326	0.651067876	0.589124611	0.061943265	4	615
chr17:42906811-42908061	chr17	42906811	42908061	0.10030953	0.129388367	-0.029078837	4	616
chr19:50833814-50834128	chr19	50833814	50834128	0.516373184	0.483815424	0.032557759	2	617
chr4:183838037-183839286	chr4	183838037	183839286	0.245080754	0.294284765	-0.049204011	10	618
chr13:102568426-102569495	chr13	102568426	102569495	0.287886798	0.316941787	-0.029054989	3	619
chr19:19256552-19256824	chr19	19256552	19256824	0.550088901	0.579141573	-0.029052672	2	620
chr9:139726218-139726440	chr9	139726218	139726440	0.831869066	0.906485232	-0.074616166	1	621
chr1:167789397-167789647	chr1	167789397	167789647	0.110305153	0.146747764	-0.036442611	3	622
chr12:7046238-7047257	chr12	7046238	7047257	0.39157043	0.420539653	-0.028969223	4	623
chr17:42091713-42091948	chr17	42091713	42091948	0.327551436	0.298601376	0.02895006	4	624
chr1:24742672-24743039	chr1	24742672	24743039	0.076759221	0.132119001	-0.05535978	3	625
chr12:49760222-49761127	chr12	49760222	49761127	0.067248761	0.101083636	-0.033834875	5	626
chr16:1069295-1070214	chr16	1069295	1070214	0.617127309	0.676316771	-0.059189463	5	627
chr12:127940452-127940907	chr12	127940452	127940907	0.657941391	0.615872498	0.042068893	3	628
chrX:102942108-102942486	chrX	102942108	102942486	0.496750284	0.536557869	-0.039807584	2	629
chr2:24307027-24307678	chr2	24307027	24307678	0.144668397	0.107849874	0.036818522	4	630
chr19:15918424-15918704	chr19	15918424	15918704	0.57703835	0.525113899	0.051924451	1	631
chrY:17567580-17568617	chrY	17567580	17568617	0.392297295	0.427525915	-0.03522862	1	632
chr20:60941620-60942684	chr20	60941620	60942684	0.147934827	0.176751995	-0.028817168	4	633
chr1:45308544-45309159	chr1	45308544	45309159	0.110886948	0.139695479	-0.028808531	4	634
chr14:48143434-48145589	chr14	48143434	48145589	0.249130505	0.196691425	0.05243908	8	635
chr8:122651666-122652389	chr8	122651666	122652389	0.168238954	0.205045143	-0.03680619	5	636
chrX:139846647-139846955	chrX	139846647	139846955	0.623305392	0.67485736	-0.051551968	3	637
chr9:77113710-77113927	chr9	77113710	77113927	0.368986423	0.225426878	0.143559545	1	638
chr11:73371801-73372632	chr11	73371801	73372632	0.514733298	0.480713786	0.034019512	3	639
chr10:118934735-118935180	chr10	118934735	118935180	0.567818757	0.613982865	-0.046164109	3	640
chr20:43921950-43922642	chr20	43921950	43922642	0.605566251	0.648042224	-0.042475973	3	641
chr2:177502241-177502910	chr2	177502241	177502910	0.223576884	0.257915362	-0.034338478	5	642
chr7:100815485-100816995	chr7	100815485	100816995	0.185984516	0.224062589	-0.038078074	7	643
chr18:77532391-77532593	chr18	77532391	77532593	0.851078561	0.784441416	0.066637145	2	644
chr12:130526916-130527117	chr12	130526916	130527117	0.251236229	0.203952546	0.047283683	7	645
chr13:113622738-113623660	chr13	113622738	113623660	0.29351256	0.322110994	-0.028598434	7	646
chr3:133646095-133646650	chr3	133646095	133646650	0.457783893	0.492330328	-0.034546435	2	647
chr20:44642095-44642406	chr20	44642095	44642406	0.654273862	0.71876453	-0.064490668	2	648
chr11:130297402-130298517	chr11	130297402	130298517	0.118475759	0.150209413	-0.031733654	7	649
chrX:53713069-53713794	chrX	53713069	53713794	0.394690963	0.433702732	-0.039011769	7	650
chr1:24229116-24229537	chr1	24229116	24229537	0.715327875	0.666188007	0.049139868	2	651
chr19:3831364-3831807	chr19	3831364	3831807	0.852403452	0.916914721	-0.064511269	3	652
chrX:146993092-146994200	chrX	146993092	146994200	0.470519583	0.520849295	-0.050329712	10	653
chr19:2578957-2579746	chr19	2578957	2579746	0.227034527	0.255555238	-0.028520711	5	654

chr17:42061047-42061643	chr17	42061047	42061643	0.151635123	0.180150848	-0.028515725	4	655
chr12:4273820-4274491	chr12	4273820	4274491	0.691829382	0.609699625	0.082129757	3	656
chr18:35065040-35065548	chr18	35065040	35065548	0.130777884	0.159243399	-0.028465515	3	657
chr4:185746558-185747827	chr4	185746558	185747827	0.079242339	0.107695723	-0.028453384	11	658
chr10:23982383-23982589	chr10	23982383	23982589	0.293197944	0.232282803	0.060915141	3	659
chr7:6654746-6655860	chr7	6654746	6655860	0.436048055	0.390073724	0.04597433	5	660
chr6:134159127-134159349	chr6	134159127	134159349	0.132443271	0.192549329	-0.060106058	3	661
chr16:88459516-88459739	chr16	88459516	88459739	0.760391358	0.702052987	0.058338371	4	662
chr19:1766145-1766364	chr19	1766145	1766364	0.635039068	0.584119329	0.050919739	2	663
chr1:209920954-209921345	chr1	209920954	209921345	0.256301105	0.285844181	-0.029543076	4	664
chr10:23384534-23385078	chr10	23384534	23385078	0.092013895	0.120374186	-0.028360291	5	665
chr10:44143857-44144698	chr10	44143857	44144698	0.173560058	0.217104119	-0.04354406	10	666
chrX:145700794-145702281	chrX	145700794	145702281	0.569088104	0.600876416	-0.031788313	4	667
chr7:158037709-158038048	chr7	158037709	158038048	0.433331256	0.470088283	-0.036757026	3	668
chr18:21269270-21270349	chr18	21269270	21270349	0.304938024	0.333263806	-0.028325782	5	669
chr18:51883948-51884994	chr18	51883948	51884994	0.13216327	0.162836742	-0.030673472	8	670
chr9:68298597-68299115	chr9	68298597	68299115	0.650229052	0.698801853	-0.048572801	3	671
chr16:1458144-1458435	chr16	1458144	1458435	0.159032423	0.187271095	-0.028238672	1	672
chr17:36575500-36575782	chr17	36575500	36575782	0.057527178	0.085734645	-0.028207467	2	673
chr6:44094709-44096134	chr6	44094709	44096134	0.132436326	0.16059494	-0.028158615	5	674
chrX:152735785-152736193	chrX	152735785	152736193	0.438713136	0.470586804	-0.031873668	4	675
chr5:3326329-3326645	chr5	3326329	3326645	0.71911767	0.801638804	-0.082521134	3	676
chrX:119385465-119385835	chrX	119385465	119385835	0.439684092	0.471057458	-0.031373366	4	677
chr4:5889204-5890645	chr4	5889204	5890645	0.067883982	0.104500429	-0.036616447	13	678
chr16:5037530-5037797	chr16	5037530	5037797	0.840144764	0.911920061	-0.071775297	1	679
chrX:49643907-49644501	chrX	49643907	49644501	0.27793731	0.306032686	-0.028095376	4	680
chr17:57287356-57287792	chr17	57287356	57287792	0.071937936	0.100020046	-0.02808211	5	681
chr8:1137208-1138672	chr8	1137208	1138672	0.710060786	0.765703632	-0.055642846	3	682
chr19:9204247-9204490	chr19	9204247	9204490	0.412701702	0.473914713	-0.061213012	2	683
chr3:56716493-56717658	chr3	56716493	56717658	0.170460244	0.128122613	0.042337631	6	684
chr20:44642606-44643111	chr20	44642606	44643111	0.059851586	0.091191643	-0.031340058	3	685
chr20:35491002-35492805	chr20	35491002	35492805	0.294975515	0.32928304	-0.034307525	9	686
chr1:20126030-20126780	chr1	20126030	20126780	0.18781848	0.155007249	0.032811231	8	687
chr7:37960317-37961046	chr7	37960317	37961046	0.07691895	0.104908476	-0.027989526	5	688
chr19:3028593-3029299	chr19	3028593	3029299	0.191284264	0.16284933	0.028434934	3	689
chr8:54569668-54570010	chr8	54569668	54570010	0.914859572	0.844902965	0.069956607	3	690
chr16:67034471-67035340	chr16	67034471	67035340	0.858006134	0.791915621	0.066090513	4	691
chrX:139589971-139590480	chrX	139589971	139590480	0.540919005	0.508088189	0.032830816	4	692
chr16:56715993-56716425	chr16	56715993	56716425	0.23276061	0.110869923	0.121890686	9	693
chr1:161008378-161008830	chr1	161008378	161008830	0.747424451	0.688287922	0.059136529	8	694
chr14:24520990-24521844	chr14	24520990	24521844	0.082123479	0.054284032	0.027839448	3	695
chr15:91414312-91415427	chr15	91414312	91415427	0.170261582	0.142424622	0.02783696	4	696
chr2:26396103-26397204	chr2	26396103	26397204	0.54492486	0.596589223	-0.051664363	4	697
chr19:36336276-36337138	chr19	36336276	36337138	0.167182696	0.194986866	-0.02780417	5	698
chr20:49548195-49548525	chr20	49548195	49548525	0.751019999	0.692909007	0.058110992	3	699
chr22:45898295-45899357	chr22	45898295	45899357	0.495695529	0.45786376	0.037831769	7	700
chr17:51834651-51834900	chr17	51834651	51834900	0.741013114	0.687840345	0.053172769	2	701
chr10:123922851-123923542	chr10	123922851	123923542	0.187464601	0.215135298	-0.027670697	9	702
chr2:220361463-220363254	chr2	220361463	220363254	0.785942122	0.743577813	0.04236431	11	703
chr9:132244402-132245732	chr9	132244402	132245732	0.133789334	0.16145264	-0.027663306	5	704
chr16:28833905-28835873	chr16	28833905	28835873	0.139045167	0.166689171	-0.027644004	9	705
chr3:183145428-183146790	chr3	183145428	183146790	0.219863582	0.256508802	-0.03664522	12	706
chr5:119800972-119801194	chr5	119800972	119801194	0.178550965	0.233726025	-0.05517506	3	707
chr19:15871065-15871318	chr19	15871065	15871318	0.327141867	0.373675207	-0.046533339	3	708
chr7:89950259-89950778	chr7	89950259	89950778	0.084696812	0.112292961	-0.027596149	4	709
chr11:132812663-132813075	chr11	132812663	132813075	0.689641014	0.591360246	0.098280769	2	710
chr2:96314996-96315230	chr2	96314996	96315230	0.816171019	0.755767479	0.060403541	2	711
chr17:33775295-33775794	chr17	33775295	33775794	0.51130778	0.538850795	-0.027543016	5	712
chr22:50608208-50608660	chr22	50608208	50608660	0.306988781	0.271495865	0.035492916	5	713
chr16:20084708-20085305	chr16	20084708	20085305	0.413339104	0.354497338	0.058841766	4	714
chr5:50683286-50683615	chr5	50683286	50683615	0.691201936	0.738319947	-0.047118011	4	715
chr19:47960106-47960890	chr19	47960106	47960890	0.876983856	0.817919377	0.05906448	3	716
chr3:137489595-137491004	chr3	137489595	137491004	0.272052164	0.299383388	-0.027331224	7	717
chr2:209271338-209271987	chr2	209271338	209271987	0.71317828	0.657934646	0.055243634	7	718
chr12:72233324-72233635	chr12	72233324	72233635	0.077318153	0.104644533	-0.02732638	8	719
chr11:78127966-78129400	chr11	78127966	78129400	0.114841586	0.082448584	0.032393002	5	720
chr11:57232314-57232573	chr11	57232314	57232573	0.830647555	0.785747229	0.044900326	4	721
chr19:16582114-16583299	chr19	16582114	16583299	0.184352129	0.157089823	0.027262306	5	722
chr12:114029319-114029752	chr12	114029319	114029752	0.151111517	0.178318733	-0.027207216	4	723
chr3:68056900-68057167	chr3	68056900	68057167	0.496362034	0.57596447	-0.079602435	2	724
chr6:43237261-43237643	chr6	43237261	43237643	0.562227886	0.535030277	0.027197608	3	725
chr1:33721449-33721703	chr1	33721449	33721703	0.380822465	0.341388763	0.039433702	2	726
chr16:67449937-67450472	chr16	67449937	67450472	0.421269313	0.331233297	0.090036015	3	727

chr9:130689379-130690215	chr9	130689379	130690215	0.915558045	0.849848792	0.065709253	4	728
chrX:153151017-153152219	chrX	153151017	153152219	0.561235489	0.594507338	-0.033271849	5	729
chr7:92219061-92219873	chr7	92219061	92219873	0.261160939	0.288225665	-0.027064726	8	730
chr16:609773-611178	chr16	609773	611178	0.634788608	0.587894259	0.04689435	5	731
chr17:77903888-77904397	chr17	77903888	77904397	0.489001425	0.528598382	-0.039596958	5	732
chr5:140248790-140249140	chr5	140248790	140249140	0.435140122	0.465263291	-0.030123169	2	733
chr9:44858800-44859106	chr9	44858800	44859106	0.568557144	0.614935758	-0.046378614	1	734
chr20:62733464-62734322	chr20	62733464	62734322	0.186112894	0.228099825	-0.041986931	5	735
chr12:114881650-114881937	chr12	114881650	114881937	0.757569013	0.70231335	0.055255663	3	736
chr1:91182510-91182857	chr1	91182510	91182857	0.44445375	0.481772403	-0.037318652	5	737
chr7:30028519-30029822	chr7	30028519	30029822	0.319000077	0.279109504	0.039890573	11	738
chr20:21501962-21503931	chr20	21501962	21503931	0.103400512	0.130263216	-0.026862704	7	739
chrX:150066793-150068172	chrX	150066793	150068172	0.303327451	0.330189689	-0.026862238	10	740
chr16:67188614-67189652	chr16	67188614	67189652	0.620714762	0.670878385	-0.050163623	3	741
chr9:126803262-126803672	chr9	126803262	126803672	0.16970672	0.142880985	0.026825736	1	742
chr20:16555519-16555779	chr20	16555519	16555779	0.105642763	0.078838371	0.026804392	4	743
chr12:57853716-57853973	chr12	57853716	57853973	0.084982745	0.111757829	-0.026775084	4	744
chr22:49063539-49063900	chr22	49063539	49063900	0.855329199	0.924002221	-0.068673022	1	745
chr1:201475886-201476516	chr1	201475886	201476516	0.744235317	0.684502287	0.05973303	7	746
chr22:44419825-44420790	chr22	44419825	44420790	0.659896595	0.718321905	-0.05842531	7	747
chr14:38677155-38677787	chr14	38677155	38677787	0.209591573	0.176350247	0.033241326	4	748
chr20:4129483-4130412	chr20	4129483	4130412	0.065450417	0.092181414	-0.026730997	2	749
chr17:7197432-7198417	chr17	7197432	7198417	0.701992057	0.73047493	-0.028482873	12	750
chr22:19748651-19749189	chr22	19748651	19749189	0.51951382	0.56521449	-0.045700671	4	751
chr7:139762256-139763245	chr7	139762256	139763245	0.167203529	0.122119126	0.045084403	3	752
chr5:180700378-180700687	chr5	180700378	180700687	0.584686458	0.635333854	-0.050647396	2	753
chr14:19685064-19687329	chr14	19685064	19687329	0.80092643	0.863029117	-0.062102687	3	754
chr4:7194538-7195467	chr4	7194538	7195467	0.233210543	0.259829494	-0.026618951	6	755
chr1:154540234-154540573	chr1	154540234	154540573	0.290067455	0.316682244	-0.026614789	4	756
chr9:132020630-132021038	chr9	132020630	132021038	0.070939165	0.114903656	-0.04396449	2	757
chr17:40573741-40575526	chr17	40573741	40575526	0.123570556	0.156376455	-0.032805899	10	758
chr18:76541148-76541888	chr18	76541148	76541888	0.702733992	0.76076914	-0.058035148	3	759
chr10:2563740-2565222	chr10	2563740	2565222	0.56734237	0.622372035	-0.055029665	3	760
chr10:9449139-9450209	chr10	9449139	9450209	0.741022953	0.785512277	-0.044489324	5	761
chr5:180229376-180230147	chr5	180229376	180230147	0.358656769	0.408466331	-0.049809562	7	762
chr9:138593528-138594253	chr9	138593528	138594253	0.110702003	0.147882633	-0.03718063	3	763
chr19:53360202-53360460	chr19	53360202	53360460	0.523230185	0.47658937	0.046640814	1	764
chr1:15573621-15573953	chr1	15573621	15573953	0.307977127	0.334449325	-0.026472197	4	765
chr19:22193331-22193583	chr19	22193331	22193583	0.291391411	0.317851606	-0.026460195	3	766
chr2:181844792-181845514	chr2	181844792	181845514	0.21544512	0.254987094	-0.039541975	5	767
chr5:77943869-77945220	chr5	77943869	77945220	0.103628789	0.130068536	-0.026439747	5	768
chr11:57249947-57250848	chr11	57249947	57250848	0.479239792	0.433513852	0.04572594	4	769
chr11:92702790-92703434	chr11	92702790	92703434	0.733344159	0.662038684	0.071305475	3	770
chr12:65514879-65515863	chr12	65514879	65515863	0.706956552	0.659163504	0.047793049	7	771
chr12:103359249-103359629	chr12	103359249	103359629	0.681031254	0.630313291	0.050717962	4	772
chrX:30326440-30327668	chrX	30326440	30327668	0.504443018	0.44883233	0.055610688	12	773
chr9:130533454-130533882	chr9	130533454	130533882	0.080651712	0.107027307	-0.026375594	1	774
chr7:152591061-152591360	chr7	152591061	152591360	0.772180544	0.827796435	-0.055615891	3	775
chrX:73834000-73834597	chrX	73834000	73834597	0.602472915	0.648738329	-0.046265414	7	776
chr21:11106719-11107132	chr21	11106719	11107132	0.68324739	0.736843218	-0.053595828	2	777
chr5:148033473-148034080	chr5	148033473	148034080	0.528050043	0.493048498	0.035001545	6	778
chr4:38869402-38869780	chr4	38869402	38869780	0.504114326	0.54060011	-0.036485784	7	779
chr16:28634441-28635031	chr16	28634441	28635031	0.875547092	0.812951793	0.062595299	3	780
chr6:167587355-167587559	chr6	167587355	167587559	0.682691675	0.735939952	-0.053248277	1	781
chr8:12219512-12219916	chr8	12219512	12219916	0.16883185	0.142620584	0.026211266	1	782
chr16:28752083-28752332	chr16	28752083	28752332	0.869671192	0.807033051	0.062638141	1	783
chr20:41817476-41819212	chr20	41817476	41819212	0.438486718	0.464654385	-0.026167667	11	784
chr10:118922352-118923520	chr10	118922352	118923520	0.348529688	0.374688782	-0.026159095	6	785
chr13:112848576-112849221	chr13	112848576	112849221	0.918768943	0.863527844	0.055241099	4	786
chr17:19410596-19411377	chr17	19410596	19411377	0.145371294	0.171446308	-0.026075013	3	787
chrX:153585698-153585944	chrX	153585698	153585944	0.826936845	0.888960794	-0.062023949	2	788
chr20:62031418-62032423	chr20	62031418	62032423	0.891203042	0.834603876	0.056599166	3	789
chrX:128674134-128674727	chrX	128674134	128674727	0.44722244	0.49124603	-0.04402359	8	790
chr10:102792043-102792266	chr10	102792043	102792266	0.081531742	0.144438651	-0.062906909	2	791
chr9:98278129-98279754	chr9	98278129	98279754	0.373152824	0.344292804	0.028860021	5	792
chr18:43355319-43355698	chr18	43355319	43355698	0.602871905	0.650145067	-0.047273162	3	793
chr6:29521111-29521833	chr6	29521111	29521833	0.585623894	0.502570171	0.083053723	32	794
chr19:55728346-55728629	chr19	55728346	55728629	0.081725206	0.17903631	-0.097311104	1	795
chr2:170220773-170221114	chr2	170220773	170221114	0.249240379	0.29168201	-0.042441631	4	796
chr5:140558932-140559789	chr5	140558932	140559789	0.693546874	0.643716422	0.049830453	1	797
chr16:88871851-88872056	chr16	88871851	88872056	0.754266558	0.814054435	-0.059787877	3	798
chr19:1856726-1857443	chr19	1856726	1857443	0.835744107	0.774491461	0.061252647	4	799
chr19:55880578-55880922	chr19	55880578	55880922	0.141408092	0.099606193	0.0418019	2	800

chr6:143247810-143248438	chr6	143247810	143248438	0.308856959	0.269047165	0.039809794	3	801
chr7:151000580-151001042	chr7	151000580	151001042	0.124898341	0.098953859	0.025944482	3	802
chr6:25652381-25652709	chr6	25652381	25652709	0.398087398	0.432626519	-0.034539121	9	803
chr5:134374386-134376751	chr5	134374386	134376751	0.844936694	0.792724209	0.052212485	8	804
chr5:10760837-10761925	chr5	10760837	10761925	0.166473864	0.140582926	0.025890938	5	805
chr7:76145397-76145781	chr7	76145397	76145781	0.433365948	0.492345898	-0.05897995	3	806
chr14:32672537-32672915	chr14	32672537	32672915	0.078725343	0.104585274	-0.02585993	3	807
chr16:19421817-19422498	chr16	19421817	19422498	0.143968941	0.169900872	-0.025931931	7	808
chr1:159141203-159141718	chr1	159141203	159141718	0.188133848	0.229298752	-0.041164905	3	809
chr9:139640641-139640885	chr9	139640641	139640885	0.842165948	0.903855747	-0.061689799	2	810
chr12:132880704-132882253	chr12	132880704	132882253	0.848022033	0.909633203	-0.061611117	2	811
chr11:100998031-100999774	chr11	100998031	100999774	0.337846652	0.401427677	-0.063581025	4	812
chr2:50574046-50574817	chr2	50574046	50574817	0.384152025	0.33545198	0.048700046	4	813
chr15:100466481-100466691	chr15	100466481	100466691	0.276808674	0.302505243	-0.025696569	3	814
chr2:5832042-5834208	chr2	5832042	5834208	0.269089788	0.294784508	-0.02569472	7	815
chr2:132439834-132440422	chr2	132439834	132440422	0.297611462	0.323742748	-0.026131285	7	816
chr15:27083993-27084222	chr15	27083993	27084222	0.285659838	0.347158456	-0.061498617	2	817
chr3:113603864-113604246	chr3	113603864	113604246	0.578370665	0.623609168	-0.045238503	3	818
chr10:48389020-48389375	chr10	48389020	48389375	0.821714749	0.765296876	0.056417872	2	819
chr22:29075101-29076219	chr22	29075101	29076219	0.456487994	0.492430464	-0.035942469	4	820
chrX:73639899-73640778	chrX	73639899	73640778	0.532535555	0.570699172	-0.038163618	3	821
chr6:6058356-6058664	chr6	6058356	6058664	0.674671527	0.700296033	-0.025624506	3	822
chr21:36258953-36259472	chr21	36258953	36259472	0.124609658	0.174053529	-0.049443871	4	823
chr8:81785426-81786038	chr8	81785426	81786038	0.098252136	0.123811085	-0.025558949	2	824
chr11:6281077-6281307	chr11	6281077	6281307	0.103348238	0.128893797	-0.025545559	4	825
chr12:130822361-130822696	chr12	130822361	130822696	0.840790808	0.801215488	0.039575319	3	826
chr14:105293561-105293879	chr14	105293561	105293879	0.323133737	0.29760452	0.025529216	4	827
chr8:977626-978351	chr8	977626	978351	0.402732025	0.438160081	-0.035428056	2	828
chr19:3970537-3970746	chr19	3970537	3970746	0.123183972	0.148706784	-0.025522812	1	829
chr22:49764996-49765272	chr22	49764996	49765272	0.199218847	0.273953307	-0.07473446	3	830
chr9:139024317-139025832	chr9	139024317	139025832	0.684828783	0.638254956	0.046573827	4	831
chr4:122685861-122686565	chr4	122685861	122686565	0.079930705	0.141942853	-0.062012149	8	832
chr2:11605744-11606385	chr2	11605744	11606385	0.489365296	0.463929868	0.025435428	3	833
chr9:139255524-139256012	chr9	139255524	139256012	0.822307514	0.878126048	-0.055818534	2	834
chr1:110210582-110210956	chr1	110210582	110210956	0.787711729	0.737896344	0.049815385	6	835
chr5:175200316-175200555	chr5	175200316	175200555	0.182529378	0.227353176	-0.044823798	3	836
chr19:1155021-1155305	chr19	1155021	1155305	0.80825727	0.753191134	0.055066136	4	837
chr8:1302768-1303403	chr8	1302768	1303403	0.565946806	0.605809476	-0.039862669	2	838
chr10:21805880-21806630	chr10	21805880	21806630	0.165911316	0.191274378	-0.025363062	2	839
chr9:86152354-86153777	chr9	86152354	86153777	0.466132397	0.491492281	-0.025359884	5	840
chr19:1428804-1429303	chr19	1428804	1429303	0.911268286	0.856933397	0.054334889	3	841
chr1:110051955-110052505	chr1	110051955	110052505	0.295743975	0.267296534	0.028447441	7	842
chr6:50813315-50813699	chr6	50813315	50813699	0.795409947	0.74487755	0.050532397	3	843
chr19:11450017-11450414	chr19	11450017	11450414	0.178942235	0.153609223	0.025333012	3	844
chr10:61468611-61469999	chr10	61468611	61469999	0.24221813	0.287904501	-0.045686372	13	845
chr19:53868811-53869485	chr19	53868811	53869485	0.284411145	0.309728654	-0.025317508	4	846
chr19:22123653-22123886	chr19	22123653	22123886	0.368774438	0.407501539	-0.038727101	3	847
chr3:80819488-80819788	chr3	80819488	80819788	0.827839365	0.770538035	0.05730133	1	848
chr16:1401335-1402348	chr16	1401335	1402348	0.138463392	0.18237923	-0.043915838	9	849
chrX:150345616-150346577	chrX	150345616	150346577	0.718933572	0.764358054	-0.045424482	3	850
chr19:45504866-45505299	chr19	45504866	45505299	0.060500902	0.085716603	-0.025215702	2	851
chr4:46995129-46995872	chr4	46995129	46995872	0.23412041	0.259319253	-0.025198843	8	852
chr2:80531368-80531719	chr2	80531368	80531719	0.384723856	0.332038355	0.052685501	7	853
chr10:105344174-105345039	chr10	105344174	105345039	0.877429157	0.816490034	0.060939122	5	854
chr7:50343758-50344519	chr7	50343758	50344519	0.160036611	0.087212912	0.072823699	6	855
chr20:43729516-43729791	chr20	43729516	43729791	0.858985739	0.799731536	0.059254203	1	856
chr19:15838997-15839277	chr19	15838997	15839277	0.616144432	0.57348885	0.042655582	1	857
chr9:133308594-133309448	chr9	133308594	133309448	0.521624557	0.457615711	0.064008846	4	858
chr19:46932069-46932349	chr19	46932069	46932349	0.864189197	0.804008684	0.060180512	4	859
chr9:132199362-132199984	chr9	132199362	132199984	0.211662458	0.241046642	-0.029384184	3	860
chr6:37673309-37673774	chr6	37673309	37673774	0.68801437	0.739060065	-0.051045695	5	861
chr21:22369424-22370582	chr21	22369424	22370582	0.657475045	0.688026174	-0.030551129	7	862
chr1:186649311-186650081	chr1	186649311	186650081	0.29903626	0.23942279	0.05961347	11	863
chr21:38935855-38936546	chr21	38935855	38936546	0.111152824	0.086103461	0.025049363	5	864
chr8:143879595-143879806	chr8	143879595	143879806	0.808077927	0.8675782	-0.059500272	1	865
chr16:89786838-89789089	chr16	89786838	89789089	0.148354486	0.176974953	-0.028620467	12	866
chr7:155601176-155603235	chr7	155601176	155603235	0.798003885	0.753416655	0.04458723	7	867
chr19:51189825-51190109	chr19	51189825	51190109	0.740463085	0.777305243	-0.036842157	2	868
chr14:93389246-93389899	chr14	93389246	93389899	0.130325707	0.155238214	-0.024912507	6	869
chr7:63505978-63506298	chr7	63505978	63506298	0.20020736	0.137902245	0.062305116	2	870
chr8:80523976-80525765	chr8	80523976	80525765	0.117906223	0.093014957	0.024891267	7	871
chr17:80918219-80919258	chr17	80918219	80919258	0.842873199	0.893448207	-0.050575008	3	872
chrX:107018607-107019611	chrX	107018607	107019611	0.480747655	0.527024752	-0.046277097	10	873

chr7:100875556-100876212	chr7	100875556	100876212	0.799882229	0.761023065	0.038859165	3	874
chr19:6024735-6024988	chr19	6024735	6024988	0.894813958	0.960114921	-0.065300963	1	875
chr3:74663507-74664121	chr3	74663507	74664121	0.418850524	0.356092897	0.062757627	6	876
chrX:68384914-68385404	chrX	68384914	68385404	0.501112349	0.525885065	-0.024772716	4	877
chr5:10307521-10307913	chr5	10307521	10307913	0.14823386	0.051853568	0.096380292	4	878
chr16:15489527-15490075	chr16	15489527	15490075	0.854383736	0.797075573	0.057308163	6	879
chr11:92930761-92931391	chr11	92930761	92931391	0.107041989	0.131769719	-0.024727729	8	880
chr13:99228320-99229576	chr13	99228320	99229576	0.067124263	0.091850379	-0.024726116	5	881
chr22:43506501-43507610	chr22	43506501	43507610	0.181913636	0.206634943	-0.024721307	12	882
chrX:112083565-112084815	chrX	112083565	112084815	0.367367753	0.398017492	-0.030649739	8	883
chr1:2435042-2435257	chr1	2435042	2435257	0.914080323	0.858256149	0.055824173	2	884
chr3:55522561-55522836	chr3	55522561	55522836	0.190117947	0.124052168	0.066065779	5	885
chr16:3989007-3989348	chr16	3989007	3989348	0.165103015	0.195884889	-0.030781874	3	886
chr1:3527620-3528078	chr1	3527620	3528078	0.143559179	0.111440397	0.032118783	5	887
chrX:152909503-152910069	chrX	152909503	152910069	0.56591654	0.610036397	-0.044119858	4	888
chr15:57598539-57599313	chr15	57598539	57599313	0.326839102	0.356093649	-0.029254547	7	889
chr2:182521222-182521927	chr2	182521222	182521927	0.171979345	0.222613447	-0.050634102	9	890
chr6:7051497-7052932	chr6	7051497	7052932	0.526734125	0.551248577	-0.024514452	4	891
chrX:49687028-49687993	chrX	49687028	49687993	0.331719969	0.363969028	-0.032249059	13	892
chr14:20106919-20107278	chr14	20106919	20107278	0.654608862	0.701997037	-0.047388176	1	893
chr5:149865065-149866038	chr5	149865065	149866038	0.106378083	0.130850139	-0.024472056	4	894
chrX:11682334-11684544	chrX	11682334	11684544	0.29792516	0.357800224	-0.059875064	11	895
chr4:13548571-13549956	chr4	13548571	13549956	0.307090618	0.331524318	-0.024433699	10	896
chr12:113917395-113918107	chr12	113917395	113918107	0.568312061	0.646078697	-0.077766636	6	897
chrX:108976163-108976894	chrX	108976163	108976894	0.489373752	0.526731446	-0.037357694	9	898
chr2:219156978-219157380	chr2	219156978	219157380	0.093562554	0.118621976	-0.025059421	7	899
chr2:26915604-26916551	chr2	26915604	26916551	0.252795936	0.221545229	0.031250706	4	900
chr3:32021970-32023364	chr3	32021970	32023364	0.178357318	0.202741334	-0.024384016	9	901
chr1:14924611-14925993	chr1	14924611	14925993	0.094347223	0.118718079	-0.024370855	10	902
chr1:47082017-47082526	chr1	47082017	47082526	0.617257242	0.546266236	0.070991006	5	903
chr7:154861798-154862074	chr7	154861798	154862074	0.063197989	0.087555252	-0.024357262	2	904
chr20:47934840-47935684	chr20	47934840	47935684	0.377318312	0.491711196	-0.114393648	3	905
chr17:46673533-46674181	chr17	46673533	46674181	0.522946597	0.561205619	-0.038259021	3	906
chr1:151881764-151882407	chr1	151881764	151882407	0.135733617	0.086086156	0.049647461	7	907
chr14:71108009-71109332	chr14	71108009	71109332	0.118762741	0.14306633	-0.024303589	5	908
chrX:53710496-53711457	chrX	53710496	53711457	0.41417144	0.460416353	-0.046244913	4	909
chr2:132767364-132767937	chr2	132767364	132767937	0.605192141	0.629487388	-0.024295247	3	910
chr8:637394-638251	chr8	637394	638251	0.11765116	0.143077166	-0.025426005	3	911
chr4:107147-107898	chr4	107147	107898	0.772738804	0.707786472	0.064952332	3	912
chr2:87088817-87089037	chr2	87088817	87089037	0.835224403	0.764005844	0.071218559	3	913
chr7:157695026-157695358	chr7	157695026	157695358	0.704950179	0.750403367	-0.045453188	3	914
chr18:72123607-72124717	chr18	72123607	72124717	0.316385674	0.340652146	-0.024266472	6	915
chr10:45496276-45496550	chr10	45496276	45496550	0.749412071	0.682633183	0.066778888	4	916
chr4:74734919-74735544	chr4	74734919	74735544	0.140498832	0.164720517	-0.024221686	7	917
chr2:131113091-131114277	chr2	131113091	131114277	0.148680353	0.173842493	-0.02516214	6	918
chr12:115130009-115130242	chr12	115130009	115130242	0.834878389	0.779424047	0.055454342	1	919
chr1:147993811-147994130	chr1	147993811	147994130	0.307264355	0.283069164	0.024195192	2	920
chr19:20149856-20150175	chr19	20149856	20150175	0.206891304	0.139661966	0.067229339	2	921
chr18:54788960-54789194	chr18	54788960	54789194	0.884286282	0.832424552	0.051861731	3	922
chr9:130674547-130674958	chr9	130674547	130674958	0.86904926	0.930568241	-0.061518981	1	923
chr20:30160787-30161107	chr20	30160787	30161107	0.154486506	0.130363902	0.024122604	2	924
chr4:4119801-4120035	chr4	4119801	4120035	0.756073779	0.809653222	-0.053579443	1	925
chrX:103401401-103401778	chrX	103401401	103401778	0.275450407	0.306940323	-0.031489917	4	926
chr20:3758207-3759184	chr20	3758207	3759184	0.733955727	0.688087376	0.045868351	4	927
chr2:5836069-5837643	chr2	5836069	5837643	0.395813263	0.419861052	-0.02404779	10	928
chr7:852961-853230	chr7	852961	853230	0.367513668	0.406035296	-0.038521628	3	929
chr10:71211117-71211780	chr10	71211117	71211780	0.108359546	0.133956767	-0.025597221	7	930
chr22:42353660-42353900	chr22	42353660	42353900	0.531400954	0.569746317	-0.038345363	2	931
chr7:157369121-157369394	chr7	157369121	157369394	0.860237129	0.806373793	0.053863335	3	932
chr17:7754919-7755584	chr17	7754919	7755584	0.779264337	0.741270518	0.03799382	3	933
chr2:232545348-232546143	chr2	232545348	232546143	0.459831829	0.491805348	-0.031973519	3	934
chr20:3451292-3452231	chr20	3451292	3452231	0.089707302	0.065797759	0.023909543	9	935
chrX:42637009-42637383	chrX	42637009	42637383	0.795928925	0.855802905	-0.05987398	2	936
chrY:9303623-9303934	chrY	9303623	9303934	0.372317342	0.40381458	-0.031497238	1	937
chr9:107526173-107526779	chr9	107526173	107526779	0.211768571	0.235667307	-0.023898736	5	938
chr1:149871080-149871946	chr1	149871080	149871946	0.561948586	0.603954576	-0.04200599	7	939
chr1:28286020-28286838	chr1	28286020	28286838	0.133271275	0.157141162	-0.023869887	8	940
chr6:66804631-66804831	chr6	66804631	66804831	0.247482977	0.223615581	0.023867395	3	941
chrX:13707056-13707555	chrX	13707056	13707555	0.085056915	0.108914992	-0.023858077	4	942
chr5:130330772-130331092	chr5	130330772	130331092	0.596181227	0.652755401	-0.056574174	4	943
chr15:83620951-83621727	chr15	83620951	83621727	0.106181153	0.13002449	-0.023843337	6	944
chr7:1452418-1452794	chr7	1452418	1452794	0.143322169	0.119486288	0.023835882	2	945
chrX:118012978-118013279	chrX	118012978	118013279	0.805982354	0.753155866	0.052826489	1	946

chr6:3156960-3157167	chr6	3156960	3157167	0.17111912	0.124752763	0.046366357	3	947
chr11:66079093-66080920	chr11	66079093	66080920	0.264503012	0.28977177	-0.025268758	8	948
chr11:45921388-45922167	chr11	45921388	45922167	0.304843474	0.354330118	-0.049486644	4	949
chr16:6068915-6070401	chr16	6068915	6070401	0.425727807	0.385418362	0.040309445	9	950
chr5:140620865-140621698	chr5	140620865	140621698	0.721449173	0.690226802	0.031222371	4	951
chr8:144240762-144242113	chr8	144240762	144242113	0.576960169	0.553175375	0.023784793	8	952
chr5:1277468-1277713	chr5	1277468	1277713	0.790262051	0.74228258	0.047979471	2	953
chrX:153978839-153979650	chrX	153978839	153979650	0.593776562	0.628833247	-0.035056685	11	954
chrY:28555536-28555932	chrY	28555536	28555932	0.44183887	0.411956282	0.029882588	1	955
chr16:1543099-1544426	chr16	1543099	1544426	0.097244725	0.073568796	0.023675929	8	956
chr1:76081379-76082365	chr1	76081379	76082365	0.096274388	0.121265476	-0.024991088	5	957
chr3:71114335-71114821	chr3	71114335	71114821	0.126970338	0.150625825	-0.023655488	2	958
chr19:46105260-46105467	chr19	46105260	46105467	0.086155086	0.159425255	-0.073270169	2	959
chr13:88329395-88329885	chr13	88329395	88329885	0.567743701	0.644718123	-0.076974423	3	960
chr20:62669305-62670730	chr20	62669305	62670730	0.476962454	0.556529371	-0.079566917	4	961
chr14:105864481-105865465	chr14	105864481	105865465	0.367915771	0.344287731	0.02362804	6	962
chr5:5303264-5303489	chr5	5303264	5303489	0.701433378	0.743783718	-0.042350341	4	963
chr6:42419511-42419743	chr6	42419511	42419743	0.08671889	0.110330276	-0.023611386	1	964
chr19:7985665-7985975	chr19	7985665	7985975	0.124334345	0.14791814	-0.023583795	1	965
chr16:419861-420256	chr16	419861	420256	0.4281237	0.459846374	-0.031722674	4	966
chr20:36034986-36035203	chr20	36034986	36035203	0.088978853	0.065396214	0.02358264	1	967
chr5:157002175-157003182	chr5	157002175	157003182	0.112127344	0.135696161	-0.023568818	8	968
chrX:107069309-107070201	chrX	107069309	107070201	0.498524172	0.531939583	-0.033415411	5	969
chr1:24739858-24740262	chr1	24739858	24740262	0.107375738	0.131672371	-0.024296633	4	970
chr10:116163392-116164599	chr10	116163392	116164599	0.383065336	0.351908818	0.031156519	4	971
chr9:131580591-131581583	chr9	131580591	131581583	0.210754364	0.245805719	-0.035051355	2	972
chr11:50238009-50238222	chr11	50238009	50238222	0.4037563	0.461622262	-0.057865962	3	973
chr12:1771935-1772513	chr12	1771935	1772513	0.713791936	0.760792696	-0.04700076	3	974
chr8:144371447-144372076	chr8	144371447	144372076	0.308329419	0.364036295	-0.055706875	4	975
chr3:129345668-129346521	chr3	129345668	129346521	0.737329265	0.762850176	-0.025520911	4	976
chr9:91995952-91996230	chr9	91995952	91996230	0.937344467	0.866301441	0.071043026	1	977
chrX:119077090-119077664	chrX	119077090	119077664	0.397652967	0.437060703	-0.039407736	5	978
chr12:50297581-50297988	chr12	50297581	50297988	0.748728706	0.797070818	-0.048342112	6	979
chr8:49890387-49890874	chr8	49890387	49890874	0.914920339	0.864074027	0.050846312	4	980
chr20:34204988-34205269	chr20	34204988	34205269	0.59833263	0.551828275	0.046504355	4	981
chr20:30135077-30135292	chr20	30135077	30135292	0.720601879	0.647425904	0.073175975	7	982
chr19:21657570-21658035	chr19	21657570	21658035	0.751735794	0.680148872	0.071586922	5	983
chr16:89988831-89989746	chr16	89988831	89989746	0.079508123	0.119695091	-0.040186967	4	984
chr16:67204209-67204637	chr16	67204209	67204637	0.220694243	0.091764528	0.128929715	3	985
chr5:50678633-50679375	chr5	50678633	50679375	0.409035978	0.37208261	0.036953367	13	986
chr4:172733735-172735118	chr4	172733735	172735118	0.275110226	0.251852859	0.023257367	11	987
chr6:33288734-33289008	chr6	33288734	33289008	0.676855568	0.733999456	-0.057143888	16	988
chr20:61660250-61660881	chr20	61660250	61660881	0.926952283	0.87108887	0.055863413	2	989
chr20:62406464-62407179	chr20	62406464	62407179	0.689773012	0.649756934	0.040016078	4	990
chrX:151649043-151649487	chrX	151649043	151649487	0.710687167	0.66250805	0.048179117	2	991
chr3:129062831-129063133	chr3	129062831	129063133	0.872732138	0.818450318	0.05428182	3	992
chr19:17982671-17983821	chr19	17982671	17983821	0.409669902	0.385672469	0.023997434	10	993
chr8:1308108-1308499	chr8	1308108	1308499	0.841711329	0.894435144	-0.052723815	2	994
chr22:20286319-20287630	chr22	20286319	20287630	0.354279025	0.305359241	0.048919784	3	995
chr22:37252476-37252709	chr22	37252476	37252709	0.099133098	0.075979504	0.023153594	3	996
chr19:45975849-45976262	chr19	45975849	45976262	0.749592685	0.7170016	0.032591085	4	997
chr7:43945584-43946456	chr7	43945584	43946456	0.150279812	0.174582826	-0.024303014	5	998
chr17:48350423-48350832	chr17	48350423	48350832	0.18074006	0.15760709	0.023132971	5	999
chr1:86621279-86622871	chr1	86621279	86622871	0.399346366	0.422473837	-0.02312747	10	1000



**Supplementary Table S4. List of the 1,000 top-ranked, differentially methylated promoters after TET triple knockdown.**

This table is related to Fig. 2D. "NA" : No gene symbol provided.

gene_symbol	chromosome	start	end	beta.GFP_siRNA	beta.GFP_scramble	difference	num.sites	rank
NA	chr7	22700912	22702911	0.328906648	0.649237408	-0.32033076	1	1
NA	chr1	149604140	149606139	0.361994384	0.160476523	0.201517861	1	2
HAS3	chr16	69137967	69139966	0.627405663	0.380628042	0.246777621	6	3
NA	chr16	13425941	13427940	0.105375209	0.314635919	-0.20926071	1	4
RARRES2P5	chr16	34455920	34457919	0.451430795	0.730780484	-0.279349689	2	5
NA	chr16	34426206	34428205	0.149149323	0.417859054	-0.268709732	1	6
NA	chr7	10514708	10516707	0.323535343	0.535049195	-0.211513852	1	7
P4HA2	chr5	131630509	131632508	0.522194038	0.326062153	0.196131886	2	8
SMARCD3	chr7	150974483	150976482	0.438274867	0.273492898	0.164781969	1	9
NA	chr12	58378045	58380044	0.281797659	0.458952958	-0.177155299	1	10
NA	chr14	21341252	21343251	0.507626129	0.319862284	0.187763845	2	11
NA	chr2	56412406	56414405	0.562791463	0.380405634	0.182385828	5	12
IRF5	chr7	128576166	128578165	0.513060596	0.38025509	0.132805506	11	13
WDR59	chr16	75033572	75035571	0.490447068	0.341102533	0.149344534	4	14
OXCT1	chr5	41870122	41872121	0.55939244	0.409200929	0.150191511	11	15
RNU6-835P	chr14	88462293	88464292	0.670996225	0.452934671	0.218061554	1	16
NA	chr14	99727785	99729784	0.285944169	0.121990269	0.163953901	3	17
NA	chr10	124514710	124516709	0.257893313	0.428482085	-0.170588772	3	18
SPANXA1	chrX	140672634	140674633	0.575277151	0.393644772	0.181632379	1	19
NA	chr11	114452475	114454474	0.389512687	0.559053912	-0.169541225	1	20
DOK7	chr4	3463533	3465532	0.585459882	0.448477239	0.136982643	11	21
NA	chr10	73636614	73638613	0.423942645	0.296772894	0.127169751	1	22
RARRES2P9	chr16	34578431	34580430	0.265107525	0.398350781	-0.133243257	2	23
CMTM3	chr16	66636277	66638276	0.255229166	0.137111242	0.118117924	3	24
VCX3B	chrX	8431371	8433370	0.491770209	0.69717796	-0.205407751	2	25
NA	chr2	108158606	108160605	0.382850364	0.65764253	-0.274792167	1	26
CPT1A	chr11	68611379	68613378	0.699526938	0.499549048	0.19997789	3	27
NA	chr5	55777274	55779273	0.217182552	0.101525449	0.115657103	2	28
NA	chr2	64870246	64872245	0.410731599	0.172339945	0.238391654	1	29
SLC25A1P4	chr16	34406187	34408186	0.522522481	0.659570616	-0.137048135	5	30
GXYLT2	chr3	72935724	72937723	0.377215558	0.261845935	0.115369622	2	31
KIAA1549	chr7	138665565	138667564	0.50113987	0.386111498	0.115028372	4	32
UBQLN1	chr9	86322619	86324618	0.462660017	0.293654856	0.169005161	4	33
ACSM1	chr16	20709713	20711712	0.522226397	0.727018781	-0.204792384	1	34
NA	chr3	55395358	55397357	0.389922839	0.712993671	-0.323070832	1	35
NA	chr2	9281795	9283794	0.570223169	0.421532699	0.14869047	3	36
HNRNPDP2	chr6	65341076	65343075	0.826573871	0.584769795	0.241804076	1	37
NA	chr3	158519225	158521224	0.381127364	0.246022391	0.135104972	11	38
WIBG	chr12	56325903	56327902	0.818920765	0.61517116	0.203749605	4	39
GGCT	chr7	30590596	30592595	0.618579549	0.451710697	0.166868851	1	40
NA	chr7	30589898	30591897	0.618579549	0.451710697	0.166868851	1	41
MIR4435-1HG	chr2	112252178	112254177	0.244189238	0.135228647	0.108960591	1	42
NA	chr2	112251889	112253888	0.244189238	0.135228647	0.108960591	1	43
NA	chr14	95651692	95653691	0.75745549	0.555590954	0.201864536	1	44
OR2L3	chr1	248222484	248224483	0.344214061	0.574729546	-0.230515485	1	45
NA	chr5	163893909	163895908	0.284292505	0.457933817	-0.173641312	2	46
TYR	chr11	88909120	88911119	0.49269879	0.668337144	-0.175638354	1	47
NA	chr2	67312645	67314644	0.542273135	0.735225209	-0.192952073	1	48
NA	chr4	92033442	92035441	0.50848416	0.785780897	-0.277296737	1	49
CCDC159	chr19	11453860	11455859	0.387744276	0.495276936	-0.10753266	2	50
NA	chr3	186648837	186650836	0.383216961	0.267149018	0.116067944	7	51
NA	chr19	46733146	46735145	0.541109742	0.725258697	-0.184148954	2	52
NA	chr3	44040142	44042141	0.646426816	0.506015043	0.140411773	7	53
MRPL36	chr5	1800981	1802980	0.208262359	0.096767782	0.111494578	9	54
OR4X2	chr11	48265108	48267107	0.312089001	0.596018714	-0.283929713	1	55
NA	chr5	50262343	50264342	0.559838123	0.438213561	0.121624562	6	56
DECR1	chr8	91012133	91014132	0.828245792	0.627839657	0.200406135	10	57
KRTAP5-AS1	chr11	1591083	1593082	0.670096951	0.516449576	0.153647375	3	58
NA	chr4	124924	126923	0.39504642	0.538414435	-0.143368015	3	59
C15orf62	chr15	41060659	41062658	0.556317218	0.436813042	0.119504175	9	60
USP4	chr3	49377646	49379645	0.485335725	0.383528628	0.101807097	6	61
NA	chr14	105121625	105123624	0.615437941	0.40707029	0.208367651	1	62
RN7SL444P	chr1	151272940	151274939	0.430046993	0.263306587	0.166740405	1	63
PLK5	chr19	1522573	1524572	0.648136359	0.546834481	0.101301877	6	64
TNRC6C-AS1	chr17	76107381	76109380	0.415549476	0.547538734	-0.131989257	1	65

HBE1	chr11	5526348	5528347	0.582506524	0.764790266	-0.182283742	2	66
NA	chr11	5526383	5528382	0.582506524	0.764790266	-0.182283742	2	67
GP2	chr16	20338631	20340630	0.276190957	0.502201253	-0.226010296	2	68
NA	chr8	65493946	65495945	0.45745742	0.303910015	0.153547405	3	69
NA	chr13	34250406	34252405	0.588035825	0.487373849	0.100661976	4	70
NA	chr16	67465095	67467094	0.546281606	0.445660618	0.100620988	3	71
SERPINE2	chr2	224903537	224905536	0.362477049	0.23963647	0.122840579	7	72
CMPK2	chr2	7006267	7008266	0.555783862	0.455510221	0.100273641	3	73
NA	chr1	209960539	209962538	0.528937423	0.692951118	-0.164013694	1	74
LRAT	chr4	155546597	155548596	0.619540329	0.49856906	0.120971269	8	75
NA	chr7	138309425	138311424	0.78819028	0.603575529	0.184614751	1	76
HIST1H3D	chr6	26199022	26201021	0.49578106	0.394785591	0.100995469	12	77
HIST1H2AD	chr6	26198972	26200971	0.49578106	0.394785591	0.100995469	12	78
OR9G1	chr11	56466364	56468363	0.210253643	0.400065424	-0.189811782	3	79
NA	chr18	20839819	20841818	0.623476336	0.471798961	0.151677375	1	80
NA	chr9	29826210	29828209	0.590302493	0.721791151	-0.131488658	2	81
NA	chr2	28617040	28619039	0.669431971	0.5178609	0.151571072	3	82
NA	chr2	158296562	158298561	0.794614619	0.60979575	0.184818869	1	83
CD274	chr9	5449003	5451002	0.477537195	0.379600909	0.097936286	5	84
NA	chr2	162928266	162930265	0.7140489	0.58241457	0.13163433	3	85
NA	chr8	102218876	102220875	0.329487561	0.185543993	0.143943568	1	86
NA	chr8	22931502	22933501	0.679065214	0.527019642	0.152045572	1	87
NA	chr16	34442108	34444107	0.651659966	0.767310255	-0.115650289	5	88
NA	chr2	149645852	149647851	0.543576137	0.422503831	0.121072306	2	89
ADAMTSL1	chr9	18472392	18474391	0.767833671	0.602492428	0.165341243	2	90
SLC2A11	chr22	24197390	24199389	0.631453903	0.495871	0.135582903	4	91
OR2M4	chr1	248400731	248402730	0.377800089	0.545018802	-0.167218713	2	92
SPINK2	chr4	57687409	57689408	0.534520264	0.428129654	0.10639061	6	93
NA	chr17	43248452	43250451	0.647296617	0.505211514	0.142085103	1	94
NA	chr7	8300363	8302362	0.444705729	0.344518817	0.100186912	12	95
NA	chr7	8300394	8302393	0.444705729	0.344518817	0.100186912	12	96
NA	chr1	203121529	203123528	0.242840812	0.337112251	-0.094271439	1	97
KCNA4	chr11	30038071	30040070	0.540792098	0.40787047	0.132921629	14	98
CIRH1A	chr16	69163694	69165693	0.654101875	0.5129905	0.141111375	1	99
IRF6	chr1	209978966	209980965	0.55948142	0.410976011	0.148505409	14	100
AACSP1	chr5	178244937	178246936	0.858017562	0.676037834	0.181979728	1	101
NA	chr5	141330484	141332483	0.175803089	0.268798683	-0.092995594	1	102
FBXO24	chr7	100180105	100182104	0.555998273	0.460059451	0.095938822	3	103
NA	chr14	23024034	23026033	0.179717484	0.08747288	0.092244604	1	104
HIST1H2BF	chr6	26198248	26200247	0.482940758	0.383552185	0.099388573	11	105
CLCF1	chr11	67141149	67143148	0.568530164	0.476549692	0.091980471	13	106
NA	chr11	89786405	89788404	0.554663441	0.701336243	-0.146672802	1	107
ZFAND2A	chr7	1199896	1201895	0.187060629	0.090665342	0.096395287	7	108
CLIC3	chr9	139890756	139892755	0.535314804	0.443565043	0.091749761	4	109
COX20P2	chr2	231820808	231822807	0.253266074	0.149507768	0.103758306	2	110
HSPB8	chr12	119614947	119616946	0.670403414	0.578887264	0.09151615	10	111
OR2I1P	chr6	29519496	29521495	0.624654396	0.507861937	0.116792459	21	112
SSBP4	chr19	18528174	18530173	0.739263057	0.601950141	0.137312916	3	113
TRIM48	chr11	55028158	55030157	0.667996041	0.834000183	-0.166004142	2	114
SULT1C4	chr2	108992867	108994866	0.785331933	0.654312667	0.131019266	9	115
HIST1H1PS1	chr6	26194294	26196293	0.87834412	0.721146084	0.157198036	5	116
NA	chr5	50263994	50265993	0.613236477	0.500798135	0.112438343	10	117
NA	chr19	21769625	21771624	0.576546726	0.45923049	0.117316236	1	118
NA	chr9	100461016	100463015	0.685974907	0.859897409	-0.173922502	1	119
TRAV8-5	chr14	22369757	22371756	0.296269163	0.445392079	-0.149122916	2	120
SOX30	chr5	157097989	157099988	0.475740685	0.359511346	0.116229339	10	121
NA	chr1	247456637	247458636	0.655797384	0.821432422	-0.165635038	1	122
CDH8	chr16	62070440	62072439	0.194005718	0.357636381	-0.163630664	1	123
BRWD1-IT2	chr21	40686387	40688386	0.794562136	0.635134861	0.159427275	1	124
ITGB5-AS1	chr3	124498502	124500501	0.847591346	0.678011867	0.169579479	1	125
C1QTNF4	chr11	47615712	47617711	0.746164884	0.657096254	0.08906863	5	126
RBP7	chr1	10055764	10057763	0.678872194	0.553371812	0.125500382	11	127
RIPPLY2	chr6	84561485	84563484	0.467526817	0.36905679	0.098470027	12	128
MEOX2	chr7	15725938	15727937	0.655179402	0.448053774	0.207125628	13	129
NA	chr2	64368873	64370872	0.197389034	0.108283984	0.08910505	1	130
GBP4	chr1	89664116	89666115	0.561335539	0.423300005	0.138035534	7	131
UBE2C	chr20	44439715	44441714	0.565287326	0.464654285	0.100633041	18	132
NA	chr11	65557840	65559839	0.647691643	0.805824046	-0.158132403	1	133

ANO1	chr11	69922908	69924907	0.491597839	0.387855037	0.103742801	11	134
PDE1B	chr12	54941634	54943633	0.601551733	0.513676434	0.087875299	7	135
ATP2C2	chr16	84400633	84402632	0.629911206	0.532787202	0.097124004	7	136
ROBO1	chr3	79816466	79818465	0.477161117	0.376733417	0.1004277	7	137
WDR86	chr7	151107314	151109313	0.481977442	0.39214589	0.089831553	5	138
USB1	chr16	58031950	58033949	0.827080679	0.682414038	0.144666641	4	139
NA	chr11	119241916	119243915	0.827439	0.668511883	0.158927117	1	140
MYCT1	chr6	153017530	153019529	0.80726857	0.652502804	0.154765766	1	141
NA	chr19	53638076	53640075	0.27780122	0.499971587	-0.222170367	1	142
FEZF1-AS1	chr7	121942212	121944211	0.734542581	0.622731313	0.111811268	5	143
PABPC4L	chr4	135122404	135124403	0.486533711	0.384221196	0.102312515	5	144
NA	chr11	67140556	67142555	0.418740932	0.331928239	0.086812693	14	145
ATP6V0CP3	chr6	42693472	42695471	0.63368396	0.547014812	0.086669148	4	146
NA	chr2	206812315	206814314	0.541937444	0.438780436	0.103157009	1	147
NA	chr12	63753318	63755317	0.706695314	0.870975912	-0.164280598	1	148
NA	chr1	156661290	156663289	0.525599535	0.419787144	0.105812391	1	149
NA	chr2	71291374	71293373	0.88969995	0.723263378	0.166436572	1	150
NAGK	chr2	71289974	71291973	0.88969995	0.723263378	0.166436572	1	151
MTATP8P2	chr2	88122961	88124960	0.408429503	0.322680122	0.085749381	1	152
EEF1A1P25	chr3	138542405	138544404	0.495042489	0.609339608	-0.114297119	1	153
MIR5684	chr19	12896442	12898441	0.831038862	0.67625437	0.154784493	1	154
ZNF597	chr16	3493043	3495042	0.626807016	0.515406588	0.111400428	12	155
CPAMD8	chr19	17137126	17139125	0.648133945	0.547478028	0.100655917	9	156
CPQ	chr8	97655955	97657954	0.413416776	0.291645524	0.121771252	14	157
NA	chr12	52772744	52774743	0.526249235	0.646701517	-0.120452282	1	158
MIR4801	chr4	37243114	37245113	0.24655939	0.415511659	-0.168952269	3	159
SPANXN5	chrX	52826642	52828641	0.674702873	0.783832274	-0.109129401	3	160
NA	chr7	15726503	15728502	0.718922114	0.535835821	0.183086294	6	161
C5orf52	chr5	157097061	157099060	0.385648699	0.273316279	0.11233242	10	162
C1QTNF2	chr5	159797149	159799148	0.656241271	0.571788004	0.084453267	12	163
TTC39B	chr9	15306859	15308858	0.545483773	0.453634655	0.091849118	2	164
LINC00966	chr8	65284385	65286384	0.620160283	0.4903983	0.129761982	10	165
NA	chr1	112530892	112532891	0.521711686	0.437476657	0.084235029	12	166
NA	chr5	74348169	74350168	0.551780996	0.456260243	0.095520753	7	167
FBXO6	chr1	11722681	11724680	0.617484229	0.520164505	0.097319724	8	168
HNRNPH1	chr5	179061286	179063285	0.823957091	0.674670835	0.149286256	1	169
SLC37A3	chr7	140103734	140105733	0.692199045	0.565785794	0.126413251	5	170
NA	chr9	132645950	132647949	0.515284753	0.431787436	0.083497317	3	171
SEMA4C	chr2	97535995	97537994	0.369894224	0.281387118	0.088507106	3	172
B4GALT6	chr18	29265300	29267299	0.451188089	0.343388048	0.107800041	3	173
CAPN1	chr11	64946537	64948536	0.770527591	0.631948906	0.138578685	1	174
NA	chr11	119579130	119581129	0.401550923	0.269107833	0.132443089	1	175
NA	chr1	11839177	11841176	0.873936065	0.717179839	0.156756226	1	176
NA	chr16	3413599	3415598	0.619771109	0.513572478	0.106198631	5	177
CYP4F22	chr19	15617804	15619803	0.61692204	0.533794616	0.083127424	7	178
NA	chr11	66762597	66764596	0.518378753	0.646017885	-0.127639133	1	179
MUM1L1	chrX	105410798	105412797	0.218658938	0.314122614	-0.095463676	1	180
NA	chr1	30181895	30183894	0.900668308	0.74032203	0.160346278	1	181
ZNF253	chr19	19975195	19977194	0.361553892	0.263629087	0.097924804	9	182
RNA5SP127	chr3	31268707	31270706	0.790324159	0.649536029	0.14078813	1	183
GPSM1	chr9	139220432	139222431	0.514221829	0.431462949	0.08275888	4	184
DPY19L2P2	chr7	102920358	102922357	0.583976333	0.48287203	0.101104303	13	185
C9orf66	chr9	215394	217393	0.751552611	0.618233782	0.133318828	1	186
FBLIM1	chr1	16081602	16083601	0.840783074	0.692675364	0.14810771	1	187
NA	chr7	57832406	57834405	0.424315658	0.562627347	-0.138311689	1	188
CYP4A22	chr1	47601607	47603606	0.48491709	0.576056714	-0.091139624	2	189
TSPAN18	chr11	44746515	44748514	0.562819949	0.461320167	0.101499782	2	190
ZSCAN1	chr19	58543900	58545899	0.81743212	0.696260055	0.121172065	11	191
ICA1	chr7	8301818	8303817	0.694179343	0.59908066	0.095098683	11	192
LINC00574	chr6	170188917	170190916	0.484665888	0.400651143	0.084014745	12	193
SP9	chr2	175198174	175200173	0.693262372	0.566333935	0.126928437	16	194
TGFBR3L	chr19	7979530	7981529	0.526641361	0.428056909	0.098584452	4	195
SERPINB4	chr18	61311033	61313032	0.364229852	0.445864279	-0.081634426	2	196
RNVU1-20	chr1	149604417	149606416	0.294279084	0.21268307	0.081596014	2	197
PPP1R26	chr9	138369425	138371424	0.710964459	0.627063367	0.083901093	3	198
PSMB10	chr16	67970491	67972490	0.564527445	0.454788062	0.109739383	5	199
ARHGAP31-AS1	chr3	119041108	119043107	0.397865917	0.315253573	0.082612343	6	200
TINCR	chr19	5567546	5569545	0.524257329	0.440908699	0.08334863	7	201

NA	chr15	40379533	40381532	0.474760445	0.57433859	-0.099578146	1	202
DUSP26	chr8	33457125	33459124	0.590337147	0.500434818	0.089902329	9	203
NA	chr5	27470899	27472898	0.371754863	0.515188382	-0.14343352	3	204
TIGD7	chr16	3355230	3357229	0.71144019	0.588832172	0.122608018	7	205
OR6Q1	chr11	57796902	57798901	0.102419209	0.212024585	-0.109605376	1	206
NAA60	chr16	3492111	3494110	0.645648898	0.545434584	0.100214314	12	207
CUL1	chr7	148393506	148395505	0.650269832	0.558397975	0.091871857	6	208
TNFRSF11A	chr18	59991020	59993019	0.410409026	0.312986882	0.097422144	8	209
NA	chr17	27076598	27078597	0.258531558	0.402778464	-0.144246906	1	210
RGS21	chr1	192284622	192286621	0.385533301	0.487657515	-0.102124214	1	211
LINC00152	chr2	87753387	87755386	0.230185838	0.091484864	0.138700974	1	212
MIR4277	chr5	1708484	1710483	0.728100758	0.614101739	0.113999019	2	213
NA	chr10	119999576	120001575	0.076820725	0.156300728	-0.079480002	6	214
BEAN1	chr16	66459700	66461699	0.394491538	0.305647477	0.08884406	5	215
MIR4740	chr17	79374079	79376078	0.839906888	0.720471437	0.119435452	7	216
SUMO2P6	chr5	173987279	173989278	0.755019311	0.627628364	0.127390947	1	217
ZNF385D	chr3	22414313	22416312	0.579357984	0.498551479	0.080806505	4	218
TCN2	chr22	31001325	31003324	0.667164665	0.555592345	0.11157232	9	219
NA	chr14	88626436	88628435	0.654204731	0.786794974	-0.132590243	1	220
DPPA4	chr3	109055920	109057919	0.769710385	0.650663815	0.11904657	6	221
OR13D1	chr9	107455160	107457159	0.251024733	0.469486786	-0.218462053	1	222
ZNF846	chr19	9903357	9905356	0.80330772	0.684301902	0.119005818	4	223
NA	chr19	49566016	49568015	0.865131223	0.724730775	0.140400448	2	224
NA	chr20	30618879	30620878	0.753798124	0.645294293	0.108503831	4	225
TRBV6-1	chr7	142026621	142028620	0.648395316	0.536044009	0.112351307	3	226
OR5H14	chr3	97866670	97868669	0.309457644	0.431463715	-0.12200607	2	227
CREBZF	chr11	85393452	85395451	0.758418746	0.631887695	0.126531051	3	228
RHOT1P3	chr13	19411739	19413738	0.364821158	0.488487313	-0.123666155	2	229
NA	chr11	117687658	117689657	0.62476198	0.510631852	0.114130128	3	230
FHAD1	chr1	15572268	15574267	0.592971288	0.512549938	0.08042135	10	231
TJP1	chr15	30260569	30262568	0.750386834	0.652746057	0.097640778	4	232
PTGER2	chr14	52779523	52781522	0.475589468	0.396739382	0.078850086	8	233
B3GNT9	chr16	67184618	67186617	0.827141451	0.688347305	0.138794145	7	234
ATP2B2	chr3	10749217	10751216	0.549705165	0.458421746	0.09128342	3	235
NA	chr4	34041016	34043015	0.365820136	0.444132575	-0.078312439	1	236
NA	chr6	31681350	31683349	0.377400104	0.465441347	-0.088041242	8	237
LY6G6E	chr6	31681343	31683342	0.377400104	0.465441347	-0.088041242	8	238
NA	chr16	34375280	34377279	0.821615973	0.685294081	0.136321892	1	239
NA	chr8	61571879	61573878	0.878552875	0.732954947	0.145597928	1	240
NA	chr5	114936254	114938253	0.614438533	0.515569125	0.098869408	8	241
NA	chr7	88195097	88197096	0.320764027	0.56365034	-0.242886313	1	242
NA	chr2	127782800	127784799	0.67738562	0.576557642	0.100827978	5	243
ZNF619	chr3	40517104	40519103	0.430482083	0.322281102	0.108200981	8	244
MYH11	chr16	15950391	15952390	0.644309746	0.52753219	0.116777556	7	245
SLC19A3	chr2	228582229	228584228	0.69150497	0.587995282	0.103509688	9	246
NA	chr1	41328086	41330085	0.711939675	0.59800183	0.113937845	8	247
RN7SKP190	chr16	82225896	82227895	0.859393837	0.718492561	0.140901276	1	248
NA	chr11	116705333	116707332	0.737747542	0.647585887	0.090161655	9	249
PHLDB3	chr19	44008588	44010587	0.578543602	0.501345342	0.077198261	10	250
NA	chr2	945461	947460	0.481047206	0.395890898	0.085156308	7	251
NA	chr8	23192184	23194183	0.818601365	0.684699443	0.133901922	1	252
OR5AP2	chr11	56409448	56411447	0.49495496	0.628155823	-0.133200863	3	253
ZFP42	chr4	188915425	188917424	0.822915387	0.703350475	0.119564912	13	254
NA	chr17	14200418	14202417	0.709129087	0.632157809	0.076971278	7	255
ZNF491	chr19	11906982	11908981	0.563242467	0.472925194	0.090317273	2	256
TAS2R39	chr7	142879012	142881011	0.392656379	0.511757434	-0.119101055	3	257
ATL3	chr11	63438894	63440893	0.803773081	0.681183825	0.122589257	11	258
RNU1-1	chr1	16840281	16842280	0.502400567	0.419996393	0.082404174	1	259
NA	chr1	16839640	16841639	0.502400567	0.419996393	0.082404174	1	260
NA	chr2	105318716	105320715	0.219085519	0.408417209	-0.18933169	1	261
RN7SL805P	chr17	61915843	61917842	0.511092418	0.393292289	0.117800129	1	262
CTNNA1	chr5	137945156	137947155	0.730714854	0.612269784	0.118445071	1	263
EVA1C	chr21	33782814	33784813	0.313103366	0.236787936	0.07631543	6	264
PDE7A	chr8	66754058	66756057	0.246596737	0.16594437	0.080652367	4	265
OR51B2	chr11	5345083	5347082	0.358724574	0.499582715	-0.140858141	4	266
NA	chr22	40354901	40356900	0.832304777	0.697950685	0.134354092	1	267
C9orf50	chr9	132382556	132384555	0.705054506	0.618075806	0.0869787	5	268
NA	chr2	25598215	25600214	0.288087889	0.197743556	0.090344332	3	269

TUBBP5	chr9	141043065	141045064	0.570007868	0.483770586	0.086237282	2	270
COL15A1	chr9	101703961	101705960	0.663011668	0.565392414	0.097619255	3	271
LRRTM3	chr10	68684264	68686263	0.336622666	0.261024055	0.075598611	6	272
DENND2A	chr7	140373294	140375293	0.679828043	0.580334152	0.099493891	2	273
MYD88	chr3	38178469	38180468	0.42813918	0.340470394	0.087668786	14	274
PTPN5	chr11	18813769	18815768	0.677148534	0.587360152	0.089788383	3	275
ANKDD1B	chr5	74905784	74907783	0.741809404	0.625120547	0.116688857	5	276
NA	chr3	102392258	102394257	0.826899187	0.695475739	0.131423448	1	277
SNTG1	chr8	50820849	50822848	0.747676465	0.627175876	0.120500589	6	278
NA	chr3	142677714	142679713	0.946134831	0.775439402	0.17069543	1	279
NA	chr10	112628001	112630000	0.734909155	0.618007353	0.116901802	1	280
ZNF784	chr19	56135468	56137467	0.217943996	0.14297058	0.074973416	9	281
MNDA	chr1	158799607	158801606	0.12210603	0.261374526	-0.139268496	2	282
NA	chr11	89459922	89461921	0.571338297	0.679106241	-0.107767945	1	283
TRMT1	chr19	13227882	13229881	0.244822944	0.158703658	0.086119287	5	284
FBXL15	chr10	104177446	104179445	0.826333787	0.70384321	0.122490577	9	285
PAH	chr12	103351689	103353688	0.677114043	0.580613605	0.096500437	12	286
NA	chr2	28618182	28620181	0.827841119	0.710808009	0.117033109	3	287
ROM1	chr11	62377694	62379693	0.58196778	0.504125846	0.077841934	2	288
NFAT5	chr16	69597497	69599496	0.410720624	0.301395554	0.10932507	5	289
NA	chr2	175189255	175191254	0.740561436	0.624910961	0.115650476	4	290
NA	chr9	15053555	15055554	0.518370401	0.431486574	0.086883827	1	291
NA	chr1	110437095	110439094	0.690114327	0.581166858	0.108947469	1	292
STMN1P1	chr12	31900532	31902531	0.084577645	0.215780999	-0.131203354	1	293
NA	chr12	31900675	31902674	0.084577645	0.215780999	-0.131203354	1	294
TMEM161BP1	chr10	37624843	37626842	0.203404285	0.129126154	0.074278131	1	295
ITGAX	chr16	31364955	31366954	0.485701264	0.398883653	0.086817611	5	296
NA	chr15	91381454	91383453	0.86937411	0.733088702	0.136285408	1	297
ESRRG	chr1	217310598	217312597	0.712165809	0.611109451	0.101056358	14	298
SUZ12	chr17	30262537	30264536	0.269812557	0.184574525	0.085238032	7	299
NA	chr19	49843366	49845365	0.633142554	0.53522244	0.097920114	3	300
BIN2P1	chr4	83194724	83196723	0.877045425	0.740057479	0.136987945	1	301
RIT1	chr1	155880696	155882695	0.316029316	0.242153975	0.073875341	7	302
NA	chr11	11590131	11592130	0.622545518	0.771457775	-0.148912257	1	303
ITGB2	chr21	46351405	46353404	0.687054309	0.583286008	0.1037683	5	304
NA	chr12	52701656	52703655	0.671091041	0.573616202	0.097474839	6	305
NA	chr1	9747114	9749113	0.456522648	0.382797843	0.073724806	4	306
NBL1	chr1	19965548	19967547	0.614656299	0.51846753	0.096188769	1	307
DSCAM	chr21	42218566	42220565	0.662124053	0.576795187	0.085328866	10	308
KCNJ12	chr17	21278009	21280008	0.730580377	0.629427375	0.101153001	8	309
RPP25	chr15	75249306	75251305	0.730002383	0.64117055	0.088831833	11	310
AS3MT	chr10	104627773	104629772	0.559637999	0.444059838	0.115578161	11	311
NA	chr19	51296342	51298341	0.885608018	0.748283084	0.137324934	1	312
LINC00693	chr3	28614782	28616781	0.43981696	0.337047269	0.10276969	2	313
ZFP2	chr5	178321395	178323394	0.74422091	0.629997336	0.114223574	5	314
RN7SL718P	chr19	41696635	41698634	0.705530994	0.596119556	0.109411438	1	315
OR13F1	chr9	107264955	107266954	0.34882378	0.595845443	-0.247021663	1	316
NA	chr2	12854041	12856040	0.803388442	0.679051809	0.124336633	1	317
NA	chr2	165695759	165697758	0.257808867	0.168412565	0.089396302	2	318
CRK	chr17	1365957	1367956	0.602656511	0.675773953	-0.073117443	4	319
ZIC1	chr3	147109709	147111708	0.790760733	0.672525558	0.118235175	14	320
KCNN2	chr5	113695142	113697141	0.614696236	0.467168301	0.147527935	3	321
NA	chr4	185274631	185276630	0.689572867	0.466787289	0.222785578	1	322
NA	chr9	132198995	132200994	0.412017024	0.32956622	0.082450804	5	323
RAB19	chr7	140102343	140104342	0.752022673	0.640436874	0.111585798	9	324
SOWAHB	chr4	77818503	77820502	0.409968069	0.337064497	0.072903572	8	325
SDCBPP2	chr8	70853683	70855682	0.570522123	0.437003679	0.133518444	3	326
PES1	chr22	31002571	31004570	0.697084173	0.596074218	0.101009955	10	327
NA	chr7	38349484	38351483	0.710943387	0.586058769	0.124884618	7	328
NA	chr2	5831121	5833120	0.575286913	0.48362408	0.091662834	7	329
KCTD13	chr16	29937857	29939856	0.606163243	0.533397556	0.072765687	2	330
LRRFIP1P1	chr3	178978562	178980561	0.606043449	0.517194771	0.088848678	6	331
MIR383	chr8	14710520	14712519	0.436837762	0.546469589	-0.109631827	2	332
FAIM3	chr1	207096093	207098092	0.80515206	0.694104282	0.111047778	3	333
NA	chr5	108165992	108167991	0.7180373	0.60801989	0.11001741	1	334
AWAT1	chrX	69453005	69455004	0.245195203	0.381472375	-0.136277172	1	335
MOB3C	chr1	47082064	47084063	0.660457014	0.565470322	0.094986692	8	336
RAB15	chr14	65438995	65440994	0.41378104	0.341593854	0.072187186	5	337

C19orf59	chr19	7740014	7742013	0.810896382	0.698231153	0.112665229	6	338
STX8	chr17	9479409	9481408	0.445586743	0.373466555	0.072120188	9	339
NA	chr19	12163283	12165282	0.547226553	0.456171427	0.091055126	5	340
NA	chr11	320491	322490	0.646590765	0.574603592	0.071987173	7	341
ELN	chr7	73440619	73442618	0.770119664	0.664385552	0.105734112	8	342
NA	chr4	43898974	43900973	0.280994473	0.186467764	0.094526709	1	343
KIRREL3	chr11	126872856	126874855	0.452564718	0.381119629	0.071445089	8	344
COX6B2	chr19	55865683	55867682	0.462568207	0.377686146	0.084882061	13	345
LINC00665	chr19	36822121	36824120	0.402344161	0.330951752	0.071392409	6	346
VAV3	chr1	108507267	108509266	0.395960616	0.322278078	0.073682537	8	347
DARS	chr2	136743171	136745170	0.304477124	0.233106821	0.071370304	5	348
STXBP6	chr14	25519004	25521003	0.558074233	0.486705003	0.071369231	4	349
NA	chr12	66429515	66431514	0.179231008	0.300917912	-0.121686904	1	350
NA	chr8	110984672	110986671	0.769384312	0.635890426	0.133493886	2	351
HEPH	chrX	65380891	65382890	0.171188065	0.286027581	-0.114839516	3	352
BCR	chr22	23520391	23522390	0.66325217	0.568028542	0.095223628	4	353
ASIC5	chr4	156786926	156788925	0.667383714	0.546131314	0.1212524	3	354
GOS2	chr1	209847265	209849264	0.554268103	0.462037791	0.092230312	12	355
NA	chr4	124982117	124984116	0.343763984	0.510858084	-0.167094101	1	356
BRWD1-AS1	chr21	40686133	40688132	0.435211757	0.350798188	0.084413569	2	357
SMKR1	chr7	129140820	129142819	0.3966098	0.318228246	0.078381554	3	358
TRABD2A	chr2	85133633	85135632	0.617582934	0.499018869	0.118564065	4	359
NA	chr7	3125556	3127555	0.939330095	0.799800009	0.139530086	1	360
NA	chr5	68797794	68799793	0.879809716	0.749067325	0.130742391	1	361
MKNK1	chr1	47082016	47084015	0.704038686	0.604552955	0.099485731	10	362
FOXN2	chr2	48540276	48542275	0.474699213	0.404034506	0.070664706	4	363
NA	chr3	110247930	110249929	0.241425732	0.465177958	-0.223752226	1	364
ISM2	chr14	77964711	77966710	0.544820698	0.474368785	0.070451913	9	365
LINC00682	chr4	41884129	41886128	0.563010092	0.445423551	0.117586541	5	366
NA	chr1	144521471	144523470	0.833345027	0.709812117	0.12353291	1	367
VSTM4	chr10	50323055	50325054	0.435431304	0.36506841	0.070362894	8	368
IFIT3	chr10	91086151	91088150	0.549859902	0.453907664	0.095952239	3	369
TSPY26P	chr20	30777831	30779830	0.757697621	0.646978022	0.110719599	6	370
GPR62	chr3	51987830	51989829	0.824791469	0.706994498	0.117796971	4	371
BEND4	chr4	42154396	42156395	0.845211735	0.726569496	0.118642239	10	372
NA	chr5	17117296	17119295	0.438238362	0.319707149	0.118531214	1	373
NA	chr1	27850816	27852815	0.469009931	0.398861358	0.070148573	2	374
PIGQ	chr16	615495	617494	0.798147705	0.704065353	0.094082352	9	375
NHLRC4	chr16	615496	617495	0.798147705	0.704065353	0.094082352	9	376
NA	chr13	91144041	91146040	0.209306305	0.407435783	-0.198129478	1	377
NA	chr18	59996545	59998544	0.732696566	0.62486981	0.107826756	1	378
NA	chr16	34378346	34380345	0.528083922	0.608906887	-0.080822965	3	379
ADCY1	chr7	45612239	45614238	0.661388229	0.559384796	0.102003433	6	380
DAOA	chr13	106116716	106118715	0.235893106	0.377464012	-0.141570906	3	381
NTSR1	chr20	61338689	61340688	0.573806207	0.493982435	0.079823773	8	382
UGT2B10	chr4	69680211	69682210	0.262270701	0.489231258	-0.226960557	1	383
LINC00544	chr13	30508542	30510541	0.787196681	0.672042197	0.115154484	1	384
C14orf39	chr14	60981762	60983761	0.824879479	0.69874806	0.126131419	6	385
TG	chr8	133877703	133879702	0.72884745	0.808094335	-0.079246885	5	386
SCAMP5	chr15	75248060	75250059	0.690253938	0.61140828	0.078845658	12	387
NA	chr6	100623585	100625584	0.588844146	0.701814378	-0.112970232	1	388
SEMA4G	chr10	102727775	102729774	0.268808553	0.19953787	0.069270682	6	389
MIR4783	chr2	128180695	128182694	0.575003355	0.495885758	0.079117597	4	390
MIR5193	chr3	49843179	49845178	0.866245672	0.740076421	0.126169251	1	391
APLNR	chr11	57004210	57006209	0.736947836	0.659936148	0.077011688	5	392
NA	chr2	105759071	105761070	0.56100514	0.473145759	0.087859381	5	393
CASD1	chr7	94137031	94139030	0.568540587	0.47096995	0.097570637	4	394
ABCF1	chr6	30537653	30539652	0.243619881	0.17456394	0.069055941	31	395
HIST1H2AE	chr6	26215665	26217664	0.780889133	0.673734819	0.107154314	11	396
NA	chr6	15244732	15246731	0.270164002	0.201144946	0.069019056	11	397
REEP1	chr2	86564707	86566706	0.559771169	0.486611027	0.073160142	12	398
ACAA1	chr3	38178234	38180233	0.380117371	0.31063283	0.069484541	13	399
FZD10-AS1	chr12	130646302	130648301	0.660758159	0.564640138	0.096118021	9	400
NA	chr19	29283279	29285278	0.607646389	0.538743639	0.06890275	5	401
SH2D2A	chr1	156786155	156788154	0.49369166	0.409404685	0.084286975	3	402
ARL17B	chr17	44438631	44440630	0.38265798	0.31386518	0.0687928	1	403
NA	chr20	30133807	30135806	0.76120756	0.65440099	0.10680657	11	404
NA	chr4	39974563	39976562	0.675503276	0.577558812	0.097944464	1	405

PABPC1P1	chr4	39973564	39975563	0.675503276	0.577558812	0.097944464	1	406
NA	chr8	42408433	42410432	0.524017014	0.651708017	-0.127691003	1	407
ARMCX6	chrX	100872492	100874491	0.243886855	0.312651082	-0.068764228	8	408
AGPAT2	chr9	139581376	139583375	0.664437539	0.591623489	0.072814049	4	409
RGS20	chr8	54762868	54764867	0.403362682	0.489084344	-0.085721661	2	410
NA	chr12	66275448	66277447	0.930006711	0.796128473	0.133878239	1	411
SLC2A3	chr12	8088372	8090371	0.672101794	0.576715748	0.095386046	7	412
NA	chr18	30348258	30350257	0.690032993	0.590968308	0.099064685	4	413
GAD2	chr10	26503736	26505735	0.590262485	0.50613491	0.084127575	13	414
NCKAP5	chr2	134325535	134327534	0.613226169	0.542312737	0.070913432	8	415
STAB2	chr12	103979551	103981550	0.729741642	0.830940436	-0.101198795	6	416
NA	chr5	70739943	70741942	0.109526124	0.196377739	-0.086851614	1	417
SH3BP1	chr22	38029161	38031160	0.851293691	0.729049308	0.122244383	1	418
NA	chr5	168438732	168440731	0.644099596	0.712422399	-0.068322803	2	419
NA	chr14	29254494	29256493	0.850620782	0.73551055	0.115110232	7	420
RHOA	chr3	49449932	49451931	0.290448244	0.222135602	0.068312642	2	421
NA	chr11	68636632	68638631	0.876003205	0.751434189	0.124569016	2	422
NA	chr9	35644767	35646766	0.261578428	0.177166288	0.08441214	3	423
SLC4A11	chr20	3219388	3221387	0.649739466	0.560624839	0.089114628	7	424
NA	chr2	113932438	113934437	0.892961539	0.765167589	0.127793949	1	425
SPATA12	chr3	57092969	57094968	0.863053737	0.743584847	0.11946889	3	426
FUOM	chr10	135171030	135173029	0.707590778	0.634502828	0.07308795	12	427
KCNS3	chr2	18057614	18059613	0.760605843	0.631392762	0.12921308	9	428
NA	chr18	77904307	77906306	0.589375855	0.434718104	0.154657751	12	429
PTPRN	chr2	220173871	220175870	0.732883738	0.640449712	0.092434026	7	430
TNFAIP8L2	chr1	151127605	151129604	0.67362423	0.59779299	0.07583124	6	431
SCNM1	chr1	151127640	151129639	0.67362423	0.59779299	0.07583124	6	432
NA	chr9	139219141	139221140	0.887228872	0.760771514	0.126457358	1	433
FHDC1	chr4	153856004	153858003	0.640850951	0.547783178	0.093067773	5	434
SGIP1	chr1	66997566	66999565	0.823300341	0.706495554	0.116804788	7	435
NA	chr1	154378541	154380540	0.848549717	0.727856373	0.120693344	2	436
NA	chr17	30953257	30955256	0.700518945	0.5520263	0.148492645	1	437
HOXA7	chr7	27197056	27199055	0.864427146	0.746931751	0.117495395	12	438
GPR19	chr12	12848642	12850641	0.578890923	0.500525995	0.078364928	12	439
NA	chr2	171570578	171572577	0.397184217	0.298935493	0.098248724	16	440
EBNA1BP2	chr1	43736108	43738107	0.796505166	0.669322625	0.127182541	3	441
SLC5A5	chr19	17981282	17983281	0.487536056	0.420144256	0.067391801	12	442
KLHL1	chr13	70682092	70684091	0.661622568	0.565022879	0.096599689	10	443
BOK-AS1	chr2	242497893	242499892	0.747303206	0.668859082	0.078444124	11	444
MEIS3	chr19	47922281	47924280	0.623674562	0.55240642	0.071268141	6	445
NA	chr2	220968877	220970876	0.666027767	0.571636054	0.094391713	1	446
TAC1	chr7	97359720	97361719	0.751989538	0.606588251	0.145401287	10	447
NA	chr5	72508274	72510273	0.243339307	0.314903573	-0.071564266	1	448
NA	chr8	91711810	91713809	0.709807769	0.795456165	-0.085648396	2	449
ACOT11	chr1	55006430	55008429	0.179427136	0.112286456	0.06714068	9	450
ACOT12	chr5	80689499	80691498	0.835894941	0.71585213	0.120042811	5	451
HIST2H3DP1	chr1	120903175	120905174	0.593301653	0.509303427	0.083998226	1	452
DBX1	chr11	20181660	20183659	0.829175975	0.716952312	0.112223663	15	453
CYP11B1	chr8	143960763	143962762	0.516954597	0.583917842	-0.066963245	6	454
FAM150B	chr2	288352	290351	0.921030362	0.79424609	0.126784272	8	455
LINC00426	chr13	30950783	30952782	0.820586356	0.705268467	0.115317889	1	456
VAV3-AS1	chr1	108505565	108507564	0.585968054	0.50551712	0.080450934	5	457
NA	chr1	190448009	190450008	0.413390033	0.343888807	0.069501225	1	458
NA	chr2	127781287	127783286	0.650625489	0.568418518	0.082206971	6	459
MKLN1	chr7	130793355	130795354	0.37600072	0.309140259	0.066860461	11	460
OR51A2	chr11	4976444	4978443	0.30591452	0.481496131	-0.175581612	4	461
PCDHGA12	chr5	140808685	140810684	0.866696772	0.78162498	0.085071792	10	462
SPARC	chr5	151066227	151068226	0.797074967	0.695304447	0.101770519	9	463
CD72	chr9	35646308	35648307	0.21281394	0.146092428	0.066721512	4	464
ATP2C1	chr3	130567939	130569938	0.844065167	0.725919348	0.118145819	1	465
TENC1	chr12	53439253	53441252	0.466712937	0.400008477	0.06670446	4	466
FAM184B	chr4	17782636	17784635	0.68829443	0.576842181	0.111452249	13	467
WDR86-AS1	chr7	151104747	151106746	0.877723959	0.757634212	0.120089747	3	468
PRTFDC1	chr10	25241034	25243033	0.553929846	0.468700096	0.08522975	6	469
TNFRSF9	chr1	8000427	8002426	0.77499681	0.701372937	0.073623874	6	470
VWC2	chr7	49811757	49813756	0.791102615	0.642719122	0.148383492	9	471
C2orf70	chr2	26783950	26785949	0.809154881	0.699499893	0.109654988	14	472
MIR1273F	chr1	53392846	53394845	0.528023434	0.451673482	0.076349952	8	473

ECHDC3	chr10	11782865	11784864	0.827589522	0.722649721	0.1049398	10	474
TRAF1	chr9	123690952	123692951	0.722624749	0.653571561	0.069053188	4	475
ACSL6	chr5	131347437	131349436	0.484285908	0.412301578	0.07198433	8	476
PAPOLA	chr14	96966270	96968269	0.510477875	0.433942867	0.076535008	4	477
HLF	chr17	53340873	53342872	0.455954203	0.348352155	0.107602049	10	478
HIST1H2BG	chr6	26216373	26218372	0.791918998	0.688562291	0.103356707	12	479
HSD17B14	chr19	49339436	49341435	0.65528638	0.565398123	0.089888257	6	480
SLC9A3P3	chr10	51786624	51788623	0.697614121	0.810376597	-0.112762476	1	481
LINC00276	chr2	14540588	14542587	0.362447607	0.470796469	-0.108348862	2	482
GPR114	chr16	57574833	57576832	0.859534755	0.740370151	0.119164604	3	483
NA	chr16	86232020	86234019	0.864528042	0.755280944	0.109247098	7	484
MIRLET7A2	chr11	122016802	122018801	0.340589569	0.475375576	-0.134786007	3	485
NA	chr1	145508004	145510003	0.667599309	0.574635522	0.092963788	1	486
NA	chr11	72064060	72066059	0.893210921	0.769380177	0.123830743	1	487
EEF1G	chr11	62341902	62343901	0.550547373	0.450469717	0.100077656	5	488
HMGB3P1	chr20	33421766	33423765	0.496773857	0.41051085	0.086263008	2	489
RORA	chr15	61521019	61523018	0.393440375	0.319684236	0.073756139	9	490
CITED4	chr1	41327519	41329518	0.684845832	0.590759156	0.094086676	11	491
FAM19A1	chr3	68051859	68053858	0.337819775	0.53697208	-0.199152305	3	492
DSCAML1	chr11	117687741	117689740	0.700520113	0.604238142	0.096281971	4	493
NA	chr19	9902797	9904796	0.78444322	0.688054916	0.096388304	5	494
KIAA1161	chr9	34376352	34378351	0.391556577	0.32586042	0.065696157	5	495
SLC16A11	chr17	6946743	6948742	0.593937036	0.511532228	0.082404808	10	496
THBD	chr20	23029879	23031878	0.444307777	0.378614302	0.065693475	10	497
OR13C8	chr9	107329949	107331948	0.34724931	0.476119298	-0.128869988	1	498
SLFN12	chr17	33759803	33761802	0.696884062	0.599985653	0.096898409	9	499
YBX2	chr17	7197435	7199434	0.804319646	0.715249324	0.089070322	16	500
SLC38A7	chr16	58718509	58720508	0.620223344	0.551035669	0.069187674	5	501
MTFR1L	chr1	26143631	26145630	0.905941165	0.79043577	0.115505395	3	502
FAM122A	chr9	71393464	71395463	0.298608774	0.225558804	0.073049971	5	503
AK3	chr9	4741544	4743543	0.854949474	0.737468485	0.117480989	1	504
VN1R64P	chr16	31556626	31558625	0.410838689	0.535144462	-0.124305773	1	505
BSCL2	chr11	62476818	62478817	0.633728692	0.550383894	0.083344798	10	506
VSNL1	chr2	17718893	17720892	0.513479141	0.400904622	0.112574519	3	507
NA	chr16	14394645	14396644	0.296086148	0.216653231	0.079432917	4	508
RIOK3	chr18	21031287	21033286	0.446689741	0.38170748	0.064982261	7	509
UBN1	chr16	4895166	4897165	0.408232823	0.319907479	0.088325344	4	510
RCOR3	chr1	211430219	211432218	0.303963742	0.23903171	0.064932032	6	511
NA	chr7	27196463	27198462	0.8071175	0.694366351	0.112751149	15	512
NA	chr4	119511428	119513427	0.322766796	0.245968941	0.076797855	1	513
BSG	chr19	569797	571796	0.687604275	0.599849339	0.087754936	7	514
NA	chr1	33190339	33192338	0.871049805	0.751894445	0.11915536	1	515
OR11H6	chr14	20690291	20692290	0.33496463	0.460399783	-0.125435153	1	516
RN7SL136P	chr1	35729584	35731583	0.449676355	0.323323002	0.126353353	1	517
IL1R1	chr2	102679504	102681503	0.849214558	0.733132023	0.116082536	1	518
NA	chr7	134832417	134834416	0.558441172	0.489066108	0.069375064	10	519
PIK3CD	chr1	9710290	9712289	0.659489333	0.572357303	0.087132029	9	520
LRFN3	chr19	36424760	36426759	0.539087613	0.652606427	-0.113518814	1	521
NA	chr18	29264118	29266117	0.299255061	0.232264026	0.066991035	5	522
C4orf50	chr4	5991046	5993045	0.719515635	0.833124271	-0.113608635	1	523
SP5	chr2	171570361	171572360	0.390084452	0.297887683	0.092196768	16	524
PLCB2	chr15	40599637	40601636	0.798628747	0.69781006	0.100818687	9	525
SOGA2P1	chr13	71496296	71498295	0.522453769	0.411737125	0.110716644	1	526
P2RX7	chr12	121569122	121571121	0.722695858	0.631884247	0.09081161	9	527
EBF4	chr20	2671980	2673979	0.704074678	0.63955867	0.064516008	4	528
RNU2-37P	chr3	127793593	127795592	0.835954089	0.71373792	0.122216168	5	529
SS18	chr18	23670682	23672681	0.194226183	0.121378905	0.072847278	8	530
GPR26	chr10	125424371	125426370	0.819624317	0.707770236	0.111854081	7	531
TICAM1	chr19	4831217	4833216	0.568669662	0.489600307	0.079069355	8	532
FABP5	chr8	82191098	82193097	0.686353548	0.576706914	0.109646634	11	533
CRIP3	chr6	43276036	43278035	0.544851152	0.467358312	0.07749284	9	534
NA	chr6	43276469	43278468	0.544851152	0.467358312	0.07749284	9	535
GPR146	chr7	1082712	1084711	0.550761561	0.482477452	0.068284109	8	536
NA	chr1	189743095	189745094	0.662732628	0.767004758	-0.10427213	1	537
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HIST1H2BPS2	chr6	27831680	27833679	0.571673726	0.467207607	0.104466118	16	539
MIR4736	chr17	56412884	56414883	0.804280899	0.696013629	0.10826727	3	540
ZNF442	chr19	12476220	12478219	0.276141438	0.212020302	0.064121137	8	541



NA	chr2	67441952	67443951	0.825625427	0.723311863	0.102313564	3	542
NA	chr15	38364661	38366660	0.140678128	0.076602556	0.064075572	5	543
SH3BGL3	chr1	26604167	26606166	0.825647368	0.713705817	0.111941551	5	544
DNAH8	chr6	38681617	38683616	0.873111752	0.756698952	0.1164128	3	545
ZNF85	chr19	21104528	21106527	0.461073672	0.397022056	0.064051617	10	546
RNU6-871P	chr12	59844054	59846053	0.291540538	0.382261083	-0.090720545	1	547
NA	chr5	9544812	9546811	0.379369345	0.305239557	0.074129788	9	548
FBLL1	chr5	167954621	167956620	0.310580992	0.246685951	0.063895041	6	549
NA	chr7	27232568	27234567	0.657479173	0.574747244	0.082731929	7	550
MIR4710	chr14	105143587	105145586	0.289720034	0.225846314	0.06387372	3	551
UBQLNL	chr11	5537436	5539435	0.339269032	0.499558035	-0.160289004	3	552
GRIK1	chr21	31311852	31313851	0.442251367	0.34243244	0.099818927	6	553
NA	chr9	113255	115254	0.431910705	0.333786074	0.098124631	4	554
NA	chr1	21618283	21620282	0.871094337	0.753859558	0.117234779	1	555
SNHG12	chr1	28908996	28910995	0.86603745	0.749526834	0.116510615	1	556
SYNE2	chr14	64318183	64320182	0.371206964	0.302659164	0.068547799	8	557
SEMA5A	chr5	9545688	9547687	0.552169652	0.475939147	0.076230505	9	558
MMD2	chr7	4998345	5000344	0.51622224	0.447996729	0.068225512	6	559
RNU7-20P	chr7	148516604	148518603	0.665616918	0.562242113	0.103374805	1	560
DMRT2	chr9	1048854	1050853	0.919659811	0.796482643	0.123177168	2	561
ZNF69	chr19	11997099	11999098	0.78277629	0.683078214	0.099698076	13	562
RAC2	chr22	37639989	37641988	0.476900989	0.409832331	0.067068658	7	563
FSTL3	chr19	674892	676891	0.729987244	0.641328505	0.088658739	7	564
NA	chr11	126860848	126862847	0.923957459	0.800245151	0.123712308	1	565
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HIST1H3H	chr6	27776342	27778341	0.671441716	0.602204476	0.06923724	9	567
DDAH1	chr1	86043434	86045433	0.574663984	0.659115348	-0.084451364	6	568
MIR509-2	chrX	146339869	146341868	0.343185798	0.230476963	0.112708836	1	569
HOXC9	chr12	54387179	54389178	0.571865768	0.479770692	0.092095076	9	570
SHANK2	chr11	70963124	70965123	0.487618973	0.406287686	0.081331287	5	571
MANSC4	chr12	27923710	27925709	0.735010759	0.665056624	0.069954135	4	572
MLYCD	chr16	83931231	83933230	0.180260281	0.117183029	0.063077253	3	573
NA	chr18	77551226	77553225	0.901222374	0.80140277	0.099819604	3	574
NA	chr14	100798627	100800626	0.916194583	0.794212033	0.12198255	1	575
IFI44	chr1	79113981	79115980	0.445539999	0.320774672	0.124765328	1	576
NA	chr16	2906399	2908398	0.813907346	0.709687802	0.104219544	8	577
IGHVII-20-1	chr14	106669452	106671451	0.824584284	0.714859768	0.109724516	1	578
SLC15A4	chr12	129308029	129310028	0.297607584	0.234668291	0.062939293	12	579
TRIM38	chr6	25961530	25963529	0.459042246	0.39189467	0.067147576	8	580
RIC3	chr11	8190103	8192102	0.570231409	0.488255777	0.081975632	11	581
NA	chr11	8189214	8191213	0.570231409	0.488255777	0.081975632	11	582
GRM5	chr11	88798614	88800613	0.178120336	0.301966008	-0.123845672	3	583
NA	chr11	124627525	124629524	0.852279492	0.746405838	0.105873654	3	584
NA	chr17	27251793	27253792	0.866347771	0.762905898	0.103441874	3	585
NA	chr10	112402044	112404043	0.740384785	0.661810584	0.078574201	6	586
NA	chr17	31860280	31862279	0.468167677	0.542963605	-0.074795928	3	587
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RN7SKP89	chr5	113587710	113589709	0.104974709	0.246773718	-0.141799009	1	589
IFI30	chr19	18282472	18284471	0.595530509	0.511727157	0.083803352	6	590
NOD2	chr16	50726014	50728013	0.542618775	0.45822506	0.084393714	3	591
NA	chr8	127567641	127569640	0.731180753	0.614674439	0.116506314	5	592
IMPA1P	chr8	82542870	82544869	0.622529552	0.541018131	0.081511421	5	593
RNU6-8	chr14	32671976	32673975	0.131318335	0.068756447	0.062561888	4	594
CSF1	chr1	110451364	110453363	0.505059708	0.442539976	0.062519732	6	595
FGF8	chr10	103535355	103537354	0.681230133	0.582328672	0.098901461	7	596
C11orf21	chr11	2323780	2325779	0.826981867	0.71616187	0.110819997	4	597
SAA3P	chr11	18137180	18139179	0.767999947	0.863675453	-0.095675506	3	598
SEMA7A	chr15	74726309	74728308	0.378570138	0.316157554	0.062412584	7	599
C20orf112	chr20	31172377	31174376	0.352390016	0.289988558	0.062401458	4	600
NA	chr16	28832855	28834854	0.243863813	0.181567839	0.062295974	6	601
ATXN2L	chr16	28832856	28834855	0.243863813	0.181567839	0.062295974	6	602
DUSP9	chrX	152906446	152908445	0.721788822	0.627965244	0.093823577	8	603
MYEOV2	chr2	241075725	241077724	0.689673042	0.627417844	0.062255198	27	604
LRRC37A7P	chr18	29302661	29304660	0.816792045	0.708947291	0.107844754	3	605
NA	chr12	58206777	58208776	0.827862851	0.718758801	0.10910405	1	606
MIR3663	chr10	118926786	118928785	0.690615198	0.604906384	0.085708814	5	607
NA	chr5	43040177	43042176	0.234043863	0.17198303	0.062060833	14	608
MYO16	chr13	109247000	109248999	0.327176447	0.441262441	-0.114085994	5	609

NA	chr19	13907248	13909247	0.824778494	0.728529264	0.09624923	2	610
HIST1H2AL	chr6	27831534	27833533	0.56338411	0.461035861	0.10234825	15	611
RPS29P22	chr17	26442933	26444932	0.73650387	0.63954923	0.09695464	1	612
NA	chr19	52672911	52674910	0.412225463	0.350383192	0.061842271	4	613
DUOX2	chr15	45406043	45408042	0.852109372	0.728159668	0.123949703	14	614
NA	chr17	30845869	30847868	0.580791146	0.495901379	0.084889767	4	615
FAM83F	chr22	40389453	40391452	0.787928422	0.686330645	0.101597777	6	616
RASAL1	chr12	113573545	113575544	0.524882329	0.463196795	0.061685534	13	617
TGIF2LY	chrY	3445582	3447581	0.358422375	0.524527194	-0.166104819	2	618
PHACTR3	chr20	58151064	58153063	0.836228784	0.73307816	0.103150625	4	619
HSBP1L1	chr18	77723061	77725060	0.592337516	0.512859842	0.079477673	8	620
UCK1	chr9	134406156	134408155	0.527104502	0.441412038	0.085692464	5	621
HERC6	chr4	89298391	89300390	0.496964916	0.435339991	0.061624925	9	622
ANGPTL2	chr9	129884663	129886662	0.699642865	0.578088323	0.121554542	3	623
APCDD1L	chr20	57089688	57091687	0.679736232	0.588993773	0.090742459	11	624
TXNDC5	chr6	7910548	7912547	0.254287315	0.192808387	0.061478928	5	625
FAM213A	chr10	82166085	82168084	0.505668066	0.418681586	0.08698648	7	626
RHBDD1	chr2	227698797	227700796	0.672721706	0.55703782	0.115683885	7	627
NA	chr12	102328494	102330493	0.774552062	0.673310228	0.101241834	1	628
NA	chr21	44034669	44036668	0.935597481	0.813600899	0.121996582	1	629
NA	chr2	5830751	5832750	0.561782999	0.490414606	0.071368393	5	630
NA	chr5	73832302	73834301	0.906687527	0.788575965	0.118111561	1	631
SLC9A9	chr3	143566874	143568873	0.548330419	0.486956358	0.061374061	2	632
KCNA5	chr12	5151585	5153584	0.745979332	0.652350456	0.093628876	6	633
TBC1D14	chr4	6909469	6911468	0.380121773	0.317420036	0.062701736	10	634
ZNF423	chr16	49891331	49893330	0.549812072	0.480076712	0.06973536	6	635
NA	chr4	186507563	186509562	0.723988646	0.65189716	0.072091487	3	636
DPY19L2P4	chr7	89747214	89749213	0.48141022	0.401390772	0.080019448	16	637
IGSF10	chr3	151175998	151177997	0.772646534	0.841206227	-0.068559693	6	638
LRRC16B	chr14	24519706	24521705	0.405644617	0.344412819	0.061231799	5	639
SNORA45	chr11	8705486	8707485	0.445971878	0.514411831	-0.068439952	4	640
PCDHGB6	chr5	140786270	140788269	0.815437264	0.721952013	0.093485251	6	641
NA	chr8	10585324	10587323	0.807047712	0.70727905	0.099768662	10	642
NQO1	chr16	69760355	69762354	0.180235294	0.114544544	0.065690751	8	643
LIF	chr22	30642341	30644340	0.410057682	0.349128994	0.060928688	7	644
DNAH11	chr7	21581333	21583332	0.706825857	0.621112378	0.085713479	9	645
NA	chr8	123705846	123707845	0.851007916	0.740730419	0.110277497	1	646
NA	chr3	150438124	150440123	0.468256588	0.275088914	0.193167675	1	647
PDGFB	chr22	39640257	39642256	0.399557896	0.335424285	0.06413361	11	648
HIST1H2BO	chr6	27859703	27861702	0.688471757	0.597640401	0.090831356	14	649
C6orf226	chr6	42858055	42860054	0.401636952	0.340965356	0.060671595	12	650
COL4A2	chr13	110956659	110958658	0.6866036	0.625162409	0.061441191	2	651
NA	chr14	88121139	88123138	0.232565407	0.412343106	-0.179777699	2	652
NA	chr16	34596283	34598282	0.421126444	0.558302615	-0.137176172	3	653
ANKRD37	chr4	186315675	186317674	0.275221288	0.205292364	0.069928925	4	654
GRASP	chr12	52399224	52401223	0.814340563	0.713102923	0.10123764	8	655
SNORA35	chrX	113863759	113865758	0.21424092	0.341499474	-0.127258554	4	656
RNF144A-AS1	chr2	7058314	7060313	0.885930572	0.778635098	0.107295474	5	657
BBOX1	chr11	27060772	27062771	0.497218449	0.600940532	-0.103722083	4	658
ANKRD34C	chr15	79573646	79575645	0.373560477	0.292030414	0.081530063	8	659
OR5D13	chr11	55539414	55541413	0.336437279	0.493387455	-0.156950176	2	660
VCX2	chrX	8138809	8140808	0.68903071	0.796450067	-0.107419357	3	661
MDGA1	chr6	37666583	37668582	0.68656496	0.626514995	0.060049965	4	662
NA	chr11	65221228	65223227	0.853531397	0.738313391	0.115218006	6	663
NA	chr2	177040945	177042944	0.688900241	0.607205094	0.081695146	3	664
FAM163A	chr1	179710798	179712797	0.659395505	0.581270662	0.078124843	13	665
EMX1	chr2	73141889	73143888	0.536091718	0.458115619	0.077976099	8	666
DNTTIP2	chr1	94344975	94346974	0.427816465	0.368023	0.059793465	4	667
FAM5C	chr1	190446260	190448259	0.377217396	0.292693179	0.084524217	8	668
NA	chr1	190446181	190448180	0.377217396	0.292693179	0.084524217	8	669
LHX2	chr9	126762449	126764448	0.457361195	0.387279701	0.070081494	2	670
ATP5LP7	chr17	40798352	40800351	0.816636211	0.712221698	0.104414514	2	671
HMGB3P27	chr17	40798696	40800695	0.816636211	0.712221698	0.104414514	2	672
TNFRSF13C	chr22	42322323	42324322	0.729585032	0.669867152	0.05971788	5	673
BARHL2	chr1	91182295	91184294	0.356592404	0.290342504	0.066249899	12	674
C9orf135-AS1	chr9	72435156	72437155	0.925987789	0.808794247	0.117193542	3	675
C1orf194	chr1	109655980	109657979	0.665744679	0.5829498	0.082794879	10	676
C21orf128	chr21	43528145	43530144	0.728185204	0.653210094	0.07497511	6	677

SRP72	chr4	57331581	57333580	0.137699012	0.078181015	0.059517997	6	678
GPRASP1	chrX	101904794	101906793	0.697014556	0.61164841	0.085366146	10	679
NA	chr9	133807738	133809737	0.858492876	0.749257351	0.109235525	1	680
FOXB2	chr9	79633071	79635070	0.496492999	0.417882129	0.07861087	6	681
PLA2G7	chr6	46702931	46704930	0.395161232	0.327823224	0.067338008	18	682
TMEM140	chr7	134831324	134833323	0.591179045	0.526016824	0.065162221	11	683
FERMT2	chr14	53418654	53420653	0.51307464	0.453695629	0.059379011	6	684
MIR4513	chr15	75080599	75082598	0.893157797	0.779721542	0.113436255	1	685
NKX2-5	chr5	172661861	172663860	0.663973084	0.591190446	0.072782639	12	686
SYTL1	chr1	27667013	27669012	0.454499494	0.389241763	0.065257732	8	687
TRPM3	chr9	74061321	74063320	0.149682228	0.210255206	-0.060572978	4	688
STRA13	chr17	79981484	79983483	0.430842288	0.371587026	0.059255262	4	689
CHODL-AS1	chr21	19257426	19259425	0.194811444	0.355853066	-0.161041622	2	690
CLMP	chr11	123065490	123067489	0.862352772	0.760257566	0.102095205	10	691
PRTN3	chr19	839463	841462	0.784804071	0.697067404	0.087736667	8	692
SLC29A1	chr6	44185742	44187741	0.698406307	0.609842736	0.088563571	12	693
NA	chr5	178509696	178511695	0.437053549	0.634838	-0.19778445	1	694
XKR5	chr8	6692667	6694666	0.692061276	0.617442891	0.074618385	11	695
RAP1GAP	chr1	21995302	21997301	0.574433172	0.511544661	0.062888512	8	696
NA	chr16	59788253	59790252	0.439738772	0.553831864	-0.114093091	8	697
APOOP5	chr16	59788431	59790430	0.439738772	0.553831864	-0.114093091	8	698
PPM1M	chr3	52278341	52280340	0.743635832	0.654564422	0.08907141	11	699
TCTEX1D4	chr1	45272458	45274457	0.706661004	0.631827895	0.074833109	7	700
IGFBPL1	chr9	38423945	38425944	0.701290995	0.635324776	0.065966218	4	701
UAP1L1	chr9	139970453	139972452	0.595341965	0.527014559	0.068327406	4	702
PCDH17	chr13	58204444	58206443	0.320041519	0.247137122	0.072904397	6	703
MIR3146	chr7	19744560	19746559	0.722407804	0.627763387	0.094644417	1	704
PHF19	chr9	123639107	123641106	0.46393964	0.404970964	0.058968677	6	705
OR14C36	chr1	248510577	248512576	0.294308369	0.407864746	-0.113556377	2	706
HIST1H3J	chr6	27860385	27862384	0.636108247	0.541434323	0.094673924	16	707
NA	chr3	47291617	47293616	0.497870502	0.316020002	0.1818505	1	708
NA	chr19	50193331	50195330	0.755188016	0.665497514	0.089690502	10	709
NA	chr16	34429533	34431532	0.494600595	0.597398217	-0.102797622	7	710
NA	chr17	36862015	36864014	0.700469476	0.641665836	0.05880364	3	711
NA	chr13	76209631	76211630	0.54841996	0.483491483	0.064928476	4	712
NA	chr1	156614180	156616179	0.761724811	0.871514652	-0.109789841	1	713
CGA	chr6	87804325	87806324	0.616854526	0.689773913	-0.072919387	3	714
NA	chr3	16379315	16381314	0.867966457	0.758762499	0.109203958	1	715
NA	chr20	57463365	57465364	0.763775205	0.670357218	0.093417987	35	716
HRC	chr19	49658182	49660181	0.722656638	0.648153933	0.074502705	6	717
HIST1H2APS4	chr6	26272269	26274268	0.83915072	0.734265272	0.104885448	16	718
RPL23AP78	chr19	8839067	8841066	0.912923938	0.802704088	0.11021985	2	719
CEACAM18	chr19	51978338	51980337	0.491517358	0.608166186	-0.116648828	4	720
NA	chr11	35989727	35991726	0.86504701	0.756451378	0.108595632	1	721
TMEM154	chr4	153600818	153602817	0.63761152	0.539353702	0.098257818	9	722
LINC00460	chr13	107027411	107029410	0.801933354	0.729169492	0.072763862	7	723
ATP1A3	chr19	42501150	42503149	0.158174373	0.099734727	0.058439646	4	724
ARHGAP20	chr11	110583413	110585412	0.448770897	0.373070857	0.07570004	11	725
NA	chr8	28196273	28198272	0.906573685	0.793151325	0.11342236	1	726
NA	chr19	21646211	21648210	0.822779855	0.703577279	0.119202576	5	727
ASB2	chr14	94442638	94444637	0.898273618	0.789217943	0.109055675	4	728
C3orf14	chr3	62303148	62305147	0.610148273	0.549805634	0.060342638	9	729
NA	chr5	33969468	33971467	0.751843909	0.588815051	0.163028858	1	730
NA	chr1	161008253	161010252	0.81938534	0.724780077	0.094605263	14	731
TSTD1	chr1	161008281	161010280	0.81938534	0.724780077	0.094605263	14	732
NA	chr7	155173271	155175270	0.852415962	0.750450941	0.101965021	7	733
ZNF525	chr19	53867446	53869445	0.4885563	0.419768115	0.068788185	5	734
OR5T1	chr11	56041529	56043528	0.31749569	0.445008557	-0.127512867	2	735
NA	chr2	19673711	19675710	0.877362954	0.767853943	0.10950901	1	736
APCDD1L-AS1	chr20	57088935	57090934	0.68966349	0.60264039	0.0870231	12	737
NMD3	chr3	160820984	160822983	0.638357033	0.545114331	0.093242702	8	738
NA	chr6	43191099	43193098	0.82326547	0.720537451	0.102728019	1	739
NA	chr8	95651196	95653195	0.865463256	0.746235427	0.119227829	8	740
NA	chr22	30640484	30642483	0.438321501	0.51700121	-0.078679709	1	741
NA	chr17	33867317	33869316	0.934614418	0.81835724	0.116257178	1	742
INO80E	chr16	30005115	30007114	0.481173959	0.423191084	0.057982876	5	743
NDUFAF3	chr3	49056392	49058391	0.336543815	0.278571663	0.057972152	13	744
HIST1H4L	chr6	27840790	27842789	0.879130304	0.770587392	0.108542912	16	745

ARHGEF40	chr14	21536929	21538928	0.404678445	0.338127973	0.066550472	7	746
HIST1H2BI	chr6	26271644	26273643	0.852658346	0.748939748	0.103718598	21	747
CCNO	chr5	54529009	54531008	0.411787261	0.353893663	0.057893599	14	748
OR4N5	chr14	20610395	20612394	0.623432894	0.521664332	0.101768562	3	749
NDUFS6	chr5	1800014	1802013	0.132961182	0.075080753	0.057880428	18	750
SLCO1B1	chr12	21282636	21284635	0.323586136	0.403832565	-0.080246429	1	751
CPT1C	chr19	50192655	50194654	0.746883735	0.659474604	0.087409131	10	752
CFLAR	chr2	201979327	201981326	0.377265894	0.314168913	0.063096981	10	753
C10orf131	chr10	97665860	97667859	0.227875461	0.166227122	0.061648339	11	754
NA	chr16	86468991	86470990	0.886224644	0.776264895	0.109959749	1	755
OXTR	chr3	8810815	8812814	0.608844142	0.55115628	0.057687862	8	756
NA	chr3	50193019	50195018	0.787927064	0.706638734	0.081288331	3	757
NA	chr15	25275520	25277519	0.345697056	0.451701597	-0.106004541	1	758
RARRES2P8	chr16	34777517	34779516	0.656201286	0.723182213	-0.066980927	4	759
SIGIRR	chr11	416956	418955	0.731520609	0.647822376	0.083698234	8	760
GSN-AS1	chr9	124047309	124049308	0.90361946	0.791881582	0.111737878	1	761
LCE1C	chr1	152778608	152780607	0.216369138	0.323895891	-0.107526752	2	762
TENM1	chrX	124097167	124099166	0.403575134	0.492379484	-0.08880435	2	763
WWC3	chrX	9982102	9984101	0.88860573	0.780811492	0.107794238	4	764
ARL11	chr13	50200935	50202934	0.760869342	0.678440505	0.082428837	8	765
NA	chr7	57687491	57689490	0.339752544	0.500752088	-0.160999545	1	766
LINC00391	chr13	95354617	95356616	0.888800874	0.780518792	0.108282082	7	767
ADAMTS9-AS2	chr3	64669085	64671084	0.799293164	0.718034891	0.081258273	8	768
NA	chr18	43606772	43608771	0.721439586	0.626721446	0.094718139	4	769
CD200R1	chr3	112693470	112695469	0.843180299	0.756584395	0.086595903	4	770
IRX6	chr16	55356172	55358171	0.439715437	0.382383022	0.057332415	4	771
MIR516B1	chr19	54238599	54240598	0.525668022	0.604845877	-0.079177855	4	772
NA	chr6	31407944	31409943	0.340236141	0.282942001	0.05729414	14	773
KLHL14	chr18	30352526	30354525	0.740830882	0.646694494	0.094136389	10	774
OR6K6	chr1	158723010	158725009	0.290003181	0.464919232	-0.174916051	4	775
NA	chr7	130794436	130796435	0.329766384	0.272474509	0.057291875	10	776
CYP24A1	chr20	52790013	52792012	0.415116012	0.358029457	0.057086555	9	777
NA	chr11	121297626	121299625	0.643682584	0.586598868	0.057083716	5	778
CD27-AS1	chr12	6560234	6562233	0.833802529	0.735114814	0.098687715	10	779
PRRX1	chr1	170630369	170632368	0.918464679	0.806022151	0.112442528	8	780
CHPT1	chr12	102089225	102091224	0.307812588	0.250811796	0.057000792	4	781
NA	chr12	132145641	132147640	0.848152943	0.744339078	0.103813865	2	782
NA	chr17	1991475	1993474	0.873984301	0.766690535	0.107293765	1	783
BAALC	chr8	104151438	104153437	0.614802471	0.535285937	0.079516534	6	784
COL24A1	chr1	86622127	86624126	0.280860128	0.223935361	0.056924767	7	785
NA	chr4	162298605	162300604	0.273332184	0.365140418	-0.091808234	1	786
PHBP1	chr6	150362182	150364181	0.50016056	0.570558801	-0.070398241	1	787
KANK3	chr19	8407647	8409646	0.627384879	0.554295622	0.073089257	12	788
ABCA5	chr17	67322886	67324885	0.484148288	0.407632989	0.0765153	8	789
PRSS22	chr16	2907672	2909671	0.738778467	0.648075245	0.090703222	11	790
C19orf35	chr19	2281682	2283681	0.768849617	0.683459234	0.085390383	9	791
MEIS1-AS2	chr2	66666945	66668944	0.857129498	0.738216616	0.118912882	11	792
ZFH3	chr16	73093098	73095097	0.411500412	0.277632888	0.133867524	2	793
NA	chr16	73092869	73094868	0.411500412	0.277632888	0.133867524	2	794
ZNF75A	chr16	3353906	3355905	0.759327096	0.670980354	0.088346743	6	795
MPP2	chr17	41986569	41988568	0.63296893	0.550253415	0.082715515	1	796
IL10RB-AS1	chr21	34638066	34640065	0.390395485	0.333190235	0.05720525	11	797
IL10RB	chr21	34637163	34639162	0.390395485	0.333190235	0.05720525	11	798
FLG	chr1	152297180	152299179	0.595176912	0.683108323	-0.087931411	4	799
BIN1	chr2	127864432	127866431	0.344240884	0.271898373	0.072342511	10	800
EPPIN-WFDC6	chr20	44175566	44177565	0.518393411	0.652768249	-0.134374838	5	801
EPPIN	chr20	44175892	44177891	0.518393411	0.652768249	-0.134374838	5	802
HLA-AS1	chr1	221052983	221054982	0.522319356	0.449045659	0.073273697	11	803
NA	chr4	90756059	90758058	0.580006217	0.482387462	0.097618755	9	804
NA	chr17	37235818	37237817	0.423732825	0.510554634	-0.086821808	1	805
NA	chr9	137417528	137419527	0.297481656	0.422880713	-0.125399057	1	806
GABRA5	chr15	27110010	27112009	0.843310284	0.747816054	0.09549423	20	807
NA	chr12	291066	293065	0.402495498	0.458915858	-0.05642036	1	808
NA	chr5	43017031	43019030	0.293204695	0.236876762	0.056327933	8	809
NA	chr11	118285192	118287191	0.892821896	0.784273762	0.108548134	1	810
GJA1	chr6	121755338	121757337	0.620167037	0.705760464	-0.085593427	2	811
NA	chr15	29032845	29034844	0.67595179	0.597042235	0.078909555	7	812
ACSS1	chr20	25039117	25041116	0.747666978	0.669892131	0.077774847	10	813

MIR10A	chr17	46659122	46661121	0.75984787	0.672129871	0.087717999	6	814
SNTG2	chr2	945054	947053	0.396130098	0.333066595	0.063063503	7	815
BCRP8	chr22	23521966	23523965	0.37102087	0.314767821	0.05625305	11	816
CTNNA3	chr10	69455428	69457427	0.720198288	0.606769024	0.113429264	4	817
GOLM1	chr9	88714589	88716588	0.888664833	0.783582851	0.105081981	3	818
OR10S1	chr11	123847989	123849988	0.373039724	0.55883977	-0.185800046	2	819
NA	chr11	58825633	58827632	0.539486436	0.477128383	0.062358053	6	820
ZNF843	chr16	31453847	31455846	0.220234804	0.164111266	0.056123537	6	821
PRR5	chr22	45063093	45065092	0.374086272	0.303497811	0.070588461	6	822
NA	chrX	95592412	95594411	0.13211549	0.271813504	-0.139698014	2	823
NA	chr16	1763710	1765709	0.866550947	0.769428409	0.097122538	3	824
NA	chr3	108895713	108897712	0.75383697	0.659154002	0.094682968	3	825
LINC00488	chr3	108895512	108897511	0.75383697	0.659154002	0.094682968	3	826
NA	chr7	132854773	132856772	0.825445199	0.725679204	0.099765995	1	827
ZIC4	chr3	147124148	147126147	0.861122138	0.764917762	0.096204376	20	828
LINC00410	chr13	91578352	91580351	0.287920057	0.450037118	-0.162117061	2	829
BCAS4	chr20	49409931	49411930	0.342368763	0.286497749	0.055871014	10	830
HPSE2	chr10	100995120	100997119	0.671381775	0.580923235	0.09045854	12	831
NA	chr6	28600872	28602871	0.656784815	0.590813926	0.065970889	28	832
MIR149	chr2	241393918	241395917	0.833780131	0.734625408	0.099154722	8	833
OR6N2	chr1	158746926	158748925	0.307714251	0.499015759	-0.191301508	2	834
RUVBL1-AS1	chr3	127793153	127795152	0.743932588	0.653475896	0.090456692	2	835
TBC1D10C	chr11	67169886	67171885	0.854193632	0.754077711	0.100115921	6	836
T	chr6	166581689	166583688	0.840457297	0.737204819	0.103252478	12	837
H2AFJ	chr12	14925770	14927769	0.851511808	0.754661379	0.096850429	14	838
MAP1LC3B2	chr12	116995686	116997685	0.895618604	0.788852499	0.106766105	11	839
NA	chr5	72745823	72747822	0.676876382	0.605563341	0.071313041	8	840
FSD1L	chr9	108208577	108210576	0.690664877	0.635164499	0.055500378	3	841
LINC00577	chr6	105387903	105389902	0.730087521	0.65562172	0.074465801	9	842
NA	chr8	6691576	6693575	0.702336269	0.627015622	0.075320647	17	843
ARL5C	chr17	37323238	37325237	0.838348778	0.746497531	0.091851246	4	844
NA	chr16	34428650	34430649	0.51299558	0.617540797	-0.104545218	5	845
NA	chr5	22141078	22143077	0.642614314	0.523420568	0.119193747	2	846
PMCHL1	chr5	22140961	22142960	0.642614314	0.523420568	0.119193747	2	847
NA	chr2	105373678	105375677	0.749367844	0.644709747	0.104658097	1	848
NA	chr12	124454392	124456391	0.562613045	0.49321588	0.069397165	1	849
NA	chr19	7741887	7743886	0.918572509	0.818928584	0.099643925	2	850
FAM219B	chr15	75198963	75200962	0.611214382	0.535532637	0.075681745	7	851
NA	chr1	563891	565890	0.394288225	0.339051696	0.055236529	1	852
MTND2P28	chr1	563520	565519	0.394288225	0.339051696	0.055236529	1	853
KRTAP13-3	chr21	31797787	31799786	0.263541201	0.394001339	-0.130460139	4	854
NOC3L	chr10	96122217	96124216	0.202895267	0.147679045	0.055216222	5	855
NA	chr16	24505999	24507998	0.646776408	0.734908749	-0.08813234	1	856
PCP4L1	chr1	161227017	161229016	0.721353229	0.646006711	0.075346519	7	857
NA	chr5	8838344	8840343	0.360004804	0.484894469	-0.124889664	5	858
TEX40	chr11	64066363	64068362	0.849464002	0.748447449	0.101016553	13	859
NA	chrX	72222196	72224195	0.944972756	0.635646477	0.309326278	1	860
PABPC1L2B	chrX	72221852	72223851	0.944972756	0.635646477	0.309326278	1	861
SSR4	chrX	153057471	153059470	0.55291121	0.487094396	0.065816814	2	862
FAM169A	chr5	74162277	74164276	0.520746125	0.465896528	0.054849597	10	863
HLA-DPB1	chr6	33042203	33044202	0.765669093	0.690200774	0.075468319	12	864
MID1IP1	chrX	38659185	38661184	0.743203698	0.659286445	0.083917253	9	865
NA	chr7	99724263	99726262	0.371216648	0.316432411	0.054784237	7	866
WNT1	chr12	49370898	49372897	0.72414299	0.642673282	0.081469708	13	867
NA	chr12	127100601	127102600	0.627063862	0.737254182	-0.110190319	1	868
NA	chr17	14205671	14207670	0.644597023	0.561366321	0.083230703	13	869
RNU6-40P	chr1	31970026	31972025	0.862349902	0.739328615	0.123021287	1	870
NA	chr1	31970341	31972340	0.862349902	0.739328615	0.123021287	1	871
NA	chr11	68769017	68771016	0.849343859	0.74819055	0.101153309	1	872
CAMK2N2	chr3	183978752	183980751	0.240812913	0.186076034	0.054736879	8	873
NA	chr16	50698622	50700621	0.647459154	0.541478884	0.10598027	3	874
NA	chr16	2030133	2032132	0.811447384	0.715875748	0.095571637	7	875
CLK3	chr15	74889341	74891340	0.884302343	0.779147814	0.10515453	2	876
ZNF213	chr16	3178278	3180277	0.252358544	0.177850583	0.074507961	2	877
SPATA6L	chr9	4666175	4668174	0.212233401	0.12096577	0.091267631	4	878
HR	chr8	21990398	21992397	0.87769215	0.773311852	0.104380299	1	879
ECHDC2	chr1	53392385	53394384	0.628797086	0.560204739	0.068592347	13	880
CD74	chr5	149791993	149793992	0.880745276	0.778847832	0.101897444	10	881

MARCH10	chr17	60885206	60887205	0.779369837	0.706240027	0.073129809	9	882
NA	chr17	60884361	60886360	0.779369837	0.706240027	0.073129809	9	883
MAATS1	chr3	119420369	119422368	0.928883541	0.820178376	0.108705165	8	884
KIAA1324	chr1	109654801	109656800	0.488446873	0.429038621	0.059408252	11	885
GALNT16	chr14	69724494	69726493	0.584062203	0.52961171	0.054450493	9	886
HIST1H2AM	chr6	27860464	27862463	0.613108397	0.519139915	0.093968482	17	887
FAM131B	chr7	143059364	143061363	0.541109552	0.486684732	0.05442482	6	888
DLX6-AS1	chr7	96642878	96644877	0.857346838	0.778334143	0.079012695	6	889
NA	chr6	74405355	74407354	0.725713269	0.642446968	0.083266302	8	890
NA	chr4	106473013	106475012	0.803111941	0.888232475	-0.085120534	3	891
MSC	chr8	72756204	72758203	0.678446436	0.605347522	0.073098914	14	892
NA	chr16	47920542	47922541	0.681490916	0.587305729	0.094185187	2	893
SPTBN2	chr11	66496198	66498197	0.882207193	0.777683649	0.104523543	1	894
ZNF320	chr19	53400447	53402446	0.73899082	0.647201698	0.091789122	5	895
NPS	chr10	129346113	129348112	0.16426181	0.248435588	-0.084173777	3	896
NA	chr16	67464868	67466867	0.339983925	0.282566527	0.057417398	5	897
PDE9A	chr21	44072246	44074245	0.441733108	0.381779375	0.059953733	6	898
LIN28B	chr6	105403423	105405422	0.318724158	0.257869958	0.060854199	7	899
C3orf55	chr3	157259535	157261534	0.900564593	0.79629034	0.104274253	12	900
C6orf99	chr6	159289454	159291453	0.171671273	0.117518486	0.054152786	8	901
SNX25P1	chr1	211588867	211590866	0.667177512	0.60756778	0.059609732	4	902
SNORD115-48	chr15	25513430	25515429	0.347424639	0.424256082	-0.076831443	4	903
OR1L6	chr9	125510519	125512518	0.496195678	0.674075164	-0.177879486	1	904
CACNG6	chr19	54494042	54496041	0.74294275	0.680620878	0.062321872	11	905
POLR2F	chr22	38347114	38349113	0.85822623	0.756918593	0.101307637	2	906
FERMT3	chr11	63972650	63974649	0.847172895	0.748892832	0.098280062	9	907
EPHA8	chr1	22888557	22890556	0.499331851	0.436793829	0.062538022	6	908
NA	chr6	47444809	47446808	0.253306053	0.199311196	0.053994857	8	909
NA	chr15	38275467	38277466	0.581003187	0.659986466	-0.078983279	2	910
NA	chr9	34665527	34667526	0.92667833	0.818450967	0.108227363	2	911
NA	chr9	34665610	34667609	0.92667833	0.818450967	0.108227363	2	912
NA	chr1	153698330	153700329	0.184273756	0.126340469	0.057933287	3	913
MIR365A	chr16	14401642	14403641	0.863328015	0.762436072	0.100891942	8	914
NA	chr16	71660220	71662219	0.406342058	0.300378149	0.105963909	3	915
ZNF439	chr19	11958041	11960040	0.722001254	0.601140468	0.120860786	3	916
ATP5G2	chr12	54070693	54072692	0.474094705	0.420184745	0.05390996	8	917
ZNF729	chr19	22467710	22469709	0.425299633	0.343970321	0.081329312	3	918
NA	chr5	158736441	158738440	0.709533138	0.622274306	0.087258832	2	919
NA	chr11	13030207	13032206	0.61963644	0.482924608	0.136711832	11	920
TMC8	chr17	76125351	76127350	0.785849603	0.695976329	0.089873274	6	921
NA	chr4	1105927	1107926	0.824542793	0.745086201	0.079456593	7	922
C17orf104	chr17	42732262	42734261	0.633226897	0.563043635	0.070183262	11	923
YES1	chr18	812048	814047	0.166960229	0.113139741	0.053820488	5	924
RAB11FIP4	chr17	29717142	29719141	0.696976916	0.621664468	0.075312448	6	925
NA	chr8	144800562	144802561	0.799924628	0.72069988	0.079224748	3	926
NA	chr2	89065335	89067334	0.856727079	0.759611106	0.097115973	5	927
NA	chr11	285805	287804	0.530623229	0.467889371	0.062733858	1	928
WIF1	chr12	65514847	65516846	0.733786684	0.662444449	0.071342235	8	929
DDHD1	chr14	53619501	53621500	0.293441653	0.239797869	0.053643785	8	930
NA	chr14	53619334	53621333	0.293441653	0.239797869	0.053643785	8	931
WIPF1	chr2	175547145	175549144	0.470902337	0.394920559	0.075981778	5	932
ZNF428	chr19	44123527	44125526	0.491080588	0.437437442	0.053643146	11	933
CCL8	chr17	32644555	32646554	0.51888308	0.576649742	-0.057766662	5	934
SNORD64	chr15	25228511	25230510	0.323688388	0.496432468	-0.172744079	6	935
ARMC4	chr10	28287478	28289477	0.459956994	0.406342936	0.053614058	14	936
NEK6	chr9	127018385	127020384	0.619262783	0.563567623	0.05569516	4	937
SMIM11P1	chr6	86445140	86447139	0.617238889	0.700862813	-0.083623924	2	938
NA	chr1	59484559	59486558	0.889923644	0.785733963	0.104189681	1	939
SNORD114-13	chr14	101434716	101436715	0.542000473	0.472040152	0.069960321	4	940
OR1Q1	chr9	125375448	125377447	0.553836733	0.639890806	-0.086054073	2	941
TBC1D15	chr12	72231987	72233986	0.345711958	0.288004978	0.057706981	13	942
IRX1	chr5	3594668	3596667	0.642738037	0.55411824	0.088619798	6	943
NA	chr17	46808953	46810952	0.894499736	0.79184152	0.102658216	6	944
RAET1L	chr6	150346169	150348168	0.893813886	0.791752887	0.102060999	11	945
CEP170B	chr14	105330117	105332116	0.688409236	0.607592108	0.080817129	4	946
CCDC63	chr12	111283073	111285072	0.618289096	0.552576428	0.065712668	11	947
LINC00862	chr1	200342983	200344982	0.780971552	0.884322506	-0.103350954	1	948
LRRFIP1	chr2	238534719	238536718	0.560384631	0.498689443	0.061695188	10	949

CAMK1D	chr10	12389981	12391980	0.475852643	0.398057187	0.077795457	7	950
RTN4	chr2	55339258	55341257	0.942183302	0.8321815	0.110001803	1	951
NA	chr11	69830482	69832481	0.724283196	0.642846888	0.081436307	6	952
CPNE2	chr16	57124949	57126948	0.503159505	0.426224765	0.07693474	8	953
PLCD3	chr17	43210222	43212221	0.601516748	0.520872303	0.080644445	1	954
NTF4	chr19	49567834	49569833	0.597539152	0.513869381	0.083669771	5	955
NA	chr2	45165839	45167838	0.736619777	0.649689726	0.086930051	5	956
NA	chr6	134212575	134214574	0.708718087	0.636108359	0.072609728	7	957
LINC00320	chr21	22175035	22177034	0.272829534	0.41258166	-0.139752126	1	958
NA	chr8	2479954	2481953	0.624162208	0.540824681	0.083337528	4	959
SLFN13	chr17	33775357	33777356	0.81182275	0.729238771	0.082583979	15	960
ZNF502	chr3	44752635	44754634	0.557637489	0.504478479	0.05315901	14	961
NA	chr8	103539468	103541467	0.403260316	0.350155004	0.053105312	3	962
HMX2	chr10	124906138	124908137	0.725804967	0.642748703	0.083056264	14	963
RASIP1	chr19	49243479	49245478	0.794946928	0.741892916	0.053054012	6	964
DSEL	chr18	65183718	65185717	0.275522596	0.17115188	0.104370716	4	965
C17orf72	chr17	62074211	62076210	0.549236638	0.491637314	0.057599324	8	966
SERPINE1	chr7	100768870	100770869	0.602923065	0.503737096	0.099185969	10	967
NA	chr1	8000932	8002931	0.80615682	0.737725702	0.068431118	9	968
ARHGEF4	chr2	131592989	131594988	0.756484648	0.664993982	0.091490666	3	969
NA	chr12	48274932	48276931	0.913785486	0.807652293	0.106133192	1	970
LNX1-AS2	chr4	54457623	54459622	0.70048611	0.532800189	0.167685921	7	971
NA	chr10	28287217	28289216	0.40442229	0.351436032	0.052986258	14	972
RSPH10B	chr7	6009815	6011814	0.907606059	0.802257022	0.105349036	1	973
CNOT6LP1	chr15	56298875	56300874	0.29673116	0.452935624	-0.156204464	1	974
PLAC1L	chr11	59806248	59808247	0.317294654	0.453900207	-0.136605553	6	975
TMEM215	chr9	32781997	32783996	0.398334059	0.331619344	0.066714715	4	976
NA	chr2	8715132	8717131	0.860961547	0.743782601	0.117178946	2	977
AKAP12	chr6	151559634	151561633	0.72744405	0.64036022	0.08708383	10	978
C1orf61	chr1	156399994	156401993	0.769362607	0.683281012	0.086081595	4	979
NA	chr4	23561046	23563045	0.247556148	0.401501214	-0.153945066	1	980
NA	chr5	175625799	175627798	0.58999386	0.518923342	0.071070518	3	981
PJA1	chrX	68385137	68387136	0.596228687	0.530566987	0.0656617	5	982
NA	chr8	38409699	38411698	0.739988998	0.641075121	0.098913877	3	983
FAIM2	chr12	50297501	50299500	0.832648557	0.738737889	0.093910668	7	984
NA	chr5	54528262	54530261	0.277927142	0.219796322	0.058130821	13	985
ACTR3C	chr7	150020315	150022314	0.614854319	0.549042954	0.065811365	11	986
NA	chr1	24882016	24884015	0.778684536	0.69085542	0.087829116	7	987
NCMAP	chr1	24881102	24883101	0.778684536	0.69085542	0.087829116	7	988
NA	chr17	79372040	79374039	0.589320135	0.522950752	0.066369383	10	989
CDH11	chr16	65159516	65161515	0.424064979	0.563727986	-0.139663007	1	990
FRZB	chr2	183731391	183733390	0.694139106	0.607272769	0.086866337	10	991
LAMP5	chr20	9493505	9495504	0.36429467	0.308564915	0.055729756	8	992
NA	chr16	30195779	30197778	0.773101454	0.680365907	0.092735547	2	993
ACSL1	chr4	185747473	185749472	0.345300445	0.247620219	0.097680226	4	994
NA	chr1	564954	566953	0.383198671	0.330609204	0.052589468	4	995
NA	chrX	123094692	123096691	0.65494344	0.583906871	0.071036569	3	996
FKBP5	chr6	35695861	35697860	0.584929191	0.510385464	0.074543728	6	997
MS4A3	chr11	59822560	59824559	0.523709893	0.614522951	-0.090813058	9	998
NA	chr22	50751560	50753559	0.802732078	0.710013309	0.092718769	1	999
NA	chr1	848051	850050	0.856913952	0.762028879	0.094885073	5	1000

**Supplementary Table S5. List of the 1,000 top-ranked, differentially methylated gene bodies after TET triple knockdown.**

This table is related to Fig. 2E. "NA" : No gene symbol provided.

gene_symbol	chromosome	start	end	beta.GFP_siRNA	beta.GFP_scramble	difference	num.sites	rank
NA	chr10	124516210	124558696	0.191074666	0.481504885	-0.29043022	1	1
NA	chr3	158519046	158519724	0.595314117	0.378443316	0.216870802	7	2
NA	chr16	34427706	34428105	0.149149323	0.417859054	-0.268709732	1	3
RARRES2P5	chr16	34455954	34456419	0.371296702	0.630335355	-0.259038653	1	4
MIR3678	chr17	73402150	73402243	0.422579473	0.15118847	0.271391002	1	5
OXCT1-AS1	chr5	41870132	41871059	0.475758851	0.294603602	0.181155249	9	6
NA	chr3	129100141	129112992	0.459473637	0.762034415	-0.302560778	1	7
NA	chr7	10516208	10516505	0.323535343	0.535049195	-0.211513852	1	8
MIR4710	chr14	105144031	105144086	0.466140878	0.285173084	0.180967794	1	9
NSUN5P2	chr7	72418120	72425329	0.7388574	0.554709766	0.184147634	5	10
KRTAP5-5	chr11	1651033	1652160	0.272022226	0.440597404	-0.168575177	1	11
RARRES2P9	chr16	34578462	34578930	0.376919186	0.600236185	-0.223316999	1	12
OR51B2	chr11	5344541	5345582	0.44200018	0.686598145	-0.244597965	2	13
NA	chr8	138864570	138941287	0.100284062	0.255508706	-0.155224644	1	14
NA	chr16	34597783	34624955	0.275582595	0.505049583	-0.229466988	1	15
NA	chr5	6933783	7190925	0.28054295	0.454223382	-0.173680433	1	16
NA	chr4	149948597	149983674	0.930558926	0.611119507	0.319439418	1	17
NA	chr7	1200010	1204903	0.303379542	0.135936351	0.16744319	4	18
NA	chr8	66754987	66755566	0.699169472	0.467344599	0.231824874	1	19
SNORD114-12	chr14	101435285	101435359	0.534356252	0.359871999	0.174484253	1	20
OR4L1	chr14	20528204	20529142	0.403942638	0.594660705	-0.190718067	1	21
SNORD115-48	chr15	25514930	25515005	0.433408437	0.658599551	-0.225191113	1	22
NAP1L3	chrX	92925929	92928567	0.557937014	0.382656951	0.175280063	2	23
NA	chr9	107753077	107754062	0.297440562	0.075943347	0.221497215	1	24
SPANXA2-OT1	chrX	140590843	140738057	0.575277151	0.393644772	0.181632379	1	25
NA	chr17	37182968	37183363	0.396411049	0.270020216	0.126390833	1	26
NA	chr14	89816629	89831043	0.74059024	0.478952838	0.261637402	1	27
OR5H14	chr3	97868170	97869249	0.251469318	0.412683863	-0.161214546	1	28
NA	chr9	86322509	86328293	0.462660017	0.293654856	0.169005161	4	29
NA	chr3	55394471	55395857	0.389922839	0.712993671	-0.323070832	1	30
NA	chr10	73638114	73638865	0.423942645	0.296772894	0.127169751	1	31
SNORD38A	chr1	45243515	45243584	0.270286469	0.389080437	-0.118793968	1	32
NA	chr2	945320	945960	0.408184625	0.280987808	0.127196817	2	33
HNRNPDP2	chr6	65341098	65341575	0.826573871	0.584769795	0.241804076	1	34
SLC25A1P4	chr16	34407687	34408464	0.522522481	0.659570616	-0.137048135	5	35
NA	chr1	191844625	191980390	0.335419958	0.470573753	-0.135153794	1	36
NA	chr16	34442308	34518517	0.518204692	0.686243978	-0.168039285	9	37
NA	chr5	163875428	163894408	0.284292505	0.457933817	-0.173641312	2	38
NA	chr5	7363092	7364644	0.523797818	0.720641825	-0.196844006	1	39
NA	chr6	114844615	114857039	0.804921892	0.559662939	0.245258953	1	40
NA	chr7	30589833	30591185	0.618579549	0.451710697	0.166868851	1	41
SMEK3P	chrX	27478921	27481413	0.275317216	0.530657816	-0.2553406	1	42
NA	chr14	95651454	95652191	0.75745549	0.555590954	0.201864536	1	43
MIR374A	chrX	73507121	73507192	0.632229333	0.86030644	-0.228077107	1	44
ZNF626	chr19	20802867	20844402	0.434414043	0.305665353	0.12874869	1	45
OR5AP2	chr11	56408942	56409947	0.410615066	0.618832203	-0.208217137	1	46
NA	chr2	112248850	112268567	0.244189238	0.135228647	0.108960591	1	47
NA	chr2	112249520	112252388	0.244189238	0.135228647	0.108960591	1	48
OR4X2	chr11	48266608	48267622	0.312089001	0.596018714	-0.283929713	1	49
NA	chr17	35969787	35973886	0.743523263	0.615499747	0.128023516	2	50
SNORD114-26	chr14	101453383	101453454	0.615596636	0.455128967	0.160467669	1	51
NA	chr11	96461317	96584822	0.352202665	0.500312631	-0.148109966	2	52
MBD3L2	chr19	7049332	7051746	0.609702782	0.816892638	-0.207189856	1	53
DNM1P50	chr15	30860025	30863292	0.410288468	0.642215188	-0.23192672	1	54
OR4S1	chr11	48327775	48328704	0.654068097	0.488586127	0.16548197	1	55
LINC00664	chr19	21666176	21686040	0.549853627	0.678951077	-0.12909745	3	56
NA	chr15	45492523	45492830	0.343899317	0.135097269	0.208802048	2	57
NA	chr18	29265618	29266786	0.655207064	0.494350524	0.16085654	2	58
NA	chr7	8301863	8302451	0.630040624	0.489847689	0.140192935	8	59
NA	chr3	108895285	108896212	0.794674697	0.602354839	0.192319858	1	60
CD274	chr9	5450503	5470566	0.462231452	0.359470174	0.102761278	3	61
NA	chr18	20837128	20840318	0.623476336	0.471798961	0.151677375	1	62
MIR648	chr22	18463634	18463727	0.52371044	0.399042147	0.124668293	1	63
RN7SL832P	chr2	10830470	10832225	0.469549232	0.368525564	0.101023668	5	64
NA	chr16	8947169	8948204	0.702027539	0.90618148	-0.204153941	1	65
NA	chr3	112521325	112531666	0.796409293	0.617237531	0.179171762	1	66
RHOT1P3	chr13	19411908	19412238	0.555447434	0.716516607	-0.161069173	1	67
CD300E	chr17	72606026	72619897	0.459117303	0.567617718	-0.108500415	3	68
NA	chr19	13907388	13907747	0.736404907	0.573665807	0.1627391	1	69



IFI44	chr1	79115481	79129763	0.692783086	0.540085647	0.152697438	1	70
MIR4724	chr17	29861901	29861989	0.453431012	0.624707014	-0.171276002	1	71
NA	chrX	122867024	122868144	0.473406489	0.368970161	0.104436328	1	72
IRF5	chr7	128577666	128590089	0.595697815	0.5003366	0.095361215	21	73
NA	chr16	34427061	34430032	0.425514584	0.577822034	-0.15230745	4	74
KIAA0125	chr14	106383838	106391825	0.188952991	0.291685577	-0.102732585	1	75
NA	chr9	128003942	128019297	0.235338858	0.335316764	-0.099977906	2	76
NA	chr12	116248164	116323942	0.638188282	0.811799679	-0.173611397	1	77
ISL1	chr5	50678921	50690564	0.514032258	0.394460174	0.119572084	27	78
ARL2	chr11	64781585	64789656	0.588421737	0.4948979	0.093523837	6	79
IGFL1	chr19	46733009	46734500	0.611509741	0.766367049	-0.154857308	3	80
RNASE6	chr14	21249210	21250626	0.734130018	0.601184613	0.132945405	3	81
NA	chr2	171568961	171571077	0.789370461	0.665108708	0.124261753	12	82
NA	chr12	126468248	126470780	0.083864882	0.224793119	-0.140928237	1	83
OR2I1P	chr6	29520996	29521943	0.646591995	0.51502437	0.131567626	35	84
NA	chr11	126873298	126874130	0.450310553	0.349348084	0.100962469	5	85
NA	chr16	1763528	1764209	0.800847529	0.636744135	0.164103394	1	86
NA	chr2	163018280	163029426	0.382940843	0.224267271	0.158673572	1	87
NA	chr2	65257861	65280151	0.824126144	0.656194774	0.16793137	1	88
KRT18P13	chr9	100461204	100463016	0.685974907	0.859897409	-0.173922502	1	89
NA	chr6	38681827	38682993	0.847911734	0.678742236	0.169169499	1	90
HIST1H2AL	chr6	27833034	27833606	0.60637817	0.464564059	0.141814112	7	91
C17orf50	chr17	34087916	34092098	0.476622351	0.387301543	0.089320808	4	92
NA	chr7	134832797	134832916	0.620359217	0.497049666	0.123309551	2	93
KRTAP9-2	chr17	39382900	39383904	0.174010562	0.304226198	-0.130215636	1	94
HIST1H3D	chr6	26197068	26199521	0.550301564	0.447648196	0.102653367	8	95
SPANXN5	chrX	52825184	52827141	0.438957464	0.546618754	-0.10766129	4	96
NA	chr19	12203078	12225491	0.687145424	0.55028235	0.136863074	5	97
DRAP1	chr11	65686728	65689032	0.550870664	0.462039512	0.088831153	4	98
NA	chr6	19690056	19753344	0.815023144	0.674405142	0.140618002	9	99
NA	chr16	81103459	81110203	0.663734084	0.769907138	-0.106173054	2	100
NA	chr19	8646044	8647599	0.656900832	0.812312284	-0.155411453	1	101
ASCL4	chr12	108168162	108170421	0.725003662	0.602387798	0.122615864	8	102
NA	chr1	156657489	156661789	0.525599535	0.419787144	0.105812391	1	103
NA	chr16	86229787	86233326	0.785526582	0.63834102	0.147185563	8	104
HIST1H2AE	chr6	26217165	26217711	0.642732764	0.523954527	0.118778237	5	105
UBE2C	chr20	44441215	44445596	0.568000195	0.480324449	0.087675746	12	106
NA	chr15	69884468	69988089	0.519735072	0.392344311	0.127390761	1	107
NA	chr7	36134882	36140263	0.89373815	0.73267614	0.161062009	1	108
MIR125B1	chr11	121970465	121970552	0.318284026	0.406567608	-0.088283582	1	109
NA	chr1	83439565	83451891	0.28859001	0.477722679	-0.189132668	1	110
NA	chr15	30114834	30116284	0.268773284	0.159572563	0.109200721	5	111
NA	chr1	1822910	1824097	0.2906583	0.207809952	0.082848348	4	112
NA	chr1	30181698	30182394	0.900668308	0.74032203	0.160346278	1	113
NA	chr14	89017941	89018837	0.737776079	0.606342852	0.131433227	1	114
NA	chr22	20194100	20194706	0.650087555	0.534406707	0.115680848	1	115
CCDC54	chr3	107096188	107097481	0.592851016	0.487300401	0.105550614	1	116
EHHADH-AS1	chr3	184880659	184909743	0.583076704	0.451189028	0.131887676	1	117
NA	chrX	70882845	70885603	0.312511511	0.228845232	0.083666279	1	118
NA	chr17	15179879	15182794	0.947389918	0.780585533	0.166804385	1	119
OR51I2	chr11	5474638	5475707	0.561200172	0.661738183	-0.100538011	2	120
NA	chr7	57832290	57832905	0.424315658	0.562627347	-0.138311689	1	121
NA	chr7	57879525	57880333	0.277374191	0.483887145	-0.206512954	1	122
NA	chr7	57879738	57880116	0.277374191	0.483887145	-0.206512954	1	123
ANKRD20A14P	chr1	142803532	142827235	0.612554454	0.742738929	-0.130184475	1	124
SLC2A3	chr12	8071826	8088871	0.472470291	0.345519383	0.126950908	3	125
GOS2	chr1	209848765	209849733	0.638637902	0.532759705	0.105878197	6	126
NA	chr16	32857285	32857501	0.65643401	0.794946966	-0.138512956	1	127
IL10RB-AS1	chr21	34636178	34638565	0.749480497	0.644478395	0.105002102	5	128
BARHL2	chr1	91177096	91182794	0.551900856	0.467587233	0.084313623	10	129
NA	chr8	144683416	144685394	0.875467056	0.724181157	0.151285899	1	130
NA	chr15	27667527	27673484	0.645104319	0.769697647	-0.124593328	2	131
ZNF702P	chr19	53471504	53541151	0.607736696	0.520156526	0.08758017	17	132
NA	chr7	69060944	69062434	0.531129045	0.354385824	0.176743221	1	133
NA	chr5	50265051	50266001	0.776503747	0.642888088	0.133615659	5	134
NXPE4	chr11	114441313	114466484	0.48797618	0.593840584	-0.105864404	2	135
LINC00242	chr6	170188886	170198921	0.581942761	0.502166796	0.079775965	16	136
ABCA10	chr17	67143355	67240987	0.705940899	0.521642589	0.18429831	2	137
GPR112	chrX	135383122	135519215	0.456647354	0.540829135	-0.084181781	2	138
NA	chr16	29476288	29479154	0.72647444	0.602242695	0.124231745	1	139
NA	chr5	9001886	9046052	0.501281753	0.656804468	-0.155522714	2	140
MIR34B	chr11	111383663	111383746	0.606859772	0.50309214	0.103767632	1	141

NA	chr3	44039573	44040641	0.796823082	0.661101021	0.135722062	6	142
NA	chr1	53832340	53833917	0.785300256	0.651977057	0.133323199	1	143
OR6Q1	chr11	57798402	57799403	0.102419209	0.212024585	-0.109605376	1	144
MIR4740	chr17	79374516	79374578	0.903307374	0.75067391	0.152633464	1	145
CLCF1	chr11	67131639	67141648	0.519493831	0.441062755	0.078431075	13	146
NA	chr3	151835962	151869513	0.527324639	0.698678126	-0.171353487	1	147
NA	chr17	48290294	48292718	0.793477261	0.659868701	0.13360856	1	148
NA	chr3	2004065	2029154	0.339957326	0.57603042	-0.236073094	1	149
SOX1	chr13	112721913	112726020	0.73604157	0.638538816	0.097502755	16	150
NA	chr20	30135307	30135852	0.777027096	0.646810217	0.130216879	1	151
ZNF718	chr4	124386	157779	0.41810905	0.525035982	-0.106926932	5	152
SLC31A2	chr9	115913222	115926417	0.663459203	0.52639935	0.137059853	5	153
NA	chr16	34375269	34375779	0.821615973	0.685294081	0.136321892	1	154
CD70	chr19	6583194	6604114	0.698141548	0.599392721	0.098748827	11	155
NA	chr14	52577840	52596343	0.845560661	0.688317148	0.157243513	1	156
MARCKSL1P2	chr6	138723722	138724697	0.903156347	0.754030442	0.149125905	1	157
OR52A1	chr11	5172239	5207612	0.473205979	0.572613572	-0.099407593	3	158
HIST1H2AD	chr6	26199079	26199471	0.632398494	0.526381703	0.106016791	2	159
NA	chr5	54529762	54591029	0.779653075	0.672092251	0.107560824	7	160
NA	chrX	36975986	36976212	0.567865619	0.466188853	0.101676767	3	161
HIST1H2BF	chr6	26199748	26200942	0.534490645	0.452054226	0.082436419	5	162
NA	chr17	1923246	1926958	0.825959787	0.690631058	0.135328729	2	163
NA	chr7	38350984	38351409	0.681692233	0.556240188	0.125452045	3	164
C6orf164	chr6	88106840	88109467	0.713877763	0.597036957	0.116840807	1	165
NA	chr1	16841140	16842249	0.502400567	0.419996393	0.082404174	1	166
RARRES2P8	chr16	34777650	34778016	0.582138403	0.672387558	-0.090249155	3	167
ZNF253	chr19	19976695	20005483	0.599794678	0.496694673	0.103100006	5	168
NA	chr18	61602042	61609601	0.551950188	0.466790869	0.085159319	7	169
NA	chr17	33164890	33186065	0.715265598	0.599715819	0.115549779	1	170
NA	chr4	152328703	152329987	0.898674337	0.737623791	0.161050546	2	171
PLK5	chr19	1524073	1535455	0.810420268	0.735436397	0.074983871	9	172
HIST1H1PS1	chr6	26195794	26195999	0.933383801	0.78523144	0.148152361	3	173
NA	chr7	22689579	22705152	0.771495866	0.856338854	-0.084842988	4	174
MIR1258	chr2	180725563	180725635	0.127532753	0.052663063	0.07486969	1	175
OMD	chr9	95176527	95186743	0.606209854	0.721301208	-0.115091354	1	176
VAV3-AS1	chr1	108507065	108537229	0.481981951	0.401228536	0.080753415	10	177
NA	chr5	153281019	153282783	0.674390221	0.80159152	-0.127201299	1	178
NA	chr12	49483991	49487095	0.716065266	0.622269634	0.093795632	9	179
LIPG	chr18	47087069	47119272	0.472283811	0.397821212	0.074462599	17	180
NA	chr11	89456650	89460421	0.571338297	0.679106241	-0.107767945	1	181
NA	chr16	57125125	57126215	0.654726797	0.551265085	0.103461711	6	182
NA	chr19	23258003	23283163	0.402832295	0.325853196	0.076979099	4	183
NA	chr10	37598113	37635959	0.203404285	0.129126154	0.074278131	1	184
OR8U1	chr11	56143100	56144029	0.308026452	0.464507587	-0.156481134	1	185
MIR30A	chr6	72113254	72113324	0.275784985	0.473697456	-0.19791247	1	186
NA	chr11	116644105	116644921	0.076724782	0.166705585	-0.089980803	1	187
NA	chr1	110438595	110440483	0.690114327	0.581166858	0.108947469	1	188
NA	chr19	58907457	58908407	0.808297846	0.681308517	0.126989329	1	189
NA	chr15	91382954	91384608	0.86937411	0.733088702	0.136285408	1	190
NA	chr11	89677203	89682570	0.469111096	0.584635284	-0.115524188	2	191
KRTAP10-12	chr21	46117087	46117959	0.547729028	0.649709688	-0.10198066	1	192
PATZ1	chr22	31721790	31742218	0.66054142	0.586930578	0.073610842	9	193
GAD2	chr10	26505236	26593487	0.710545249	0.627789535	0.082755714	15	194
TUBB8P9	chr1	227693883	227695993	0.484069941	0.573834316	-0.089764375	1	195
ARHGAP31-AS1	chr3	119033140	119041607	0.466907648	0.393697071	0.073210577	5	196
NA	chr17	27219487	27220360	0.856243323	0.723152921	0.133090402	1	197
CH25H	chr10	90965694	90967071	0.639566818	0.548721863	0.090844954	5	198
RNF224	chr9	140122018	140124090	0.266392626	0.193398704	0.072993922	2	199
NA	chr17	21793031	21814739	0.758221536	0.846153055	-0.08793152	4	200
NA	chr1	27995979	27996787	0.634029189	0.380711601	0.253317588	1	201
BSX	chr11	122848278	122852428	0.732321133	0.636706064	0.095615069	14	202
NA	chr2	12855541	12856353	0.803388442	0.679051809	0.124336633	1	203
ANKDD1B	chr5	74907284	74967671	0.621660409	0.544466929	0.07719348	10	204
MAGI1-AS1	chr3	65879491	65910972	0.581603825	0.654141098	-0.072537272	2	205
C1orf68	chr1	152691998	152692905	0.532877214	0.637351893	-0.10447468	1	206
RIPPLY2	chr6	84562985	84567234	0.588069722	0.499193343	0.088876379	7	207
NA	chr6	68597538	68599231	0.48864835	0.560866405	-0.072218055	8	208
SLFN13	chr17	33762115	33775856	0.697440649	0.61859576	0.078844889	8	209
CHODL-AS1	chr21	19207333	19257925	0.450628008	0.575317198	-0.124689191	1	210
TGFBR3L	chr19	7981030	7983982	0.640134379	0.568028121	0.072106259	8	211
MIR663B	chr2	133014539	133014653	0.899294699	0.761423895	0.137870803	1	212
NA	chr8	109907258	110075646	0.485362231	0.354098054	0.131264177	2	213

SEPN1	chr1	26126667	26144713	0.683045113	0.611218565	0.071826548	6	214
NA	chr14	53620072	53624246	0.52712925	0.455613082	0.071516168	6	215
PTGR1	chr9	114312002	114362135	0.588839604	0.509616864	0.07922274	4	216
NA	chr2	220362333	220362968	0.817119111	0.643854663	0.173264447	2	217
NA	chr16	9535151	9538842	0.727175204	0.857682779	-0.130507575	1	218
DECR1	chr8	91013633	91064320	0.83809195	0.705997599	0.132094351	6	219
ASCL1	chr12	103351464	103354294	0.677114043	0.580613605	0.096500437	12	220
NA	chr16	760746	761277	0.787743884	0.667856368	0.119887516	1	221
NEURL2	chr20	44517264	44519926	0.675352082	0.58965473	0.085697352	8	222
LINC00677	chr14	103587184	103589344	0.3504436	0.276993782	0.073449818	1	223
NA	chr15	80846950	80855285	0.905439767	0.768598382	0.136841385	1	224
SH3BGR3	chr1	26605667	26608007	0.431348382	0.360196055	0.071152327	9	225
NA	chr17	75523080	75532674	0.729045938	0.657907578	0.07113836	13	226
NA	chr10	120001076	120027222	0.504528422	0.577980593	-0.073452171	6	227
NA	chr3	186528669	186543310	0.685158186	0.568584543	0.116573643	1	228
TRAT1	chr3	108541545	108573852	0.260941823	0.403044926	-0.142103103	1	229
NA	chr20	6194346	6196028	0.819185232	0.610506088	0.208679144	1	230
KRTAP13-3	chr21	31797583	31798286	0.178955271	0.3279866	-0.149031329	2	231
C10orf71-AS1	chr10	50504157	50507063	0.647492953	0.734739241	-0.087246288	7	232
HMX3	chr10	124895478	124897257	0.767920905	0.661571439	0.106349466	11	233
NA	chr14	62536236	62547872	0.844142065	0.704449343	0.139692722	1	234
TRIM74	chr7	72430016	72439997	0.949169724	0.808664335	0.140505389	1	235
NA	chr9	128506033	128508831	0.369895331	0.235401291	0.13449404	2	236
OR13F1	chr9	107266455	107267547	0.34882378	0.595845443	-0.247021663	1	237
NA	chr16	56226526	56228430	0.726584446	0.610674127	0.115910319	5	238
ZDHC20P4	chr13	69559190	69560196	0.782012358	0.684301236	0.097711122	2	239
BNIP3P1	chr14	28733596	28735180	0.614610691	0.499083291	0.115527401	1	240
EGFL6	chrX	13587724	13651694	0.815725694	0.699805666	0.115920028	6	241
SSX6	chrX	47967365	47980073	0.855967859	0.730884876	0.125082982	1	242
MIR4655	chr7	1883816	1883889	0.842110068	0.719087316	0.123022752	1	243
DUSP26	chr8	33448856	33457624	0.677488494	0.595819875	0.081668619	11	244
MAST4-AS1	chr5	66297211	66299781	0.379657843	0.196805441	0.182852402	1	245
NA	chr6	30616443	30616536	0.811090109	0.9475156	-0.13642549	2	246
IL17RB	chr3	53880607	53899827	0.737311722	0.646102745	0.091208978	5	247
IGFL4	chr19	46543006	46580376	0.51050482	0.636572551	-0.126067731	8	248
SPAG4	chr20	34203814	34208971	0.431189438	0.362766398	0.06842304	12	249
LINC00877	chr3	72084451	72291716	0.702786402	0.624414694	0.078371708	15	250
NA	chr16	30215637	30220392	0.672482483	0.570366932	0.102115552	1	251
CTSE	chr1	206317459	206332104	0.806552848	0.69897062	0.107582228	3	252
PABPC1P1	chr4	39975064	39975958	0.675503276	0.577558812	0.097944464	1	253
LINC00152	chr2	87754887	87906324	0.698060979	0.629775072	0.068285907	3	254
NA	chr17	79336072	79348014	0.822914557	0.708611451	0.114303105	3	255
GBP4	chr1	89646831	89664615	0.506528942	0.413354941	0.093174	8	256
ANKRD18EP	chr6	39078097	39080728	0.244070825	0.386553242	-0.142482417	1	257
RASD1	chr17	17397751	17399709	0.656223856	0.588080359	0.068143498	6	258
NA	chr10	119776998	119805321	0.625539427	0.713245695	-0.087706268	3	259
NA	chr14	91288709	91294472	0.250269574	0.33370386	-0.083434286	2	260
NA	chr19	53426635	53427328	0.411060931	0.323436558	0.087624373	1	261
NA	chr4	19748802	19756214	0.485722986	0.622174741	-0.136451755	1	262
OR4C15	chr11	55321783	55322895	0.278943405	0.526750446	-0.247807042	1	263
MIR146A	chr5	159895275	159914433	0.578964304	0.646596061	-0.067631757	4	264
LINC00113	chr21	29094698	29123552	0.317898832	0.46974829	-0.151849458	1	265
PNLIPRP3	chr10	118187379	118237469	0.339638275	0.438763872	-0.099125597	1	266
NA	chr5	164647583	164668758	0.133460315	0.275578292	-0.142117977	1	267
IFITM1	chr11	313506	315272	0.78471694	0.692671445	0.092045495	9	268
LINC00620	chr3	13692196	13788132	0.660607707	0.59276735	0.067840357	11	269
NA	chr18	18820636	18821332	0.863691306	0.742057374	0.121633932	1	270
GALNT4	chr12	89913185	89918583	0.807729215	0.717774854	0.089954361	2	271
NA	chr1	51660767	51700768	0.804990122	0.700714519	0.104275603	4	272
NA	chr7	89748613	89752204	0.458592431	0.378813389	0.079779042	9	273
NA	chr16	68679283	68680071	0.769394577	0.661648063	0.107746514	3	274
NA	chr1	228483612	228490699	0.389300863	0.457198868	-0.067898005	1	275
LCE2A	chr1	152670840	152671918	0.201914135	0.299977353	-0.098063218	3	276
NA	chr9	35646267	35647096	0.21281394	0.146092428	0.066721512	4	277
ZNF85	chr19	21106028	21133503	0.405320059	0.318247508	0.087072552	6	278
NA	chr4	166605791	166683930	0.52658118	0.633840922	-0.107259742	2	279
TCN2	chr22	31002825	31023265	0.6756747	0.586378747	0.089295953	10	280
HIST1H2BI	chr6	26273144	26273622	0.838418938	0.721658012	0.116760926	9	281
SOX10	chr22	38366693	38383429	0.908208054	0.841857321	0.066350734	11	282
GPR151	chr5	145892666	145895753	0.249807064	0.397434209	-0.147627145	1	283
NA	chr2	77213091	77236917	0.218661385	0.422541241	-0.203879856	1	284
TMCO5B	chr15	33527753	33539822	0.846367824	0.729329157	0.117038667	1	285

NA	chr11	66176629	66184608	0.851650427	0.75420915	0.097441277	3	286
NA	chr18	43608272	43609795	0.743860934	0.660337688	0.083523246	3	287
ZFP36L2	chr2	43449541	43453748	0.406364664	0.34044461	0.065920054	15	288
NA	chrX	135377849	135382457	0.723208932	0.805101194	-0.081892262	2	289
NA	chr5	114937754	114956356	0.634179714	0.549149688	0.085030027	10	290
HELT	chr4	185939995	185941958	0.750413192	0.647023203	0.103389989	14	291
NA	chr11	116969703	116978886	0.933817024	0.805593688	0.128223336	1	292
NA	chr3	146627472	147088443	0.672926257	0.569122607	0.10380365	35	293
NA	chr2	177042445	177043736	0.685149447	0.59476023	0.090389217	7	294
DHH	chr12	49483204	49488602	0.719040191	0.621735376	0.097304815	17	295
NA	chr14	29252697	29254993	0.880170423	0.770193668	0.109976755	6	296
NA	chr12	54822087	54823187	0.874517141	0.754918064	0.119599077	1	297
C8orf56	chr8	104145191	104153703	0.724788279	0.636925476	0.087862803	12	298
ZNF75A	chr16	3355406	3368852	0.787322827	0.68940989	0.097912937	7	299
UGT2B10	chr4	69681711	69696914	0.262270701	0.489231258	-0.226960557	1	300
SIGLEC17P	chr19	51670585	51676780	0.774300339	0.642356397	0.131943942	1	301
NA	chr17	58203896	58213005	0.741766558	0.643073275	0.098693283	5	302
NA	chr2	127782787	127787262	0.719500073	0.635374065	0.084126008	6	303
NA	chr2	127781828	127783299	0.650625489	0.568418518	0.082206971	6	304
OR4S2	chr11	55418380	55419315	0.355247561	0.550900911	-0.19565335	1	305
ANKRD36BP2	chr2	89065324	89106126	0.790914889	0.692875067	0.098039822	6	306
NBN	chr8	90945564	91015456	0.63933398	0.55241431	0.086919671	24	307
SNORD64	chr15	25230011	25230320	0.467098066	0.630989884	-0.163891818	2	308
NA	chr7	129781571	129782455	0.880091638	0.761939248	0.11815239	2	309
MBD3L5	chr19	7030589	7033022	0.780855012	0.902938336	-0.122083324	1	310
ARL11	chr13	50202435	50208008	0.760164622	0.669028443	0.09113618	7	311
DPY19L2P4	chr7	89748714	89754914	0.542307109	0.456629367	0.085677742	3	312
VPS9D1-AS1	chr16	89778264	89784573	0.886390495	0.776898782	0.109491713	5	313
NA	chr16	34809205	34809865	0.569729837	0.634384856	-0.06465502	3	314
NA	chr2	166651361	166666520	0.534021615	0.332430541	0.201591074	1	315
MIR184	chr15	79502130	79502213	0.877820999	0.759683484	0.118137515	1	316
MIR1914	chr20	62572818	62572897	0.901426725	0.780148334	0.121278391	1	317
LINC00575	chr4	83534266	83542590	0.558573664	0.697128579	-0.138554915	1	318
EDN1	chr6	12290596	12297427	0.620129533	0.550486574	0.069642959	3	319
SOX14	chr3	137483579	137484396	0.782000372	0.675162453	0.106837919	5	320
NA	chr7	9765870	9767915	0.642404099	0.734602418	-0.09219832	5	321
NA	chr8	42409933	42410336	0.524017014	0.651708017	-0.127691003	1	322
MIR501	chrX	49774330	49774413	0.800894794	0.685803086	0.115091709	1	323
NA	chr16	34430150	34431915	0.594239158	0.6750932	-0.080854042	4	324
LINC00665	chr19	36803969	36822620	0.528919411	0.463929954	0.064989457	5	325
NA	chr14	66424015	66471241	0.672580678	0.745734068	-0.07315339	3	326
NA	chr9	110182565	110193083	0.704171808	0.609851687	0.094320121	1	327
NA	chr1	95302304	95320982	0.504586812	0.438462036	0.066124776	3	328
NA	chr17	9550337	9550977	0.817031414	0.708028552	0.109002862	1	329
SNORD3D	chr17	19015313	19015949	0.225060269	0.160985699	0.06407457	2	330
HIST1H3A	chr6	26020718	26021186	0.759078824	0.658316123	0.100762701	3	331
NA	chr5	70741443	70742396	0.109526124	0.196377739	-0.086851614	1	332
NA	chr16	4230118	4233516	0.886852995	0.778017889	0.108835106	3	333
NA	chr19	47050313	47104118	0.275505961	0.201275745	0.074230216	3	334
NA	chr12	52700400	52702155	0.827864398	0.720447738	0.10741666	3	335
NA	chr5	3596325	3600302	0.52077727	0.435327861	0.085449409	12	336
KRTAP4-5	chr17	39305178	39306054	0.622929814	0.718212358	-0.095282544	1	337
NA	chr8	134585426	134586104	0.785171504	0.697977405	0.087194099	2	338
URAHP	chr16	90106169	90114181	0.718892991	0.632878425	0.086014566	5	339
NA	chr21	43290742	43292163	0.594745576	0.685212299	-0.090466723	1	340
TRBJ2-3	chr7	142494531	142494579	0.560906522	0.476448751	0.084457771	1	341
OXTR	chr3	8792094	8811314	0.753384616	0.688020795	0.065363821	14	342
RPS29P22	chr17	26443265	26443432	0.73650387	0.63954923	0.09695464	1	343
NA	chr7	27226192	27233067	0.555277209	0.475378007	0.079899203	19	344
GRAP2	chr22	40297086	40369725	0.830195905	0.721556973	0.108638932	2	345
C2orf50	chr2	11273179	11286916	0.713532824	0.641878496	0.071654328	5	346
NA	chr19	49927006	49932075	0.617751214	0.53432318	0.083428034	8	347
NA	chr16	34659735	34660854	0.485613902	0.585760562	-0.10014666	2	348
UCN2	chr3	48599160	48601206	0.745414016	0.83876877	-0.093354754	3	349
NA	chr12	102329994	102330452	0.774552062	0.673310228	0.101241834	1	350
NA	chr21	44019390	44035168	0.935597481	0.813600899	0.121996582	1	351
HIST1H2BO	chr6	27861203	27861669	0.698628449	0.610106748	0.088521701	6	352
NA	chr17	8261731	8263538	0.826943193	0.68546381	0.141479383	1	353
MROH6	chr8	144648357	144655141	0.57619075	0.513819803	0.062370946	21	354
FGFBP2	chr4	15961866	15970932	0.783885657	0.70241673	0.081468927	10	355
NA	chr16	28873487	28874661	0.228110495	0.306280707	-0.078170212	1	356
CD163	chr12	7623409	7656489	0.558732453	0.642498208	-0.083765754	1	357

GALNT14	chr2	31133333	31378068	0.668326034	0.606195838	0.062130196	24	358
NA	chr16	66503699	66515133	0.69786614	0.607176642	0.090689498	1	359
NA	chr9	29824740	29826709	0.554999652	0.663545354	-0.108545702	3	360
ANKRD20A7P	chr9	44076368	44118444	0.526995581	0.457992684	0.069002897	2	361
SLC22A20	chr11	64981311	65010228	0.749915759	0.661378668	0.08853709	7	362
ACCS	chr11	44087475	44105772	0.636679285	0.549050039	0.087629246	11	363
NA	chr5	50265494	50266021	0.755898756	0.658577028	0.097321728	3	364
NA	chr1	190447681	190449865	0.413390033	0.343888807	0.069501225	1	365
MIR548B	chr6	119390212	119390308	0.661161748	0.576092738	0.08506901	1	366
ZNF730	chr19	23258012	23330021	0.445000197	0.349520957	0.09547924	9	367
NA	chr9	13406379	13433052	0.593407241	0.680786343	-0.087379102	1	368
CD46P1	chr1	207818579	207830755	0.654146479	0.592769365	0.061377114	5	369
USP4	chr3	49315264	49378145	0.380960994	0.319630653	0.06133034	12	370
NA	chr5	50261521	50262842	0.814989574	0.717442456	0.097547119	3	371
INCA1	chr17	4891425	4900905	0.530881625	0.469672717	0.061208908	7	372
BCRP8	chr22	23522058	23522465	0.567522563	0.490655948	0.076866615	4	373
NA	chr19	49567516	49568113	0.68763217	0.589708298	0.097923871	3	374
NA	chr2	108145943	108172782	0.281438182	0.410065996	-0.128627814	2	375
C19orf59	chr19	7741514	7744712	0.826908875	0.732378617	0.094530258	7	376
NA	chr6	31409444	31414750	0.158259648	0.097289722	0.060969926	10	377
SULT1C4	chr2	108994367	109004513	0.71266476	0.617612113	0.095052647	4	378
HCST	chr19	36393382	36395279	0.731430547	0.65351235	0.077918197	2	379
PHOSPHO1	chr17	47300724	47308128	0.697418332	0.613350682	0.08406765	11	380
NA	chr20	31169765	31181702	0.426121461	0.365345889	0.060775572	10	381
DEFB125	chr20	68351	77174	0.375390026	0.464201456	-0.08881143	2	382
ADAM28	chr8	24151553	24216531	0.77625242	0.698875968	0.077376452	4	383
NA	chr16	73517216	73521643	0.803105467	0.671681072	0.131424395	1	384
NA	chr14	92719837	92730000	0.822949922	0.730683187	0.092266735	3	385
SP100	chr2	231280657	231408805	0.886488599	0.776503051	0.109985549	6	386
ATP5LP7	chr17	40799852	40800161	0.755789951	0.66103973	0.094750221	1	387
TCF24	chr8	67858736	67874825	0.432834901	0.361853067	0.070981834	10	388
OR13C8	chr9	107331449	107332411	0.34724931	0.476119298	-0.128869988	1	389
NA	chr19	567212	572215	0.656804009	0.578068569	0.078735441	8	390
OR6K6	chr1	158724510	158725681	0.257046351	0.401930025	-0.144883674	2	391
DUOXA2	chr15	45406519	45410619	0.865036788	0.76083219	0.104204598	15	392
TMEM238	chr19	55890613	55895966	0.87492858	0.766168399	0.108760181	3	393
NA	chr5	1884080	1884763	0.912817303	0.799104391	0.113712912	2	394
NA	chr17	33867058	33867816	0.934614418	0.81835724	0.116257178	1	395
KLF2	chr19	16435628	16438685	0.620435476	0.550155305	0.070280171	7	396
NA	chr9	14993310	15019727	0.819426093	0.695286143	0.12413995	2	397
CCDC78	chr16	772582	776954	0.660362426	0.583832246	0.07653018	11	398
AMOT	chrX	112017731	112084043	0.540531018	0.618600114	-0.078069096	12	399
C7orf69	chr7	47834889	47859445	0.77427217	0.850154152	-0.075881982	4	400
NA	chr4	66868999	66882510	0.233967692	0.427907307	-0.193939615	1	401
RNF126P1	chr17	55122839	55124158	0.891091178	0.781415147	0.109676031	5	402
GPR97	chr16	57702099	57723975	0.833709886	0.749407625	0.084302261	3	403
RUVBL1-AS1	chr3	127794653	127797899	0.854005528	0.749860128	0.104145399	7	404
ZIC4	chr3	147103833	147124647	0.79749159	0.695917213	0.101574377	65	405
NA	chr8	125823860	125827924	0.267084845	0.439142916	-0.172058072	1	406
NA	chr1	151102551	151104086	0.904687757	0.793037828	0.111649929	3	407
C20orf201	chr20	62714733	62715712	0.715893612	0.627343777	0.088549835	1	408
NA	chr10	104614029	104661656	0.544210673	0.472717937	0.071492736	20	409
NT5C1A	chr1	40124793	40137710	0.790719149	0.731546031	0.059173118	5	410
NA	chr5	153863477	153865710	0.874550558	0.767168091	0.107382467	4	411
NA	chr16	68595964	68601032	0.770042745	0.878044655	-0.10800191	1	412
MBOAT4	chr8	29989340	30002202	0.68359969	0.546443384	0.137156306	1	413
NA	chr6	150361683	150363169	0.50016056	0.570558801	-0.070398241	1	414
IL11	chr19	55875757	55881831	0.538997558	0.479991929	0.059005628	6	415
PHLDA1	chr12	76419227	76427712	0.268937572	0.210000863	0.058936708	8	416
FPR3	chr19	52298416	52329442	0.837707074	0.733781271	0.103925803	3	417
NA	chr5	27472399	27496508	0.262389438	0.439791763	-0.177402325	2	418
SLFN12	chr17	33738079	33760302	0.698788799	0.614994678	0.083794121	12	419
ZNF597	chr16	3486104	3493542	0.676892355	0.588663434	0.088228921	8	420
CNN2P7	chr21	15199017	15199948	0.700738847	0.798155267	-0.09741642	1	421
NA	chr6	73972731	73972807	0.303888936	0.098977383	0.204911552	1	422
SNORA57	chr11	62432894	62433042	0.850358841	0.746836232	0.103522609	1	423
NA	chr1	243242159	243265035	0.708873271	0.644119484	0.064753787	3	424
NA	chr2	10588820	10591453	0.362327336	0.292564164	0.069763171	3	425
NA	chr4	106461347	106473512	0.795892086	0.883869697	-0.087977611	3	426
TMBIM1	chr2	219138915	219157309	0.557397712	0.495834549	0.061563163	13	427
NA	chr3	159944270	159945841	0.873392229	0.767113306	0.106278922	2	428
NA	chr7	1499573	1503644	0.554660813	0.492385221	0.062275592	3	429

TSTD1	chr1	161007421	161008780	0.7957507	0.706860436	0.088890264	8	430
KRTAP15-1	chr21	31812597	31813070	0.177728157	0.316648835	-0.138920678	1	431
NA	chr11	124614530	124616233	0.880045984	0.780199666	0.099846318	3	432
NA	chrX	124337654	124338187	0.607388082	0.524814529	0.082573554	3	433
LRRCS2	chr1	165513244	165533198	0.801043141	0.721345611	0.07969753	7	434
DEFB122	chr20	30009239	30016983	0.745590747	0.848001828	-0.102411081	1	435
NA	chr4	175015811	175141549	0.775280825	0.659667008	0.115613817	25	436
TAGLN3	chr3	111717511	111732734	0.854220513	0.744487117	0.109733395	16	437
NA	chr2	162280526	162285285	0.870983898	0.764713255	0.106270643	16	438
NA	chr16	86226399	86232519	0.819761382	0.727995334	0.091766048	12	439
MIR365A	chr16	14403142	14403228	0.93612387	0.82375336	0.11237051	1	440
TMEM233	chr12	120031264	120079363	0.571630792	0.49666714	0.074963652	12	441
BPIFA3	chr20	31805116	31815564	0.890482549	0.78364568	0.106836869	1	442
SNORD116-1	chr15	25296624	25296718	0.299401909	0.477590116	-0.178188207	2	443
SIX2	chr2	45232300	45236569	0.876108178	0.774324597	0.101783581	14	444
B3GNT9	chr16	67182008	67185117	0.899586701	0.797590006	0.101996695	9	445
NA	chr17	31861129	31868358	0.21928242	0.337006839	-0.117724418	2	446
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ENO2	chr12	7022909	7032861	0.541404809	0.483848097	0.057556712	15	448
KRTAP3-3	chr17	39149686	39150385	0.566222632	0.631205955	-0.064983323	2	449
NA	chr12	50302665	50305646	0.732742509	0.644916118	0.087826391	1	450
HOXB5	chr17	46668619	46671323	0.553893143	0.473435724	0.080457419	24	451
OR4F5	chr1	69091	70008	0.756368899	0.665798433	0.090570466	1	452
NA	chr4	188534919	188581523	0.341540266	0.45769371	-0.116153444	4	453
SETDB1	chr1	150898739	150937213	0.515109152	0.457686177	0.057422975	5	454
CTSW	chr11	65647280	65651212	0.887999661	0.782373574	0.105626087	3	455
SNORA69	chrX	118921316	118921447	0.207048927	0.387104346	-0.18005542	1	456
C6orf183	chr6	109487036	109592217	0.595620707	0.693708169	-0.098087463	2	457
MEIS1-AS2	chr2	66666220	66667444	0.852617341	0.723733258	0.128884083	9	458
ZNF66	chr19	20959110	20991922	0.210000697	0.267286504	-0.057285807	1	459
PNPLA4	chrX	7866288	7895780	0.441556025	0.3678369	0.073719125	13	460
MIR574	chr4	38869653	38869748	0.765879019	0.649644026	0.116234994	1	461
KRTAP1-3	chr17	39190142	39191107	0.788951097	0.895594835	-0.106643738	1	462
MT1E	chr16	56659387	56661024	0.880418618	0.776323018	0.1040956	6	463
NA	chr8	38401170	38410198	0.383288099	0.248566709	0.13472139	1	464
CEBPD	chr8	48649471	48651648	0.485841708	0.424243855	0.061597853	9	465
NA	chr22	42318027	42319104	0.844883172	0.744564508	0.100318664	1	466
NA	chr4	150587209	150632301	0.378464824	0.489182441	-0.110717616	1	467
NA	chr2	9897625	9910470	0.873890123	0.770277326	0.103612797	2	468
ZNRF1	chr16	75032928	75144892	0.679524354	0.613101715	0.066422639	20	469
AGFG2	chr7	100136834	100165842	0.604550767	0.539470683	0.065080084	6	470
SPARC	chr5	151040657	151066726	0.848389026	0.761606232	0.086782794	12	471
MIR138-1	chr3	44155704	44155802	0.892727259	0.787352115	0.105375144	1	472
RN7SKP89	chr5	113589210	113589451	0.104974709	0.246773718	-0.141799009	1	473
NA	chr9	34665662	34681295	0.92667833	0.818450967	0.108227363	2	474
NA	chr1	21619783	21626267	0.887874179	0.783586432	0.104287747	2	475
TMEM140	chr7	134832824	134850650	0.79842021	0.719686529	0.078733681	9	476
MIR9-3	chr15	89911248	89911337	0.870200637	0.754322127	0.11587851	2	477
NA	chr17	21934958	21935393	0.807115903	0.712194662	0.094921241	1	478
NA	chr14	38503492	38663486	0.579199316	0.488091663	0.091107653	5	479
OTOL1	chr3	161214596	161221730	0.192073979	0.316247165	-0.124173186	2	480
NA	chr1	47846600	47874149	0.166644484	0.223167198	-0.056522714	1	481
NA	chr8	65486863	65494445	0.590192445	0.479241488	0.110950957	40	482
NA	chr17	46810453	46811250	0.894499736	0.79184152	0.102658216	6	483
KRT84	chr12	52771596	52779436	0.702165032	0.778985797	-0.076820765	3	484
NA	chr22	25957084	25960429	0.554458646	0.498122618	0.056336029	4	485
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CD34	chr1	208057594	208084747	0.667174663	0.5971126	0.070062063	14	487
C1QTNF2	chr5	159774758	159797648	0.631104279	0.574813483	0.056290796	6	488
C1orf56	chr1	151020216	151024462	0.614455871	0.558273858	0.056182014	7	489
NA	chr5	169758433	169760883	0.944828484	0.833732209	0.111096275	1	490
NA	chr14	75310727	75322378	0.768514072	0.868972085	-0.100458013	2	491
TEX26	chr13	31506840	31549639	0.842309511	0.756899987	0.085409524	3	492
KCNC2	chr12	75433857	75603648	0.574667027	0.477330566	0.097336461	15	493
NA	chr14	82071691	82089405	0.196953807	0.370964222	-0.174010415	1	494
NA	chr4	1714548	1715349	0.572402066	0.466504835	0.105897232	3	495
ATL3	chr11	63391559	63439393	0.761029576	0.675985294	0.085044282	21	496
NA	chr1	187412738	187446354	0.655216778	0.741358977	-0.0861422	1	497
FOXD4L1	chr2	114256661	114258728	0.696044806	0.609833658	0.086211148	5	498
NA	chr6	34247456	34254545	0.869616918	0.768926229	0.100690689	1	499
KRTAP10-2	chr21	45970240	45971388	0.728587576	0.644181489	0.084406087	1	500
C19orf45	chr19	7557862	7573336	0.785525817	0.716920645	0.068605172	12	501

OR51F1	chr11	4790209	4791168	0.193699846	0.390898716	-0.197198871	1	502
NA	chr4	175898722	175900532	0.2860183	0.434596428	-0.148578128	1	503
NA	chr22	50753060	50754437	0.802732078	0.710013309	0.092718769	1	504
SH2D1B	chr1	162365056	162381928	0.708799263	0.641963839	0.066835424	3	505
NA	chr7	56355923	56359118	0.433633388	0.537725405	-0.104092017	3	506
NA	chr1	158444244	158464676	0.736787206	0.832561186	-0.09577398	1	507
OR10R2	chr1	158449668	158450675	0.736787206	0.832561186	-0.09577398	1	508
LINC00568	chr1	150488233	150490508	0.157464866	0.097949715	0.059515152	2	509
LHX5	chr12	113899839	113910085	0.731845953	0.651225443	0.08062051	37	510
NA	chr18	65183783	65566856	0.47140135	0.377922414	0.093478937	4	511
NA	chr14	21989234	21990794	0.78224988	0.692440571	0.089809309	1	512
NA	chr8	138821687	139095813	0.191829186	0.331173262	-0.139344076	3	513
NA	chr6	140175987	140181288	0.289340482	0.447631825	-0.158291343	1	514
CLPSL2	chr6	35744371	35747329	0.179644198	0.091394491	0.088249706	1	515
NA	chr20	30615556	30619378	0.8327559	0.755599551	0.077156349	7	516
FKBP11	chr12	49315301	49320257	0.732925257	0.650857515	0.082067742	19	517
CYP4A22-AS1	chr1	47562325	47644943	0.680169161	0.747407829	-0.067238667	4	518
BTC	chr4	75669969	75719896	0.729505203	0.646278464	0.08322674	6	519
MTND2P28	chr1	565020	566063	0.394288225	0.339051696	0.055236529	1	520
C16orf86	chr16	67700719	67702661	0.71481248	0.658980224	0.055832256	5	521
OR1S1	chr11	57982217	57983195	0.621446865	0.743326071	-0.121879206	1	522
CLIC3	chr9	139889087	139891255	0.692781369	0.637579312	0.055202058	7	523
NA	chr18	76736555	76739074	0.777877055	0.676300762	0.101576293	7	524
ZNF878	chr19	12154620	12167127	0.573714718	0.499648285	0.074066433	8	525
ZIC1	chr3	147111209	147228080	0.812040644	0.716344792	0.095695852	125	526
SRRD	chr22	26879843	26887899	0.775053569	0.719877964	0.055175604	5	527
NA	chr5	16617334	16621385	0.572836207	0.517672539	0.055163667	5	528
C1orf194	chr1	109648573	109656479	0.518990006	0.461914312	0.057075694	10	529
C1QA	chr1	22962999	22966101	0.810666506	0.740965061	0.069701445	5	530
SSTR1	chr14	38677204	38682272	0.540593956	0.448156009	0.092437947	14	531
MIXL1	chr1	226411319	226414755	0.701017921	0.625063956	0.075953965	5	532
C3orf80	chr3	159943423	159945999	0.426153869	0.359608798	0.066545071	5	533
NA	chr5	67726254	67730308	0.826187108	0.732386688	0.09380042	2	534
OR6K3	chr1	158686958	158687953	0.172863936	0.366433603	-0.193569666	1	535
MBLAC1	chr7	99724317	99726118	0.371216648	0.316432411	0.054784237	7	536
NA	chr19	38307999	38317278	0.785950465	0.696924465	0.089026	5	537
TCF21	chr6	134210276	134216691	0.812436116	0.72416286	0.088273257	20	538
NA	chr1	53793905	53802181	0.780831975	0.726108539	0.054723436	6	539
ARAP1-AS2	chr11	72411519	72416652	0.655632757	0.739497289	-0.083864532	1	540
IFITM2	chr11	307631	315272	0.775661851	0.700505902	0.075155948	22	541
PRTN3	chr19	840963	848175	0.762863697	0.698723227	0.064140469	14	542
NA	chr5	72747323	72749220	0.886319673	0.79396929	0.092350383	3	543
RHOT1P2	chr21	15309314	15309646	0.578292671	0.661853422	-0.083560751	1	544
NA	chr16	218678	219333	0.91690764	0.813656829	0.10325081	1	545
NA	chr7	39649209	39649889	0.893332216	0.795268681	0.098063535	5	546
OR51G1	chr11	4944531	4945637	0.281028392	0.416956467	-0.135928075	1	547
ZNF319	chr16	58028572	58034357	0.779448969	0.716132986	0.063315984	11	548
NA	chr6	157097494	157098211	0.145535554	0.091122568	0.054412987	2	549
NA	chr8	101487903	101513376	0.926420512	0.822313325	0.104107187	1	550
NA	chr1	206214526	206223548	0.664743447	0.586605557	0.07813789	3	551
NA	chr1	205425057	205438152	0.461850149	0.407512655	0.054337494	10	552
PPAP2C	chr19	281040	291393	0.856064482	0.773997435	0.082067047	13	553
NA	chr18	74207477	74210045	0.548302903	0.473848258	0.074454645	6	554
OR5D13	chr11	55540914	55541858	0.336437279	0.493387455	-0.156950176	2	555
NA	chr1	101788893	101855859	0.228878118	0.350897194	-0.122019076	1	556
NA	chr1	75595659	75598261	0.880849035	0.770054967	0.110794069	12	557
KIRREL3-AS3	chr11	126872805	126875953	0.479883533	0.416214058	0.063669476	9	558
NA	chr5	106150898	106346715	0.615207312	0.671039639	-0.055832327	3	559
NKX2-5	chr5	172659112	172662360	0.583210771	0.51554489	0.067665881	15	560
WDR5B	chr3	122130715	122134882	0.157972807	0.093171263	0.064801544	3	561
NA	chr5	74161718	74163679	0.440534764	0.386595641	0.053939123	10	562
NA	chr1	26186104	26189911	0.428730917	0.353078314	0.075652604	3	563
NA	chr16	9760742	9770700	0.710445434	0.799622131	-0.089176697	1	564
NA	chr8	29384829	29387840	0.898001222	0.79825051	0.099750712	4	565
GNAT1	chr3	50229045	50233949	0.724357111	0.660802681	0.06355443	7	566
NA	chr8	88986393	89031341	0.401372088	0.543638219	-0.142266131	1	567
NA	chr12	121407641	121410095	0.567548029	0.513799591	0.053748438	2	568
CNTN4-AS1	chr3	3080717	3102829	0.59532262	0.717451551	-0.122128931	3	569
RLN2	chr9	5299868	5304969	0.588487338	0.518006559	0.070480778	2	570
ULBP1	chr6	150285143	150294844	0.638072784	0.558354977	0.079717807	12	571
ATXN8OS	chr13	70681345	70713561	0.673903504	0.57931575	0.094587754	12	572
NA	chr21	46222492	46224632	0.729896196	0.626105552	0.103790644	1	573

NA	chr7	156799001	156799826	0.889376204	0.790541566	0.098834638	3	574
NA	chr22	31742875	31744670	0.905503607	0.792665426	0.112838181	4	575
MIR518C	chr19	54211989	54212089	0.141911868	0.258660866	-0.116748998	1	576
RAC2	chr22	37621301	37640488	0.585248814	0.513338877	0.071909937	6	577
NA	chr16	34739464	34740833	0.715223255	0.636337078	0.078886177	2	578
SIX3-AS1	chr2	45167293	45169012	0.902726974	0.803700959	0.099026015	7	579
LINC00596	chr14	24391456	24403777	0.086816244	0.177746874	-0.09093063	1	580
IFI30	chr19	18283972	18288927	0.407579499	0.354109377	0.053470122	13	581
NA	chr2	232253687	232259702	0.897366027	0.79879698	0.098569047	6	582
NA	chr9	70921444	70945542	0.750511334	0.669530916	0.080980418	3	583
MIR330	chr19	46142252	46142345	0.151762802	0.098499971	0.053262831	1	584
MIR106B	chr7	99691616	99691697	0.87321627	0.779855105	0.093361165	2	585
IGF2-AS	chr11	2161731	2169894	0.597810805	0.535315804	0.062495001	35	586
TSPY11P	chrY	6134634	6137316	0.29754117	0.242226944	0.055314226	1	587
NA	chr8	82192106	82193681	0.532654232	0.430503595	0.102150636	13	588
TRAF3IP2	chr6	111877657	111927481	0.547443045	0.494345716	0.053097328	23	589
NA	chr16	20754985	20777942	0.67188954	0.618821554	0.053067986	6	590
NA	chr14	105147483	105151269	0.827038486	0.745764841	0.081273645	4	591
ENDOG	chr9	131580753	131584956	0.658068344	0.605025221	0.053043122	3	592
NA	chr16	75446582	75498604	0.44923216	0.386173726	0.063058434	26	593
C21orf128	chr21	43522244	43528644	0.841705704	0.788688219	0.053017485	5	594
HSPB1	chr7	75931861	75933612	0.635031731	0.557652289	0.077379441	12	595
NA	chr5	92355369	92404375	0.826480411	0.740503624	0.085976787	2	596
TRBJ2-6	chr7	142494923	142494975	0.920383865	0.817130117	0.103253748	1	597
NA	chrX	38080644	38082920	0.742970551	0.834358327	-0.091387776	1	598
ILVBL	chr19	15225795	15236596	0.637408277	0.578628675	0.058779602	9	599
HAS3	chr16	69139467	69152622	0.812603846	0.742136722	0.070467124	24	600
NA	chr17	30845971	30858510	0.655592886	0.584491014	0.071101872	5	601
DGAT1	chr8	145539954	145550573	0.56459272	0.497513611	0.067079109	6	602
HAUS3	chr4	2229191	2243891	0.506127809	0.558906219	-0.052778411	4	603
BOK	chr2	242498136	242513546	0.780610094	0.727864334	0.05274576	12	604
NA	chr19	54292036	54292422	0.817692871	0.723257271	0.094435601	1	605
FAM72D	chr1	143896452	143913143	0.136009971	0.29192288	-0.155912909	1	606
NA	chr6	15244154	15245231	0.722849816	0.656030311	0.066819505	5	607
FGF14-AS2	chr13	103046980	103048053	0.532427141	0.594040525	-0.061613384	5	608
NA	chr2	162929766	162931679	0.539772739	0.487091704	0.052681035	12	609
C9orf96	chr9	136243117	136271220	0.59434705	0.538478857	0.055868193	6	610
HIST1H2APS4	chr6	26272421	26272768	0.743194504	0.664638717	0.078555788	3	611
FOXD4L5	chr9	70175707	70178815	0.716300569	0.638042846	0.078257723	1	612
TREH	chr11	118528026	118550399	0.73545125	0.68281665	0.0526346	5	613
GPR62	chr3	51989330	51991509	0.863190678	0.772985145	0.090205533	6	614
C15orf62	chr15	41062159	41064643	0.799875905	0.721432791	0.078443115	3	615
OR6C74	chr12	55640982	55642086	0.20178514	0.386853112	-0.185067972	1	616
NA	chr5	131347141	131348892	0.429764007	0.364078977	0.06568503	10	617
C9orf135-AS1	chr9	72433899	72435655	0.932620149	0.833979104	0.098641045	3	618
NA	chr1	13839715	13842765	0.654096141	0.569679435	0.084416706	7	619
NA	chr19	3558013	3558484	0.648073159	0.577390386	0.070682773	1	620
RPSAP58	chr19	23945807	24010937	0.397848286	0.298794814	0.099053472	3	621
CD79B	chr17	62006100	62009714	0.852730712	0.762527354	0.090203358	7	622
SMKR1	chr7	129142320	129152773	0.776560609	0.707878011	0.068682598	5	623
KCNJ9	chr1	160051360	160060353	0.712400312	0.6378261	0.074574212	10	624
HIST1H3F	chr6	26250370	26250835	0.903297779	0.805301293	0.097996486	4	625
OR5T1	chr11	56043029	56044146	0.31749569	0.445008557	-0.127512867	2	626
NA	chr20	61052926	61053650	0.82442641	0.735135969	0.089290441	1	627
NA	chr9	101705619	101706057	0.516624571	0.441605204	0.075019367	4	628
NA	chr14	29198289	29234483	0.866369823	0.773788905	0.092580918	15	629
RAB15	chr14	65412532	65439494	0.48288042	0.428651457	0.054228962	13	630
NA	chr12	67834778	67836339	0.131975382	0.063670713	0.068304669	1	631
PYCARD	chr16	31212806	31214771	0.879700021	0.776012159	0.103687863	15	632
NA	chr2	52600256	52617150	0.370257182	0.474955568	-0.104698386	1	633
MIR140	chr16	69966984	69967083	0.935662406	0.835269031	0.100393375	1	634
FOXD2-AS1	chr1	47897805	47900313	0.809381909	0.726745531	0.082636377	11	635
IRX1	chr5	3596168	3601517	0.517234101	0.443070746	0.074163355	16	636
NA	chr4	158125614	158126007	0.16645024	0.234942823	-0.068492583	2	637
NA	chr11	111284967	111288911	0.931798021	0.8153955	0.116402521	1	638
LRRFIP1P1	chr3	178976816	178979061	0.750623508	0.679710092	0.070913415	7	639
ADRB1	chr10	115803806	115806667	0.615152335	0.549501199	0.065651136	7	640
NA	chr15	25272883	25277194	0.345697056	0.451701597	-0.106004541	1	641
NA	chr10	134774844	134775741	0.842539168	0.75305057	0.089488598	2	642
UCP1	chr4	141480588	141489959	0.799716827	0.7042795	0.095437327	6	643
KRTAP10-4	chr21	45993606	45994987	0.901376807	0.805137521	0.096239286	1	644
NA	chr5	9546312	9550721	0.563983153	0.51230286	0.051680293	11	645



HM13-AS1	chr20	30155510	30161066	0.523908725	0.472234947	0.051673777	4	646
NA	chr16	31720434	31723305	0.847178245	0.765925569	0.081252677	2	647
SDC4P	chr22	30877298	30877898	0.752530912	0.672164038	0.080366874	1	648
RGS13	chr1	192605275	192629390	0.62205185	0.724602987	-0.102551137	3	649
TECTB	chr10	114043493	114064793	0.784213613	0.863033525	-0.078819913	2	650
LIME1	chr20	62366815	62370456	0.841163554	0.754532761	0.086630793	16	651
NA	chr14	60981837	61021634	0.838764977	0.731716011	0.107048966	7	652
NA	chr16	2907899	2909727	0.724499841	0.646071756	0.078428085	8	653
NA	chr9	117159004	117160783	0.622909144	0.571506274	0.05140287	3	654
TAC1	chr7	97361220	97369784	0.66697097	0.538571504	0.128399466	10	655
TREX1	chr3	48506445	48509044	0.837401385	0.750988308	0.086413078	11	656
UPK1A-AS1	chr19	36158850	36164193	0.743652397	0.657557856	0.08609454	2	657
ZNF671	chr19	58231119	58238992	0.78458741	0.710644846	0.073942563	7	658
NA	chr3	80810193	80838114	0.56562087	0.656220429	-0.090599559	3	659
NA	chr3	80814048	80838505	0.56562087	0.656220429	-0.090599559	3	660
NA	chr2	51429219	51448902	0.274629364	0.480931836	-0.206302472	1	661
KRTAP5-1	chr11	1605572	1606513	0.878291497	0.785468271	0.092823226	1	662
FAM215A	chr17	41994576	41995326	0.908982632	0.813955911	0.095026721	2	663
NA	chr16	49476821	49487989	0.905704549	0.810143667	0.095560881	1	664
PCDH8P1	chr13	53774116	53776547	0.838308822	0.754942028	0.083366795	9	665
WNT10A	chr2	219745085	219764303	0.637508212	0.586560298	0.050947915	31	666
SUMO3	chr21	46225532	46238694	0.704100451	0.653171275	0.050929176	9	667
LINC00525	chr7	47801074	47806370	0.488972232	0.319095233	0.169876999	1	668
NA	chr17	69093916	69198318	0.759779032	0.858027102	-0.098248071	1	669
NPBWR1	chr8	53850991	53853677	0.696928058	0.590980763	0.105947295	15	670
NA	chr7	129423210	129425025	0.882252622	0.79024014	0.092012482	5	671
SLC25A22	chr11	790475	798316	0.670792538	0.620046996	0.050745542	22	672
HIST1H1D	chr6	26234440	26235216	0.565889724	0.466023727	0.099865997	3	673
LBX2-AS1	chr2	74729722	74731805	0.707384176	0.637926561	0.069457615	15	674
NA	chr20	37590568	37590754	0.253937099	0.085569357	0.168367742	1	675
EIF4EBP3	chr5	139927251	139929163	0.872065596	0.775871479	0.096194117	4	676
MED18	chr1	28655513	28662476	0.457862737	0.406828324	0.051034413	6	677
NA	chr11	91527528	91545460	0.946433604	0.847295176	0.099138427	1	678
NA	chr7	76875657	76887440	0.714196891	0.797820261	-0.08362337	1	679
NA	chr1	846815	850328	0.863552819	0.77711651	0.086436308	6	680
HOXD1	chr2	177053307	177055688	0.605843495	0.52187135	0.083972145	8	681
OR2T10	chr1	248756052	248757100	0.399448631	0.523498865	-0.124050234	1	682
NA	chr19	42636707	42641251	0.714786877	0.660091308	0.054695569	9	683
NA	chr9	100148522	100158394	0.869985435	0.789295872	0.080689563	2	684
NA	chr4	81104434	81111323	0.69497831	0.613737573	0.081240737	23	685
NA	chr9	132192931	132213701	0.668281137	0.607167614	0.061113524	10	686
SNORD116-9	chr15	25318254	25318348	0.715447506	0.798754223	-0.083306718	1	687
NA	chr11	28700730	28705016	0.615849072	0.759123958	-0.143274886	1	688
SLITRK5	chr13	88324870	88331871	0.605128756	0.54192073	0.063208026	20	689
NA	chr1	173991647	173992123	0.144050409	0.093837285	0.050213124	2	690
LRRC32	chr11	76368568	76381791	0.796240626	0.720905358	0.075335268	18	691
SNAI3	chr16	88744090	88752901	0.751464174	0.701276482	0.050187693	11	692
NA	chr8	125313556	125314045	0.619167446	0.680742139	-0.061574692	3	693
NA	chr5	139152113	139154991	0.500168377	0.436508263	0.063660113	1	694
NA	chr7	10980050	10980362	0.119333073	0.065873508	0.053459565	2	695
NA	chr19	14141667	14142369	0.844314116	0.764234884	0.080079232	4	696
LINC00923	chr15	98285448	98417780	0.904890751	0.79145062	0.11344013	2	697
NA	chr4	3760475	3765117	0.935560206	0.838529595	0.097030611	1	698
NA	chr1	75593515	75598743	0.864871816	0.766078154	0.098793662	23	699
NA	chr2	175190755	175195371	0.839822606	0.737140296	-0.10268231	18	700
NA	chr21	34619079	34656082	0.500872361	0.450060736	0.050811625	14	701
FBXO6	chr1	11724181	11734411	0.664264839	0.605603362	0.058661477	10	702
NA	chr11	115509281	115517680	0.92117733	0.825795982	0.095381347	2	703
TRIM48	chr11	55029658	55038595	0.740102925	0.82570408	-0.085601155	1	704
C11orf68	chr11	65684279	65686588	0.606586822	0.556550601	0.05003622	12	705
ZC3H12A	chr1	37940153	37949980	0.716023845	0.656065808	0.059958037	12	706
NA	chr13	25767245	25784433	0.932572384	0.836169938	0.096402446	1	707
NA	chr8	38409766	38416538	0.731736783	0.618867045	0.112869738	4	708
NA	chr11	1784239	1784979	0.791688022	0.709750475	0.081937547	1	709
LINC00619	chr10	44340754	44346070	0.904387083	0.810945988	0.093441094	1	710
NA	chr7	8301894	8384146	0.696553207	0.640741696	0.055811511	15	711
C21orf90	chr21	45937099	45945835	0.88617411	0.802100177	0.084073933	2	712
NA	chr11	25756317	25803305	0.262209048	0.35854045	-0.096331403	1	713
NA	chr12	124456004	124456261	0.562613045	0.49321588	0.069397165	1	714
SPIN3	chrX	57002803	57021970	0.505241614	0.55502979	-0.049788176	5	715
DMRTC1	chrX	72091859	72163653	0.803454904	0.720560478	0.082894426	1	716
NA	chr11	65222728	65234028	0.877928715	0.792465895	0.08546282	3	717

PARD3-AS1	chr10	35104695	35105314	0.404066763	0.345858801	0.058207962	3	718
GSTTP2	chr22	24385938	24401899	0.78373972	0.85545354	-0.07171382	2	719
NA	chr15	23095170	23115256	0.841862822	0.754848824	0.087013998	3	720
NEUROD2	chr17	37759789	37766030	0.544077883	0.482432267	0.061645616	29	721
NA	chr16	51051669	51069688	0.91193117	0.820701989	0.091229181	2	722
NA	chr22	37621304	37622035	0.799794883	0.717441653	0.08235323	1	723
TMEM141	chr9	139685807	139695010	0.490766113	0.441190215	0.049575898	10	724
NA	chr17	18541332	18541683	0.633435654	0.56804827	0.065387384	1	725
LHX3	chr9	139088096	139096955	0.795282059	0.723911431	0.071370628	25	726
FABP5	chr8	82192598	82197012	0.485141572	0.39876787	0.086373702	13	727
IRX4	chr5	1877541	1887350	0.731656027	0.65784357	0.073812457	38	728
FTMT	chr5	121187650	121188519	0.648292586	0.742618934	-0.094326347	2	729
ITGA5	chr12	54789045	54813244	0.456449233	0.403491794	0.052957439	12	730
SLC51B	chr15	65337708	65345734	0.788954721	0.718006798	0.070947923	11	731
LINC00654	chr20	5476713	5485259	0.826407487	0.742159604	0.084247883	2	732
NA	chr12	127094580	127174864	0.627063862	0.737254182	-0.110190319	1	733
HIST1H2BE	chr6	26183958	26184454	0.798998789	0.717121767	0.081877022	3	734
NA	chr15	41128006	41136585	0.710244478	0.63978354	0.070460938	12	735
NA	chr16	18814405	18823503	0.55551004	0.486350157	0.069159883	1	736
MIR3655	chr5	140027429	140027511	0.080864982	0.130177454	-0.049312472	1	737
NA	chr1	1980642	1981509	0.623196357	0.544831393	0.078364964	3	738
HIST1H2AI	chr6	27775899	27776429	0.336602573	0.28730451	0.049298063	4	739
SIGLEC8	chr19	51954101	51961710	0.419533631	0.527815909	-0.108282279	3	740
SLC16A13	chr17	6939394	6943440	0.752992577	0.686103243	0.066889334	4	741
NA	chr2	103583866	103600887	0.382020316	0.314873339	0.067146977	1	742
ZBTB26	chr9	125677845	125693779	0.70974088	0.66050329	0.04923759	3	743
PLIN4	chr19	4502204	4517716	0.930197839	0.842516677	0.087681162	3	744
KREMEN1	chr22	29469066	29564321	0.790489862	0.723268209	0.067221653	8	745
NA	chr10	135341026	135342661	0.768513776	0.707772378	0.060741399	8	746
NA	chr2	155292365	155313950	0.349520811	0.213789483	0.135731328	1	747
PROM1	chr4	15964699	16086001	0.77523251	0.710946563	0.064285947	33	748
NA	chr12	109022463	109035094	0.839807843	0.757143316	0.082664527	9	749
NA	chr17	55169506	55173786	0.936280967	0.840804769	0.095476198	1	750
NA	chr1	9242263	9252148	0.830142082	0.751810905	0.078331177	8	751
SNAP29	chr22	21213271	21245502	0.487565882	0.43736957	0.050196312	7	752
NA	chr3	179367282	179367988	0.49887371	0.555956598	-0.057082888	1	753
RPP25	chr15	75246757	75249805	0.600809293	0.540012287	0.060797006	7	754
NA	chr11	125128522	125136694	0.700981332	0.624372097	0.076609235	5	755
LTB	chr6	31548302	31550299	0.623069396	0.561895381	0.061174015	30	756
BARHL1	chr9	135457572	135465653	0.882998355	0.79303056	0.089967795	14	757
NA	chr11	318640	325631	0.728213619	0.672444021	0.055769598	17	758
NA	chr5	9363387	9422593	0.364001476	0.476946177	-0.112944701	3	759
NA	chr5	167364722	167380474	0.590432979	0.682783251	-0.092350272	1	760
MIR663A	chr20	26167556	26232162	0.717735249	0.659091092	0.058644157	16	761
SSMEM1	chr7	129847700	129856683	0.677739834	0.75705203	-0.079312196	3	762
CYTH4	chr22	37678068	37711382	0.733362069	0.660181869	0.0731802	9	763
NA	chr7	44998598	45000508	0.804377545	0.895437533	-0.091059988	1	764
WWC2-AS2	chr4	184018170	184020352	0.602816181	0.544021605	0.058794576	6	765
CLUHP4	chr4	190979057	190984160	0.479078469	0.661712548	-0.182634079	1	766
TMC6	chr17	76106539	76128488	0.7155544	0.658502781	0.057051619	27	767
MATK	chr19	3777971	3802127	0.513110656	0.456147633	0.056963024	21	768
NA	chr1	11837134	11839676	0.872082683	0.783618313	0.08846437	1	769
NA	chr4	99580055	99585701	0.628633047	0.579733848	0.048899198	7	770
NA	chr5	126087655	126112178	0.829905031	0.759394204	0.070510827	2	771
CCL8	chr17	32646055	32648421	0.837127409	0.76093496	0.07619245	2	772
TMSB4X	chrX	12993227	12995346	0.141991768	0.250225784	-0.108234016	3	773
NA	chr19	33157204	33164116	0.762653411	0.68524362	0.077409791	1	774
NA	chr7	102067265	102075227	0.511448074	0.444614649	0.066833426	10	775
NA	chr16	28986294	28990145	0.682435274	0.614445282	0.067989993	6	776
NA	chr12	49315767	49333446	0.760237351	0.68769133	0.072546021	22	777
SELL	chr1	169659808	169680839	0.734439438	0.645267923	0.089171515	4	778
RNA5SP155	chr4	10117380	10117508	0.913354374	0.821046744	0.09230763	1	779
NA	chr1	41708045	41750533	0.430681606	0.381950671	0.048730935	5	780
TMEM72	chr10	45406648	45432450	0.581708567	0.508192497	0.07351607	5	781
MIR142	chr17	56408245	56409869	0.868530545	0.784030211	0.084500334	8	782
NA	chr11	62304784	62309490	0.78021005	0.730890033	0.049320017	5	783
NA	chr15	78285747	78287631	0.636211903	0.581474793	0.054737111	5	784
MAP7D2	chrX	20024831	20135035	0.72137886	0.659951208	0.061427653	12	785
NA	chrX	28589649	28604512	0.537304233	0.626124294	-0.08882006	1	786
MAT1A	chr10	82031576	82049440	0.686557235	0.735100934	-0.048543698	4	787
STK24-AS1	chr13	99229498	99231084	0.526609392	0.478105243	0.04850415	4	788
NA	chr1	37920480	37940012	0.446021338	0.397527587	0.048493752	9	789

NA	chr3	128764606	128765764	0.901837834	0.815662801	0.086175033	4	790
MEIS1-AS1	chr2	66666575	66668968	0.862430269	0.74242495	0.12000532	12	791
NA	chr4	13547699	13549425	0.818709582	0.734000698	0.084708884	5	792
NA	chr20	21378456	21381029	0.830626907	0.748398243	0.082228664	2	793
XIAP	chrX	122993574	123047829	0.522142802	0.47337135	0.048771452	16	794
NA	chr10	118918167	118928570	0.643095866	0.576161283	0.066934583	28	795
CNTNAP3B	chr9	43684902	43924049	0.849353078	0.771308517	0.078044561	3	796
OR1Q1	chr9	125376948	125378026	0.553836733	0.639890806	-0.086054073	2	797
NA	chr12	65153301	65173098	0.487671447	0.439332287	0.04833916	8	798
RIPK3	chr14	24805227	24809251	0.875245906	0.788908158	0.086337748	9	799
POU3F1	chr1	38509523	38512450	0.643249208	0.584638402	0.058610806	12	800
EN1	chr2	119599747	119605254	0.741182948	0.647779402	0.093403547	30	801
ZNF619	chr3	40518604	40531727	0.557771623	0.471097224	0.086674399	8	802
SPATA41	chr15	100884662	100890438	0.840848018	0.763250883	0.077597134	8	803
NA	chr1	2512999	2515972	0.730261788	0.788284438	-0.058022649	2	804
DFNB59	chr2	179316163	179326117	0.55675962	0.461587964	0.095171656	5	805
NTF4	chr19	49559050	49568333	0.656133089	0.597030122	0.059102966	17	806
BHLHE22	chr8	65492814	65496181	0.375102531	0.282629845	0.092472686	7	807
VMO1	chr17	4688580	4689728	0.879603885	0.79247634	0.087127545	7	808
TNFSF12	chr17	7452208	7464925	0.665920667	0.595216667	0.070704	20	809
HIST1H3H	chr6	27777842	27778314	0.778304841	0.701454236	0.076850605	3	810
THBD	chr20	23026270	23030378	0.680306863	0.615545875	0.064760988	10	811
CTSZ	chr20	57570240	57582302	0.777727591	0.71110444	0.066623151	10	812
LINC00939	chr12	126443234	126467920	0.096799059	0.289771453	-0.192972394	1	813
NA	chr1	150521897	150524367	0.845876717	0.77885262	0.067024097	5	814
PPM1M	chr3	52279841	52284613	0.780321632	0.714571818	0.065749814	10	815
PRB4	chr12	11460017	11463369	0.368875312	0.467936763	-0.099061451	2	816
LBX2	chr2	74724644	74730443	0.825701387	0.745640491	0.080060896	22	817
CD86	chr3	121774213	121839983	0.860821191	0.791264398	0.069556792	12	818
HIST1H2BK	chr6	27106073	27114619	0.764721157	0.700596799	0.064124358	16	819
HCG9P5	chr6	29716066	29716290	0.314802917	0.267222436	0.047580482	5	820
DEXI	chr16	11022748	11036317	0.563333292	0.515780304	0.047552988	7	821
ATP6V0CP3	chr6	42694972	42695438	0.776110908	0.704191049	0.071919859	3	822
FBLN1	chr22	45898118	45997015	0.676877776	0.629389296	0.04748848	12	823
NA	chr2	91911049	91911631	0.835618521	0.75298256	0.08263596	1	824
TMPRSS13	chr11	117771358	117800174	0.729871399	0.777329571	-0.047458172	6	825
SPATA2P1	chr13	56788507	56791076	0.31827068	0.422796377	-0.104525697	1	826
NA	chr7	155192617	155194477	0.794023745	0.721252562	0.072771183	3	827
ZNF415	chr19	53611132	53636330	0.638795263	0.577300469	0.061494794	10	828
NA	chr11	110225855	110277124	0.76753696	0.692370016	0.075166944	2	829
RAMP2-AS1	chr17	40905932	40913275	0.805274248	0.736137762	0.069136486	6	830
KIAA1324	chr1	109656301	109749401	0.775205627	0.705480844	0.069724783	15	831
EMX1	chr2	73143389	73162020	0.756338389	0.681139842	0.075198547	29	832
NKAIN1P1	chr1	148864594	148865175	0.818857013	0.738085605	0.080771407	2	833
APOL1	chr22	36649056	36663576	0.715500791	0.649329902	0.066170889	5	834
RBP7	chr1	10057264	10076078	0.630382445	0.567109569	0.063272875	8	835
RMND1	chr6	151725989	151773259	0.603263123	0.556075101	0.047188022	7	836
NA	chr17	14198829	14200917	0.639380926	0.544043278	0.095337647	3	837
NA	chr12	116019866	116077539	0.868216062	0.789826181	0.078389882	7	838
FAM195B	chr17	79780287	79791178	0.484104734	0.436830343	0.047274392	6	839
NA	chr15	37168580	37179236	0.783367864	0.700194855	0.083173009	24	840
NA	chr12	52214243	52216199	0.700262853	0.635351255	0.064911598	6	841
NA	chr2	131501111	131513452	0.876493027	0.795055014	0.081438013	14	842
LAT	chr16	28996147	29002104	0.857455813	0.775053575	0.082402238	9	843
BPESC1	chr3	138823027	138844009	0.707125645	0.647992988	0.059132656	3	844
NA	chr1	235115394	235116551	0.797583367	0.71946423	0.078119137	1	845
NA	chr7	56243327	56244105	0.952459833	0.859470747	0.092989086	1	846
DEFB118	chr20	29956421	29961726	0.464512851	0.412505863	0.052006987	2	847
TSPY15P	chrY	9385717	9388290	0.469421164	0.520588662	-0.051167498	1	848
CHD1L	chr1	146714291	146767443	0.433125177	0.386282179	0.046842997	13	849
FAM71E2	chr19	55866276	55874628	0.693958142	0.647121538	0.046836603	20	850
KRT27	chr17	38933060	38938786	0.787284657	0.731451227	0.05583343	8	851
CSF1	chr1	110452864	110473614	0.503268515	0.456449265	0.04681925	12	852
NA	chr15	89878284	89879392	0.47697001	0.407749239	0.069220771	3	853
HOXD4	chr2	177015950	177017954	0.912110563	0.824143147	0.087967416	13	854
PAPPA-AS2	chr9	119048108	119051048	0.257504549	0.329156147	-0.071651598	1	855
ANXA2R	chr5	43039335	43043272	0.206410829	0.159742593	0.046668236	23	856
NA	chr16	74701404	74702604	0.740138194	0.681993638	0.058144556	3	857
OR2M3	chr1	248366332	248367392	0.272163805	0.424095015	-0.15193121	3	858
NA	chr5	121464457	121490551	0.811073903	0.747795473	0.06327843	4	859
RAB21	chr12	72148654	72184699	0.356090576	0.309615707	0.046474869	8	860
CLDN3	chr7	73183328	73184600	0.787974227	0.712706908	0.07526732	4	861

CD52	chr1	26644448	26647014	0.870731184	0.787498054	0.083233129	7	862
TNFSF13	chr17	7461609	7464925	0.561670526	0.472098024	0.089572502	6	863
NA	chr5	87008952	87029086	0.854123996	0.771429616	0.08269438	1	864
NA	chr3	110246329	110248429	0.370063783	0.451850022	-0.08178624	1	865
ZNF727	chr7	63505821	63538927	0.162167593	0.255780779	-0.093613186	4	866
NA	chr7	63505821	63539697	0.162167593	0.255780779	-0.093613186	4	867
CCNO	chr5	54526980	54529508	0.503261795	0.424650652	0.078611144	13	868
RNASEH1P2	chr17	16586752	16587541	0.920813517	0.834705999	0.086107518	2	869
PRKACG	chr9	71627469	71629039	0.557333229	0.603564953	-0.046231724	2	870
SLC22A17	chr14	23815515	23822121	0.68610379	0.63988256	0.04622123	16	871
AGPAT2	chr9	139567595	139581875	0.723265354	0.666486674	0.056778681	9	872
IL2RB	chr22	37521878	37571094	0.796930192	0.727335483	0.069594709	9	873
NA	chr1	103228878	103319398	0.269825698	0.407363522	-0.137537824	1	874
CFC1B	chr2	131278770	131285579	0.866649932	0.78304327	0.083606662	1	875
IZUMO1	chr19	49244109	49250166	0.783170874	0.737008147	0.046162728	7	876
DNAJC17	chr15	41060067	41099675	0.692444517	0.644076764	0.048367753	22	877
NA	chr5	87988468	87988676	0.90732426	0.790210489	0.117113771	2	878
APOA1	chr11	116706467	116708666	0.748785623	0.696081791	0.052703832	9	879
PCDHGC5	chr5	140868808	140892546	0.829638821	0.755089907	0.074548914	14	880
SLC7A5P1	chr16	29624425	29624961	0.455811522	0.409747901	0.046063621	2	881
PRLHR	chr10	120352916	120355160	0.787330389	0.710862515	0.076467874	8	882
ANKRD26P3	chr13	19864733	19918965	0.802559195	0.746337174	0.056222021	4	883
NA	chr10	11210885	11213339	0.895820348	0.809664963	0.086155385	1	884
FGF17	chr8	21899909	21906320	0.839561462	0.76234902	0.077212441	11	885
NA	chr8	142363503	142365465	0.915520695	0.82768305	0.087837645	1	886
NA	chr6	74403626	74405854	0.835017074	0.763511937	0.071505137	7	887
GDF7	chr2	20866424	20873418	0.790069662	0.734751204	0.055318458	13	888
TMIGD2	chr19	4292229	4302428	0.826740354	0.754142431	0.072597923	2	889
METTL13	chr1	171750788	171783163	0.71361149	0.667630115	0.045981375	12	890
NA	chr16	89003187	89006059	0.900453993	0.815544464	0.084909529	8	891
OGFRL1	chr6	71998506	72018653	0.393453185	0.318262151	0.075191034	7	892
AKNA	chr9	117096436	117156685	0.887641513	0.812065054	0.075576459	4	893
DPP4	chr2	162848751	162931052	0.580927042	0.530750708	0.050176334	16	894
DLX3	chr17	48067369	48072588	0.819575729	0.733714357	0.085861372	12	895
NA	chr2	1624282	1629191	0.695924243	0.741676252	-0.045752009	5	896
CNFN	chr19	42891171	42894439	0.516538467	0.47079465	0.045743817	7	897
WIF1	chr12	65444406	65515346	0.70070865	0.645733932	0.054974718	9	898
ARL9	chr4	57371509	57390614	0.841152906	0.762238769	0.078914137	10	899
PTPRCAP	chr11	67202981	67205538	0.87541856	0.793495778	0.081922781	10	900
ADH7	chr4	100333418	100356894	0.251075028	0.44978909	-0.198714062	1	901
WDR16	chr17	9479944	9546776	0.567975641	0.522306271	0.04566937	6	902
FGD2	chr6	36973422	36996846	0.879797278	0.800192849	0.079604429	4	903
VCX	chrX	7810303	7812184	0.727342282	0.796522003	-0.069179721	2	904
NA	chr4	178163693	178169927	0.825054512	0.746251243	0.078803269	1	905
HIST1H4PS1	chr6	27774853	27775117	0.906683445	0.821675798	0.085007647	3	906
ZNF836	chr19	52657117	52674896	0.510270412	0.460080964	0.050189448	5	907
NA	chr2	42104214	42121179	0.922070492	0.834233256	0.087837236	1	908
C10orf10	chr10	45466429	45474258	0.649572551	0.603023201	0.046549349	11	909
FRAT1	chr10	99079022	99081672	0.753064889	0.681094291	0.071970597	9	910
SERPINE1	chr7	100770370	100782547	0.836295866	0.7716698	0.064626067	10	911
NA	chr1	861264	866445	0.737498778	0.692136807	0.04536197	7	912
MYF6	chr12	81101277	81103253	0.81695138	0.738620854	0.078330526	7	913
NA	chr17	27966645	27967843	0.250782152	0.327689881	-0.076907729	1	914
ZNF844	chr19	12175514	12192380	0.758688711	0.681391992	0.077296719	9	915
NA	chr5	55753622	55777773	0.555588764	0.510300341	0.045288424	12	916
HIST1H2AM	chr6	27860477	27860963	0.646291592	0.571091748	0.075199844	3	917
ADAMTS15	chr11	130318869	130346532	0.855477632	0.805574891	0.049902741	11	918
NA	chr22	46463236	46465771	0.089065216	0.172660077	-0.083594861	4	919
NA	chr16	1209548	1210176	0.218822603	0.173597414	0.045225189	1	920
FGF8	chr10	103529899	103535854	0.76355063	0.701335228	0.062215403	13	921
NA	chrX	95592235	95592911	0.122424819	0.226945334	-0.104520515	1	922
CORO1A	chr16	30194148	30200397	0.390733767	0.345072762	0.045661004	16	923
EIF3FP3	chr2	58478575	58479703	0.725807762	0.661216304	0.064591458	4	924
NA	chr2	105199610	105201812	0.545849889	0.603220594	-0.057370706	1	925
NA	chr17	62073431	62077259	0.580114393	0.51824121	0.061873183	9	926
NA	chr19	23945746	24016116	0.357643727	0.274380651	0.083263077	4	927
HIST1H2BB	chr6	26043455	26043885	0.846809108	0.765327787	0.081481321	4	928
NA	chr18	56422091	56425074	0.911670867	0.825540204	0.086130664	1	929
LRRC61	chr7	150019728	150035239	0.718515425	0.666412437	0.052102988	31	930
HOXD10	chr2	176973518	176984670	0.784619147	0.707626482	0.076992665	39	931
NA	chr2	105760571	105761882	0.652167938	0.578855372	0.073312566	3	932
MTATP6P1	chr1	569076	569756	0.387813471	0.342841795	0.044971677	3	933

EVX1-AS	chr7	27281048	27286848	0.891347194	0.799980627	0.091366566	35	934
RNY4P10	chr6	33167378	33167472	0.150811864	0.224341866	-0.073530002	1	935
ZCCHC16	chrX	111697727	111700473	0.10096628	0.19649572	-0.09552944	1	936
NA	chr5	97421964	97496897	0.156808431	0.27604755	-0.119239118	1	937
HSPB8	chr12	119616447	119658936	0.677119165	0.632300798	0.044818367	14	938
LGALS8-AS1	chr1	236686369	236687808	0.719159942	0.660082734	0.059077208	12	939
TNNI3	chr19	55663137	55669141	0.714424927	0.653848614	0.060576313	9	940
CD27	chr12	6554033	6560884	0.880620054	0.798478785	0.082141269	7	941
NA	chr17	62745781	62778117	0.669086606	0.604635853	0.064450753	24	942
TMEM249	chr8	145575878	145578574	0.881305537	0.805289111	0.076016427	7	943
NTHL1	chr16	2089816	2097867	0.481679801	0.437065304	0.044614497	12	944
ADRBK1	chr11	67033881	67054027	0.786796973	0.734828058	0.051968914	21	945
NA	chr22	29909878	29931379	0.827454714	0.750008444	0.07744627	1	946
TNFSF12-TNFSF13	chr17	7452416	7464918	0.742044618	0.665544533	0.076500085	17	947
NA	chr7	99235865	99236390	0.629762197	0.570622387	0.05913981	1	948
C11orf40	chr11	4592653	4599050	0.905516694	0.813658267	0.091858427	1	949
NA	chr5	150537667	150538023	0.048847093	0.093367815	-0.044520722	1	950
RASSF1	chr3	50367219	50378411	0.546199116	0.492810179	0.053388937	45	951
UBA7	chr3	49842640	49851379	0.837238154	0.759367876	0.077870277	4	952
EREG	chr4	75230860	75254468	0.134626048	0.09012678	0.044499269	3	953
NA	chr16	28986125	29002096	0.807743098	0.733458279	0.07428482	22	954
OSBPL10-AS1	chr3	31745550	31763144	0.716890785	0.588850606	0.128040179	1	955
NA	chr7	62517831	62520462	0.142648681	0.248785377	-0.106136696	1	956
NCF1C	chr7	74572445	74587848	0.485533587	0.424154767	0.061378821	2	957
NA	chr7	127284739	127292066	0.40223704	0.350221023	0.052016017	6	958
NA	chr15	96904487	96904900	0.87797761	0.796123445	0.081854165	1	959
NA	chr14	61107448	61109307	0.930516352	0.844852886	0.085663466	4	960
ZNF30	chr19	35417807	35436074	0.344703065	0.300309145	0.044393921	4	961
HOXB-AS5	chr17	46800530	46802819	0.829724967	0.74451364	0.085211327	11	962
CD244	chr1	160799950	160832692	0.837981578	0.737613318	0.100368259	4	963
MGAT1	chr5	180217541	180242652	0.599967889	0.548493621	0.051474268	42	964
SNAI3-AS1	chr16	88729706	88753594	0.566804625	0.522465596	0.044339029	28	965
ABHD14A	chr3	52005442	52015212	0.605251331	0.548514988	0.056736343	21	966
HIST1H2BM	chr6	27782822	27783267	0.755508932	0.681534201	0.073974731	4	967
GIPR	chr19	46171502	46186982	0.650850345	0.600843822	0.050006523	27	968
OR2M4	chr1	248402231	248403166	0.381823208	0.573872447	-0.192049239	1	969
NA	chr16	60520723	60557154	0.521545531	0.671684656	-0.150139125	1	970
SLC16A12	chr10	91190051	91316398	0.723194254	0.669604143	0.053590111	26	971
NA	chr3	197171932	197185194	0.599498336	0.555277757	0.044220579	11	972
NA	chr16	77469907	77469999	0.922996561	0.837355432	0.08564113	1	973
DEFB121	chr20	29992648	30000641	0.391287136	0.455596533	-0.064309397	6	974
FREM3	chr4	144498455	144621828	0.67807924	0.583471233	0.094608008	5	975
C16orf54	chr16	29753784	29757327	0.89971291	0.81193169	0.087781219	4	976
NA	chr16	87526161	87549241	0.602179744	0.538699493	0.063480251	4	977
NA	chr15	33595858	33602860	0.475439084	0.395165572	0.080273512	6	978
NA	chr10	101286838	101288018	0.779064885	0.696676217	0.082388667	7	979
SLC39A4	chr8	145635126	145642279	0.724227033	0.678375278	0.045851754	19	980
MAOA	chrX	43515467	43606068	0.425610491	0.524835275	-0.099224784	4	981
NA	chr16	70413360	70433405	0.537866358	0.48747567	0.050390688	11	982
NA	chr17	30836972	30850442	0.705281921	0.645535708	0.059746213	6	983
NA	chr16	75142499	75144610	0.878366913	0.797251386	0.081115527	2	984
GRXCR1	chr4	42895284	43032675	0.297257341	0.409417121	-0.11215978	2	985
ZPBP2	chr17	38024417	38034149	0.767446035	0.699290063	0.068155972	2	986
C2orf70	chr2	26785450	26802400	0.839667341	0.76680073	0.07286661	10	987
H1FO	chr22	38201114	38203442	0.53678477	0.468400067	0.068384703	8	988
NA	chr17	35297346	35300755	0.916742512	0.833855099	0.082887412	11	989
SRP14-AS1	chr15	40331512	40359491	0.462218224	0.418172571	0.044045653	14	990
MIR4520A;MIR4520B	chr17	6558759	6558828	0.888805077	0.806836735	0.081968342	1	991
CCDC71	chr3	49199968	49203754	0.524496335	0.48048502	0.044011315	7	992
DSG1	chr18	28898052	28936992	0.78388874	0.720071079	0.063817661	3	993
C17orf96	chr17	36827961	36831187	0.720331319	0.649146615	0.071184704	9	994
NA	chr1	55683534	55699850	0.70584041	0.623599285	0.082241124	1	995
NA	chr6	43690523	43705571	0.874693474	0.794123508	0.080569967	1	996
NA	chr17	37913974	37920089	0.947942845	0.860703822	0.087239024	1	997
DISP2	chr15	40650436	40663257	0.780916388	0.734832827	0.046083561	10	998
TRAF1	chr9	123664671	123691451	0.834585456	0.778420888	0.056164568	8	999
POU5F1P6	chr3	128393578	128395848	0.659709684	0.740915049	-0.081205365	1	1000

**Supplementary Table S6. List of the 1,000 top-ranked, differentially methylated CGIs after TET triple knockdown.**

This table is related to Fig. 2F.

CGI	chromosome	start	end	beta.GFP_siRNA	beta.GFP_scramble	difference	num.sites	rank
chr7:138666359-138666972	chr7	138666359	138666972	0.489669095	0.265051096	0.224618	2	1
chr1:149605515-149605903	chr1	149605515	149605903	0.361994384	0.160476523	0.201517861	1	2
chr4:3464800-3465440	chr4	3464800	3465440	0.530252206	0.357766806	0.172485399	8	3
chr9:103791945-103792173	chr9	103791945	103792173	0.592916636	0.346410793	0.246505843	2	4
chr3:46933747-46934293	chr3	46933747	46934293	0.766497096	0.511601366	0.25489573	5	5
chr9:34377402-34377610	chr9	34377402	34377610	0.436128902	0.274696406	0.161432495	2	6
chr17:54674874-54675232	chr17	54674874	54675232	0.400776177	0.263999798	0.136776378	4	7
chr14:26674164-26674478	chr14	26674164	26674478	0.673964325	0.541186619	0.132777705	4	8
chr12:47224913-47225664	chr12	47224913	47225664	0.692618476	0.471692535	0.220925941	4	9
chr3:46887629-46887919	chr3	46887629	46887919	0.710075536	0.476483867	0.23359167	2	10
chr12:108168987-108169570	chr12	108168987	108169570	0.622011859	0.44593321	0.176078649	4	11
chr4:155547985-155548322	chr4	155547985	155548322	0.418931194	0.239848867	0.179082327	5	12
chr1:15573621-15573953	chr1	15573621	15573953	0.389119751	0.239083461	0.15003629	4	13
chr8:117950473-117950717	chr8	117950473	117950717	0.509981124	0.321085221	0.188895903	2	14
chr16:66460504-66460850	chr16	66460504	66460850	0.400427933	0.254246521	0.146181412	2	15
chr12:131199825-131200157	chr12	131199825	131200157	0.578978284	0.427105293	0.151872991	3	16
chr11:1592499-1592810	chr11	1592499	1592810	0.596487917	0.415102353	0.181385564	2	17
chr19:42501262-42501486	chr19	42501262	42501486	0.244210877	0.109212808	0.134998069	2	18
chr13:28540357-28541279	chr13	28540357	28541279	0.717871695	0.510745901	0.207125793	2	19
chr19:45947711-45948047	chr19	45947711	45948047	0.695483123	0.538320425	0.157162697	3	20
chr6:19691911-19692305	chr6	19691911	19692305	0.820811335	0.597481627	0.223329708	4	21
chr18:47087880-47088528	chr18	47087880	47088528	0.289102376	0.162691444	0.126410932	9	22
chr2:75787130-75787420	chr2	75787130	75787420	0.597771015	0.407713056	0.190057959	3	23
chr5:50685454-50686148	chr5	50685454	50686148	0.778374275	0.568692374	0.209681901	4	24
chr10:72218131-72218484	chr10	72218131	72218484	0.332018859	0.201900988	0.130117871	2	25
chr12:54811982-54812202	chr12	54811982	54812202	0.665139504	0.472591149	0.192548355	2	26
chr9:72026904-72027428	chr9	72026904	72027428	0.916460393	0.654077341	0.262383052	1	27
chr19:1523706-1524565	chr19	1523706	1524565	0.496793725	0.352935032	0.143858693	4	28
chr3:72788073-72788416	chr3	72788073	72788416	0.482021201	0.242749969	0.239271232	3	29
chr2:220173871-220174283	chr2	220173871	220174283	0.594928427	0.434395655	0.160532771	4	30
chr7:128577819-128578756	chr7	128577819	128578756	0.397240703	0.28041728	0.116823423	12	31
chr5:134824932-134825224	chr5	134824932	134825224	0.427599045	0.305573907	0.122025138	1	32
chr9:46861917-46862270	chr9	46861917	46862270	0.712962808	0.515882238	0.19708057	1	33
chr3:158519510-158520329	chr3	158519510	158520329	0.280878515	0.136227907	0.144650608	9	34
chr7:32110064-32110910	chr7	32110064	32110910	0.361857837	0.243268098	0.118589739	5	35
chr17:33775295-33775794	chr17	33775295	33775794	0.571281868	0.444332884	0.126948983	5	36
chr14:76597649-76597911	chr14	76597649	76597911	0.621806102	0.465522943	0.156283158	2	37
chr9:44419920-44420345	chr9	44419920	44420345	0.657299331	0.481366016	0.175933315	1	38
chr17:34091137-34091919	chr17	34091137	34091919	0.330429591	0.217511091	0.1129185	3	39
chr11:47615711-47616055	chr11	47615711	47616055	0.426409157	0.169088109	0.257321048	1	40
chr11:64781451-64782385	chr11	64781451	64782385	0.225415587	0.113467779	0.111947808	4	41
chr11:18067717-18067928	chr11	18067717	18067928	0.797203056	0.615710838	0.181492218	2	42
chr5:41869664-41870876	chr5	41869664	41870876	0.401641729	0.249222756	0.152418972	10	43
chr20:34652455-34653500	chr20	34652455	34653500	0.465441932	0.350387702	0.11505423	4	44
chr2:170220773-170221114	chr2	170220773	170221114	0.306156333	0.187032545	0.119123788	4	45
chr1:243264941-243265196	chr1	243264941	243265196	0.530066324	0.394819713	0.135246611	1	46
chr8:91013142-91014266	chr8	91013142	91014266	0.833483767	0.62893995	0.204543817	10	47
chr20:56323974-56324254	chr20	56323974	56324254	0.499555128	0.355562791	0.143992337	3	48
chr14:36977519-36977996	chr14	36977519	36977996	0.505561781	0.373965057	0.131596724	4	49
chr12:49485767-49485977	chr12	49485767	49485977	0.560793552	0.451501029	0.109292524	3	50
chr13:92051154-92051716	chr13	92051154	92051716	0.476273763	0.354907247	0.121366516	4	51
chr6:58180155-58180443	chr6	58180155	58180443	0.681169373	0.513933503	0.167235871	1	52
chr12:56325775-56326223	chr12	56325775	56326223	0.418962423	0.288705036	0.130257387	6	53
chr2:79220193-79220592	chr2	79220193	79220592	0.550802352	0.418936717	0.131865635	4	54
chr5:74907287-74907770	chr5	74907287	74907770	0.840941225	0.656041974	0.184899251	3	55
chr19:2540907-2541138	chr19	2540907	2541138	0.5780065	0.75146714	-0.173460639	3	56
chr9:88137610-88137985	chr9	88137610	88137985	0.737524932	0.56708562	0.170439313	2	57
chr1:91182510-91182857	chr1	91182510	91182857	0.506551433	0.399163332	0.107388101	5	58
chr9:77112713-77113583	chr9	77112713	77113583	0.41301017	0.276933826	0.136076345	2	59
chr8:144653775-144653976	chr8	144653775	144653976	0.229902421	0.123366068	0.106536353	4	60
chr3:133747921-133748266	chr3	133747921	133748266	0.750369212	0.571494494	0.178874718	2	61
chr11:30038523-30038823	chr11	30038523	30038823	0.453007891	0.28065993	0.172347961	9	62
chr11:68611251-68611807	chr11	68611251	68611807	0.760582441	0.600699271	0.15988317	5	63
chr1:209979317-209979666	chr1	209979317	209979666	0.518263729	0.333455662	0.184808067	8	64
chr6:84562821-84563758	chr6	84562821	84563758	0.40420047	0.292196265	0.112004205	10	65
chr17:46690391-46691055	chr17	46690391	46691055	0.546559564	0.421851856	0.124707708	2	66
chr6:50692150-50692375	chr6	50692150	50692375	0.441849267	0.274005194	0.167844073	3	67
chr15:60690709-60690930	chr15	60690709	60690930	0.664864397	0.517122611	0.147741785	2	68
chr5:50694985-50695352	chr5	50694985	50695352	0.750439709	0.582932993	0.167506716	3	69
chr9:29826527-29826736	chr9	29826527	29826736	0.590302493	0.721791151	-0.131488658	2	70
chr5:115912002-115912384	chr5	115912002	115912384	0.680177506	0.562107212	0.118070294	4	71
chr2:31360322-31361821	chr2	31360322	31361821	0.415570428	0.311671655	0.103898773	12	72
chr17:16487651-16487884	chr17	16487651	16487884	0.77222646	0.611450432	0.160776029	3	73

chr9:35111268-35111504	chr9	35111268	35111504	0.264165589	0.146842162	0.117323427	1	74
chr10:104629039-104629479	chr10	104629039	104629479	0.458523508	0.297522996	0.161000512	7	75
chr16:30042308-30042612	chr16	30042308	30042612	0.720306738	0.567982868	0.15232387	3	76
chrX:3630407-3630620	chrX	3630407	3630620	0.755988997	0.571469357	0.18451964	4	77
chr16:67188614-67189652	chr16	67188614	67189652	0.702827956	0.600111036	0.10271692	3	78
chr8:49293202-49293547	chr8	49293202	49293547	0.605436362	0.483534486	0.121901876	3	79
chr6:29521111-29521833	chr6	29521111	29521833	0.625419509	0.491876913	0.133542596	32	80
chr9:115708029-115708238	chr9	115708029	115708238	0.678785934	0.533593633	0.1451923	1	81
chr1:39044060-39044561	chr1	39044060	39044561	0.294757431	0.163667907	0.131089524	5	82
chr1:217311468-217311773	chr1	217311468	217311773	0.712178438	0.564405623	0.147772814	4	83
chr20:44440947-44441655	chr20	44440947	44441655	0.535132739	0.426932684	0.108200054	16	84
chr1:209848444-209849428	chr1	209848444	209849428	0.498941568	0.354511499	0.144430069	8	85
chr12:113592204-113592620	chr12	113592204	113592620	0.866212447	0.687594219	0.178618228	4	86
chr7:948295-949168	chr7	948295	949168	0.447678732	0.321163469	0.126515264	2	87
chr11:8009048-8009251	chr11	8009048	8009251	0.372745771	0.271435333	0.101310438	2	88
chr8:10586614-10586886	chr8	10586614	10586886	0.815336007	0.648103403	0.167232604	4	89
chr20:57797224-57797441	chr20	57797224	57797441	0.511784085	0.410488077	0.101296009	2	90
chr8:33456916-33457515	chr8	33456916	33457515	0.559122479	0.440413866	0.118708613	6	91
chr9:32572997-32573227	chr9	32572997	32573227	0.208203095	0.082953234	0.125249861	1	92
chr16:34407637-34407919	chr16	34407637	34407919	0.563682063	0.67108939	-0.107407326	4	93
chr4:991239-991625	chr4	991239	991625	0.74757208	0.600427626	0.147144454	2	94
chr19:23257958-23258518	chr19	23257958	23258518	0.391885958	0.276817162	0.115068796	3	95
chr16:74734153-74734572	chr16	74734153	74734572	0.643962714	0.51662921	0.127333505	4	96
chr3:22413493-22414365	chr3	22413493	22414365	0.491406272	0.377251436	0.114154837	6	97
chr5:33892192-33892403	chr5	33892192	33892403	0.616054546	0.491010439	0.125044107	1	98
chr9:33044246-33044612	chr9	33044246	33044612	0.67624309	0.539364841	0.136878248	1	99
chr18:61603401-61604244	chr18	61603401	61604244	0.410038574	0.29214163	0.117896944	5	100
chr10:133849677-133850826	chr10	133849677	133850826	0.595048922	0.493504506	0.101544417	7	101
chr1:21948675-21949263	chr1	21948675	21949263	0.535700428	0.43190539	0.103795038	3	102
chr10:130339527-130339777	chr10	130339527	130339777	0.791894202	0.64068077	0.151213432	5	103
chr9:129677707-129678009	chr9	129677707	129678009	0.255044604	0.151094746	0.103949858	2	104
chr17:38935800-38936093	chr17	38935800	38936093	0.669273019	0.556766742	0.112506277	4	105
chr19:9903582-9903990	chr19	9903582	9903990	0.759669543	0.612808028	0.146861515	3	106
chr16:31453944-31454561	chr16	31453944	31454561	0.356568308	0.258135393	0.098432915	3	107
chr4:570951-571768	chr4	570951	571768	0.705690355	0.567089174	0.138601181	7	108
chr4:10462833-10463689	chr4	10462833	10463689	0.722237393	0.573611067	0.148626326	6	109
chr1:11724114-11724885	chr1	11724114	11724885	0.568480374	0.462571519	0.105908855	7	110
chr7:123172733-123173231	chr7	123172733	123173231	0.231416491	0.133844979	0.097571511	1	111
chr16:75033042-75034207	chr16	75033042	75034207	0.313722565	0.216235514	0.09748705	5	112
chr6:33181011-33181256	chr6	33181011	33181256	0.594446013	0.478536327	0.115909687	7	113
chr1:91172103-91172771	chr1	91172103	91172771	0.595957755	0.478856486	0.117101269	5	114
chr16:3493099-3493569	chr16	3493099	3493569	0.596386274	0.477308666	0.119077608	6	115
chr6:26689804-26690092	chr6	26689804	26690092	0.699054913	0.563660255	0.135394658	2	116
chr1:98510967-98511710	chr1	98510967	98511710	0.287977907	0.18388667	0.104091238	6	117
chrX:9863528-9863822	chrX	9863528	9863822	0.786832652	0.895718137	-0.108885485	4	118
chr19:18220765-18221445	chr19	18220765	18221445	0.41346649	0.304727865	0.108738625	3	119
chr1:10057122-10058108	chr1	10057122	10058108	0.602307166	0.49394722	0.108359946	8	120
chr1:20692583-20693534	chr1	20692583	20693534	0.647503555	0.517964114	0.129539441	5	121
chr16:68678687-68680149	chr16	68678687	68680149	0.739232515	0.600230374	0.139002141	5	122
chr10:94831513-94832312	chr10	94831513	94832312	0.739326087	0.5994298	0.139896287	3	123
chr6:170190112-170190712	chr6	170190112	170190712	0.327439316	0.209118703	0.118320613	6	124
chr9:130980901-130981317	chr9	130980901	130981317	0.608560306	0.48808132	0.120478986	2	125
chr7:1084388-1084595	chr7	1084388	1084595	0.294098849	0.172702686	0.121396163	2	126
chr14:100259161-100259542	chr14	100259161	100259542	0.88963529	0.724201779	0.165433512	4	127
chr16:88449290-88450382	chr16	88449290	88450382	0.59311526	0.482626526	0.110488734	5	128
chr2:5813483-5813710	chr2	5813483	5813710	0.634094976	0.513003776	0.121091201	2	129
chr9:138606404-138606934	chr9	138606404	138606934	0.535490573	0.402762551	0.132728022	2	130
chr13:21900426-21900637	chr13	21900426	21900637	0.85937044	0.700211919	0.159158521	3	131
chr12:113914441-113914657	chr12	113914441	113914657	0.812385904	0.631939178	0.180446726	3	132
chr17:46673533-46674181	chr17	46673533	46674181	0.615240833	0.498395439	0.116845394	3	133
chr7:121943868-121944538	chr7	121943868	121944538	0.357081876	0.25918423	0.097897645	5	134
chr19:59010485-59011011	chr19	59010485	59011011	0.541704055	0.440876437	0.100827618	4	135
chr7:5526390-5526693	chr7	5526390	5526693	0.770608369	0.624668705	0.145939664	1	136
chr5:43000344-43000791	chr5	43000344	43000791	0.820775416	0.667799179	0.152976237	4	137
chr8:97657175-97657943	chr8	97657175	97657943	0.352082693	0.213228514	0.138854179	12	138
chr8:50822271-50822860	chr8	50822271	50822860	0.870178682	0.708070855	0.162107827	4	139
chr15:41952536-41953222	chr15	41952536	41953222	0.563272821	0.458468521	0.1048043	3	140
chr19:53360202-53360460	chr19	53360202	53360460	0.520075242	0.421327604	0.098747638	1	141
chr11:63438302-63439314	chr11	63438302	63439314	0.724720946	0.589658898	0.135062048	13	142
chr14:25518425-25519612	chr14	25518425	25519612	0.435493018	0.332694574	0.102798444	3	143
chr5:157098264-157099041	chr5	157098264	157099041	0.463018565	0.322368132	0.140650433	8	144
chr19:58545116-58545897	chr19	58545116	58545897	0.808435379	0.680400552	0.128034827	10	145
chr1:54965024-54965391	chr1	54965024	54965391	0.365940134	0.271343909	0.094596225	3	146
chr19:16528759-16529029	chr19	16528759	16529029	0.71841881	0.61926961	0.0991492	3	147
chr5:75377899-75378189	chr5	75377899	75378189	0.603093855	0.498943581	0.104150274	4	148
chr6:26197071-26197537	chr6	26197071	26197537	0.525680597	0.422325927	0.103354669	4	149

chr17:33814235-33814947	chr17	33814235	33814947	0.767358499	0.616700369	0.150658131	6	150
chr2:176950596-176950846	chr2	176950596	176950846	0.720838088	0.59743971	0.123398378	3	151
chr16:81437205-81437542	chr16	81437205	81437542	0.107874852	0.226857671	-0.118982819	2	152
chr5:50265086-50265737	chr5	50265086	50265737	0.759965475	0.618424929	0.141540546	4	153
chr13:31019861-31020137	chr13	31019861	31020137	0.42661866	0.319447776	0.107170884	2	154
chr7:41745179-41745462	chr7	41745179	41745462	0.658434618	0.537794362	0.120640256	3	155
chr16:1463763-1464716	chr16	1463763	1464716	0.389296499	0.289329284	0.099967214	3	156
chr2:26396103-26397204	chr2	26396103	26397204	0.631144573	0.532084978	0.099059595	4	157
chr16:49309124-49309353	chr16	49309124	49309353	0.82186964	0.674286275	0.147583365	2	158
chr19:54024646-54024923	chr19	54024646	54024923	0.494821696	0.401369479	0.093452217	4	159
chr2:228582486-228582821	chr2	228582486	228582821	0.671148433	0.557058388	0.114090045	8	160
chr21:42218490-42219222	chr21	42218490	42219222	0.603897287	0.496812783	0.107084503	8	161
chr15:45480702-45480922	chr15	45480702	45480922	0.623432965	0.517804165	0.1056288	2	162
chr4:155254131-155254603	chr4	155254131	155254603	0.896700984	0.740879097	0.155821887	4	163
chr20:34204988-34205269	chr20	34204988	34205269	0.608412736	0.50469054	0.103722196	4	164
chr5:139076543-139077179	chr5	139076543	139077179	0.324271483	0.20930927	0.114962213	5	165
chr9:129088647-129088994	chr9	129088647	129088994	0.740173982	0.606853911	0.133320071	1	166
chr19:1795923-1797001	chr19	1795923	1797001	0.715819516	0.622809563	0.093009952	4	167
chr14:103557607-103558235	chr14	103557607	103558235	0.446431761	0.353618747	0.092813014	4	168
chr1:87797369-87797884	chr1	87797369	87797884	0.394097579	0.301304483	0.092793096	4	169
chr18:43355319-43355698	chr18	43355319	43355698	0.67559331	0.553595178	0.121998132	3	170
chr19:3671903-3672121	chr19	3671903	3672121	0.675925895	0.554009791	0.121916104	2	171
chr12:54387826-54388732	chr12	54387826	54388732	0.697779773	0.571604935	0.126174838	5	172
chr12:54408427-54408713	chr12	54408427	54408713	0.866775081	0.713599725	0.153175356	2	173
chr5:50683286-50683615	chr5	50683286	50683615	0.779110346	0.639402842	0.139707504	4	174
chr8:142528186-142529029	chr8	142528186	142529029	0.638528481	0.517394148	0.121134333	3	175
chr18:77724353-77724836	chr18	77724353	77724836	0.414913268	0.3184867	0.096426568	5	176
chrX:102884437-102884677	chrX	102884437	102884677	0.648342267	0.527310356	0.121031912	2	177
chr2:200524002-200524204	chr2	200524002	200524204	0.578571329	0.482530214	0.096041115	3	178
chr7:155325812-155326357	chr7	155325812	155326357	0.695700311	0.57522122	0.120479091	4	179
chr7:102920310-102921514	chr7	102920310	102921514	0.5546664	0.457804239	0.096862161	13	180
chr17:1808573-1808773	chr17	1808573	1808773	0.830428585	0.68904125	0.141387335	3	181
chr6:43276420-43276659	chr6	43276420	43276659	0.574102563	0.472206634	0.101895929	6	182
chr2:230135709-230136004	chr2	230135709	230136004	0.305769338	0.205181721	0.100587617	4	183
chr3:50275394-50275645	chr3	50275394	50275645	0.659729352	0.546299887	0.113429465	4	184
chr5:80689819-80690228	chr5	80689819	80690228	0.893815866	0.739881003	0.153934863	3	185
chr10:100227439-100227832	chr10	100227439	100227832	0.691509679	0.577138324	0.114371355	3	186
chr19:53496733-53497028	chr19	53496733	53497028	0.450618487	0.358048566	0.092569922	5	187
chr22:19701515-19701891	chr22	19701515	19701891	0.802531276	0.673868973	0.128662303	5	188
chr10:94459255-94459591	chr10	94459255	94459591	0.30132538	0.186535068	0.114790312	4	189
chr17:30263762-30264515	chr17	30263762	30264515	0.159969879	0.064280853	0.095689027	6	190
chr3:40518518-40518848	chr3	40518518	40518848	0.266859094	0.119338042	0.147521052	5	191
chr4:16084196-16085735	chr4	16084196	16085735	0.682786106	0.580925575	0.101860531	11	192
chr11:123065427-123066184	chr11	123065427	123066184	0.743900502	0.620883381	0.123017121	4	193
chr8:65492936-65494452	chr8	65492936	65494452	0.25135984	0.12539966	0.12596018	4	194
chr22:43165948-43166287	chr22	43165948	43166287	0.672628067	0.523643649	0.148984417	2	195
chr19:53696030-53696650	chr19	53696030	53696650	0.831151852	0.696882685	0.134269167	6	196
chr1:18436552-18437673	chr1	18436552	18437673	0.409019999	0.312861332	0.096158668	5	197
chr16:29477390-29478502	chr16	29477390	29478502	0.72647444	0.602242695	0.124231745	1	198
chr6:85482570-85484718	chr6	85482570	85484718	0.599866466	0.507395214	0.092471252	13	199
chr17:7197432-7198417	chr17	7197432	7198417	0.7565119	0.648461782	0.108050117	12	200
chr8:145637966-145639182	chr8	145637966	145639182	0.72266754	0.632324581	0.090342959	6	201
chr16:31548738-31549184	chr16	31548738	31549184	0.851440454	0.714257507	0.137182947	3	202
chr7:27227521-27229043	chr7	27227521	27229043	0.677965603	0.564281499	0.113684103	4	203
chr20:58152281-58152847	chr20	58152281	58152847	0.83297969	0.698186991	0.134792698	3	204
chr3:46607347-46607806	chr3	46607347	46607806	0.810864787	0.681186651	0.129678136	3	205
chr1:161008378-161008830	chr1	161008378	161008830	0.742973605	0.618707359	0.124266247	8	206
chr18:73627918-73628658	chr18	73627918	73628658	0.758353059	0.619777202	0.138575857	3	207
chr15:72476677-72476969	chr15	72476677	72476969	0.757897957	0.641050897	0.116847061	4	208
chr12:54071054-54071265	chr12	54071054	54071265	0.482087843	0.39240749	0.089680352	5	209
chr22:19156978-19157413	chr22	19156978	19157413	0.759057175	0.62493411	0.134123064	3	210
chr10:112431836-112432426	chr10	112431836	112432426	0.361349464	0.180618597	0.180730867	7	211
chr14:38678246-38680937	chr14	38678246	38680937	0.600438833	0.489484713	0.11095412	10	212
chr22:43505952-43506167	chr22	43505952	43506167	0.795747866	0.673332702	0.122415164	3	213
chr22:21311337-21312201	chr22	21311337	21312201	0.789945792	0.662834291	0.127111501	4	214
chr18:13801000-13801223	chr18	13801000	13801223	0.20607336	0.116829764	0.089243596	3	215
chr17:37764093-37764304	chr17	37764093	37764304	0.589902036	0.496553091	0.093348946	7	216
chr9:135039674-135039978	chr9	135039674	135039978	0.856813032	0.714853453	0.141959579	2	217
chr6:26199198-26199466	chr6	26199198	26199466	0.632398494	0.526381703	0.106016791	2	218
chr6:13873766-13874262	chr6	13873766	13874262	0.577867869	0.486168552	0.091699317	4	219
chr5:54528096-54528404	chr5	54528096	54528404	0.73023903	0.620202114	0.110036916	4	220
chr10:26504384-26507434	chr10	26504384	26507434	0.641064887	0.549487525	0.091577362	18	221
chr12:133195923-133196556	chr12	133195923	133196556	0.734979371	0.627156013	0.107823359	3	222
chr9:122131087-122132214	chr9	122131087	122132214	0.730249007	0.617173783	0.113075223	6	223
chr2:105760110-105761018	chr2	105760110	105761018	0.470517848	0.367071299	0.103446549	4	224
chr12:115130009-115130242	chr12	115130009	115130242	0.815762358	0.683311299	0.132451059	1	225



chr6:33396051-33396296	chr6	33396051	33396296	0.713263052	0.600226913	0.113036139	9	226
chr20:30135077-30135292	chr20	30135077	30135292	0.723711675	0.607303077	0.116408598	7	227
chr10:13933483-13934184	chr10	13933483	13934184	0.502073707	0.414891198	0.087182509	3	228
chr3:121902743-121903645	chr3	121902743	121903645	0.868594675	0.730333504	0.138261171	4	229
chr17:7108305-7108654	chr17	7108305	7108654	0.564830416	0.472010028	0.092820388	3	230
chr5:141293785-141294049	chr5	141293785	141294049	0.711986104	0.597917218	0.114068886	4	231
chrX:13587649-13588221	chrX	13587649	13588221	0.850111391	0.718591851	0.131519539	4	232
chr9:94903573-94903827	chr9	94903573	94903827	0.812218186	0.682836241	0.129381945	1	233
chr20:1783825-1784552	chr20	1783825	1784552	0.677506835	0.568781457	0.108725379	4	234
chr3:184321784-184322277	chr3	184321784	184322277	0.831934237	0.700421926	0.131512312	3	235
chr10:91294948-91295925	chr10	91294948	91295925	0.602080103	0.515305487	0.086774616	12	236
chr2:26785115-26785687	chr2	26785115	26785687	0.772731363	0.649884828	0.122846535	10	237
chr1:109656096-109656611	chr1	109656096	109656611	0.598168611	0.502215712	0.095952899	5	238
chr11:32008803-32009044	chr11	32008803	32009044	0.778347067	0.657838352	0.120508715	3	239
chr9:123690772-123691675	chr9	123690772	123691675	0.646856748	0.559576445	0.087280303	3	240
chr18:2905951-2907348	chr18	2905951	2907348	0.808466657	0.690691766	0.11777489	6	241
chr1:16543684-16544307	chr1	16543684	16544307	0.460368833	0.374036708	0.086332125	5	242
chr16:2907575-2907836	chr16	2907575	2907836	0.808822534	0.686379331	0.122443203	2	243
chr8:72917306-72917641	chr8	72917306	72917641	0.859179683	0.723777031	0.135402652	3	244
chr9:138156711-138156983	chr9	138156711	138156983	0.701888519	0.856081342	-0.154192823	1	245
chr9:141044509-141045113	chr9	141044509	141045113	0.570007868	0.483770586	0.086237282	2	246
chr10:135170646-135171954	chr10	135170646	135171954	0.68795095	0.601823736	0.086127214	11	247
chr22:50468455-50469353	chr22	50468455	50469353	0.284404513	0.198418065	0.085986448	3	248
chr12:57635241-57635572	chr12	57635241	57635572	0.893732127	0.755384687	0.138347439	2	249
chr19:36164078-36164286	chr19	36164078	36164286	0.901972441	0.760498322	0.14147412	1	250
chr10:23487758-23488543	chr10	23487758	23488543	0.566174402	0.480364143	0.085810258	4	251
chr16:1120154-1120441	chr16	1120154	1120441	0.179889619	0.265628765	-0.085739146	1	252
chr6:105388191-105389545	chr6	105388191	105389545	0.785625872	0.689926802	0.095699069	7	253
chr13:88329395-88329885	chr13	88329395	88329885	0.650826727	0.534953334	0.115873392	3	254
chr14:21537083-21537355	chr14	21537083	21537355	0.696494324	0.587535691	0.108958633	1	255
chr18:59992070-59993556	chr18	59992070	59993556	0.368175131	0.282547636	0.085627495	9	256
chr16:3355021-3356012	chr16	3355021	3356012	0.712434003	0.604294825	0.108139178	7	257
chr7:8301032-8302252	chr7	8301032	8302252	0.357181513	0.266035559	0.091145954	10	258
chr13:28363744-28364269	chr13	28363744	28364269	0.878771563	0.743014469	0.135757094	3	259
chr2:149645537-149645834	chr2	149645537	149645834	0.613823281	0.516406449	0.097416832	3	260
chr17:16310307-16310914	chr17	16310307	16310914	0.58550408	0.500019018	0.085485062	3	261
chr11:111385338-111385712	chr11	111385338	111385712	0.663155557	0.557890994	0.105264562	6	262
chr16:68563760-68564281	chr16	68563760	68564281	0.552038523	0.466557098	0.085481425	6	263
chr7:103086345-103086840	chr7	103086345	103086840	0.478467674	0.393076885	0.085390789	5	264
chr17:56326686-56327262	chr17	56326686	56327262	0.694373566	0.600232032	0.094141534	3	265
chr21:46351329-46352911	chr21	46351329	46352911	0.709169364	0.602545769	0.106623595	6	266
chr2:219757459-219758001	chr2	219757459	219758001	0.361278125	0.276112024	0.085166101	4	267
chr20:4202149-4202765	chr20	4202149	4202765	0.60962924	0.516537857	0.093091383	3	268
chr5:134914179-134914981	chr5	134914179	134914981	0.838011577	0.711009932	0.127001645	4	269
chr2:119599060-119599299	chr2	119599060	119599299	0.879647177	0.733794304	0.145852873	1	270
chr1:116710838-116711260	chr1	116710838	116711260	0.739216925	0.626933376	0.11228355	3	271
chr19:45954066-45954504	chr19	45954066	45954504	0.402179384	0.297364642	0.104814742	2	272
chr2:97173852-97174485	chr2	97173852	97174485	0.73733559	0.630403236	0.106932354	10	273
chr14:60336952-60337461	chr14	60336952	60337461	0.593864571	0.480930244	0.112934327	3	274
chr3:125075916-125076481	chr3	125075916	125076481	0.546598514	0.439430073	0.107168441	4	275
chr10:31422710-31423316	chr10	31422710	31423316	0.518271273	0.398340639	0.119930634	3	276
chr1:217262999-217263214	chr1	217262999	217263214	0.792983634	0.671683809	0.121299825	1	277
chr9:115652447-115653448	chr9	115652447	115653448	0.869214062	0.739607208	0.129606855	2	278
chr13:113540351-113540558	chr13	113540351	113540558	0.603915751	0.461294119	0.142621632	4	279
chr12:69327022-69327532	chr12	69327022	69327532	0.711857055	0.605493183	0.106363872	4	280
chr15:57025348-57026150	chr15	57025348	57026150	0.654186475	0.570009015	0.08417746	6	281
chr5:114937614-114938149	chr5	114937614	114938149	0.620454874	0.527405578	0.093049296	6	282
chr4:75719102-75719740	chr4	75719102	75719740	0.655038651	0.52329564	0.131743012	4	283
chr15:75248278-75249922	chr15	75248278	75249922	0.663781269	0.577867303	0.085913966	11	284
chr13:29105412-29105676	chr13	29105412	29105676	0.758551715	0.645155309	0.113396406	3	285
chr11:64038965-64039306	chr11	64038965	64039306	0.476993547	0.364817657	0.11217589	4	286
chr11:18742691-18743513	chr11	18742691	18743513	0.593877007	0.50725149	0.086625517	3	287
chr2:242498014-242499274	chr2	242498014	242499274	0.637534819	0.542803678	0.094731141	7	288
chr4:1049653-1049923	chr4	1049653	1049923	0.838824155	0.724313743	0.114510412	3	289
chr19:52674328-52674855	chr19	52674328	52674855	0.227424804	0.144091865	0.083332939	3	290
chr17:46669435-46669811	chr17	46669435	46669811	0.803691333	0.666862917	0.136828416	8	291
chr6:168841439-168841699	chr6	168841439	168841699	0.813947368	0.691416397	0.12253097	4	292
chr16:3639093-3639306	chr16	3639093	3639306	0.789256998	0.670347658	0.11890934	1	293
chr9:123605044-123605585	chr9	123605044	123605585	0.865542479	0.732885531	0.132656948	4	294
chr14:106025534-106026386	chr14	106025534	106026386	0.700229949	0.594820899	0.10540905	1	295
chr12:120031495-120033212	chr12	120031495	120033212	0.54575779	0.44888556	0.096872229	9	296
chr19:46181221-46181455	chr19	46181221	46181455	0.862714402	0.732688471	0.130025931	4	297
chr22:29467292-29467817	chr22	29467292	29467817	0.724908236	0.620091308	0.104816928	2	298
chr5:114514717-114516220	chr5	114514717	114516220	0.488066498	0.402489732	0.085576766	10	299
chr14:24020003-24020251	chr14	24020003	24020251	0.428334079	0.32065738	0.107676699	3	300
chr9:139580970-139582615	chr9	139580970	139582615	0.59748068	0.514678838	0.082801842	4	301

chr19:11959578-11960064	chr19	11959578	11960064	0.781482306	0.63555318	0.145929126	2	302
chr17:42835777-42836242	chr17	42835777	42836242	0.768516656	0.66554722	0.102969436	3	303
chrY:4870745-4871225	chrY	4870745	4871225	0.543484464	0.384185967	0.159298497	1	304
chr3:62354292-62355012	chr3	62354292	62355012	0.853053721	0.733320068	0.119733653	4	305
chr7:77669671-77670057	chr7	77669671	77670057	0.811595769	0.694568445	0.117027324	3	306
chr10:11784408-11784937	chr10	11784408	11784937	0.818181777	0.701961276	0.1162205	3	307
chr11:62476771-62477481	chr11	62476771	62477481	0.596752439	0.507344136	0.089408303	9	308
chr19:58554355-58554587	chr19	58554355	58554587	0.903272305	0.775199322	0.128072983	3	309
chr16:34430776-34431004	chr16	34430776	34431004	0.580299739	0.666839431	-0.086539692	3	310
chr13:95359642-95359874	chr13	95359642	95359874	0.72504249	0.618749851	0.106292639	2	311
chr2:127783082-127783311	chr2	127783082	127783311	0.622450691	0.518800981	0.103649711	3	312
chrX:101906002-101907017	chrX	101906002	101907017	0.658612515	0.563297699	0.095314817	10	313
chr6:168079012-168079213	chr6	168079012	168079213	0.751219737	0.639175349	0.112044388	3	314
chr3:156008992-156009320	chr3	156008992	156009320	0.585607852	0.49080211	0.094805742	3	315
chr20:49548195-49548525	chr20	49548195	49548525	0.75616286	0.645114806	0.111048054	3	316
chr3:13696628-13697127	chr3	13696628	13697127	0.629209755	0.535211946	0.093997808	2	317
chr10:81892223-81892640	chr10	81892223	81892640	0.65099996	0.556355773	0.094644186	3	318
chr2:88469692-88470386	chr2	88469692	88470386	0.651899758	0.555954835	0.095944923	4	319
chr12:75601082-75601752	chr12	75601082	75601752	0.738726622	0.585882982	0.15284364	3	320
chr19:47139338-47139547	chr19	47139338	47139547	0.856573868	0.733230722	0.123343146	3	321
chr9:39078690-39079006	chr9	39078690	39079006	0.813739754	0.694586287	0.119153468	1	322
chr12:54089212-54089413	chr12	54089212	54089413	0.837175048	0.714704895	0.122470153	1	323
chr7:38350921-38351331	chr7	38350921	38351331	0.644570025	0.494141896	0.150428129	5	324
chr13:36728963-36729267	chr13	36728963	36729267	0.806910545	0.695009561	0.111900984	5	325
chr8:142425441-142425716	chr8	142425441	142425716	0.316795821	0.235334064	0.081461757	3	326
chr11:64993281-64993484	chr11	64993281	64993484	0.647206335	0.55741035	0.089795985	2	327
chr16:90148484-90148793	chr16	90148484	90148793	0.36416179	0.272028456	0.092133334	3	328
chrY:14107138-14107480	chrY	14107138	14107480	0.669797091	0.838528942	-0.168731851	1	329
chr1:159158229-159158498	chr1	159158229	159158498	0.564270615	0.429388811	0.134881804	2	330
chr14:29254366-29255069	chr14	29254366	29255069	0.874133796	0.752445861	0.121687935	5	331
chr16:51189801-51190260	chr16	51189801	51190260	0.114043645	0.233265606	-0.119221961	5	332
chr7:21582444-21583313	chr7	21582444	21583313	0.676406119	0.579528427	0.096877693	8	333
chr6:150246753-150247257	chr6	150246753	150247257	0.753464717	0.660217426	0.093247291	4	334
chr4:188916606-188916876	chr4	188916606	188916876	0.845042466	0.725835335	0.119207131	8	335
chr1:181454975-181455261	chr1	181454975	181455261	0.551744185	0.462403687	0.089340498	4	336
chr13:28534433-28535560	chr13	28534433	28535560	0.669950137	0.571660255	0.098289882	5	337
chr2:43037868-43038564	chr2	43037868	43038564	0.655786708	0.559977133	0.095809576	4	338
chr12:122016171-122017693	chr12	122016171	122017693	0.886376139	0.763245481	0.123130658	5	339
chr3:134369465-134370242	chr3	134369465	134370242	0.744720079	0.636383481	0.108336598	12	340
chr7:75909704-75909906	chr7	75909704	75909906	0.879398859	0.752309545	0.127089314	1	341
chr6:30068493-30068794	chr6	30068493	30068794	0.835473341	0.715332732	0.120140609	6	342
chr7:27283409-27283614	chr7	27283409	27283614	0.862187365	0.73890642	0.123280946	3	343
chr19:8407675-8408338	chr19	8407675	8408338	0.607529645	0.521217089	0.086312556	10	344
chr1:32892429-32892835	chr1	32892429	32892835	0.653500214	0.559027301	0.094472913	1	345
chr6:50810643-50810994	chr6	50810643	50810994	0.821644786	0.709734359	0.111910427	4	346
chr2:128180295-128181381	chr2	128180295	128181381	0.653932062	0.5592146	0.094717462	6	347
chr20:30618794-30619138	chr20	30618794	30619138	0.815941017	0.71979872	0.096142297	4	348
chr3:129345668-129346521	chr3	129345668	129346521	0.797789668	0.696194825	0.101594842	4	349
chr7:156409024-156409294	chr7	156409024	156409294	0.76946695	0.662513457	0.106953493	3	350
chr20:26188639-26190348	chr20	26188639	26190348	0.695478927	0.609332821	0.086146105	12	351
chr1:22889596-22890096	chr1	22889596	22890096	0.441886284	0.35284253	0.089043754	4	352
chr12:131783094-131784199	chr12	131783094	131784199	0.74519859	0.57518604	0.170012549	1	353
chr1:221054555-221054888	chr1	221054555	221054888	0.857142603	0.735686309	0.121456294	3	354
chr7:112031476-112032181	chr7	112031476	112032181	0.403743318	0.323617357	0.080125961	2	355
chr3:52279602-52280140	chr3	52279602	52280140	0.690418174	0.5947904	0.095627773	8	356
chr11:32460587-32461004	chr11	32460587	32461004	0.890303631	0.768970859	0.121332772	4	357
chr19:53635626-53636230	chr19	53635626	53636230	0.612848774	0.501561345	0.111287428	6	358
chr3:129323916-129325332	chr3	129323916	129325332	0.556915197	0.477024734	0.079890464	5	359
chr2:207506775-207507422	chr2	207506775	207507422	0.679513581	0.571143159	0.108370421	6	360
chr3:27756213-27756422	chr3	27756213	27756422	0.846169268	0.71639104	0.129778228	3	361
chr17:38599670-38600306	chr17	38599670	38600306	0.649207026	0.550618289	0.098588737	3	362
chr6:43970074-43970922	chr6	43970074	43970922	0.340434516	0.260931171	0.079503345	4	363
chr9:139872238-139873143	chr9	139872238	139873143	0.839489417	0.725613044	0.113876373	4	364
chr6:50787287-50788091	chr6	50787287	50788091	0.764882223	0.65630322	0.108579004	4	365
chr11:17497464-17498626	chr11	17497464	17498626	0.440577051	0.356146651	0.0844304	12	366
chr6:75911580-75912133	chr6	75911580	75912133	0.72455984	0.62214454	0.1024153	4	367
chr1:166916866-166917215	chr1	166916866	166917215	0.681654527	0.572842326	0.108812202	3	368
chr16:30216739-30217851	chr16	30216739	30217851	0.672482483	0.570366932	0.102115552	1	369
chr19:49931204-49931804	chr19	49931204	49931804	0.585574984	0.492404482	0.093170502	2	370
chr3:139396339-139396882	chr3	139396339	139396882	0.623721096	0.53803664	0.085684456	4	371
chr14:38060842-38062119	chr14	38060842	38062119	0.763993896	0.659398592	0.104595304	4	372
chr6:26217212-26217521	chr6	26217212	26217521	0.636860194	0.547186289	0.089673905	3	373
chr7:6566067-6566650	chr7	6566067	6566650	0.788932416	0.682710276	0.10622214	3	374
chr15:51633725-51634318	chr15	51633725	51634318	0.743359743	0.642007107	0.101352636	4	375
chr14:23821088-23822106	chr14	23821088	23822106	0.463535844	0.382448804	0.08108704	8	376
chr9:130616620-130616858	chr9	130616620	130616858	0.820517546	0.705463984	0.115053561	1	377

chr5:140767197-140767695	chr5	140767197	140767695	0.550233032	0.46285852	0.087374512	7	378
chr1:151300523-151300724	chr1	151300523	151300724	0.55083478	0.465223852	0.085610928	3	379
chr16:84029457-84029710	chr16	84029457	84029710	0.875734526	0.757923172	0.117811353	4	380
chr1:149871080-149871946	chr1	149871080	149871946	0.622078789	0.528531768	0.093547021	7	381
chr5:178322714-178323538	chr5	178322714	178323538	0.774621141	0.662995063	0.111626079	6	382
chr6:117591534-117592279	chr6	117591534	117592279	0.832995226	0.715939971	0.117055255	4	383
chr20:62947649-62948464	chr20	62947649	62948464	0.212269099	0.095676352	0.116592747	3	384
chr13:30982288-30982827	chr13	30982288	30982827	0.205562009	0.127083196	0.078478813	3	385
chr6:27858167-27858564	chr6	27858167	27858564	0.840942221	0.720796186	0.120146035	3	386
chr15:45408574-45409528	chr15	45408574	45409528	0.857192431	0.743487014	0.113705417	4	387
chr1:45308544-45309159	chr1	45308544	45309159	0.175885166	0.097483234	0.078401932	4	388
chr3:9595186-9595533	chr3	9595186	9595533	0.563073117	0.481007651	0.082065466	2	389
chr12:106975196-106975714	chr12	106975196	106975714	0.602048704	0.51533251	0.086716194	3	390
chr14:85997469-85998637	chr14	85997469	85998637	0.482749551	0.389664446	0.093085106	6	391
chr14:78432386-78432804	chr14	78432386	78432804	0.757266187	0.646575175	0.110691012	3	392
chr11:789872-790133	chr11	789872	790133	0.073549491	0.151849627	-0.078300136	2	393
chr2:110872946-110873587	chr2	110872946	110873587	0.700983909	0.590166714	0.110817195	4	394
chr1:211589678-211590293	chr1	211589678	211590293	0.612073584	0.533816902	0.078256681	3	395
chr9:23822413-23822667	chr9	23822413	23822667	0.938541054	0.808321018	0.130220036	1	396
chr12:7046238-7047257	chr12	7046238	7047257	0.441987669	0.363814595	0.078173074	4	397
chr2:173099483-173100098	chr2	173099483	173100098	0.604708625	0.508617298	0.096091326	4	398
chr19:39894559-39894768	chr19	39894559	39894768	0.584663861	0.501557598	0.083106263	4	399
chr17:21279507-21281574	chr17	21279507	21281574	0.767328225	0.666488852	0.100839373	16	400
chr7:852961-853230	chr7	852961	853230	0.442475849	0.342813482	0.099662367	3	401
chr18:29303961-29304254	chr18	29303961	29304254	0.784200138	0.672413456	0.111786682	2	402
chr8:1094751-1094967	chr8	1094751	1094967	0.821261277	0.709307351	0.111953926	3	403
chr15:51387533-51387755	chr15	51387533	51387755	0.887243568	0.765093306	0.122150263	4	404
chr2:220377744-220377946	chr2	220377744	220377946	0.753040939	0.650153509	0.10288743	3	405
chr19:10542663-10543120	chr19	10542663	10543120	0.797329665	0.688287152	0.109042512	2	406
chr1:205537752-205538443	chr1	205537752	205538443	0.614111079	0.536497451	0.077613628	7	407
chr12:113917395-113918107	chr12	113917395	113918107	0.645677319	0.541867026	0.103810293	6	408
chr9:115913082-115913807	chr9	115913082	115913807	0.494988491	0.306273433	0.188715058	3	409
chr4:3485964-3486381	chr4	3485964	3486381	0.722346594	0.626568646	0.095777948	4	410
chr2:172951290-172952159	chr2	172951290	172952159	0.883075343	0.76258133	0.120494013	5	411
chr4:174448334-174448845	chr4	174448334	174448845	0.909816654	0.78850854	0.121308114	4	412
chr7:993402-994574	chr7	993402	994574	0.364066801	0.283578869	0.080487932	2	413
chr7:131242694-131243006	chr7	131242694	131243006	0.7178563	0.620353573	0.097502727	3	414
chr9:503937-505722	chr9	503937	505722	0.646648005	0.535936646	0.110711359	5	415
chr19:2462065-2462442	chr19	2462065	2462442	0.882458658	0.762206601	0.120252057	2	416
chr2:119602617-119604486	chr2	119602617	119604486	0.749005197	0.647900885	0.101104311	13	417
chr19:49340489-49340774	chr19	49340489	49340774	0.703103142	0.60859633	0.094506811	4	418
chr16:31008833-31009036	chr16	31008833	31009036	0.786251236	0.678530291	0.107720945	2	419
chr3:160822495-160823260	chr3	160822495	160823260	0.70533334	0.605168949	0.100164391	8	420
chr4:185939223-185942747	chr4	185939223	185942747	0.654833452	0.561926001	0.092907452	28	421
chr20:21000766-21001280	chr20	21000766	21001280	0.902833992	0.787097872	0.11573612	3	422
chr11:124628368-124629590	chr11	124628368	124629590	0.857492023	0.747923346	0.109568678	3	423
chr18:76069223-76069699	chr18	76069223	76069699	0.59255707	0.710695565	-0.118138495	4	424
chr15:83001661-83002634	chr15	83001661	83002634	0.302843779	0.226212743	0.076631035	1	425
chr15:96904723-96905050	chr15	96904723	96905050	0.896458556	0.77643429	0.120024266	3	426
chr6:27833121-27833406	chr6	27833121	27833406	0.57725782	0.482647606	0.094610214	4	427
chr3:170303533-170303768	chr3	170303533	170303768	0.608322381	0.525773042	0.082549338	3	428
chr6:38682950-38683265	chr6	38682950	38683265	0.873111752	0.756698952	0.1164128	3	429
chr17:77903888-77904397	chr17	77903888	77904397	0.542293621	0.465916528	0.076377092	5	430
chr2:132182328-132183101	chr2	132182328	132183101	0.772669731	0.659035557	0.113634174	3	431
chr3:126108020-126108488	chr3	126108020	126108488	0.312541669	0.236243581	0.076298088	3	432
chr16:49314038-49316543	chr16	49314038	49316543	0.618186304	0.516737512	0.101448792	10	433
chr1:87617693-87617986	chr1	87617693	87617986	0.830402604	0.716772188	0.113630416	4	434
chrX:136134511-136135269	chrX	136134511	136135269	0.792743252	0.686479011	0.106264242	3	435
chr2:176956505-176956707	chr2	176956505	176956707	0.908973667	0.781259848	0.127713818	2	436
chr1:50882434-50882660	chr1	50882434	50882660	0.919787034	0.795873746	0.123913288	1	437
chr11:119612092-119612476	chr11	119612092	119612476	0.371172314	0.273866116	0.097306198	3	438
chr16:67208068-67208678	chr16	67208068	67208678	0.398275108	0.322261287	0.076013821	3	439
chr16:56650982-56651384	chr16	56650982	56651384	0.78231176	0.651850616	0.130461145	4	440
chr20:44685772-44687610	chr20	44685772	44687610	0.821609114	0.711453594	0.11015552	4	441
chr14:89493136-89494382	chr14	89493136	89494382	0.710711477	0.632594569	0.078116908	5	442
chr11:126873092-126873809	chr11	126873092	126873809	0.300639377	0.224868294	0.075771083	6	443
chr10:16561605-16563822	chr10	16561605	16563822	0.654757659	0.578504574	0.076253085	8	444
chr10:135203102-135203316	chr10	135203102	135203316	0.851155789	0.738412247	0.112743542	2	445
chr12:7023262-7024089	chr12	7023262	7024089	0.478276232	0.402653545	0.075622687	11	446
chr2:177042752-177043444	chr2	177042752	177043444	0.641660539	0.553053362	0.088607177	5	447
chr7:976648-976894	chr7	976648	976894	0.735560329	0.849041004	-0.113480675	1	448
chr4:42152767-42154984	chr4	42152767	42154984	0.547984959	0.417005617	0.130979342	12	449
chrX:36975506-36976349	chrX	36975506	36976349	0.630525776	0.54710624	0.083419536	4	450
chr10:135039938-135040196	chr10	135039938	135040196	0.874322165	0.758629456	0.115692708	3	451
chr3:50230431-50232344	chr3	50230431	50232344	0.732842335	0.647868615	0.08497372	5	452
chr9:14346266-14348149	chr9	14346266	14348149	0.874381499	0.742629794	0.131751705	3	453

chr2:175204844-175207553	chr2	175204844	175207553	0.731188812	0.627326481	0.103862331	13	454
chr15:98971491-98971876	chr15	98971491	98971876	0.162551762	0.087323407	0.075228355	3	455
chr17:58212843-58213193	chr17	58212843	58213193	0.649583193	0.562646261	0.086936932	5	456
chr5:172068287-172069174	chr5	172068287	172069174	0.815896258	0.714900267	0.100995991	3	457
chr8:124172801-124173541	chr8	124172801	124173541	0.892191803	0.774557789	0.117634015	5	458
chr1:9242168-9243827	chr1	9242168	9243827	0.781596229	0.685546422	0.096049807	7	459
chr6:106958233-106958718	chr6	106958233	106958718	0.798678302	0.694013287	0.104665016	5	460
chr6:28457569-28457926	chr6	28457569	28457926	0.894088854	0.756489076	0.137599779	2	461
chr11:111383169-111383892	chr11	111383169	111383892	0.650437116	0.543408314	0.107028802	8	462
chr12:65514879-65515863	chr12	65514879	65515863	0.700438927	0.619224792	0.081214135	7	463
chr5:95768875-95769080	chr5	95768875	95769080	0.593141311	0.502538914	0.090602397	7	464
chr10:43361553-43362350	chr10	43361553	43362350	0.696799923	0.609811215	0.086988707	5	465
chr16:85203158-85203941	chr16	85203158	85203941	0.761411793	0.660427595	0.100984198	2	466
chr18:77280145-77280414	chr18	77280145	77280414	0.925305304	0.803567685	0.121737619	3	467
chr12:52701963-52702560	chr12	52701963	52702560	0.615304161	0.504341501	0.110962659	5	468
chr12:12849068-12849270	chr12	12849068	12849270	0.579607005	0.504693255	0.074913749	7	469
chr3:147142182-147142391	chr3	147142182	147142391	0.904820191	0.785469508	0.119350683	3	470
chr4:169799087-169799625	chr4	169799087	169799625	0.873097951	0.743466465	0.129631486	3	471
chr1:18971730-18972097	chr1	18971730	18972097	0.897806561	0.780065351	0.11774121	3	472
chr20:61339859-61341220	chr20	61339859	61341220	0.645822465	0.570379098	0.075443367	9	473
chr9:140040092-140040698	chr9	140040092	140040698	0.805777212	0.699393666	0.106383546	1	474
chr8:65281904-65283043	chr8	65281904	65283043	0.71542011	0.591577592	0.123842518	5	475
chr20:57581903-57582595	chr20	57581903	57582595	0.72173558	0.628749246	0.092986334	9	476
chr14:89017661-89017972	chr14	89017661	89017972	0.666607879	0.578794445	0.087813435	2	477
chr17:35289389-35289623	chr17	35289389	35289623	0.723258974	0.6289898	0.094269174	2	478
chr7:129142172-129143038	chr7	129142172	129143038	0.530313055	0.453210692	0.077102363	4	479
chr2:233925092-233925318	chr2	233925092	233925318	0.835791562	0.715852138	0.119939424	2	480
chr2:66652692-66654218	chr2	66652692	66654218	0.59660553	0.489329213	0.107276317	6	481
chr10:118927022-118928132	chr10	118927022	118928132	0.690615198	0.604906384	0.085708814	5	482
chr20:57463653-57467739	chr20	57463653	57467739	0.613647028	0.524434376	0.089212653	54	483
chrX:152909014-152909214	chrX	152909014	152909214	0.508496088	0.434281358	0.07421473	3	484
chr19:1766145-1766364	chr19	1766145	1766364	0.675019917	0.572525102	0.102494816	2	485
chr15:75470912-75471212	chr15	75470912	75471212	0.72355907	0.624988409	0.098570661	4	486
chr11:22454301-22454518	chr11	22454301	22454518	0.879734971	0.767391422	0.112343549	3	487
chr1:75595814-75596162	chr1	75595814	75596162	0.868569963	0.738878972	0.129690992	3	488
chr12:50297581-50297988	chr12	50297581	50297988	0.814068042	0.707348146	0.106719896	6	489
chr2:8723856-8724093	chr2	8723856	8724093	0.690193114	0.589023586	0.101169528	3	490
chr3:196255496-196256013	chr3	196255496	196256013	0.906197033	0.788385903	0.11781113	4	491
chr8:2480426-2480920	chr8	2480426	2480920	0.604714002	0.530778172	0.073935829	3	492
chr5:172386894-172387102	chr5	172386894	172387102	0.523979503	0.450134768	0.073844736	3	493
chr19:8674333-8674764	chr19	8674333	8674764	0.320282825	0.404336011	-0.084053186	2	494
chr15:90293222-90294733	chr15	90293222	90294733	0.605910302	0.526627441	0.079282861	9	495
chr7:97361133-97363018	chr7	97361133	97363018	0.650259168	0.487890135	0.162369033	10	496
chrX:53713069-53713794	chrX	53713069	53713794	0.45369692	0.374626156	0.079070763	7	497
chr4:379900-380399	chr4	379900	380399	0.719830013	0.622317142	0.097512871	4	498
chr1:43832815-43833073	chr1	43832815	43833073	0.846196165	0.738682038	0.107514126	3	499
chr7:27231806-27233097	chr7	27231806	27233097	0.640724984	0.557625015	0.083099969	7	500
chr8:1649440-1649759	chr8	1649440	1649759	0.785159426	0.682808493	0.102350932	2	501
chr22:45898295-45899357	chr22	45898295	45899357	0.500092741	0.418775536	0.081317205	7	502
chr19:3228730-3228992	chr19	3228730	3228992	0.737408204	0.654304442	0.083103762	2	503
chr7:150019951-150020752	chr7	150019951	150020752	0.564745709	0.491280696	0.073465013	11	504
chr2:177039552-177039951	chr2	177039552	177039951	0.908463912	0.788355506	0.120108406	3	505
chr3:8808962-8811280	chr3	8808962	8811280	0.721099105	0.647633327	0.073465778	12	506
chr9:37034136-37038341	chr9	37034136	37038341	0.890420115	0.776534299	0.113885815	13	507
chr2:241562470-241562910	chr2	241562470	241562910	0.81657548	0.711146152	0.105429327	4	508
chr20:2672905-2674698	chr20	2672905	2674698	0.648131144	0.574811301	0.073319843	6	509
chr17:3438842-3439046	chr17	3438842	3439046	0.56173627	0.488502471	0.073233799	4	510
chr17:42733487-42734626	chr17	42733487	42734626	0.633826932	0.551766031	0.082060901	11	511
chr8:143879595-143879806	chr8	143879595	143879806	0.868864816	0.756200747	0.112664069	1	512
chr11:116706482-116706910	chr11	116706482	116706910	0.537813529	0.452028869	0.085784661	4	513
chr17:40912817-40913553	chr17	40912817	40913553	0.768704441	0.673704251	0.09500019	5	514
chr18:55862654-55862873	chr18	55862654	55862873	0.897711672	0.782554349	0.115157323	5	515
chr18:76732971-76734765	chr18	76732971	76734765	0.655602184	0.532119283	0.1234829	4	516
chr3:44596536-44597018	chr3	44596536	44597018	0.78918524	0.693719183	0.095466057	5	517
chr7:156801419-156801632	chr7	156801419	156801632	0.839084266	0.732160786	0.10692348	2	518
chr19:3933474-3933816	chr19	3933474	3933816	0.243145715	0.170139814	0.073005901	3	519
chr10:125425496-125426642	chr10	125425496	125426642	0.831415551	0.72556949	0.10584606	7	520
chr12:113900751-113906442	chr12	113900751	113906442	0.748073203	0.656663864	0.091409339	23	521
chr6:132271357-132271658	chr6	132271357	132271658	0.838652827	0.733820919	0.104831908	3	522
chr12:186864-187610	chr12	186864	187610	0.560425781	0.40237784	0.158047941	3	523
chr4:154713538-154714240	chr4	154713538	154714240	0.938410661	0.817551331	0.12085933	3	524
chr16:2892580-2892810	chr16	2892580	2892810	0.907210246	0.790616375	0.116593872	5	525
chr16:82660652-82661813	chr16	82660652	82661813	0.726085707	0.631568937	0.09451677	7	526
chr19:41102846-41103281	chr19	41102846	41103281	0.646959129	0.562330109	0.084629021	3	527
chr5:155107505-155108934	chr5	155107505	155108934	0.661351455	0.557938083	0.103413372	7	528
chr19:29284314-29285010	chr19	29284314	29285010	0.418878228	0.331565986	0.087312242	3	529

chr15:27215952-27216856	chr15	27215952	27216856	0.641094419	0.531484431	0.109609989	12	530
chr17:46658949-46660003	chr17	46658949	46660003	0.74321073	0.650379514	0.092831215	6	531
chr4:8429930-8430441	chr4	8429930	8430441	0.206151236	0.133845495	0.072305742	6	532
chr5:523677-524887	chr5	523677	524887	0.608046356	0.535557948	0.072488408	8	533
chr9:126770664-126772091	chr9	126770664	126772091	0.107773038	0.180046602	-0.072273564	3	534
chr16:89990070-89990507	chr16	89990070	89990507	0.318735209	0.39099643	-0.072261221	3	535
chr5:145722468-145722925	chr5	145722468	145722925	0.849437893	0.743767391	0.105670501	5	536
chr9:123638821-123639936	chr9	123638821	123639936	0.19203649	0.119843092	0.072193399	3	537
chr5:2738954-2741237	chr5	2738954	2741237	0.693856877	0.606751014	0.087105863	7	538
chr14:92789495-92790712	chr14	92789495	92790712	0.666100173	0.586442341	0.079657831	7	539
chr17:6945390-6947521	chr17	6945390	6947521	0.693137626	0.608256101	0.084881525	14	540
chr8:89339966-89340481	chr8	89339966	89340481	0.38215584	0.31007922	0.072076621	5	541
chr1:181287301-181287873	chr1	181287301	181287873	0.300695904	0.221910732	0.078785171	6	542
chr8:53851702-53854426	chr8	53851702	53854426	0.600180362	0.505101421	0.095078941	15	543
chr1:16163753-16164123	chr1	16163753	16164123	0.89392383	0.779649986	0.114273844	4	544
chr9:44227155-44227529	chr9	44227155	44227529	0.447447068	0.370817029	0.076630039	2	545
chr2:120281662-120282211	chr2	120281662	120282211	0.779303522	0.684680901	0.094622621	4	546
chr7:100075304-100075551	chr7	100075304	100075551	0.472637876	0.400664398	0.071973479	5	547
chr5:122424338-122424539	chr5	122424338	122424539	0.509515045	0.437577261	0.071937784	3	548
chr10:29011054-29011453	chr10	29011054	29011453	0.776934835	0.676990633	0.099944202	2	549
chr11:504190-504659	chr11	504190	504659	0.909170376	0.79020602	0.118964356	2	550
chr6:26020672-26021125	chr6	26020672	26021125	0.805087764	0.702723795	0.102363969	6	551
chr19:53039078-53039920	chr19	53039078	53039920	0.753184226	0.657100582	0.096083645	4	552
chr12:66135121-66136400	chr12	66135121	66136400	0.61086366	0.512506115	0.098357545	5	553
chr6:161100093-161100456	chr6	161100093	161100456	0.881978688	0.777747269	0.104231419	3	554
chr16:80965953-80966478	chr16	80965953	80966478	0.852224257	0.744273469	0.107950788	5	555
chr2:45161428-45163058	chr2	45161428	45163058	0.668932519	0.580500286	0.088432233	5	556
chr9:34623513-34624081	chr9	34623513	34624081	0.879350558	0.767557401	0.111793157	2	557
chr7:127775630-127776442	chr7	127775630	127776442	0.23427466	0.161143601	0.073131059	4	558
chr19:53193140-53193945	chr19	53193140	53193945	0.385375484	0.314058971	0.071316513	5	559
chr19:932599-932845	chr19	932599	932845	0.882519762	0.770945334	0.111574428	2	560
chr7:54612325-54612558	chr7	54612325	54612558	0.53276191	0.41736434	0.11539757	3	561
chr14:100751673-100752339	chr14	100751673	100752339	0.436032348	0.364799393	0.071232954	4	562
chr5:140734721-140735028	chr5	140734721	140735028	0.537400694	0.466174701	0.071225993	4	563
chr1:67600391-67600715	chr1	67600391	67600715	0.868137499	0.760016661	0.108120838	4	564
chr19:54481413-54481955	chr19	54481413	54481955	0.436888292	0.362425837	0.074462455	3	565
chr17:75524590-75525152	chr17	75524590	75525152	0.386638568	0.269436033	0.117202535	5	566
chr18:76486314-76486864	chr18	76486314	76486864	0.622241591	0.7499815	-0.127739909	3	567
chr16:82044887-82045306	chr16	82044887	82045306	0.786577425	0.689132586	0.09744484	7	568
chr15:37179517-37179782	chr15	37179517	37179782	0.68894092	0.582003748	0.106937172	4	569
chr19:18335073-18337375	chr19	18335073	18337375	0.521450408	0.450595743	0.070854664	14	570
chr9:112917-114839	chr9	112917	114839	0.535711094	0.446544031	0.089167063	5	571
chr2:176949512-176949795	chr2	176949512	176949795	0.883637777	0.743138064	0.140499714	3	572
chr2:114033360-114033617	chr2	114033360	114033617	0.914316347	0.800331016	0.113985331	3	573
chr9:19127180-19127880	chr9	19127180	19127880	0.784077241	0.686104955	0.097972286	2	574
chr4:2305515-2305793	chr4	2305515	2305793	0.174557459	0.329803832	-0.155246373	1	575
chr4:111539907-111540127	chr4	111539907	111540127	0.889704571	0.77825845	0.111446121	3	576
chr8:1113059-1114073	chr8	1113059	1114073	0.837404965	0.736536165	0.1008688	4	577
chr22:38793181-38793451	chr22	38793181	38793451	0.436709429	0.366201627	0.070507803	1	578
chr17:1395120-1395372	chr17	1395120	1395372	0.856641895	0.748976073	0.107665822	1	579
chr3:38179858-38180689	chr3	38179858	38180689	0.522755522	0.412345772	0.110409751	10	580
chr12:25538133-25538344	chr12	25538133	25538344	0.898674446	0.782982366	0.11569208	3	581
chr19:6740670-6741203	chr19	6740670	6741203	0.71204244	0.605426755	0.106615685	6	582
chr1:46859725-46860291	chr1	46859725	46860291	0.121035549	0.206477192	-0.085441643	6	583
chr20:56803283-56804112	chr20	56803283	56804112	0.806342637	0.686129713	0.120212924	3	584
chr9:132499969-132500553	chr9	132499969	132500553	0.706154348	0.614655237	0.091499111	2	585
chr14:32672537-32672915	chr14	32672537	32672915	0.140961275	0.070720813	0.070240463	3	586
chr3:133646095-133646650	chr3	133646095	133646650	0.536192759	0.463696267	0.072496492	2	587
chr2:127863643-127865288	chr2	127863643	127865288	0.382345474	0.31039364	0.071951833	11	588
chr9:34589114-34591978	chr9	34589114	34591978	0.790028755	0.681208498	0.108820257	9	589
chr1:41326950-41328285	chr1	41326950	41328285	0.656964277	0.576542358	0.080421919	11	590
chr2:158453800-158454111	chr2	158453800	158454111	0.564694083	0.484712328	0.079981755	4	591
chr19:708531-708742	chr19	708531	708742	0.463207066	0.393081863	0.070125203	4	592
chr9:139024317-139025832	chr9	139024317	139025832	0.693238546	0.607458052	0.085780494	4	593
chr10:28287448-28288057	chr10	28287448	28288057	0.34909286	0.278970156	0.070122705	9	594
chr3:178978949-178979364	chr3	178978949	178979364	0.482569923	0.412480434	0.070089489	4	595
chr7:143582126-143582610	chr7	143582126	143582610	0.725546258	0.649225264	0.076320994	3	596
chr1:11708768-11709277	chr1	11708768	11709277	0.649745195	0.572775444	0.076969751	4	597
chr19:18896516-18896860	chr19	18896516	18896860	0.832141706	0.737180182	0.094961524	3	598
chr5:74349801-74350239	chr5	74349801	74350239	0.898379048	0.792826224	0.105552824	4	599
chr21:19617099-19617874	chr21	19617099	19617874	0.412838319	0.321609172	0.091229147	4	600
chr13:19918586-19919221	chr13	19918586	19919221	0.799840595	0.712497489	0.087343106	5	601
chrX:7895078-7895608	chrX	7895078	7895608	0.384719439	0.277101921	0.107617518	9	602
chr2:172944989-172945384	chr2	172944989	172945384	0.887184234	0.752957949	0.134226284	5	603
chr2:119605201-119605620	chr2	119605201	119605620	0.556966408	0.476376962	0.080589446	4	604
chr17:26578273-26578682	chr17	26578273	26578682	0.852220124	0.754475367	0.097744757	3	605

chr18:67069934-67070171	chr18	67069934	67070171	0.671559102	0.576316768	0.095242334	4	606
chr12:122356316-122356853	chr12	122356316	122356853	0.911338869	0.802458609	0.10888026	6	607
chr16:21294981-21295414	chr16	21294981	21295414	0.309697812	0.154292455	0.155405357	2	608
chr19:10589682-10590041	chr19	10589682	10590041	0.885574571	0.77843399	0.107140581	4	609
chr20:44746823-44747060	chr20	44746823	44747060	0.814578486	0.723617253	0.090961233	5	610
chr11:69924339-69925197	chr11	69924339	69925197	0.408588715	0.299940122	0.108648592	6	611
chr22:17081937-17082595	chr22	17081937	17082595	0.677735061	0.593891426	0.083843635	2	612
chr3:27765197-27765675	chr3	27765197	27765675	0.918090073	0.788186587	0.129903486	5	613
chr20:30777757-30778329	chr20	30777757	30778329	0.728544705	0.639026284	0.08951842	3	614
chr8:80695831-80696458	chr8	80695831	80696458	0.703314647	0.616214625	0.087100022	4	615
chr14:38057139-38057798	chr14	38057139	38057798	0.738672111	0.647366597	0.091305514	2	616
chr19:55667533-55668465	chr19	55667533	55668465	0.626080558	0.550336825	0.075743733	4	617
chr19:44763979-44764312	chr19	44763979	44764312	0.084161255	0.153318359	-0.069157104	4	618
chr5:67584214-67584451	chr5	67584214	67584451	0.742284505	0.651120898	0.091163607	5	619
chr20:61447686-61448891	chr20	61447686	61448891	0.749552326	0.657378792	0.092173534	23	620
chr16:863279-863917	chr16	863279	863917	0.653171885	0.573158676	0.080013209	3	621
chr9:127539240-127540081	chr9	127539240	127540081	0.581382022	0.507168184	0.074213838	4	622
chr10:82168065-82168917	chr10	82168065	82168917	0.365460991	0.245892889	0.119568102	7	623
chr9:97021465-97021967	chr9	97021465	97021967	0.225775967	0.134695686	0.09108028	2	624
chr8:40755165-40755404	chr8	40755165	40755404	0.195926224	0.267371371	-0.071445147	4	625
chr2:628910-629190	chr2	628910	629190	0.787780096	0.864720023	-0.076939927	4	626
chr8:6691834-6693135	chr8	6691834	6693135	0.583935738	0.507085236	0.076850502	9	627
chr9:137393049-137393305	chr9	137393049	137393305	0.822029484	0.722470017	0.099559467	3	628
chr10:22764709-22767050	chr10	22764709	22767050	0.820096747	0.739639819	0.080456929	7	629
chr17:44438566-44439569	chr17	44438566	44439569	0.38265798	0.31386518	0.0687928	1	630
chr5:76249436-76250528	chr5	76249436	76250528	0.67362828	0.549501226	0.124127054	6	631
chr19:41633777-41634047	chr19	41633777	41634047	0.517674353	0.44896564	0.068708712	3	632
chr2:946882-947286	chr2	946882	947286	0.88419418	0.776882592	0.107311588	3	633
chr6:74405601-74406021	chr6	74405601	74406021	0.611798653	0.536274797	0.075523856	3	634
chr10:112402954-112404328	chr10	112402954	112404328	0.697341545	0.607802726	0.089538819	5	635
chr6:45387347-45388164	chr6	45387347	45388164	0.799763539	0.703668355	0.096095184	5	636
chr22:39323204-39323528	chr22	39323204	39323528	0.932300262	0.819338106	0.112962156	3	637
chr2:945687-946774	chr2	945687	946774	0.178686975	0.110147127	0.068539848	4	638
chr16:84538885-84539115	chr16	84538885	84539115	0.785817332	0.693971149	0.091846183	3	639
chr1:26249206-26249613	chr1	26249206	26249613	0.648457085	0.570910413	0.077546672	4	640
chr4:17782643-17783624	chr4	17782643	17783624	0.666440774	0.55277946	0.113661315	12	641
chr2:131673687-131674150	chr2	131673687	131674150	0.870665564	0.765137548	0.105528015	4	642
chr12:52400468-52401696	chr12	52400468	52401696	0.87755542	0.775619255	0.101936165	8	643
chr16:450835-451140	chr16	450835	451140	0.88396101	0.776661381	0.107299629	4	644
chr19:47217162-47217555	chr19	47217162	47217555	0.902248143	0.794280134	0.107968009	5	645
chr2:95401381-95401636	chr2	95401381	95401636	0.589475103	0.517052217	0.072422885	1	646
chr5:28927606-28928637	chr5	28927606	28928637	0.597110853	0.672809709	-0.075698855	3	647
chr8:101661672-101662022	chr8	101661672	101662022	0.659160344	0.577770263	0.081390081	7	648
chr11:416420-417650	chr11	416420	417650	0.747953399	0.649139965	0.098813434	8	649
chr5:172661487-172662228	chr5	172661487	172662228	0.481119965	0.412966952	0.068153013	5	650
chr4:94755787-94756310	chr4	94755787	94756310	0.935065008	0.821496094	0.113568915	2	651
chr12:115124730-115125152	chr12	115124730	115125152	0.89580711	0.786419013	0.109388097	4	652
chr1:33358470-33359449	chr1	33358470	33359449	0.639080601	0.560510222	0.078570378	4	653
chr19:49199965-49200184	chr19	49199965	49200184	0.862796194	0.75440294	0.108393254	3	654
chr14:106145949-106146803	chr14	106145949	106146803	0.844122762	0.741266043	0.102856719	1	655
chr19:17404960-17405377	chr19	17404960	17405377	0.581536407	0.649565691	-0.068029284	4	656
chr19:675672-675881	chr19	675672	675881	0.716676309	0.641627851	0.075048458	3	657
chr15:45814336-45815344	chr15	45814336	45815344	0.164735913	0.096738521	0.067997392	8	658
chr11:64815041-64815722	chr11	64815041	64815722	0.912157849	0.801938926	0.110218923	3	659
chr5:7849946-7850439	chr5	7849946	7850439	0.863117499	0.758789554	0.104327945	4	660
chr20:3218579-3220930	chr20	3218579	3220930	0.707531086	0.63256572	0.074965365	9	661
chr19:40005649-40005869	chr19	40005649	40005869	0.558444751	0.490045134	0.068399617	7	662
chr17:19648140-19648492	chr17	19648140	19648492	0.543707555	0.476024313	0.067683243	3	663
chr4:25865064-25865376	chr4	25865064	25865376	0.87766098	0.771496003	0.106164977	3	664
chr3:127794370-127796136	chr3	127794370	127796136	0.84040193	0.72490531	0.11549662	6	665
chr1:1289708-1291126	chr1	1289708	1291126	0.646254461	0.571236709	0.075017752	7	666
chr1:109203594-109204378	chr1	109203594	109204378	0.888225051	0.76686917	0.12135588	7	667
chr6:44187187-44187400	chr6	44187187	44187400	0.75333971	0.661937702	0.091402008	2	668
chr3:159756633-159756997	chr3	159756633	159756997	0.671355132	0.587160444	0.084194687	5	669
chr4:85404987-85405252	chr4	85404987	85405252	0.921873766	0.798273552	0.123600214	2	670
chr22:48970858-48972947	chr22	48970858	48972947	0.693800818	0.610699995	0.083100823	8	671
chr2:85664695-85665055	chr2	85664695	85665055	0.635649384	0.558098953	0.077550431	4	672
chr2:241395249-241395802	chr2	241395249	241395802	0.853642716	0.750187595	0.103455122	4	673
chr11:66314208-66314455	chr11	66314208	66314455	0.843646733	0.742053337	0.101593397	5	674
chr19:17982671-17983821	chr19	17982671	17983821	0.42225839	0.354877347	0.067381042	10	675
chr10:12390803-12392589	chr10	12390803	12392589	0.351445506	0.279901949	0.071543557	7	676
chr12:113572978-113573758	chr12	113572978	113573758	0.586802363	0.516919092	0.069883271	9	677
chr1:86621279-86622871	chr1	86621279	86622871	0.441091239	0.370115316	0.070975923	10	678
chr5:131346893-131347776	chr5	131346893	131347776	0.342861391	0.275691427	0.067169964	9	679
chr8:57359900-57360114	chr8	57359900	57360114	0.63411182	0.551463737	0.082648083	4	680
chr1:55007705-55008448	chr1	55007705	55008448	0.179427136	0.112286456	0.06714068	9	681

chr11:124790815-124791354	chr11	124790815	124791354	0.851001508	0.723200308	0.1278012	3	682
chr19:50193021-50194798	chr19	50193021	50194798	0.74099425	0.651913206	0.089081044	10	683
chr16:67183209-67184968	chr16	67183209	67184968	0.897942736	0.794329967	0.103612769	7	684
chr21:15351909-15352658	chr21	15351909	15352658	0.729391947	0.642554989	0.086836958	4	685
chr17:3599053-3599551	chr17	3599053	3599551	0.700181597	0.59224962	0.107931977	4	686
chr12:127210779-127211651	chr12	127210779	127211651	0.740745484	0.654373299	0.086372184	2	687
chr2:121101047-121101432	chr2	121101047	121101432	0.396661407	0.329732525	0.066928882	3	688
chr2:106886119-106886738	chr2	106886119	106886738	0.256421839	0.189493343	0.066928497	5	689
chr9:969530-973276	chr9	969530	973276	0.898675938	0.769270784	0.129405154	14	690
chr10:135436148-135436805	chr10	135436148	135436805	0.740570725	0.656575058	0.083995667	3	691
chr9:46132797-46133096	chr9	46132797	46133096	0.712089108	0.626240464	0.085848644	1	692
chr3:147113609-147114479	chr3	147113609	147114479	0.812064258	0.708152411	0.103911846	5	693
chr6:30523287-30523519	chr6	30523287	30523519	0.283847093	0.217093595	0.066753499	9	694
chr2:9614195-9615235	chr2	9614195	9615235	0.417715131	0.336328144	0.081386986	9	695
chr1:26551518-26552194	chr1	26551518	26552194	0.876576771	0.770817779	0.105758991	5	696
chr17:16520939-16521317	chr17	16520939	16521317	0.684573936	0.606151315	0.078422621	2	697
chr12:49318487-49319476	chr12	49318487	49319476	0.717301129	0.631152764	0.086148365	14	698
chr4:154074384-154075045	chr4	154074384	154075045	0.212481346	0.128024464	0.084456882	3	699
chr2:89064494-89065513	chr2	89064494	89065513	0.753790203	0.669745032	0.084045171	10	700
chr4:38869402-38869780	chr4	38869402	38869780	0.574965452	0.479479121	0.095486331	7	701
chr6:32116591-32117229	chr6	32116591	32117229	0.91499677	0.807739416	0.107257354	17	702
chr16:89268493-89268865	chr16	89268493	89268865	0.59919529	0.482817419	0.116377871	2	703
chr3:147108512-147111703	chr3	147108512	147111703	0.800816578	0.693921868	0.10689471	20	704
chr2:131792238-131793189	chr2	131792238	131793189	0.660099604	0.586930855	0.073168749	4	705
chr18:56934834-56936827	chr18	56934834	56936827	0.70734599	0.588729042	0.118616948	7	706
chr3:119041383-119042255	chr3	119041383	119042255	0.148567582	0.082249173	0.06631841	4	707
chr7:32801485-32801972	chr7	32801485	32801972	0.598699341	0.528161535	0.070537807	3	708
chr1:183774194-183774416	chr1	183774194	183774416	0.194426765	0.128190753	0.066236012	2	709
chr10:119293918-119297675	chr10	119293918	119297675	0.8357463	0.742197523	0.093548776	20	710
chr2:108602825-108603467	chr2	108602825	108603467	0.624782983	0.50500888	0.119774103	10	711
chr14:65016517-65016909	chr14	65016517	65016909	0.923282458	0.807962622	0.115319836	6	712
chr16:67564059-67564332	chr16	67564059	67564332	0.906805631	0.798510906	0.108294725	1	713
chr16:89259556-89260000	chr16	89259556	89260000	0.308394665	0.401351103	-0.092956438	2	714
chr17:32484008-32484280	chr17	32484008	32484280	0.782563512	0.685840094	0.096723418	6	715
chr2:5831188-5831413	chr2	5831188	5831413	0.754983389	0.665874108	0.08910928	2	716
chr13:69558905-69559304	chr13	69558905	69559304	0.69740392	0.622349918	0.075054003	4	717
chr5:77805754-77806313	chr5	77805754	77806313	0.728254338	0.639475709	0.088778629	4	718
chr1:217310750-217311178	chr1	217310750	217311178	0.844727406	0.744779637	0.099947769	6	719
chr16:84401958-84402497	chr16	84401958	84402497	0.701835601	0.603218623	0.098616978	4	720
chr3:13520913-13521319	chr3	13520913	13521319	0.783167544	0.682186907	0.100980637	12	721
chr16:750399-751451	chr16	750399	751451	0.706980975	0.630093199	0.076887776	5	722
chr15:89952272-89953061	chr15	89952272	89953061	0.902709018	0.796355959	0.106353059	7	723
chr19:34175345-34175768	chr19	34175345	34175768	0.339624115	0.273869741	0.065754374	6	724
chr15:91208320-91209026	chr15	91208320	91209026	0.688475529	0.606097963	0.082377566	5	725
chr2:98962874-98964187	chr2	98962874	98964187	0.572407865	0.485896232	0.086511633	9	726
chr2:242549374-242549995	chr2	242549374	242549995	0.250424257	0.184745275	0.065678981	4	727
chr3:44754100-44754399	chr3	44754100	44754399	0.42604836	0.356584302	0.069464058	7	728
chr20:22559554-22560001	chr20	22559554	22560001	0.937774489	0.826670676	0.111103812	3	729
chr19:7980971-7982983	chr19	7980971	7982983	0.463433994	0.384601411	0.078832582	5	730
chr3:147138917-147139564	chr3	147138917	147139564	0.895413043	0.788491369	0.106921674	3	731
chr17:53342199-53343061	chr17	53342199	53343061	0.427708798	0.362090376	0.065618422	5	732
chr8:82192379-82193685	chr8	82192379	82193685	0.532654232	0.430503595	0.102150636	13	733
chr10:31073836-31074433	chr10	31073836	31074433	0.679508991	0.601030921	0.07847807	4	734
chr16:52581294-52581610	chr16	52581294	52581610	0.674835969	0.609253384	0.065582585	3	735
chr8:38831593-38832353	chr8	38831593	38832353	0.896581775	0.792615876	0.103965898	6	736
chr17:45771108-45772993	chr17	45771108	45772993	0.647305709	0.535592616	0.111713093	10	737
chr6:36628587-36628997	chr6	36628587	36628997	0.909564019	0.802977206	0.106586813	2	738
chr3:157260667-157261224	chr3	157260667	157261224	0.890687851	0.778753024	0.111934828	9	739
chr16:1208358-1208721	chr16	1208358	1208721	0.833816554	0.734810274	0.09900628	1	740
chr7:50342896-50343456	chr7	50342896	50343456	0.72604898	0.660639475	0.065409505	3	741
chr19:9896564-9896994	chr19	9896564	9896994	0.224435083	0.149958939	0.074476144	4	742
chr15:65203731-65204392	chr15	65203731	65204392	0.682576642	0.603366761	0.079209881	8	743
chr5:43040846-43041161	chr5	43040846	43041161	0.35350523	0.288147593	0.065357636	4	744
chr10:135341256-135342561	chr10	135341256	135342561	0.772780691	0.701326986	0.071453705	6	745
chr20:23028404-23032218	chr20	23028404	23032218	0.550320925	0.484972906	0.065348019	17	746
chr12:57853716-57853973	chr12	57853716	57853973	0.149121834	0.083880672	0.065241162	4	747
chr19:7938333-7939779	chr19	7938333	7939779	0.519050541	0.423075117	0.095975425	5	748
chr14:105992500-105996414	chr14	105992500	105996414	0.540864011	0.475718757	0.065145254	13	749
chr7:45960138-45961347	chr7	45960138	45961347	0.553217705	0.44557218	0.107645525	10	750
chr19:16394451-16394662	chr19	16394451	16394662	0.875967483	0.772861329	0.103106154	3	751
chr1:2232311-2232617	chr1	2232311	2232617	0.806176354	0.712256046	0.093920308	3	752
chr16:89160019-89160706	chr16	89160019	89160706	0.132155069	0.197203755	-0.065048686	7	753
chr7:89747893-89749036	chr7	89747893	89749036	0.456945823	0.380155904	0.076789919	14	754
chr15:34786493-34788138	chr15	34786493	34788138	0.699423386	0.608370999	0.091052387	5	755
chr16:70414430-70415865	chr16	70414430	70415865	0.187054279	0.122041719	0.065012559	5	756
chr15:37387387-37387614	chr15	37387387	37387614	0.843405836	0.739745352	0.103660484	4	757

chr20:21683745-21684420	chr20	21683745	21684420	0.872530032	0.774659641	0.097870391	4	758
chr2:102803673-102804556	chr2	102803673	102804556	0.893386246	0.791310212	0.102076035	3	759
chr1:31158010-31158261	chr1	31158010	31158261	0.587150883	0.518647467	0.068503416	4	760
chr7:155174129-155175248	chr7	155174129	155175248	0.852415962	0.750450941	0.101965021	7	761
chr1:160053722-160054738	chr1	160053722	160054738	0.728956886	0.646955987	0.0820009	5	762
chr4:177713244-177714457	chr4	177713244	177714457	0.441675744	0.36746335	0.074212394	6	763
chr6:10415019-10415318	chr6	10415019	10415318	0.481133811	0.416262418	0.064871393	4	764
chr11:30038935-30039148	chr11	30038935	30039148	0.873594232	0.770435034	0.103159199	3	765
chr9:139090421-139095472	chr9	139090421	139095472	0.781519505	0.703272338	0.078247166	17	766
chr22:31741046-31743707	chr22	31741046	31743707	0.444409745	0.373458303	0.070951443	10	767
chr4:154605087-154606052	chr4	154605087	154606052	0.809875376	0.713531788	0.096343588	5	768
chr1:114696887-114697185	chr1	114696887	114697185	0.461008667	0.35797647	0.103032197	4	769
chr3:119421856-119422334	chr3	119421856	119422334	0.937888689	0.827163909	0.110724779	4	770
chr20:48184194-48184833	chr20	48184194	48184833	0.624384212	0.553323011	0.071061201	5	771
chr8:65488537-65489116	chr8	65488537	65489116	0.825935735	0.702145252	0.123790483	5	772
chrX:68369819-68370085	chrX	68369819	68370085	0.703547388	0.620142443	0.083404945	2	773
chr5:180229376-180230147	chr5	180229376	180230147	0.422105746	0.33238474	0.089721007	7	774
chr9:139262002-139262396	chr9	139262002	139262396	0.879920127	0.776388414	0.103531713	1	775
chr4:1107126-1107728	chr4	1107126	1107728	0.824542793	0.745086201	0.079456593	7	776
chr12:52262628-52263215	chr12	52262628	52263215	0.876667332	0.764593583	0.112073749	2	777
chr9:140033236-140034176	chr9	140033236	140034176	0.77301089	0.670963734	0.102047156	3	778
chr20:36226618-36226841	chr20	36226618	36226841	0.767044165	0.679017077	0.088027088	2	779
chr19:15619224-15619613	chr19	15619224	15619613	0.371937785	0.229064962	0.142872823	3	780
chrX:70150676-70151002	chrX	70150676	70151002	0.676770033	0.59479209	0.081977944	3	781
chr8:144800958-144801335	chr8	144800958	144801335	0.799924628	0.72069988	0.079224748	3	782
chr5:76925446-76926875	chr5	76925446	76926875	0.455671849	0.386589509	0.06908234	7	783
chr13:36044845-36045481	chr13	36044845	36045481	0.867102999	0.735151681	0.131951318	6	784
chr19:12889084-12889343	chr19	12889084	12889343	0.586992024	0.517745505	0.069246519	2	785
chr19:56135774-56136007	chr19	56135774	56136007	0.121190965	0.056981263	0.064209702	2	786
chr2:2654109-2654358	chr2	2654109	2654358	0.383851587	0.450652136	-0.066800549	1	787
chr18:77905298-77905566	chr18	77905298	77905566	0.503719147	0.359803868	0.143915279	5	788
chr10:102489344-102491011	chr10	102489344	102491011	0.432699283	0.361426262	0.071273021	5	789
chr3:122745184-122746986	chr3	122745184	122746986	0.48843538	0.418699014	0.069736366	8	790
chr9:1045542-1046394	chr9	1045542	1046394	0.821358139	0.689795948	0.131562191	3	791
chrX:118616427-118616886	chrX	118616427	118616886	0.440942786	0.505068287	-0.064125501	3	792
chr10:43800154-43800445	chr10	43800154	43800445	0.788871928	0.697761755	0.091110173	4	793
chr12:54424611-54425173	chr12	54424611	54425173	0.894152885	0.79014781	0.104005075	4	794
chr16:58058713-58058928	chr16	58058713	58058928	0.835284123	0.73317767	0.102106453	2	795
chr3:52008944-52009339	chr3	52008944	52009339	0.612189396	0.540148963	0.072040433	3	796
chr8:99438693-99440425	chr8	99438693	99440425	0.362811829	0.293612088	0.069199741	9	797
chr1:204159599-204159833	chr1	204159599	204159833	0.822054038	0.727473233	0.094580804	3	798
chr2:43019666-43020509	chr2	43019666	43020509	0.589340292	0.508483284	0.080857008	9	799
chr1:6301696-6302856	chr1	6301696	6302856	0.669378319	0.588673616	0.080704703	4	800
chr7:130794690-130795032	chr7	130794690	130795032	0.296645102	0.232766943	0.063878158	7	801
chr17:27038085-27038919	chr17	27038085	27038919	0.602371415	0.535762254	0.06660916	6	802
chr11:44330543-44331761	chr11	44330543	44331761	0.666956181	0.588466483	0.078489698	8	803
chr3:37493419-37494538	chr3	37493419	37494538	0.443786901	0.379980019	0.063806882	6	804
chr1:113044411-113044992	chr1	113044411	113044992	0.589791721	0.526007403	0.063784318	3	805
chr1:1072370-1072847	chr1	1072370	1072847	0.855810346	0.757378018	0.098432328	3	806
chr15:30260496-30261394	chr15	30260496	30261394	0.567546242	0.50228043	0.065265813	4	807
chr21:43654847-43655465	chr21	43654847	43655465	0.685416751	0.621717971	0.063698781	4	808
chr9:133884360-133885010	chr9	133884360	133885010	0.596586639	0.532891083	0.063695556	2	809
chr10:130008559-130009620	chr10	130008559	130009620	0.618929796	0.555253396	0.063676399	6	810
chr2:127782614-127782829	chr2	127782614	127782829	0.708904417	0.625936507	0.08296791	2	811
chr7:75931705-75932978	chr7	75931705	75932978	0.695775335	0.608217198	0.087558137	16	812
chr19:2041824-2042593	chr19	2041824	2042593	0.656469156	0.579759642	0.076709514	7	813
chr2:74729400-74731166	chr2	74729400	74731166	0.731272133	0.643119925	0.088152208	17	814
chr7:4764685-4765252	chr7	4764685	4765252	0.820817882	0.726677262	0.09414062	3	815
chr2:96990858-96991283	chr2	96990858	96991283	0.893255439	0.784680851	0.108574588	6	816
chr3:36985541-36987041	chr3	36985541	36987041	0.877653381	0.769410396	0.108242986	12	817
chr14:75447512-75447779	chr14	75447512	75447779	0.603719456	0.672166087	-0.068446631	3	818
chr9:71394794-71395492	chr9	71394794	71395492	0.175504702	0.104978906	0.070525796	5	819
chr1:91182098-91182364	chr1	91182098	91182364	0.552208223	0.488776079	0.063432144	4	820
chr18:44337511-44338100	chr18	44337511	44338100	0.88480835	0.767445502	0.117362848	5	821
chr20:31170741-31173640	chr20	31170741	31173640	0.3157134	0.252314535	0.063398865	8	822
chr11:44087519-44088165	chr11	44087519	44088165	0.604855213	0.520736583	0.08411863	9	823
chr6:36807679-36808808	chr6	36807679	36808808	0.665411804	0.586220401	0.079191404	6	824
chr6:42858170-42858960	chr6	42858170	42858960	0.351922017	0.288591138	0.063330879	11	825
chr11:63775347-63775613	chr11	63775347	63775613	0.82335484	0.727771742	0.095583099	3	826
chr17:60729646-60730269	chr17	60729646	60730269	0.390658188	0.327328298	0.06332989	3	827
chr2:237086728-237088463	chr2	237086728	237088463	0.906512596	0.803001257	0.103511339	8	828
chr8:121137100-121137778	chr8	121137100	121137778	0.258930084	0.195066858	0.063863226	4	829
chr7:6010076-6010408	chr7	6010076	6010408	0.907606059	0.802257022	0.105349036	1	830
chr2:96093012-96093247	chr2	96093012	96093247	0.801978761	0.708786017	0.093192744	1	831
chr12:54338762-54339168	chr12	54338762	54339168	0.882138439	0.770693593	0.111444846	3	832
chr15:40728263-40728466	chr15	40728263	40728466	0.811972315	0.711680146	0.10029217	2	833



chr7:6654746-6655860	chr7	6654746	6655860	0.435451753	0.366071082	0.069380672	5	834
chr15:41135720-41137210	chr15	41135720	41137210	0.665073334	0.586568075	0.078505259	12	835
chr2:162930234-162930879	chr2	162930234	162930879	0.24945952	0.186284255	0.063175265	6	836
chr19:11531279-11531590	chr19	11531279	11531590	0.686245686	0.590595224	0.095650462	5	837
chr1:53392881-53393645	chr1	53392881	53393645	0.495987612	0.433005187	0.062982425	7	838
chr4:4387594-4389919	chr4	4387594	4389919	0.524919634	0.418534673	0.106384962	13	839
chr18:47018435-47018948	chr18	47018435	47018948	0.161912989	0.098947049	0.06296594	5	840
chr6:134210640-134211218	chr6	134210640	134211218	0.911890667	0.807194379	0.104696288	5	841
chr7:39649254-39649510	chr7	39649254	39649510	0.894618087	0.794356172	0.100261915	4	842
chr2:232469148-232469379	chr2	232469148	232469379	0.345036492	0.282252321	0.062784172	2	843
chr3:125931736-125932535	chr3	125931736	125932535	0.705316133	0.596906327	0.108409806	5	844
chr1:2222199-2222569	chr1	2222199	2222569	0.839107937	0.74196347	0.097144467	4	845
chr19:38307879-38308526	chr19	38307879	38308526	0.844313187	0.747616086	0.096697101	4	846
chr6:75794881-75795088	chr6	75794881	75795088	0.870566028	0.766863479	0.103702549	3	847
chr15:29033879-29034710	chr15	29033879	29034710	0.67595179	0.597042235	0.078909555	7	848
chr19:19256552-19256824	chr19	19256552	19256824	0.588314135	0.525662427	0.062651708	2	849
chr19:5338789-5339130	chr19	5338789	5339130	0.81571133	0.728247999	0.087463331	3	850
chr21:15052411-15052644	chr21	15052411	15052644	0.628214295	0.710237694	-0.082023399	1	851
chr19:13208344-13210525	chr19	13208344	13210525	0.863665022	0.767191436	0.096473586	8	852
chr1:149149251-149149505	chr1	149149251	149149505	0.793581688	0.705741863	0.087839825	4	853
chr20:37230524-37230742	chr20	37230524	37230742	0.598803741	0.508102251	0.09070149	2	854
chrX:122993548-122994335	chrX	122993548	122994335	0.467974307	0.405446188	0.062528119	12	855
chr1:156893520-156894232	chr1	156893520	156894232	0.899740541	0.796178425	0.103562116	4	856
chr9:35689611-35691101	chr9	35689611	35691101	0.509648161	0.4255528	0.084095361	3	857
chr19:3369478-3369913	chr19	3369478	3369913	0.81960443	0.727532195	0.092072235	5	858
chr21:34392163-34392656	chr21	34392163	34392656	0.831984928	0.735120661	0.096864267	2	859
chr6:5999150-5999787	chr6	5999150	5999787	0.868687104	0.768575552	0.100111552	4	860
chr1:146552329-146552577	chr1	146552329	146552577	0.893746114	0.785417613	0.108328501	3	861
chr2:162283582-162284677	chr2	162283582	162284677	0.867907783	0.74628743	0.121620354	8	862
chr1:196847159-196847418	chr1	196847159	196847418	0.747665017	0.661750004	0.085915013	1	863
chr9:136294739-136295236	chr9	136294739	136295236	0.832156111	0.732730185	0.099425926	1	864
chr11:64739011-64739750	chr11	64739011	64739750	0.876874317	0.776308907	0.10056541	7	865
chr2:25354284-25354777	chr2	25354284	25354777	0.879011308	0.775838356	0.103172952	3	866
chr9:98783217-98784364	chr9	98783217	98784364	0.826007252	0.729977619	0.096029633	6	867
chr3:38040290-38040535	chr3	38040290	38040535	0.747864654	0.662878639	0.084986014	3	868
chr7:2774445-2774655	chr7	2774445	2774655	0.867148078	0.767761046	0.099387031	3	869
chr20:61927195-61927482	chr20	61927195	61927482	0.912017068	0.809582864	0.102434204	3	870
chr10:50817096-50817309	chr10	50817096	50817309	0.839212625	0.739312965	0.09989966	4	871
chr2:220082992-220084012	chr2	220082992	220084012	0.616853694	0.546408573	0.070445121	10	872
chr6:35181096-35182547	chr6	35181096	35182547	0.743280411	0.660636943	0.082643467	7	873
chr9:14349308-14349515	chr9	14349308	14349515	0.916126788	0.796399551	0.119727237	2	874
chr16:5037530-5037797	chr16	5037530	5037797	0.933320444	0.826741079	0.106579365	1	875
chr1:110282352-110283306	chr1	110282352	110283306	0.615282672	0.545688865	0.069593807	5	876
chr5:3594468-3603054	chr5	3594468	3603054	0.564038769	0.485891945	0.078146824	24	877
chr19:3585358-3585947	chr19	3585358	3585947	0.604325525	0.486753777	0.117571747	3	878
chr11:68622723-68623252	chr11	68622723	68623252	0.690979563	0.612635786	0.078343777	3	879
chr8:48649767-48651653	chr8	48649767	48651653	0.485841708	0.424243855	0.061597853	9	880
chr19:42431917-42432376	chr19	42431917	42432376	0.434498974	0.368703165	0.065795809	2	881
chr10:133794407-133794637	chr10	133794407	133794637	0.881752684	0.78281272	0.098939963	3	882
chr12:133135294-133135722	chr12	133135294	133135722	0.864284976	0.766291467	0.097993509	3	883
chr11:33890358-33891495	chr11	33890358	33891495	0.279350965	0.217824906	0.061526058	7	884
chr9:99639590-99640054	chr9	99639590	99640054	0.89418557	0.767414136	0.126771434	2	885
chr7:2558372-2559967	chr7	2558372	2559967	0.347435969	0.285925837	0.061510133	8	886
chr2:237145614-237146576	chr2	237145614	237146576	0.91942584	0.815449276	0.103976564	3	887
chr6:151560767-151560993	chr6	151560767	151560993	0.89191702	0.791712756	0.100204263	5	888
chr1:229542944-229543770	chr1	229542944	229543770	0.829021669	0.740834599	0.08818707	5	889
chr8:124169040-124169449	chr8	124169040	124169449	0.586185561	0.501390021	0.08479554	3	890
chr17:42072139-42072444	chr17	42072139	42072444	0.375380445	0.300997005	0.07438344	3	891
chr2:45028956-45029318	chr2	45028956	45029318	0.910592476	0.774822042	0.135770434	2	892
chr12:132690340-132690571	chr12	132690340	132690571	0.8980287	0.796255839	0.101772862	3	893
chr19:55880578-55880922	chr19	55880578	55880922	0.148297371	0.086920467	0.061376904	2	894
chr19:45908141-45908466	chr19	45908141	45908466	0.556225652	0.488839008	0.067386644	6	895
chr19:5827755-5828405	chr19	5827755	5828405	0.573150047	0.508353617	0.06479643	4	896
chr19:17958491-17958808	chr19	17958491	17958808	0.906195364	0.803652958	0.102542405	4	897
chr5:87955639-87955864	chr5	87955639	87955864	0.929016548	0.823765583	0.105250965	2	898
chr19:12076030-12076366	chr19	12076030	12076366	0.513903624	0.445905614	0.067998009	4	899
chr15:27212903-27213396	chr15	27212903	27213396	0.899215781	0.797390757	0.101825024	3	900
chr19:996075-996679	chr19	996075	996679	0.329330734	0.268225203	0.06110553	3	901
chr20:2731064-2731395	chr20	2731064	2731395	0.854076	0.757283919	0.096792081	3	902
chr2:177005365-177005666	chr2	177005365	177005666	0.733071697	0.623263187	0.10980851	4	903
chr19:36822396-36822690	chr19	36822396	36822690	0.358417709	0.297423835	0.060993875	4	904
chr16:86612189-86613821	chr16	86612189	86613821	0.912254303	0.80927189	0.102982413	7	905
chr1:26490523-26491015	chr1	26490523	26491015	0.494433495	0.420863963	0.073569532	3	906
chr11:31825744-31826967	chr11	31825744	31826967	0.903068678	0.77989063	0.123178047	6	907
chr17:79485600-79486913	chr17	79485600	79486913	0.74973539	0.667139049	0.082596341	5	908
chr5:176558853-176561652	chr5	176558853	176561652	0.754322314	0.691757335	0.062564979	10	909

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chr19:53400461-53401205	chr19	53400461	53401205	0.73899082	0.647201698	0.091789122	5	911
chr7:56515586-56515864	chr7	56515586	56515864	0.5137097	0.584885649	-0.071175949	4	912
chr1:201708788-201709429	chr1	201708788	201709429	0.384708729	0.309092598	0.075616131	7	913
chr2:218621280-218621498	chr2	218621280	218621498	0.281475542	0.213779123	0.067696419	4	914
chr17:15847758-15849513	chr17	15847758	15849513	0.53874019	0.453817415	0.084922775	11	915
chr1:21996162-21996409	chr1	21996162	21996409	0.818227862	0.708460678	0.109767184	4	916
chr1:32705525-32707141	chr1	32705525	32707141	0.818585356	0.73077606	0.087809296	7	917
chr5:150325905-150326194	chr5	150325905	150326194	0.697128956	0.629735557	0.067393399	6	918
chr11:59382688-59382929	chr11	59382688	59382929	0.126975512	0.066429968	0.060545544	3	919
chr1:244213398-244213619	chr1	244213398	244213619	0.312015527	0.224774034	0.087241492	4	920
chrX:39942757-39943419	chrX	39942757	39943419	0.805223492	0.708652971	0.096570521	3	921
chrX:152735785-152736193	chrX	152735785	152736193	0.495580129	0.435142088	0.060438041	4	922
chr9:131580591-131581583	chr9	131580591	131581583	0.257209963	0.193336589	0.063873375	2	923
chr2:176989338-176989587	chr2	176989338	176989587	0.829076699	0.738695259	0.09038144	3	924
chr17:60885409-60885857	chr17	60885409	60885857	0.578262512	0.437432631	0.140829881	4	925
chr4:111554966-111555504	chr4	111554966	111555504	0.917343561	0.80528352	0.112060042	5	926
chr4:4866439-4866813	chr4	4866439	4866813	0.904094251	0.80243125	0.101663001	3	927
chr14:37116189-37117628	chr14	37116189	37117628	0.863218141	0.753597036	0.109621105	7	928
chr14:92788914-92789204	chr14	92788914	92789204	0.65635305	0.575863538	0.080489512	4	929
chr3:172167527-172167866	chr3	172167527	172167866	0.740010044	0.640881564	0.099128479	4	930
chr1:236304759-236305025	chr1	236304759	236305025	0.518051126	0.457834469	0.060216657	4	931
chr4:3767073-3769789	chr4	3767073	3769789	0.520841717	0.451699059	0.069142659	12	932
chr16:32126915-32128143	chr16	32126915	32128143	0.550610559	0.490463479	0.06014708	4	933
chr15:55879793-55881228	chr15	55879793	55881228	0.351813702	0.258225457	0.093588245	11	934
chr11:49229718-49230040	chr11	49229718	49230040	0.695176395	0.547605829	0.147570566	2	935
chr17:74235759-74237211	chr17	74235759	74237211	0.415143846	0.355020409	0.060123436	6	936
chr9:132312157-132312892	chr9	132312157	132312892	0.825067415	0.73235793	0.092709485	1	937
chr19:15833734-15833983	chr19	15833734	15833983	0.744510894	0.673454307	0.071056587	3	938
chrX:71524833-71527299	chrX	71524833	71527299	0.53274666	0.472632663	0.060113997	22	939
chr10:27547669-27548402	chr10	27547669	27548402	0.901696079	0.800955077	0.100741002	4	940
chr2:241507464-241507669	chr2	241507464	241507669	0.139821608	0.079724299	0.060097309	2	941
chr14:104690040-104690274	chr14	104690040	104690274	0.887983318	0.790258481	0.097724837	5	942
chr12:96252021-96252246	chr12	96252021	96252246	0.901788708	0.798624708	0.103164	4	943
chr19:48945801-48947636	chr19	48945801	48947636	0.871125264	0.779174405	0.091950859	6	944
chr10:44806146-44806729	chr10	44806146	44806729	0.787209652	0.700305928	0.086903724	3	945
chr12:3982247-3982708	chr12	3982247	3982708	0.243639438	0.183579636	0.060059803	2	946
chr19:21769190-21769786	chr19	21769190	21769786	0.501724251	0.419505953	0.082218298	4	947
chr22:19742902-19744729	chr22	19742902	19744729	0.712285773	0.628222613	0.08406316	11	948
chr11:396686-397462	chr11	396686	397462	0.907974535	0.80801087	0.099963666	3	949
chr7:1286023-1287658	chr7	1286023	1287658	0.846307785	0.751968969	0.094338817	10	950
chr7:1283840-1284040	chr7	1283840	1284040	0.916184223	0.81375418	0.102430044	3	951
chr16:711066-711414	chr16	711066	711414	0.622275739	0.562419925	0.059855813	2	952
chr19:3868587-3869217	chr19	3868587	3869217	0.900230727	0.799779612	0.100451115	6	953
chr7:27244531-27245297	chr7	27244531	27245297	0.916462356	0.787962455	0.128499902	3	954
chr14:57278069-57278287	chr14	57278069	57278287	0.931526488	0.827368044	0.104158444	2	955
chr11:120110498-120110719	chr11	120110498	120110719	0.860747424	0.764302405	0.09644502	4	956
chr4:8929991-89300429	chr4	8929991	89300429	0.18804828	0.128422944	0.059625336	3	957
chr5:178421226-178422337	chr5	178421226	178422337	0.870410886	0.773305714	0.097105171	7	958
chr15:31689501-31689707	chr15	31689501	31689707	0.639646256	0.569514156	0.0701321	3	959
chr2:45164562-45166567	chr2	45164562	45166567	0.8356497	0.742055516	0.093594184	10	960
chr12:54343623-54343848	chr12	54343623	54343848	0.895513442	0.795592872	0.09992057	4	961
chr5:79330929-79331488	chr5	79330929	79331488	0.851682918	0.764209317	0.087473601	6	962
chr17:58216794-58217515	chr17	58216794	58217515	0.899043747	0.79886995	0.100173797	3	963
chr4:17513310-17513981	chr4	17513310	17513981	0.233375476	0.173928915	0.059446561	7	964
chr13:76209541-76211213	chr13	76209541	76211213	0.575541268	0.51610216	0.059439108	4	965
chr16:85394177-85394378	chr16	85394177	85394378	0.769001433	0.683454357	0.085547076	2	966
chr19:41115446-41115767	chr19	41115446	41115767	0.480026902	0.420621888	0.059405013	3	967
chr1:18964181-18964401	chr1	18964181	18964401	0.831796754	0.73949875	0.092298004	2	968
chr7:39015544-39015929	chr7	39015544	39015929	0.90956586	0.808455137	0.101110723	3	969
chr7:153445165-153446786	chr7	153445165	153446786	0.747937725	0.666242784	0.081694941	4	970
chr12:14927292-14928023	chr12	14927292	14928023	0.808862094	0.719396583	0.089465511	6	971
chr4:57371583-57372022	chr4	57371583	57372022	0.883792479	0.775710984	0.108081495	5	972
chr3:62304515-62304780	chr3	62304515	62304780	0.433702421	0.374457175	0.059245246	4	973
chr1:29101791-29102069	chr1	29101791	29102069	0.895982076	0.797928905	0.098053171	4	974
chrX:64754317-64754805	chrX	64754317	64754805	0.578125233	0.515996613	0.06212862	6	975
chr17:79894669-79895533	chr17	79894669	79895533	0.67011177	0.595501945	0.074609825	11	976
chr19:18527652-18531118	chr19	18527652	18531118	0.348304228	0.289124154	0.059180074	8	977
chr11:65547500-65549261	chr11	65547500	65549261	0.643767173	0.570691107	0.073076066	8	978
chr17:14200580-14200996	chr17	14200580	14200996	0.519792026	0.387469684	0.132322342	2	979
chr17:1627746-1629897	chr17	1627746	1629897	0.71118606	0.652090211	0.059095849	10	980
chr1:149399899-149400518	chr1	149399899	149400518	0.549515737	0.489559109	0.059956629	5	981
chr2:101033607-101034296	chr2	101033607	101034296	0.27278451	0.213803402	0.058981108	4	982
chr8:143645073-143645673	chr8	143645073	143645673	0.370994149	0.465721503	-0.094727354	4	983
chr1:150254366-150254637	chr1	150254366	150254637	0.482891018	0.423961837	0.058929181	4	984
chr1:235805319-235805771	chr1	235805319	235805771	0.894366159	0.798658469	0.09570769	4	985

chr5:88185225-88185589	chr5	88185225	88185589	0.81064117	0.688997899	0.121643271	1	986
chr9:96720587-96723189	chr9	96720587	96723189	0.894837723	0.793669296	0.101168427	9	987
chr14:75517718-75518224	chr14	75517718	75518224	0.177893091	0.118999467	0.058893623	4	988
chr6:5851611-5851841	chr6	5851611	5851841	0.809438117	0.720899752	0.088538365	3	989
chr10:25241111-25241900	chr10	25241111	25241900	0.570334146	0.503325923	0.067008223	5	990
chr11:63974830-63975048	chr11	63974830	63975048	0.843091992	0.745046476	0.098045516	3	991
chr1:40782221-40783145	chr1	40782221	40783145	0.735749719	0.654399644	0.081350075	8	992
chr17:42287693-42288392	chr17	42287693	42288392	0.805370579	0.716846246	0.088524333	3	993
chr22:17090456-17091224	chr22	17090456	17091224	0.533148167	0.443214311	0.089933857	4	994
chrX:9982514-9984583	chrX	9982514	9984583	0.894679507	0.79791709	0.096762417	5	995
chrX:77150838-77151247	chrX	77150838	77151247	0.488683426	0.430075437	0.058607989	10	996
chr12:28127891-28128575	chr12	28127891	28128575	0.697912807	0.616237878	0.081674929	3	997
chr7:49813009-49815752	chr7	49813009	49815752	0.612359255	0.503986122	0.108373133	17	998
chr4:41883493-41884570	chr4	41883493	41884570	0.826745738	0.699623275	0.127122463	6	999
chr17:75447478-75447821	chr17	75447478	75447821	0.69971052	0.623413172	0.076297347	4	1000

**Supplementary Table S7. List of the 500 top-ranked, gene symbol-associated differentially methylated promoters after induced overexpression of *TET1* .**

gene_symbol	beta.TET1+Dox	beta.TET1-Dox	difference	num.sites	rank
IFI44	0.190210932	0.409157366	-0.218946433	1	1
TRGV3	0.155041443	0.367268093	-0.21222665	2	2
PRC1	0.212478088	0.36766959	-0.155191503	1	3
ZNF726	0.141953305	0.327020175	-0.18506687	1	4
CLEC5A	0.332514009	0.526198143	-0.193684134	1	5
GLIS2	0.136088356	0.28710581	-0.151017454	4	6
PRKRIRP7	0.339430918	0.145788105	0.193642813	1	7
KRTAP19-6	0.335823175	0.488154289	-0.152331113	2	8
RNA5SP42	0.391115907	0.588939481	-0.197823575	1	9
SPRR2G	0.148150654	0.336810049	-0.188659395	2	10
TRGV10	0.331477967	0.487728367	-0.1562504	1	11
TRBVB	0.502936609	0.329692569	0.17324404	1	12
LINC00504	0.320456569	0.467990765	-0.147534196	1	13
MIR550A1	0.287333918	0.424083114	-0.136749196	1	14
PMCHL1	0.471654419	0.638563701	-0.166909282	2	15
MIR320D2	0.217399129	0.348950725	-0.131551596	3	16
ZNF510	0.096527523	0.220102259	-0.123574736	4	17
MIR509-2	0.128498339	0.25125834	-0.122760001	1	18
C1orf68	0.329523184	0.48564099	-0.156117807	2	19
GFRAL	0.515688989	0.680968349	-0.165279361	2	20
CASP5	0.344211792	0.496909229	-0.152697437	2	21
TSPY13P	0.396539801	0.281606303	0.114933498	1	22
BBS2	0.213021516	0.332673888	-0.119652371	7	23
OR7G1	0.536857222	0.741637839	-0.204780617	1	24
RPA3	0.532911849	0.388233086	0.144678762	1	25
NUDT21	0.169161709	0.275703275	-0.106541566	3	26
SLC9A7P1	0.131880689	0.245959396	-0.114078707	5	27
UBQLN4P2	0.305332155	0.533824311	-0.228492156	1	28
SUB1	0.485288944	0.657497376	-0.172208432	1	29
TMEM114	0.457937341	0.581749361	-0.12381202	4	30
SNCAIP	0.469767788	0.571696277	-0.101928489	5	31
NPNT	0.163756406	0.294740012	-0.130983605	3	32
TLL11-IT1	0.274095062	0.475529329	-0.201434266	1	33
RNU6-173P	0.297431615	0.412957275	-0.11552566	1	34
KLHL3	0.573589662	0.674707154	-0.101117492	6	35
LZTR1	0.63685967	0.524073375	0.112786296	2	36
TXNDC9	0.151712672	0.347951342	-0.19623867	1	37
B3GALT1	0.471104625	0.661815844	-0.190711219	5	38
UGT2B10	0.216353361	0.373730151	-0.15737679	1	39
HNRNPDP2	0.56156639	0.756302233	-0.194735843	1	40
FHL5	0.432453672	0.53066199	-0.098208318	4	41
CAMK1G	0.480512586	0.619588523	-0.139075937	3	42
CDH18	0.269086826	0.36588223	-0.096795403	1	43
MIR100	0.359345118	0.562352862	-0.203007743	2	44
RNU6-502P	0.366474216	0.246830172	0.119644045	3	45
IGHV1OR15-1	0.474835213	0.626281196	-0.151445983	1	46

RNU6-698P	0.480655679	0.303703464	0.176952215	1	47
SNORD58C	0.407991238	0.537533859	-0.12954262	4	48
OR6C6	0.279596516	0.459161158	-0.179564642	1	49
KRTAP6-2	0.336285428	0.442847064	-0.106561636	5	50
TNFSF11	0.368692218	0.519482974	-0.150790756	3	51
SNORD115-25	0.275049149	0.384284904	-0.109235755	4	52
ALDOC	0.38594715	0.483622594	-0.097675444	11	53
GIMAP4	0.384214325	0.512232689	-0.128018364	6	54
CYP4F22	0.511350166	0.600366895	-0.089016729	7	55
RNU6-275P	0.555654188	0.715863427	-0.16020924	1	56
CARD6	0.178236875	0.269541553	-0.091304678	5	57
NRBP1	0.362882049	0.222314341	0.140567708	2	58
GUCY2C	0.527747665	0.627481811	-0.099734147	4	59
LINC00968	0.226120527	0.310657409	-0.084536882	2	60
SMARCD3	0.411091042	0.31552861	0.095562432	1	61
OR1E2	0.328927903	0.41279812	-0.083870217	6	62
NBPF22P	0.591395224	0.746016801	-0.154621576	2	63
LINC00488	0.595310732	0.757763635	-0.162452904	3	64
BCMO1	0.23445121	0.322102145	-0.087650935	5	65
OR52E6	0.484743546	0.787624802	-0.302881256	1	66
ST6GALNAC2	0.399030109	0.509828026	-0.110797917	2	67
LHFPL3-AS1	0.534945616	0.6784219	-0.143476284	4	68
NAV2-IT1	0.647664357	0.814213954	-0.166549597	1	69
PF4V1	0.423134404	0.571165595	-0.148031191	6	70
LY6H	0.470070525	0.382065371	0.088005154	7	71
RNU6-1309P	0.272085197	0.364069083	-0.091983886	1	72
MAPK15	0.522963163	0.600589664	-0.077626502	14	73
LCE4A	0.397084391	0.494880264	-0.097795873	2	74
OR52K2	0.295143496	0.411961143	-0.116817647	3	75
OR4N5	0.431979611	0.609457279	-0.177477667	3	76
RNA5SP107	0.301175913	0.553285895	-0.252109982	1	77
SPANXA1	0.377170654	0.604684169	-0.227513514	1	78
MIR526A1	0.164730672	0.265655612	-0.10092494	4	79
RAB39B	0.478239724	0.563470944	-0.08523122	5	80
KIAA0947	0.642408992	0.728985494	-0.086576503	2	81
RPSAP52	0.397475453	0.494113445	-0.096637992	3	82
HSD11B2	0.233430853	0.160971697	0.072459156	8	83
KRTAP10-8	0.526353136	0.610052923	-0.083699786	4	84
SCNM1	0.596380946	0.668133561	-0.071752616	6	85
TNFAIP8L2	0.596380946	0.668133561	-0.071752616	6	86
TRIML1	0.38867281	0.494914802	-0.106241992	6	87
CNN3P1	0.54740114	0.621201095	-0.073799954	2	88
FAM27E2	0.586671306	0.47688265	0.109788656	1	89
HBG2	0.534077221	0.330402253	0.203674969	2	90
MAGEB3	0.344510353	0.476251332	-0.131740979	5	91
OR2L3	0.30883153	0.47607148	-0.16723995	1	92
RNU6-835P	0.434682969	0.636897619	-0.20221465	1	93
PRAMEF11	0.317562739	0.391446633	-0.073883894	2	94
SNORD87	0.561956039	0.662640791	-0.100684752	5	95
CRYAB	0.525569409	0.643700683	-0.118131274	1	96

TJAP1	0.098272765	0.16791979	-0.069647025	4	97
LAYN	0.561955928	0.631484298	-0.06952837	10	98
MTND1P28	0.449262381	0.560858029	-0.111595648	1	99
MIR550A3	0.424072643	0.539143825	-0.115071182	1	100
OLFML2A	0.574841387	0.493986622	0.080854765	3	101
S100A7L2	0.351121089	0.419650669	-0.06852958	2	102
KRT38	0.529833647	0.631351503	-0.101517856	5	103
OR1J4	0.116809372	0.197422216	-0.080612844	1	104
BZW1	0.411285719	0.501285554	-0.089999834	1	105
OR2W1	0.51956738	0.606199244	-0.086631863	4	106
SNX2P2	0.19160047	0.37951284	-0.18791237	1	107
TRIML2	0.21059265	0.362910086	-0.152317436	1	108
STAC2	0.372307758	0.439943887	-0.06763613	10	109
DLGAP2	0.57100093	0.674274685	-0.103273755	11	110
GLIS1	0.560007379	0.654659916	-0.094652537	6	111
CCL2	0.517518218	0.584865139	-0.067346921	9	112
SNORD115-41	0.497072971	0.584169963	-0.087096992	6	113
MIR514A1	0.739708236	0.896984396	-0.15727616	1	114
TRIM77	0.582454464	0.694532002	-0.112077538	2	115
NTF6A	0.633939102	0.52279486	0.111144241	1	116
RGS6	0.201144765	0.123447644	0.077697121	5	117
MID2	0.425783003	0.501172508	-0.075389505	7	118
KRTAP19-3	0.472173592	0.574395157	-0.102221565	4	119
PSMA2P2	0.669153193	0.809669149	-0.140515957	1	120
RXRG	0.38700662	0.469583711	-0.082577091	13	121
IL7R	0.396545246	0.611473914	-0.214928669	1	122
COX6B2	0.381588895	0.450391158	-0.068802263	13	123
POU6F2-AS2	0.771956951	0.594183307	0.177773644	1	124
ENOSF1	0.37310646	0.437333395	-0.064226936	7	125
IGHV3-21	0.321339923	0.488395218	-0.167055295	1	126
PRSS58	0.658132872	0.791294098	-0.133161226	1	127
ACTL6B	0.532172313	0.595977399	-0.063805086	8	128
SDR16C6P	0.32265367	0.462957688	-0.140304018	4	129
ARHGAP40	0.388537505	0.461640204	-0.073102699	9	130
ALDH1L1-AS2	0.114298562	0.177956109	-0.063657547	7	131
RN7SL805P	0.39323438	0.476962616	-0.083728237	1	132
LPCAT2	0.43626969	0.499875416	-0.063605726	9	133
KRTAP23-1	0.318169033	0.385543908	-0.067374874	3	134
C1orf172	0.530252016	0.593764694	-0.063512678	10	135
GIMAP2	0.494302348	0.583772445	-0.089470098	2	136
MROH9	0.606929122	0.729308445	-0.122379323	1	137
C4orf26	0.695820291	0.791414858	-0.095594566	6	138
OR1A1	0.369884524	0.469793677	-0.099909154	5	139
FAM120C	0.444878669	0.533663667	-0.088784998	8	140
ESM1	0.696307032	0.596487744	0.099819288	2	141
GZMK	0.696307032	0.596487744	0.099819288	2	142
OR11H12	0.236788232	0.299572596	-0.062784364	1	143
OR4K5	0.365631083	0.444603992	-0.07897291	2	144
LINC00442	0.561441974	0.647638732	-0.086196758	2	145
CACNA1A	0.686744069	0.768971884	-0.082227814	3	146

SYCP2	0.51725544	0.578784299	-0.061528859	7	147
LRAT	0.538414712	0.599761928	-0.061347216	8	148
KIR2DL3	0.439492439	0.511319747	-0.071827307	5	149
SNTN	0.710474923	0.817284063	-0.10680914	4	150
HEMGN	0.648951115	0.773909001	-0.124957885	1	151
PGM5P2	0.527603808	0.625501695	-0.097897887	2	152
SNORD115-19	0.374580346	0.470931523	-0.096351176	9	153
CLK4	0.299650968	0.224587279	0.075063689	1	154
ACPL2	0.698353668	0.831102413	-0.132748744	1	155
FAM131B	0.479457892	0.539345983	-0.059888091	6	156
GGCT	0.468707162	0.558132768	-0.089425606	1	157
CCIN	0.73420641	0.84019418	-0.10598777	2	158
LINC00152	0.090986619	0.149973451	-0.058986831	1	159
SIN3B	0.104315301	0.167682949	-0.063367648	4	160
OR6B1	0.478277757	0.541852251	-0.063574493	6	161
RPS26P49	0.300035372	0.192829986	0.107205386	1	162
SCG2	0.158936307	0.234421385	-0.075485077	4	163
CC2D2A	0.307482056	0.386375768	-0.078893712	6	164
MYD88	0.367254643	0.453860153	-0.086605511	14	165
RN7SKP54	0.193211559	0.312862128	-0.119650569	1	166
ARMCX2	0.557731594	0.615563041	-0.057831447	10	167
SNORD115-36	0.217189478	0.336824622	-0.119635144	6	168
RETNLB	0.498784852	0.577811597	-0.079026746	6	169
OXCT1-AS1	0.348685933	0.429851088	-0.081165155	4	170
MAPK3	0.224722753	0.282391534	-0.057668781	6	171
TMEM31	0.584487021	0.667176434	-0.082689412	2	172
SNORD93	0.518907631	0.576423	-0.057515369	5	173
RASSF10	0.541423792	0.647643909	-0.106220117	11	174
MPZL2	0.259888659	0.317055753	-0.057167094	11	175
SNORD115-44	0.239841659	0.317842466	-0.078000807	3	176
ALDH1L2	0.64340531	0.728004041	-0.084598731	11	177
SERPINA6	0.620981829	0.719315361	-0.098333532	5	178
IDO2	0.361175552	0.426137822	-0.06496227	4	179
PATE3	0.332331022	0.426877376	-0.094546355	5	180
CIRH1A	0.546355042	0.644709125	-0.098354082	1	181
LDB2	0.382025856	0.469240415	-0.087214559	5	182
LCE6A	0.345066455	0.424753912	-0.079687457	7	183
MTND1P4	0.155132398	0.230511268	-0.07537887	1	184
SNORD109A	0.451932416	0.377178802	0.074753614	3	185
CYB5AP5	0.297339023	0.428474543	-0.131135521	1	186
BCKDHA	0.398388059	0.454334366	-0.055946307	2	187
TMEM91	0.398388059	0.454334366	-0.055946307	2	188
KRTAP19-1	0.234555907	0.31766796	-0.083112054	2	189
HERC3	0.848015819	0.732757	0.115258819	2	190
ADH7	0.275630772	0.476977231	-0.201346459	2	191
CREB3L3	0.380620681	0.450885244	-0.070264563	7	192
ELP3	0.862795063	0.733560987	0.129234076	1	193
SMIM20	0.121255356	0.176853773	-0.055598417	1	194
CREB5	0.487486998	0.550131926	-0.062644928	6	195
TRPV6	0.563999375	0.654997344	-0.090997969	6	196

LINC00922	0.278601913	0.391365621	-0.112763708	3	197
EEF1G	0.455468399	0.525494553	-0.070026154	5	198
CDA	0.565380711	0.659538893	-0.094158182	4	199
RN7SKP78	0.538118805	0.632576045	-0.09445724	1	200
OR1E1	0.109574644	0.164699192	-0.055124548	2	201
SPTBN1	0.122203665	0.177279257	-0.055075593	10	202
DOK7	0.471055401	0.548305757	-0.077250356	11	203
MX1	0.421464493	0.493044114	-0.071579621	8	204
SNORD115-40	0.256848449	0.358167395	-0.101318946	6	205
MYADM	0.542498667	0.59733302	-0.054834354	11	206
RERG	0.725548271	0.850688987	-0.125140716	1	207
TMEM151A	0.363077204	0.417892711	-0.054815506	7	208
MIR301A	0.453667949	0.514855719	-0.06118777	4	209
CCK	0.70524136	0.768785288	-0.063543928	4	210
INPP1	0.620170888	0.696936298	-0.076765409	8	211
GNAO1	0.129344631	0.201925312	-0.072580681	9	212
FAM84A	0.458735639	0.390440343	0.068295295	9	213
RAB3IP	0.277869549	0.331965929	-0.05409638	5	214
ZFH3	0.263440585	0.324009146	-0.060568561	2	215
ACTBL2	0.754172834	0.659901514	0.09427132	3	216
MIR720	0.654922097	0.741405866	-0.086483769	3	217
MORF4L2	0.433627443	0.502277229	-0.068649786	3	218
KRT18P42	0.661753511	0.774130354	-0.112376843	1	219
GPR22	0.656727872	0.780296505	-0.123568633	1	220
SERPINA12	0.670929013	0.759312621	-0.088383608	5	221
RNU6-871P	0.291973039	0.345505494	-0.053532455	1	222
ASAP1	0.181190958	0.234711813	-0.053520854	3	223
MIR147A	0.314952359	0.465040388	-0.150088029	2	224
OR1S2	0.417016468	0.533060398	-0.11604393	3	225
GPX1P2	0.424179201	0.506073885	-0.081894684	3	226
SEPT10P1	0.483497753	0.634491479	-0.150993726	1	227
MLF1	0.221468722	0.168453094	0.053015627	12	228
KNG1	0.713800356	0.652376227	0.061424129	3	229
HIATL1	0.126050476	0.214182462	-0.088131986	3	230
KCNK3	0.353196969	0.42100341	-0.067806441	5	231
SNORD115-18	0.297636202	0.402758196	-0.105121994	6	232
TINAG	0.71859986	0.618917294	0.099682567	3	233
SNORD115-43	0.349936315	0.426304896	-0.076368581	5	234
GPX8	0.295801104	0.348349919	-0.052548815	5	235
SYTL1	0.401682955	0.454068452	-0.052385497	8	236
COX20P2	0.142533866	0.218190525	-0.075656658	2	237
OR5P3	0.627863584	0.704830651	-0.076967067	4	238
ZNF208	0.341895693	0.41019319	-0.068297498	7	239
PRAMEF12	0.58766173	0.667948341	-0.08028661	3	240
FAM225A	0.276173231	0.396963082	-0.120789851	2	241
FAM225B	0.276173231	0.396963082	-0.120789851	2	242
DUXAP3	0.177435547	0.229472795	-0.052037248	1	243
OR52I2	0.565269403	0.618890237	-0.053620835	3	244
SLAMF6	0.339901823	0.410275279	-0.070373456	2	245
POU5F1P6	0.63566149	0.739191406	-0.103529916	1	246



PSMD2	0.078716033	0.130606806	-0.051890773	5	247
CLK2	0.364268005	0.421237979	-0.056969973	2	248
SNORD16	0.478243712	0.55105549	-0.072811778	6	249
LPAL2	0.149021982	0.268396538	-0.119374557	2	250
MS4A6A	0.351054254	0.475774906	-0.124720652	4	251
DEFB133	0.356318778	0.430890827	-0.074572048	6	252
DISC1FP1	0.765695246	0.660623534	0.105071713	1	253
BTLA	0.805509707	0.706624081	0.098885626	3	254
C4orf50	0.811258733	0.700638669	0.110620065	1	255
MMP24	0.641425436	0.528285375	0.113140062	2	256
ERI1	0.827534763	0.73636696	0.091167803	4	257
UGT3A1	0.510870244	0.590731031	-0.079860787	3	258
HNRNPCL1	0.569883056	0.627057451	-0.057174395	5	259
OXCT1	0.437022727	0.50771127	-0.070688543	11	260
TMEM202	0.624312997	0.677328549	-0.053015553	2	261
DUSP26	0.528877195	0.595269906	-0.066392711	9	262
RN7SL718P	0.614410101	0.710849891	-0.09643979	1	263
GPR62	0.724576193	0.822070389	-0.097494196	4	264
TRAV16	0.547292508	0.597150971	-0.049858464	2	265
TGFBR3L	0.45352614	0.503323177	-0.049797037	4	266
SCARF2	0.273210582	0.357018311	-0.083807729	10	267
CHIA	0.634567783	0.692137932	-0.057570148	5	268
OR4N4	0.440058134	0.508546208	-0.068488073	1	269
FTLP17	0.51814528	0.598423032	-0.080277752	1	270
HIST1H2APS6	0.51977818	0.449910136	0.069868045	1	271
LCE1E	0.464425375	0.519649852	-0.055224477	4	272
RASGEF1A	0.557951656	0.508652318	0.049299337	3	273
RPL4P5	0.615307968	0.69565618	-0.080348212	2	274
RNF166	0.165043301	0.214183279	-0.049139978	8	275
SUMO2P6	0.644989824	0.743875575	-0.098885751	1	276
LPAR3	0.346739699	0.395798313	-0.049058614	7	277
LGI1	0.488506103	0.537507268	-0.049001166	10	278
IGHV3-37	0.268202852	0.317092728	-0.048889876	3	279
TNR-IT1	0.414300235	0.541687169	-0.127386935	1	280
OR2S2	0.67908555	0.782355926	-0.103270377	1	281
FAM57B	0.309577052	0.255467686	0.054109366	4	282
KRTAP19-2	0.291578749	0.379785487	-0.088206737	1	283
CTBP2P4	0.576320432	0.672338971	-0.096018539	2	284
OR10H5	0.521190183	0.569403902	-0.048213719	3	285
CT60	0.716715331	0.798541049	-0.081825718	6	286
MIR5701-1;MIR5701-2	0.716715331	0.798541049	-0.081825718	6	287
ATP1A1OS	0.283737133	0.331714572	-0.047977439	11	288
OR52A5	0.793693803	0.690734105	0.102959698	1	289
PTP4A2P1	0.084815991	0.132685376	-0.047869385	2	290
CLCF1	0.49492381	0.54273789	-0.04781408	13	291
OR13C4	0.445526586	0.619164069	-0.173637483	1	292
ITLN1	0.664699915	0.565880466	0.098819448	5	293
MARCH10	0.701235651	0.788278026	-0.087042375	9	294
LELP1	0.308074097	0.387121549	-0.079047451	6	295
MIR148B	0.586555024	0.654931358	-0.068376334	4	296

BBS10	0.241064635	0.131405949	0.109658686	13	297
CLUU10S	0.682151127	0.756167513	-0.074016385	2	298
SYT3	0.464084667	0.52910856	-0.065023893	6	299
PLXNB1	0.312566962	0.259929936	0.052637026	8	300
CABS1	0.483377459	0.545131394	-0.061753934	3	301
ACTG1P4	0.751769834	0.681804771	0.069965063	2	302
OR2A2	0.466598734	0.562201349	-0.095602615	3	303
PCDH15	0.282742289	0.334431375	-0.051689086	9	304
MND1	0.116295594	0.060928264	0.05536733	8	305
MUC16	0.380792325	0.540941445	-0.16014912	4	306
MIR105-2	0.218162876	0.301904841	-0.083741965	2	307
CPT1A	0.556098075	0.693028314	-0.136930239	3	308
ANKRD20A5P	0.282132617	0.329070596	-0.046937979	3	309
F2RL2	0.512491607	0.560572309	-0.048080702	5	310
WDR86	0.41709132	0.46556177	-0.048470451	5	311
SNORD115-42	0.475671862	0.541195125	-0.065523263	10	312
TRAV8-5	0.27917838	0.327653481	-0.048475101	2	313
ATCAY	0.745533335	0.842734247	-0.097200912	3	314
SYBU	0.434826763	0.481356049	-0.046529286	9	315
IGFBP7	0.164716418	0.265689493	-0.100973075	9	316
PTPN3	0.495022979	0.561012018	-0.065989039	3	317
BDH2	0.392034078	0.441296105	-0.049262027	5	318
CPZ	0.530963413	0.57741693	-0.046453517	10	319
TRGV7	0.318490996	0.389720797	-0.0712298	2	320
CYP4A22	0.467276449	0.542546126	-0.075269677	2	321
TTI1	0.343867312	0.297428204	0.046439108	9	322
SNORD115-35	0.403663344	0.479761138	-0.076097794	6	323
GPR82	0.666904448	0.762376992	-0.095472544	1	324
RARRES2P7	0.625781039	0.704643756	-0.078862717	3	325
WDR45B	0.421223983	0.375128988	0.046094996	4	326
SEMA4C	0.366808358	0.318532672	0.048275686	3	327
MPZL1	0.48792985	0.5422939	-0.05436405	5	328
ACAA1	0.33402133	0.402702498	-0.068681167	13	329
OR6C3	0.199349334	0.322278375	-0.122929041	1	330
RIN3	0.383206393	0.428877811	-0.045671418	9	331
FAM170A	0.667929133	0.744259852	-0.076330719	8	332
FGG	0.714681034	0.625362558	0.089318476	4	333
CSAG2	0.597574235	0.523757361	0.073816874	1	334
MAGEA2	0.597574235	0.523757361	0.073816874	1	335
TRBV27	0.353965751	0.399426683	-0.045460931	3	336
GABRA6	0.154859929	0.200308798	-0.045448869	8	337
WNT7B	0.205962257	0.251346089	-0.045383832	5	338
IGFBP2	0.137785002	0.193463468	-0.055678466	5	339
SLC26A4-AS1	0.194576724	0.239754454	-0.04517773	8	340
SNX10	0.072053352	0.133642872	-0.06158952	9	341
GZMA	0.811172034	0.726738032	0.084434002	4	342
OR52H1	0.247810412	0.354983158	-0.107172746	3	343
CRK	0.67395123	0.598618494	0.075332736	4	344
SNORD62A	0.833029228	0.947634725	-0.114605497	1	345
PDE6H	0.768606322	0.844718512	-0.07611219	6	346

IGFL1	0.564634124	0.6093643	-0.044730176	5	347
ZDHHC18	0.46800552	0.423293764	0.044711756	6	348
RNU6-560P	0.376182093	0.45732797	-0.081145877	1	349
ARMCX6	0.204246765	0.282291302	-0.078044537	8	350
PDYN	0.617032757	0.678948042	-0.061915286	7	351
RNU6-813P	0.772750983	0.680347951	0.092403032	1	352
GPR42	0.638921488	0.725448658	-0.086527169	1	353
IFNA7	0.650890332	0.568735697	0.082154635	1	354
PKMP3	0.757422894	0.859635635	-0.102212741	1	355
KRT34	0.726279563	0.80367993	-0.077400367	4	356
TMEM54	0.564479975	0.520285255	0.04419472	5	357
ZCCHC18	0.373801152	0.41769003	-0.043888878	5	358
ZNF786	0.152984666	0.196840251	-0.043855585	7	359
TAS2R38	0.705690724	0.771916277	-0.066225553	6	360
FAM19A1	0.368223896	0.412008588	-0.043784693	3	361
AFG3L2	0.210553582	0.263441626	-0.052888044	10	362
KRTAP20-4	0.485371413	0.586545979	-0.101174566	1	363
PRELP	0.700118772	0.772741792	-0.072623021	4	364
AKR1C4	0.659467281	0.749883168	-0.090415887	3	365
PRSS29P	0.418842046	0.536189649	-0.117347603	1	366
OR6W1P	0.478504213	0.562258176	-0.083753964	2	367
SPANXC	0.477245908	0.544062292	-0.066816384	2	368
ZNF853	0.501850553	0.448826387	0.053024166	5	369
LINC00696	0.731171727	0.659887476	0.071284251	2	370
OR9I1	0.306180419	0.426326382	-0.120145963	2	371
BHLHE23	0.561227896	0.63558759	-0.074359695	9	372
CHRN2	0.518247484	0.574896918	-0.056649434	10	373
FBXO27	0.533474916	0.577362341	-0.043887425	7	374
SOX6	0.414388792	0.456861199	-0.042472406	5	375
SYNPR	0.523637609	0.675715687	-0.152078078	1	376
COX4I1	0.209419242	0.251764245	-0.042345002	6	377
MIR3663	0.7116284	0.636355755	0.075272645	5	378
ZNF597	0.543079797	0.609847164	-0.066767366	12	379
SHISA5	0.734637015	0.649913597	0.084723418	3	380
SPATA6L	0.116446054	0.177798413	-0.061352358	4	381
PCDHA13	0.686967359	0.737144529	-0.05017717	10	382
GXYLT2	0.282071756	0.324148456	-0.0420767	2	383
TMC4	0.393436399	0.338323451	0.055112948	6	384
TMSB15B	0.333691731	0.396247878	-0.062556147	3	385
TP53I11	0.618144429	0.671764527	-0.053620097	11	386
TRAC	0.736527245	0.831545822	-0.095018577	1	387
CHST4	0.903250681	0.807931397	0.095319283	3	388
PRPH	0.571061496	0.644979254	-0.073917758	1	389
OVCH2	0.384932659	0.444463803	-0.059531143	4	390
ATP6V1G1	0.318098627	0.359974905	-0.041876278	7	391
ZNF619	0.328104223	0.370794843	-0.042690621	8	392
NTAN1P3	0.525931884	0.421038107	0.104893777	1	393
PPIAP17	0.587054757	0.730415787	-0.14336103	1	394
OR2AT4	0.614289018	0.557583575	0.056705442	4	395
C20orf166	0.690536245	0.632534949	0.058001297	9	396

PTGES3P1	0.798023823	0.899894362	-0.101870539	1	397
TRPS1	0.417414709	0.471221882	-0.053807173	1	398
LINC00507	0.279807869	0.39196523	-0.112157361	1	399
SPINT4	0.318588208	0.478298833	-0.159710625	2	400
CHIAP2	0.411260268	0.493045485	-0.081785217	4	401
PACSIN2	0.088660465	0.129857903	-0.041197438	6	402
CA2	0.096817819	0.14767996	-0.050862141	7	403
KRTAP10-9	0.66157182	0.717998919	-0.056427099	4	404
KPRP	0.515417324	0.556534247	-0.041116923	6	405
DCTD	0.360202695	0.419592269	-0.059389574	9	406
TCHH	0.665060574	0.72121275	-0.056152176	6	407
MIR515-1	0.28401822	0.392156128	-0.108137908	4	408
MIR527	0.736273729	0.828472924	-0.092199195	3	409
C22orf26	0.243838289	0.30195202	-0.058113731	11	410
MIR520E	0.546087476	0.599366333	-0.053278857	2	411
NAB1	0.784569459	0.883251935	-0.098682476	1	412
OR52M1	0.557589776	0.63194514	-0.074355364	5	413
FAM217B	0.657330459	0.697719158	-0.040388699	8	414
TFAP2D	0.131532158	0.171829341	-0.040297183	5	415
NLRP9	0.668193371	0.730050388	-0.061857017	5	416
AGGF1P2	0.597794401	0.672546858	-0.074752457	1	417
SLC2A3	0.591014614	0.662066054	-0.07105144	7	418
PNPLA4	0.37528996	0.30819025	0.067099711	15	419
IRX6	0.397537103	0.437598235	-0.040061131	4	420
KRTAP6-3	0.612991839	0.694983736	-0.081991897	5	421
C10orf131	0.241258899	0.173890368	0.067368531	11	422
RN7SL526P	0.197099968	0.290591158	-0.093491191	1	423
KRTAP19-4	0.199877309	0.290357872	-0.090480564	2	424
PRKRIRP2	0.450817708	0.505277435	-0.054459726	2	425
NQO1	0.117283628	0.157101141	-0.039817513	8	426
SNRPD2P1	0.7848898	0.852492221	-0.067602421	5	427
RFPL2	0.5474095	0.614791422	-0.067381922	5	428
SCUBE2	0.351918533	0.416013446	-0.064094912	2	429
FAM47A	0.600166948	0.650338281	-0.050171333	6	430
OLFM4	0.732474465	0.797862143	-0.065387677	6	431
CCNYL3	0.22782681	0.296009115	-0.068182304	1	432
TCEAL6	0.513147954	0.561464992	-0.048317038	4	433
CYP11B1	0.491275045	0.549272259	-0.057997214	6	434
LCE2A	0.162113783	0.254806961	-0.092693178	4	435
FCRL3	0.272299636	0.311783807	-0.039484171	8	436
SPANXD	0.595866154	0.640403813	-0.044537659	2	437
SNORD18B	0.566348703	0.625063485	-0.058714781	8	438
MIR767	0.164615486	0.229211463	-0.064595977	3	439
MIR498	0.432751229	0.500459313	-0.067708085	5	440
DNAJB14	0.120837163	0.161560554	-0.040723391	7	441
FAM122A	0.235431315	0.274791109	-0.039359794	5	442
FTH1P19	0.791999344	0.860862473	-0.068863128	5	443
SNORD115-20	0.389042346	0.45710888	-0.068066534	5	444
ANKRD20A14P	0.418272768	0.469375869	-0.051103102	2	445
SPAG16	0.151978098	0.191234251	-0.039256153	11	446

UBQLNL	0.257735609	0.402688267	-0.144952658	3	447
OR6X1	0.481834453	0.530977922	-0.04914347	5	448
RARRES2P9	0.376391238	0.29120189	0.085189348	2	449
WFDC8	0.772132405	0.692024425	0.080107979	2	450
BCL9	0.11522003	0.163585988	-0.048365957	6	451
CDHR2	0.612269525	0.546250657	0.066018867	1	452
FLG2	0.680019506	0.760756797	-0.080737292	3	453
CETN2	0.413048297	0.458144505	-0.045096208	14	454
LINC00703	0.736577625	0.824955334	-0.088377709	1	455
LDHD	0.579114379	0.513392309	0.06572207	8	456
GPR183	0.671471885	0.71026817	-0.038796285	4	457
C1QTNF4	0.654737713	0.720644388	-0.065906675	5	458
KCTD1	0.196629657	0.235419571	-0.038789914	4	459
RFC5	0.550469317	0.420590751	0.129878566	1	460
ITPKB	0.371086143	0.428941797	-0.057855654	9	461
TRBJ2-1	0.618552685	0.673999622	-0.055446938	8	462
ARHGAP32	0.346457174	0.275748508	0.070708666	6	463
RDH8	0.576190123	0.649119278	-0.072929155	4	464
RNU6-1061P	0.051845171	0.090412349	-0.038567178	3	465
HCRT2	0.330023002	0.36853257	-0.038509568	6	466
TAS2R40	0.591638135	0.640873986	-0.049235851	4	467
NAA60	0.569726458	0.628856609	-0.059130151	12	468
MIR4270	0.845412011	0.75580502	0.089606991	1	469
DUSP23	0.49763749	0.535914687	-0.038277197	7	470
CPQ	0.321350615	0.361370538	-0.040019923	14	471
SRSF10	0.742436514	0.687022484	0.055414029	5	472
ATE1	0.082943102	0.044825903	0.038117199	3	473
OR7E155P	0.753731675	0.824505682	-0.070774007	2	474
OR7E37P	0.753731675	0.824505682	-0.070774007	2	475
EBP	0.166562261	0.236727638	-0.070165377	3	476
METTL21A	0.416876715	0.363769164	0.053107551	5	477
PRPS2	0.26259044	0.349054627	-0.086464187	10	478
KCNJ3	0.312118968	0.265612017	0.046506951	10	479
MIR500A	0.745985247	0.701766665	0.044218582	5	480
TBC1D3P7	0.66414846	0.749873068	-0.085724608	2	481
PCDHB1	0.409644058	0.44713151	-0.037487453	9	482
HMG2P6	0.604136772	0.666463186	-0.062326413	2	483
DAP	0.304525623	0.267067209	0.037458414	5	484
TRIM29	0.911406232	0.817150221	0.094256012	1	485
RPRD1B	0.278761511	0.241361536	0.037399975	8	486
MIR520C	0.201418376	0.271487318	-0.070068943	4	487
SNORD115-23	0.276135075	0.343208994	-0.067073919	8	488
PDZD11	0.425801434	0.470218293	-0.044416859	5	489
PPFIBP1	0.20861876	0.162247083	0.046371677	3	490
MIR518F	0.372663973	0.409916199	-0.037252226	5	491
ADH1B	0.199405308	0.265180106	-0.065774798	3	492
PRAMEF21	0.701093451	0.77631784	-0.075224389	2	493
PRR5	0.375819589	0.298825267	0.076994323	6	494
TRIM34	0.856666979	0.775075918	0.081591061	3	495
PPP1R17	0.578006383	0.661339844	-0.08333346	7	496

ZNF449	0.373004067	0.430938494	-0.057934427	16	497
ZNF75D	0.373004067	0.430938494	-0.057934427	16	498
MAGED1	0.477973891	0.575669497	-0.097695606	5	499
MTHFSD	0.216887957	0.2579791	-0.041091143	15	500

**Supplementary Table S8. List of the 500 top-ranked, gene symbol-associated differentially methylated gene bodies after induced overexpression of *TET1* .**

gene_symbol	beta.TET1+Dox	beta.TET1-Dox	difference	num.sites	rank
LINC00424	0.336338211	0.660893691	-0.324555479	1	1
MIR100	0.356190771	0.723647342	-0.36745657	1	2
USP12-AS1	0.39039492	0.64608486	-0.25568994	1	3
ZNF726	0.141953305	0.327020175	-0.18506687	1	4
PRKRIRP7	0.339430918	0.145788105	0.193642813	1	5
DEFB133	0.225037558	0.39363274	-0.168595181	2	6
AKR1C6P	0.197497691	0.396302977	-0.198805287	1	7
RNA5SP42	0.391115907	0.588939481	-0.197823575	1	8
MROH9	0.522698559	0.666302755	-0.143604196	2	9
SNORD109A	0.567836579	0.36022288	0.207613698	1	10
CABS1	0.159029591	0.387320059	-0.228290468	1	11
MIR647	0.238631499	0.374134489	-0.13550299	1	12
SNTN	0.406437567	0.673327653	-0.266890086	1	13
KRTAP4-12	0.378210321	0.56732251	-0.189112189	1	14
LCE1E	0.249351773	0.375327023	-0.12597525	3	15
TSPY13P	0.396539801	0.281606303	0.114933498	1	16
OR1E2	0.269000307	0.382761544	-0.113761237	2	17
ALDOC	0.268593441	0.386073075	-0.117479634	9	18
IFI44	0.550823843	0.749275687	-0.198451845	1	19
OR4K5	0.383070536	0.520239508	-0.137168972	1	20
MIR485	0.544979723	0.734636336	-0.189656613	1	21
ANKRD18EP	0.211236362	0.315042136	-0.103805774	1	22
OR11H6	0.444258517	0.599321031	-0.155062515	1	23
RNU6-173P	0.297431615	0.412957275	-0.11552566	1	24
MIR518E	0.295502857	0.405080921	-0.109578064	1	25
ADH7	0.162191641	0.442765495	-0.280573855	1	26
CNTN4-AS1	0.722850149	0.589800326	0.133049823	3	27
TRAT1	0.197950643	0.34080076	-0.142850118	1	28
MYO16-AS1	0.351806686	0.470191047	-0.118384361	1	29
UGT2B10	0.216353361	0.373730151	-0.15737679	1	30
HNRNPDP2	0.56156639	0.756302233	-0.194735843	1	31
LCE4A	0.357710668	0.460057716	-0.102347048	4	32
OR6V1	0.282512275	0.383046151	-0.100533877	1	33
OR1E1	0.158426608	0.258677758	-0.10025115	1	34
WFDC12	0.784002164	0.654596938	0.129405226	2	35
SNORD12B	0.321547336	0.483299672	-0.161752336	1	36
TNFAIP8L2	0.756095827	0.852981672	-0.096885845	4	37
KRTAP6-2	0.3746847	0.490658355	-0.115973655	3	38
OR6C6	0.279596516	0.459161158	-0.179564642	1	39
OR6C72P	0.279596516	0.459161158	-0.179564642	1	40
KRTAP23-1	0.338477903	0.441357645	-0.102879742	1	41
MBOAT4	0.681341303	0.466859742	0.214481562	1	42
LCE1B	0.46301964	0.57139399	-0.10837435	2	43
KRTAP27-1	0.425307907	0.605389265	-0.180081358	1	44
PPP2R2B-IT1	0.139926348	0.28262042	-0.142694072	1	45
ZNF32	0.383227417	0.486865848	-0.103638431	4	46

HULC	0.564264647	0.742375296	-0.178110649	1	47
PRKRIRP2	0.410442286	0.521528804	-0.111086519	1	48
TAS2R38	0.568370974	0.65879565	-0.090424676	2	49
LCE1C	0.390379191	0.537884484	-0.147505293	2	50
LARP1BP1	0.476326614	0.588592322	-0.112265708	2	51
MAST4-AS1	0.15643913	0.260674784	-0.104235654	1	52
LINC00898	0.748081029	0.909072878	-0.160991849	2	53
SNORA69	0.178096415	0.344683956	-0.166587541	1	54
LPAL2	0.484751706	0.572546526	-0.08779482	4	55
PF4V1	0.433144261	0.582972533	-0.149828272	6	56
ABCA10	0.535260991	0.671412314	-0.136151323	2	57
OR52E6	0.484743546	0.787624802	-0.302881256	1	58
NAV2-IT1	0.647664357	0.814213954	-0.166549597	1	59
TRAV12-3	0.557900442	0.758800636	-0.200900194	1	60
OSBPL10-AS1	0.609447448	0.760969267	-0.151521818	1	61
MIR105-2	0.165779905	0.243066791	-0.077286886	1	62
OR111	0.741208022	0.919279972	-0.178071951	1	63
SPANXA2-OT1	0.377170654	0.604684169	-0.227513514	1	64
TAS2R8	0.579226431	0.467330028	0.111896402	1	65
KRTAP19-3	0.40119424	0.510765429	-0.109571189	2	66
KRTAP19-6	0.451327871	0.564224864	-0.112896993	1	67
EIF3CL	0.315597366	0.240940121	0.074657245	1	68
KCNH1-IT1	0.83028015	0.672647505	0.157632645	1	69
STC1	0.347515227	0.421856996	-0.074341769	3	70
LDLRAD1	0.631102819	0.743444966	-0.112342146	3	71
NLRP5	0.215878098	0.347588996	-0.131710898	2	72
GPX8	0.362530153	0.436037237	-0.073507084	2	73
OR1N1	0.120742614	0.267759916	-0.147017302	1	74
DEFA10P	0.484154935	0.595003224	-0.110848289	1	75
SNORD115-23	0.365640832	0.449663449	-0.084022617	1	76
CARD6	0.269699454	0.348539727	-0.078840272	6	77
RARRES2P9	0.575452245	0.430186482	0.145265763	1	78
C4orf6	0.472210988	0.584982334	-0.112771346	5	79
OXCT1-AS1	0.326376411	0.412767809	-0.086391398	9	80
MROH2B	0.143516061	0.260862324	-0.117346263	2	81
CLEC5A	0.6628762	0.749968477	-0.087092278	5	82
MIR514A1	0.739708236	0.896984396	-0.15727616	1	83
NTF6A	0.633939102	0.52279486	0.111144241	1	84
OR5A1	0.444983101	0.537408523	-0.092425422	3	85
CYP4F22	0.50461871	0.572836352	-0.068217642	9	86
SNORA48	0.367344505	0.444421802	-0.077077297	1	87
PASD1	0.428102427	0.514869978	-0.086767551	3	88
MYD88	0.504316129	0.619999181	-0.115683052	8	89
CMA1	0.513299606	0.618339963	-0.105040357	1	90
CTSG	0.436620273	0.505156846	-0.068536573	5	91
RDH8	0.568015727	0.681806697	-0.11379097	4	92
SMCP	0.51762225	0.626787949	-0.109165699	5	93
ISX	0.561319509	0.664716802	-0.103397293	3	94
IFI16	0.275237999	0.346274315	-0.071036317	9	95
IGHV3-21	0.321339923	0.488395218	-0.167055295	1	96



GATSL2	0.173141094	0.274325096	-0.101184003	1	97
MMP8	0.811605298	0.703131496	0.108473802	2	98
STAU2-AS1	0.236357758	0.333395451	-0.097037693	5	99
HIST1H2AL	0.489764861	0.591924222	-0.102159361	7	100
RELN	0.49287631	0.556829789	-0.063953479	14	101
MIR648	0.374557592	0.50826036	-0.133702768	1	102
CD163	0.649384596	0.544308805	0.105075791	1	103
LSMEM1	0.650865576	0.751565647	-0.100700071	5	104
TRBV23-1	0.529455117	0.602115284	-0.072660166	2	105
OR1A1	0.277491325	0.376928972	-0.099437646	1	106
SLAMF6	0.396947995	0.459970769	-0.063022774	3	107
PPP1R17	0.609734619	0.67603798	-0.066303361	9	108
MIR376C	0.544638171	0.647309795	-0.102671624	1	109
OR9I1	0.428015041	0.593717001	-0.16570196	1	110
MIR105-1	0.287074852	0.374566884	-0.087492031	1	111
CSTF2	0.509157264	0.579668423	-0.070511159	3	112
ZFP42	0.630739268	0.754043413	-0.123304145	10	113
SNORD115-33	0.318028299	0.410073089	-0.09204479	1	114
TBC1D26	0.659150722	0.532495124	0.126655598	2	115
KERA	0.396694858	0.53871267	-0.142017812	1	116
OR4N5	0.262734705	0.42565986	-0.162925154	1	117
XG	0.371529099	0.432378222	-0.060849123	4	118
CCDC129	0.493418234	0.574737893	-0.081319659	10	119
RPS26P49	0.300035372	0.192829986	0.107205386	1	120
MIR130B	0.762996969	0.899292269	-0.1362953	1	121
PTCHD3P3	0.619005525	0.687315496	-0.068309971	2	122
EPGN	0.684264433	0.804793618	-0.120529186	1	123
GIMAP4	0.486431313	0.544998073	-0.058566676	4	124
CTAGE14P	0.609000347	0.669721849	-0.060721503	3	125
IGFL1	0.722117696	0.618978303	0.103139393	3	126
FAM92A1P2	0.685211825	0.80513095	-0.119919125	1	127
MAGEB3	0.318720413	0.426332431	-0.107612018	5	128
MIR518C	0.108387866	0.16645225	-0.058064384	1	129
GATSL3	0.267012567	0.324901243	-0.057888676	4	130
KLK13	0.49768579	0.579023488	-0.081337698	5	131
HTN1	0.380824458	0.448671878	-0.06784742	2	132
SIGLEC14	0.374835061	0.508266654	-0.133431593	2	133
KRTAP19-1	0.254471977	0.328563691	-0.074091714	1	134
DPPA2	0.764863451	0.895260048	-0.130396597	3	135
GCG	0.619589166	0.724282336	-0.10469317	2	136
KRT18P42	0.661753511	0.774130354	-0.112376843	1	137
SLC2A3	0.3552381	0.438416279	-0.083178179	3	138
TRIML2	0.567805835	0.677696299	-0.109890463	10	139
GPX1P2	0.424179201	0.506073885	-0.081894684	3	140
OGFOD1	0.120316508	0.175529063	-0.055212554	7	141
TAF13	0.275417801	0.330484084	-0.055066283	4	142
KIAA0125	0.185505799	0.261840107	-0.076334308	1	143
MIR2117	0.575917559	0.385876223	0.190041336	1	144
SERPINB2	0.7499493	0.815824618	-0.065875318	5	145
PRAMEF12	0.45753836	0.529516651	-0.071978291	2	146

POU5F1P6	0.63566149	0.739191406	-0.103529916	1	147
KRTAP5-9	0.735854032	0.825600988	-0.089746955	2	148
SPZ1	0.768904016	0.686929066	0.08197495	2	149
SNORD114-9	0.604533226	0.460715424	0.143817802	1	150
SNORD71	0.716107333	0.829818133	-0.1137108	1	151
PGM5P1	0.455858489	0.551602669	-0.09574418	1	152
MIR29A	0.822554057	0.710184485	0.112369572	1	153
PDE6H	0.770099565	0.872614997	-0.102515432	2	154
RXRG	0.331174487	0.398457337	-0.06728285	4	155
GZMB	0.578885307	0.660240842	-0.081355534	2	156
ZNF510	0.550938055	0.60257112	-0.051633065	5	157
RAB39B	0.58950132	0.644202938	-0.054701618	7	158
MAGEB6	0.615590665	0.70287404	-0.087283375	4	159
RPL4P5	0.615307968	0.69565618	-0.080348212	2	160
SSMEM1	0.735856773	0.684907626	0.050949147	3	161
HAUS6P1	0.460432783	0.544058012	-0.083625229	2	162
TLL11-IT1	0.739076871	0.835673957	-0.096597086	3	163
SLC9A7P1	0.597310009	0.657081606	-0.059771597	7	164
IDO1	0.47832874	0.55205555	-0.073726809	3	165
CD200R1	0.57503324	0.635405603	-0.060372363	4	166
C20orf203	0.909440068	0.790813619	0.118626449	1	167
RPTN	0.570188352	0.671115534	-0.100927182	3	168
OR52A5	0.793693803	0.690734105	0.102959698	1	169
HIGD1AP5	0.895983769	0.780060491	0.115923277	1	170
SNORD18A	0.222696228	0.275164907	-0.052468679	1	171
PRAMEF11	0.503418719	0.588813548	-0.08539483	3	172
CDH9	0.471668592	0.532811554	-0.061142961	14	173
LPA	0.492996339	0.424342827	0.068653512	4	174
MIR425	0.739501801	0.849203519	-0.109701718	1	175
FRMPD1	0.438596034	0.488059488	-0.049463454	6	176
MS4A12	0.179947226	0.322585064	-0.142637838	1	177
KRTAP19-2	0.291578749	0.379785487	-0.088206737	1	178
NMS	0.51282128	0.600441236	-0.087619956	2	179
TSPY11P	0.208383156	0.257553544	-0.049170388	1	180
MIR1208	0.592941651	0.680128386	-0.087186735	1	181
VN1R5	0.354813549	0.507161707	-0.152348158	1	182
SMCO1	0.648911821	0.705711492	-0.056799672	3	183
OR13C4	0.445526586	0.619164069	-0.173637483	1	184
FBXO36-IT1	0.624493678	0.715268054	-0.090774376	1	185
ABCD1P3	0.51562126	0.590629696	-0.075008436	1	186
S100A7A	0.249663709	0.329440379	-0.07977667	4	187
MIR520F	0.60236469	0.707418883	-0.105054193	1	188
SH2D1B	0.588298656	0.662289944	-0.073991288	3	189
TMEM158	0.161701286	0.276520805	-0.114819519	2	190
PRAME	0.533750785	0.618100398	-0.084349614	8	191
ABCF3	0.337122297	0.385011619	-0.047889322	6	192
GP2	0.3367388	0.384556448	-0.047817648	4	193
CTU2	0.598135569	0.645634802	-0.047499234	8	194
NAV3	0.472483323	0.536204313	-0.06372099	14	195
SNORD35B	0.65630181	0.565033053	0.091268756	1	196

MAGEA2	0.597574235	0.523757361	0.073816874	1	197
DCAF8L2	0.338095296	0.40195021	-0.063854914	6	198
OR4A5	0.123270026	0.18379361	-0.060523584	1	199
FCRL3	0.330709255	0.377672689	-0.046963434	5	200
OR6Y1	0.391994676	0.304039145	0.087955532	2	201
CLLU1	0.719025067	0.807681829	-0.088656762	6	202
C12orf50	0.476954383	0.398335145	0.078619238	4	203
FAM47A	0.677625955	0.742607115	-0.06498116	10	204
RERGL	0.72407417	0.815286161	-0.091211991	7	205
ACTL6B	0.529516429	0.582866644	-0.053350216	6	206
KRTAP13-1	0.223531846	0.285136406	-0.06160456	1	207
IDO2	0.454416057	0.51433919	-0.059923132	15	208
SNORD37	0.879981181	0.773053516	0.106927665	1	209
SERPINB3	0.57288825	0.684606742	-0.111718492	2	210
LRRCS5	0.577937543	0.632171275	-0.054233732	5	211
SCG2	0.293446724	0.350761348	-0.057314624	5	212
SSX6	0.708776545	0.805925415	-0.09714887	1	213
BCMO1	0.517319629	0.57423541	-0.056915781	7	214
MIR4724	0.352491041	0.519825852	-0.167334811	1	215
DNAJB5	0.84238854	0.741433059	0.100955481	1	216
GPR42	0.638921488	0.725448658	-0.086527169	1	217
CSN2	0.38570222	0.436323858	-0.050621638	2	218
PYDC2	0.722972528	0.820646963	-0.097674435	1	219
PKMP3	0.757422894	0.859635635	-0.102212741	1	220
STX18-IT1	0.738726511	0.824704287	-0.085977777	2	221
LAYN	0.586681888	0.631906081	-0.045224193	15	222
NBPF22P	0.437819753	0.496727094	-0.058907341	1	223
DEFB126	0.454398048	0.393148466	0.061249582	2	224
OR1L3	0.298414059	0.362415386	-0.064001327	3	225
PSG9	0.400524181	0.450716622	-0.050192441	2	226
KIR3DL2	0.711487796	0.767861889	-0.056374093	5	227
GPR112	0.425510218	0.495628046	-0.070117828	2	228
GPAA1	0.344677642	0.293242178	0.051435464	4	229
OR7E37P	0.726365435	0.642006245	0.084359189	1	230
PTGR1	0.520547184	0.606669851	-0.086122667	4	231
ALDH1L1-AS2	0.517690001	0.573749368	-0.056059367	21	232
DEFB104A	0.535418488	0.607709825	-0.072291337	1	233
SPRR2E	0.311703307	0.387054496	-0.075351189	3	234
SOX11	0.397813886	0.441753559	-0.043939673	21	235
DIAPH2-AS1	0.382844294	0.441810283	-0.058965989	2	236
OR4D5	0.536221977	0.677359359	-0.141137382	1	237
CDH12	0.359369704	0.406493792	-0.047124088	15	238
MAFB	0.409298645	0.453556431	-0.044257786	9	239
MIR519C	0.548027816	0.618466956	-0.07043914	1	240
RPL35	0.295803311	0.355771493	-0.059968181	3	241
USP30-AS1	0.067779972	0.111108049	-0.043328076	7	242
ARHGAP31-AS1	0.41066884	0.453971879	-0.043303039	5	243
MPL	0.574475135	0.622617573	-0.048142438	11	244
KRTAP5-3	0.54779983	0.611560473	-0.063760644	2	245
PTPRQ	0.60914392	0.675877271	-0.066733352	11	246

MC3R	0.428849802	0.482317939	-0.053468137	6	247
SRPX2	0.77024526	0.700778975	0.069466284	4	248
PVRL3-AS1	0.495047606	0.544815936	-0.04976833	8	249
POLR2K	0.253295214	0.295977067	-0.042681853	2	250
ACSS3	0.481426277	0.524104328	-0.042678051	32	251
CCL8	0.759711522	0.835377091	-0.075665569	2	252
MIR516A1	0.181847454	0.249920325	-0.068072871	1	253
NF1P1	0.370794718	0.442770126	-0.071975408	3	254
AKR1CL1	0.59926826	0.671249473	-0.071981213	9	255
FAM120C	0.510645419	0.569633988	-0.058988569	7	256
PLA2G2D	0.692402835	0.780581077	-0.088178242	3	257
RBM8B	0.786456049	0.649412935	0.137043114	1	258
ZNF658	0.273522024	0.35716955	-0.083647526	3	259
CADM2-AS1	0.450817708	0.505277435	-0.054459726	2	260
GPX3	0.500529629	0.542306197	-0.041776568	8	261
LINC00899	0.858042099	0.772358343	0.085683755	4	262
LINC00442	0.6423449	0.705263958	-0.062919058	2	263
PPRC1	0.279856653	0.321976813	-0.04212016	7	264
SUCLA2-AS1	0.23194086	0.274499604	-0.042558744	8	265
SPIN4	0.389882789	0.469304617	-0.079421828	3	266
PLA2G2A	0.795686649	0.745911079	0.049775571	4	267
PNPLA4	0.444095975	0.378720719	0.065375256	13	268
C4orf26	0.780879738	0.845589221	-0.064709483	3	269
MIR206	0.383301845	0.252851298	0.130450548	1	270
TMCC3	0.573808221	0.61624776	-0.042439539	18	271
NPPB	0.496025856	0.537088857	-0.041063	4	272
PRSS58	0.743673689	0.82881581	-0.085142121	2	273
CLCA2	0.759137866	0.682834258	0.076303608	3	274
BBC3	0.338474002	0.379360668	-0.040886666	18	275
GOLGA6L1	0.618642966	0.693087781	-0.074444815	1	276
ENDOG	0.597341651	0.64928922	-0.051947568	3	277
KCNA4	0.463660098	0.504455634	-0.040795536	11	278
TRPV5	0.728818337	0.795173485	-0.066355147	2	279
KMO	0.634481975	0.694060136	-0.059578162	4	280
NSDHL	0.566647391	0.607303606	-0.040656215	11	281
C10orf67	0.294876867	0.341075747	-0.04619888	9	282
OCRL	0.521287192	0.56420218	-0.042914988	13	283
SLC18A1	0.601676049	0.642285831	-0.040609782	8	284
DNM1P50	0.398751655	0.532782057	-0.134030402	1	285
OR4D6	0.806687314	0.902159457	-0.095472143	1	286
RHO	0.815169911	0.85844933	-0.04327942	5	287
VAMP8	0.407185008	0.447597337	-0.040412329	16	288
BIRC8	0.709394549	0.662484995	0.046909554	5	289
KRTAP1-3	0.783952173	0.88561266	-0.101660487	1	290
SLAMF9	0.733581559	0.693243857	0.040337702	4	291
ZNF597	0.611742957	0.665626381	-0.053883424	8	292
SSX5	0.742755509	0.680733056	0.062022453	3	293
DSG3	0.7402548	0.66266242	0.07759238	1	294
ZNF675	0.185642227	0.225760244	-0.040118017	2	295
MIR3678	0.181013651	0.303421423	-0.122407772	1	296

ENOPH1	0.353222873	0.406310955	-0.053088082	8	297
ANKRD20A12P	0.536824544	0.600756471	-0.063931926	1	298
GPR183	0.659712158	0.699612663	-0.039900504	3	299
OR56A4	0.15052527	0.190424455	-0.039899185	1	300
STRADBP1	0.618522646	0.699097284	-0.080574638	2	301
HCRTR2	0.466560341	0.508260183	-0.041699842	10	302
CEACAM3	0.673046791	0.76523615	-0.092189359	2	303
OR4F5	0.631094079	0.704142746	-0.073048667	1	304
UQCR10	0.364165107	0.403891087	-0.03972598	3	305
KIF4A	0.425801434	0.470218293	-0.044416859	5	306
PLSCR5	0.420171082	0.470258695	-0.050087613	2	307
PRR21	0.734227229	0.818692471	-0.084465242	1	308
ZNF619	0.467897022	0.508572727	-0.040675705	8	309
TMEM202	0.709623323	0.755521608	-0.045898284	3	310
TMEM248	0.380856669	0.445444953	-0.064588284	8	311
CD99L2	0.37674444	0.416229122	-0.039484683	9	312
PSG7	0.40934747	0.456809424	-0.047461953	1	313
OR2AJ1	0.68689128	0.638453711	0.048437569	2	314
PTH2	0.366912842	0.406296446	-0.039383604	6	315
F2RL2	0.616232726	0.662707233	-0.046474507	4	316
MIR519B	0.537895771	0.599437828	-0.061542057	1	317
RNASE6	0.645825714	0.710266452	-0.064440738	3	318
OR2W5	0.781080476	0.929005385	-0.147924909	1	319
MIR522	0.483317937	0.629341688	-0.146023751	1	320
AKR1C2	0.609334265	0.67391628	-0.064582015	5	321
MAGEC1	0.424878869	0.464467691	-0.039588822	4	322
HOTAIRM1	0.202848528	0.249941923	-0.047093395	18	323
IGHEP2	0.892567681	0.80202891	0.090538772	1	324
ECM2	0.568164078	0.626150277	-0.057986199	4	325
OR10G7	0.39512658	0.513105142	-0.117978562	1	326
DCAF16	0.258789028	0.297627886	-0.038838857	7	327
ALOX12P2	0.870896154	0.802031483	0.068864671	15	328
SEPHS1	0.587632768	0.635129699	-0.047496931	12	329
ACKR4	0.67026073	0.779432789	-0.109172059	2	330
ERP27	0.720815417	0.770940125	-0.050124708	6	331
RGS18	0.404857111	0.453350911	-0.0484938	2	332
SDR16C5	0.670701232	0.718599869	-0.047898637	10	333
LETM1P2	0.822288864	0.751171136	0.071117728	4	334
ADNP2	0.623936026	0.688201946	-0.06426592	9	335
ACSL4	0.417871514	0.478377003	-0.060505489	5	336
LINC00841	0.830760509	0.748204251	0.082556258	1	337
PFKFB1	0.595044008	0.652532445	-0.057488436	11	338
HIST1H2AI	0.290981254	0.329098503	-0.03811725	4	339
KRTAP12-2	0.576696874	0.519428825	0.057268049	1	340
MT1JP	0.850590861	0.768394763	0.082196098	3	341
MIR196A2	0.392542562	0.469538254	-0.076995692	2	342
CLUU1OS	0.745108206	0.821366553	-0.076258347	7	343
CCL2	0.585987959	0.652835814	-0.066847855	3	344
GABRG3	0.581660986	0.645493315	-0.063832329	31	345
DUSP9	0.567547444	0.613905518	-0.046358074	19	346

SIRPD	0.572121888	0.609997209	-0.037875321	5	347
PRAMEF6	0.520209575	0.579466221	-0.059256645	4	348
INSL4	0.812336778	0.738333437	0.074003341	2	349
NOVA1-AS1	0.337835345	0.405816181	-0.067980836	9	350
OR2W3	0.751414371	0.684527795	0.066886576	4	351
DUSP26	0.627180164	0.674729867	-0.047549703	11	352
OR4S2	0.295539077	0.392350061	-0.096810984	1	353
MPP1	0.488847896	0.534372433	-0.045524537	15	354
FATE1	0.325457529	0.36283683	-0.037379301	3	355
POTEA	0.637624206	0.696431379	-0.058807173	3	356
SUB1P2	0.620222406	0.686863421	-0.066641016	1	357
OR5H2	0.266859535	0.384096761	-0.117237226	1	358
RPS6KA6	0.449149306	0.488735114	-0.039585808	3	359
OR4K13	0.789506427	0.873544859	-0.084038432	1	360
OR52I2	0.592624723	0.655808255	-0.063183533	1	361
GRM1	0.498048822	0.554274663	-0.056225841	27	362
OR52K2	0.671289002	0.742681764	-0.071392762	1	363
CYP7A1	0.619134352	0.52864613	0.090488222	1	364
BBS10	0.27946302	0.189214732	0.090248288	6	365
TIPARP-AS1	0.280377561	0.349495248	-0.069117687	3	366
SOWAHC	0.517416082	0.557751073	-0.040334991	6	367
AKR1C4	0.474413919	0.544872443	-0.070458523	6	368
MAGI2-AS1	0.731918469	0.661978186	0.069940283	1	369
NLRP8	0.359678319	0.408072477	-0.048394157	3	370
SNORA10	0.460292972	0.562231006	-0.101938034	2	371
TUBB8P9	0.477809657	0.542452902	-0.064643246	1	372
PSG10P	0.32351412	0.361838744	-0.038324624	1	373
THAP11	0.124357531	0.087971783	0.036385748	7	374
OR5P3	0.779777421	0.861366626	-0.081589204	1	375
MIR1468	0.492812135	0.545379462	-0.052567327	1	376
ACOT2	0.363183038	0.410779018	-0.04759598	10	377
UGT3A1	0.521180781	0.55735816	-0.036177378	9	378
RHOT1P2	0.651137259	0.589422372	0.061714887	1	379
SEMG1	0.403546055	0.439680378	-0.036134323	3	380
KRTAP20-2	0.235916202	0.289445211	-0.053529009	1	381
CRABP2	0.356154978	0.392227979	-0.036073	11	382
CYP2C8	0.940078332	0.851944284	0.088134048	1	383
OR2Z1	0.422322881	0.288112126	0.134210754	1	384
C6orf223	0.395805289	0.446678675	-0.050873386	7	385
LINC00158	0.210668283	0.28351808	-0.072849797	1	386
BATF2	0.67223457	0.586563532	0.085671038	4	387
IGJ	0.782495126	0.710025093	0.072470034	2	388
MAOA	0.487754368	0.412964744	0.074789623	4	389
LINC00968	0.517289513	0.570783773	-0.05349426	1	390
SNORD3D	0.161783585	0.202076184	-0.040292599	2	391
BEST3	0.644380387	0.680011099	-0.035630712	9	392
LCE6A	0.411053951	0.474081686	-0.063027735	3	393
PLXDC2	0.363397148	0.434721673	-0.071324525	28	394
OR8K1	0.312537547	0.397539368	-0.085001822	2	395
HSD17B4	0.515158623	0.558464076	-0.043305454	24	396

RLBP1	0.832608221	0.875006318	-0.042398097	5	397
SERPINB11	0.401960608	0.497303294	-0.095342686	8	398
SCARNA13	0.172146583	0.20755082	-0.035404237	1	399
TBC1D21	0.598676359	0.540536805	0.058139554	3	400
TTPA	0.203192707	0.284111348	-0.08091864	5	401
IL10RB-AS1	0.73149031	0.696301369	0.03518894	5	402
RIMBP2	0.599934036	0.641089782	-0.041155746	206	403
HHLA1	0.470902974	0.538711364	-0.06780839	6	404
MSC	0.588412823	0.623487568	-0.035074745	13	405
SPATA12	0.817378784	0.88234273	-0.064963946	5	406
FLNA	0.553027053	0.593551512	-0.040524459	21	407
OR10A7	0.453344732	0.617006849	-0.163662117	1	408
CPA3	0.660021129	0.70766515	-0.047644021	3	409
LINC00615	0.781193465	0.85975942	-0.078565955	1	410
ALDH1L1	0.604106758	0.646161451	-0.042054692	32	411
KRTAP1-5	0.50685421	0.558149943	-0.051295733	1	412
LINC00941	0.267873592	0.302725622	-0.034852031	13	413
USP27X	0.377423528	0.415201876	-0.037778348	4	414
MID1	0.428918375	0.469594112	-0.040675738	21	415
OR5AK2	0.234688985	0.320201414	-0.085512428	1	416
OR4X2	0.558089881	0.383374686	0.174715195	1	417
MIR1306	0.758924661	0.834618663	-0.075694001	1	418
C12orf68	0.691910113	0.65741391	0.034496203	7	419
MIR517A	0.36859812	0.419971917	-0.051373796	1	420
MORF4L2-AS1	0.545449252	0.587135589	-0.041686337	5	421
ARRB2	0.608569227	0.553584159	0.054985068	11	422
C6orf164	0.618121124	0.679469908	-0.061348784	1	423
NUP62CL	0.599127082	0.633576508	-0.0344449426	7	424
DEFB119	0.274009297	0.35667852	-0.082669223	3	425
GRIA1	0.221384687	0.278000031	-0.056615344	12	426
MS4A6A	0.325667159	0.403920213	-0.078253054	9	427
FUNDC1	0.070508551	0.104892225	-0.034383675	2	428
ARMCX6	0.338133827	0.378697555	-0.040563728	5	429
OR2T33	0.387786961	0.426518361	-0.0387314	1	430
NANOS2	0.855633341	0.8120662	0.043567141	6	431
ATP6V1G1P2	0.678198175	0.744982839	-0.066784664	1	432
LGALS9B	0.520307606	0.473404187	0.046903419	1	433
CRBN	0.247502337	0.281669246	-0.03416691	6	434
MPZL2	0.239310163	0.273462693	-0.03415253	10	435
HYAL4	0.677594363	0.711709204	-0.034114841	8	436
OR3A2	0.305426255	0.375045042	-0.069618787	2	437
LDOC1	0.505161461	0.541619608	-0.036458147	4	438
SEPW1	0.431375889	0.46541712	-0.034041231	8	439
PEX6	0.299675621	0.342481491	-0.04280587	7	440
PSG8	0.528874302	0.573758218	-0.044883916	8	441
MLLT11	0.275362483	0.30929243	-0.033929947	21	442
LINC00525	0.427171501	0.296143754	0.131027747	1	443
SLC10A2	0.198201215	0.291809454	-0.093608239	3	444
ZBP1	0.853588133	0.789845692	0.063742442	3	445
FAM83C-AS1	0.706983934	0.757903427	-0.050919494	2	446

AGAP2-AS1	0.630028371	0.663726958	-0.033698587	4	447
CCR2	0.588662252	0.55184708	0.036815172	4	448
SNHG6	0.435589795	0.492897944	-0.057308148	10	449
HTATSF1	0.480153142	0.526423748	-0.046270606	12	450
ZNF66	0.268521463	0.23486394	0.033657524	1	451
KIR2DS4	0.28266861	0.325790443	-0.043121833	2	452
DMD-AS2	0.491897559	0.525323573	-0.033426014	16	453
CYP4F24P	0.298212506	0.331627604	-0.033415097	6	454
KRTAP12-4	0.529963233	0.581149239	-0.051186006	1	455
LINC00395	0.706135139	0.755673569	-0.04953843	2	456
NBPF4	0.637462883	0.581435774	0.056027109	1	457
CLEC7A	0.745550291	0.819952469	-0.074402177	3	458
PCDHB11	0.480882037	0.546745738	-0.065863701	7	459
OR4F15	0.828926124	0.908138132	-0.079212007	1	460
AMELX	0.533401013	0.390676011	0.142725002	1	461
ADAL	0.37566881	0.447868147	-0.072199336	11	462
SCML2P1	0.830772298	0.909653654	-0.078881356	1	463
MYH4	0.573235468	0.622921285	-0.049685816	3	464
FAM9A	0.896829427	0.828038395	0.068791031	7	465
TPTEP1	0.59907224	0.64378102	-0.044708779	19	466
EFCAB6-AS1	0.672118499	0.735683243	-0.063564744	1	467
LINC00928	0.795394285	0.870400673	-0.075006387	1	468
OPN1MW	0.640821123	0.701414415	-0.060593292	1	469
G6PD	0.558072819	0.604789157	-0.046716338	19	470
OR2T27	0.459985374	0.515989605	-0.056004231	2	471
TTLL13	0.402617232	0.369987512	0.03262972	4	472
FLG2	0.761316735	0.831080578	-0.069763843	3	473
AK3	0.291155177	0.323629195	-0.032474018	5	474
F2RL1	0.262953612	0.295292474	-0.032338861	13	475
APCDD1L-AS1	0.827233137	0.756819102	0.070414035	2	476
SDC4P	0.725687942	0.663786077	0.061901865	1	477
CXorf64	0.181194454	0.244998839	-0.063804384	2	478
CT47B1	0.634549951	0.685137809	-0.050587858	5	479
CALR4P	0.775283746	0.829236572	-0.053952826	5	480
PTPRT	0.354176518	0.38630149	-0.032124972	9	481
ATP6AP1	0.594936203	0.634344442	-0.039408239	9	482
CADM3	0.307116372	0.341087709	-0.033971338	15	483
YIPF6	0.527458633	0.571440759	-0.043982126	13	484
MIR4710	0.351035927	0.399263277	-0.048227349	1	485
MIR135A1	0.892741924	0.817220807	0.075521118	1	486
OLFM4	0.846081958	0.92330961	-0.077227652	4	487
CYSLTR2	0.645010818	0.697153444	-0.052142626	2	488
ZNF208	0.350199806	0.394017807	-0.043818001	12	489
LINC00659	0.736536115	0.659456222	0.077079893	1	490
KCNMB2	0.481026652	0.535151031	-0.054124379	21	491
CENPVP3	0.672642071	0.615895896	0.056746175	1	492
PATE4	0.257767742	0.318746226	-0.060978484	2	493
SENP7	0.364030979	0.415962083	-0.051931105	8	494
GLRA4	0.689435834	0.736930829	-0.047494995	6	495
PGR	0.401552712	0.433388527	-0.031835815	17	496



SGCG	0.791826438	0.836779624	-0.044953187	4	497
SNORA70	0.70797132	0.772860372	-0.064889052	1	498
DGAT2L6	0.613386783	0.672090117	-0.058703334	3	499
DNAJC5B	0.585283823	0.646436801	-0.061152978	4	500

**Supplementary Table S9. List of the 500 top-ranked, differentially methylated CGIs after induced overexpression of TET1 .**

For CGIs overlapping with 2 kb promoter regions, corresponding promoter gene symbols are provided.

CGI	promoter_overlap	beta.TET1+Dox	beta.TET1-Dox	difference	num.sites	rank
chr1:158119489-158119704		0.083231257	0.266035827	-0.18280457	4	1
chr19:15619224-15619613	CYP4F22	0.165546679	0.352916775	-0.187370096	3	2
chr9:99540026-99540472	ZNF510	0.057398485	0.196285722	-0.138887237	3	3
chr2:88650248-88650686		0.258580389	0.426194027	-0.167613638	4	4
chr3:72788073-72788416		0.239107279	0.444377539	-0.205270261	3	5
chr20:4152867-4153398		0.106261466	0.241809836	-0.135548371	3	6
chr9:112262011-112262317	PTPN3	0.263175696	0.474672877	-0.211497181	1	7
chr16:67208068-67208678		0.31323473	0.435778555	-0.122543825	3	8
chr3:125898663-125899568	ALDH1L1-AS2	0.087088685	0.246835842	-0.159747157	9	9
chr12:186864-187610		0.400301438	0.539151779	-0.138850341	3	10
chr8:37557928-37558887		0.195238965	0.344873549	-0.149634583	2	11
chr12:132990778-132990987		0.208831816	0.363535841	-0.154704025	3	12
chr1:45082740-45083285		0.321843876	0.502992355	-0.181148479	6	13
chr16:4363936-4364151	GLIS2	0.14092594	0.251360407	-0.110434468	3	14
chr11:47615711-47616055	C1QTNF4	0.173370704	0.377760502	-0.204389798	1	15
chr7:19145873-19146256		0.150071951	0.372057135	-0.221985185	2	16
chr12:98850691-98851002	SLC9A7P1	0.116047161	0.241776758	-0.125729597	4	17
chr4:8594413-8594777	CPZ	0.258169775	0.398254677	-0.140084903	4	18
chr19:18319146-18319363		0.138805497	0.244914913	-0.106109417	2	19
chr5:72746990-72747587		0.314632117	0.429370621	-0.114738504	3	20
chr19:15662114-15662358		0.227209994	0.328967577	-0.101757583	2	21
chr17:60885409-60885857	MARCH10	0.413090469	0.604865998	-0.191775528	4	22
chrX:129118346-129118690		0.177589113	0.363192929	-0.185603816	1	23
chr7:100253783-100254150	ACTL6B	0.360889263	0.489823234	-0.128933971	5	24
chr9:77111779-77112042	RORB	0.171967229	0.266203405	-0.094236176	1	25
chr9:16828936-16829169		0.183215258	0.381984702	-0.198769444	1	26
chr5:139076543-139077179		0.202190646	0.297694396	-0.09550375	5	27
chr6:73972820-73973027		0.058056631	0.176190202	-0.118133571	3	28
chr19:3687787-3688262		0.287700849	0.164730195	0.122970654	4	29
chr18:77905298-77905566		0.385183209	0.528703148	-0.143519939	5	30
chr4:74719088-74719339	PF4V1	0.329761906	0.50218856	-0.172426654	3	31
chr9:71650647-71651176	FXN	0.072242007	0.16402858	-0.091786573	2	32
chr10:112431836-112432426		0.183934701	0.272102573	-0.088167872	7	33
chr7:1265112-1265379		0.122597066	0.232472743	-0.109875677	3	34
chr12:109729573-109729826		0.303954679	0.42912124	-0.125166561	3	35
chr7:150652808-150653080		0.433954052	0.518967285	-0.085013233	5	36
chr19:41732007-41732556		0.13308835	0.227159268	-0.094070918	3	37
chr10:133058339-133058609		0.29893558	0.405565443	-0.106629863	2	38
chr13:113656117-113656379		0.283157134	0.392325158	-0.109168023	2	39
chr1:27286066-27287101	C1orf172	0.189491181	0.312946393	-0.123455212	6	40
chr7:157690560-157690770		0.431724584	0.537017146	-0.105292561	4	41
chr19:31210518-31210884		0.20950321	0.291776521	-0.082273311	3	42
chr12:131303094-131303836		0.173767293	0.284457887	-0.110690594	7	43
chr17:34997844-34998760		0.076449118	0.15784926	-0.081400142	2	44
chr14:74100344-74101230		0.232718561	0.325841814	-0.093123252	4	45
chr14:42075859-42076329	LRFN5	0.14457537	0.271883055	-0.127307685	2	46
chr2:242549374-242549995		0.176253851	0.25556502	-0.079311169	4	47
chrX:101397306-101397514	TCEAL6	0.249608118	0.336427747	-0.086819629	1	48
chr12:56039989-56040337		0.208683548	0.313736692	-0.105053144	5	49
chr21:42792294-42792704	MX1	0.208701646	0.32051079	-0.111809145	5	50
chr1:116961183-116961542	ATP1A1OS	0.070156835	0.146581995	-0.076425161	7	51
chr8:72755784-72756667	MSC	0.221311369	0.313174216	-0.091862847	6	52
chr9:127212625-127213064	GPR144	0.06625163	0.145397006	-0.079145377	1	53
chr9:32572997-32573227	NDUFB6	0.07266985	0.147935283	-0.075265433	1	54
chr10:20106644-20106946		0.128640472	0.238486063	-0.109845591	3	55
chr1:43814306-43815277		0.274371037	0.367128258	-0.092757221	5	56
chr4:155547985-155548322	LRAT	0.289842796	0.39142277	-0.101579974	5	57
chr10:49348138-49348676		0.32913971	0.535995281	-0.206855571	1	58
chr19:55450823-55451128		0.827913353	0.627832545	0.200080807	1	59
chr19:47733885-47734806		0.087577334	0.194006492	-0.106429158	5	60
chr18:712233-713086	ENOSF1	0.275123726	0.349005622	-0.073881896	6	61
chr19:2613933-2614133		0.151279051	0.260485356	-0.109206305	3	62

chr2:220222903-220223854		0.302858409	0.375662287	-0.072803878	5	63
chr16:32252570-32252823		0.530213596	0.692413168	-0.162199572	1	64
chr11:30040073-30040294		0.75994458	0.582077891	0.177866688	2	65
chr22:17090456-17091224		0.429053164	0.541608716	-0.112555552	4	66
chr16:29093366-29093833		0.076665797	0.156252687	-0.07958689	1	67
chr7:149469543-149469748		0.179814275	0.250298784	-0.070484509	1	68
chr12:105478090-105478517	ALDH1L2	0.511814154	0.643220169	-0.131406015	7	69
chrX:154493304-154493907	RAB39B	0.390252183	0.489136649	-0.098884465	4	70
chr10:31422710-31423316		0.417412862	0.541521967	-0.124109105	3	71
chr16:24267041-24267527	CACNG3	0.12329438	0.198536397	-0.075242017	3	72
chr20:62947649-62948464		0.087877352	0.179149916	-0.091272564	3	73
chr9:129677707-129678009		0.171626484	0.240156164	-0.06852968	2	74
chr11:132952539-132953307		0.124149424	0.223827107	-0.099677684	2	75
chr17:14200580-14200996		0.416190735	0.484131252	-0.067940517	2	76
chr14:24020003-24020251		0.307096299	0.411948781	-0.104852482	3	77
chr19:54369388-54369809	MYADM	0.455204585	0.522592706	-0.06738812	8	78
chr15:85291080-85291697	ZNF592	0.115069278	0.193685146	-0.078615868	3	79
chr9:35111268-35111504		0.149083957	0.216414274	-0.067330317	1	80
chr13:111719705-111720014		0.368831937	0.467609887	-0.09877795	3	81
chr14:71288404-71288957		0.080048791	0.147358548	-0.067309756	2	82
chr6:55039171-55039392	HCRTR2	0.079446285	0.147668657	-0.068222372	4	83
chrX:34148741-34148957		0.506156856	0.622894643	-0.116737787	2	84
chr2:102758807-102759577		0.626507029	0.515093975	0.111413054	3	85
chr11:58873890-58874486	FAM111B	0.106141516	0.174567816	-0.068426299	3	86
chr17:35014273-35014596		0.046234956	0.120812754	-0.074577798	3	87
chr12:54811982-54812202		0.474306653	0.604253639	-0.129946986	2	88
chr16:55542921-55543274	LPCAT2	0.060905817	0.149465381	-0.088559564	5	89
chr1:50798668-50799536		0.056353316	0.121282125	-0.064928809	5	90
chr19:46119455-46119815		0.1880379	0.313143817	-0.125105917	2	91
chr13:88326601-88326919		0.568242325	0.441558888	0.126683437	3	92
chr13:108518335-108518633	FAM155A	0.176461309	0.112604507	0.063856803	3	93
chr8:121137100-121137778		0.181024047	0.244850785	-0.063826739	4	94
chr14:72398665-72399554	RGS6	0.217317601	0.12578557	0.091532031	4	95
chr6:167275721-167276626		0.219647082	0.295924366	-0.076277284	12	96
chr10:74079337-74079861		0.145554531	0.208051535	-0.062497004	4	97
chr14:85996495-85996958	FLRT2	0.339643353	0.24768681	0.091956543	4	98
chrX:103809795-103810167	IL1RAPL2	0.69960913	0.623073764	0.076535366	3	99
chr20:25058289-25058726		0.370442323	0.538676119	-0.168233796	2	100
chr16:75550614-75551426		0.095186043	0.164179305	-0.068993263	3	101
chr1:85358360-85359187	LPAR3	0.12968887	0.189982852	-0.060293982	6	102
chr5:41869664-41870876	OXCT1;OXCT1-AS1	0.269529422	0.368284204	-0.098754782	10	103
chr8:33456916-33457515	DUSP26	0.460878488	0.559418338	-0.098539849	6	104
chr17:46697414-46697701		0.427710936	0.542249734	-0.114538798	3	105
chr4:3464800-3465440	DOK7	0.397006168	0.483601637	-0.086595468	8	106
chr17:46619088-46619314		0.085464266	0.219132203	-0.133667936	2	107
chr20:39316040-39316322		0.550858118	0.661624522	-0.110766404	3	108
chrX:153569548-153571439		0.345497136	0.429611817	-0.084114681	1	109
chr1:15929824-15930289	CHCHD2P6	0.044262682	0.113141225	-0.068878543	4	110
chrX:51138954-51139255		0.269306525	0.371006494	-0.101699969	4	111
chr19:53757820-53758148	ZNF677	0.364580976	0.306093401	0.058487576	3	112
chr7:150942305-150943033		0.205210092	0.303651044	-0.098440953	3	113
chr19:58175624-58176104		0.101819118	0.168739869	-0.066920752	3	114
chr3:11195902-11196552		0.388221251	0.447926907	-0.059705656	2	115
chr19:51568155-51568412	KLK13	0.286711711	0.377705585	-0.090993874	3	116
chr11:8289533-8290322	LMO1	0.313681724	0.379591799	-0.065910076	5	117
chr11:111410933-111412199	LAYN	0.480506034	0.537771278	-0.057265244	11	118
chr1:244213398-244213619	ZBTB18	0.219847228	0.293176581	-0.073329352	4	119
chr10:103535637-103536505	FGF8	0.609857389	0.677484234	-0.067626845	5	120
chr1:110185962-110186164		0.133203766	0.189054217	-0.055850451	4	121
chr4:134071663-134073628		0.363454447	0.419117733	-0.055663286	5	122
chr9:120507228-120507642		0.568190501	0.419185181	0.14900532	2	123
chr15:78236689-78237084		0.136575074	0.192236062	-0.055660988	3	124
chr9:137217063-137218078		0.105942014	0.181737523	-0.075795509	2	125
chr8:1949246-1951390		0.532473478	0.477702523	0.054770955	7	126
chrX:149736721-149737756	MTM1	0.415758429	0.493323351	-0.077564922	8	127

chr12:118499104-118499473		0.425691407	0.348740892	0.076950515	1	128
chr9:707022-707420		0.07858401	0.132325974	-0.053741963	3	129
chr16:34295487-34296109		0.377113517	0.43046597	-0.053352453	3	130
chr9:138156711-138156983		0.882406975	0.726715518	0.155691457	1	131
chr5:139492724-139492966		0.153685746	0.214948631	-0.061262885	2	132
chr12:113772634-113772934		0.123285202	0.195587893	-0.07230269	3	133
chr1:201708788-201709429		0.316267154	0.368267212	-0.052000058	7	134
chr19:9517469-9517986		0.449457664	0.371329923	0.078127741	3	135
chr9:117160140-117161064		0.1563382	0.209797333	-0.053459133	2	136
chr14:105332409-105332651		0.215615814	0.287445154	-0.07182934	3	137
chr12:125534061-125534527		0.155473599	0.20688085	-0.05140725	2	138
chr18:47087076-47087446	LIPG	0.225299632	0.280736084	-0.055436452	3	139
chr8:104152727-104153390	BAALC;C8orf56	0.387864269	0.46948864	-0.081624371	4	140
chr9:127539240-127540081	OLFML2A	0.598971774	0.51417577	0.084796004	4	141
chr11:131560938-131561613		0.704443369	0.770086829	-0.06564346	3	142
chr19:42416993-42417513		0.286974724	0.370337302	-0.083362578	3	143
chr5:52777789-52777996		0.121728969	0.201831578	-0.080102609	2	144
chr16:88803803-88804112		0.088260215	0.138733849	-0.050473634	4	145
chr3:187455331-187455843		0.257818672	0.308256605	-0.050437933	4	146
chr8:1495106-1495333		0.629841384	0.725667827	-0.095826443	4	147
chr10:135450884-135451867	RARRES2P2	0.295120557	0.35462059	-0.059500033	1	148
chr13:112063570-112064022		0.188871874	0.273336648	-0.084464774	2	149
chr3:38179858-38180689	ACAA1;MYD88	0.454485186	0.573673809	-0.119188623	10	150
chr8:1327332-1327547		0.661256918	0.750202045	-0.088945127	4	151
chr19:49522774-49523093		0.392482724	0.330977296	0.061505428	3	152
chr17:20811749-20812158		0.247857231	0.368263231	-0.120406	4	153
chr4:2305515-2305793		0.167582553	0.258512759	-0.090930205	1	154
chr3:6904134-6904641		0.319429036	0.384647783	-0.065218747	4	155
chr6:161352085-161352386		0.504251571	0.591513152	-0.087261582	2	156
chr21:46897842-46898158		0.124456512	0.174123823	-0.049667311	2	157
chr2:223183014-223185468		0.157697134	0.208085771	-0.050388637	7	158
chr21:40032244-40033665	ERG	0.43434343	0.495268673	-0.060925243	4	159
chr12:119212111-119212393		0.636369136	0.567001526	0.06936761	4	160
chr9:41954479-41954842		0.283315727	0.33901296	-0.055697233	1	161
chr20:10152769-10153193		0.194696315	0.14549643	0.049199885	3	162
chr6:27833121-27833406	HIST1H2AL;HIST1H2BPS2	0.491216466	0.587251818	-0.096035352	4	163
chr5:2643106-2643309		0.343063372	0.410374179	-0.067310807	3	164
chr17:37380954-37382363	STAC2	0.410644986	0.458860169	-0.048215183	10	165
chr12:49735720-49736875		0.570901161	0.654514839	-0.083613678	4	166
chr8:65491084-65491319	BHLHE22	0.71824629	0.612574091	0.1056722	3	167
chr19:42501262-42501486	ATP1A3	0.135328605	0.193110878	-0.057782272	2	168
chr19:11353961-11354362		0.206753693	0.254500095	-0.047746402	4	169
chr1:32713919-32714186		0.371190997	0.424385942	-0.053194945	4	170
chr19:40376868-40377136		0.601118589	0.735430021	-0.134311432	1	171
chrX:39021663-39022131		0.654402341	0.553889346	0.100512996	1	172
chrX:54208940-54209723	FAM120C	0.461319259	0.543734728	-0.082415469	6	173
chr1:17746201-17746547		0.510784577	0.557802569	-0.047017992	5	174
chr6:170921394-170921775		0.26867543	0.221696093	0.046979337	1	175
chr6:154360587-154361008		0.351871161	0.41161459	-0.059743429	4	176
chr19:51843076-51843926		0.335617341	0.229142858	0.106474483	2	177
chr11:47376652-47377236		0.308954286	0.381986122	-0.073031835	3	178
chr9:131965038-131965636		0.281991537	0.2132102	0.068781336	4	179
chr9:114361411-114361760	PTGR1	0.251395894	0.387879648	-0.136483755	1	180
chr1:27854417-27854963		0.183229353	0.136674052	0.0465553	4	181
chr11:49071438-49071764		0.834502146	0.719256812	0.115245334	2	182
chr16:7568196-7568413		0.666834599	0.756834128	-0.089999529	2	183
chr19:42497820-42498560		0.162161247	0.208412916	-0.046251669	3	184
chrY:6134499-6134748	TSPY11P	0.208383156	0.257553544	-0.049170388	1	185
chr9:98273679-98273908		0.080915911	0.126786233	-0.045870321	1	186
chr2:11924984-11925253		0.453858439	0.505836991	-0.051978552	3	187
chr9:68726057-68726939		0.289773257	0.354112594	-0.064339337	1	188
chr11:64611715-64612634	CDC42BPG	0.129478667	0.184396605	-0.054917938	5	189
chr2:231902027-231903122	C2orf72	0.510585742	0.426393678	0.084192064	3	190
chrX:136629545-136630303		0.480330514	0.527126912	-0.046796398	5	191
chr7:138666359-138666972	KIAA1549	0.302695218	0.397387429	-0.094692211	2	192

chr4:113445023-113445350		0.093293643	0.224326747	-0.131033105	2	193
chr16:3493099-3493569	NAA60;ZNF597	0.504377529	0.58435585	-0.079978321	6	194
chr7:6676455-6676785	ZNF316	0.081343113	0.138080344	-0.056737231	2	195
chr21:28515803-28516306	GPX1P2	0.424179201	0.506073885	-0.081894684	3	196
chr11:44971049-44972685	TP53I11	0.25007386	0.307241665	-0.057167804	11	197
chr3:87101768-87102008	PPATP1	0.348477253	0.408817766	-0.060340513	2	198
chr2:229045958-229046553	SPHKAP	0.262292619	0.320445349	-0.05815273	5	199
chr7:157612037-157612316		0.740968077	0.849095357	-0.10812728	2	200
chr14:107221093-107221298		0.727423318	0.849295885	-0.121872567	2	201
chr1:37783612-37784258		0.601655216	0.649386359	-0.047731143	4	202
chr4:57975861-57976916	IGFBP7	0.201570666	0.283743635	-0.082172969	9	203
chr19:49298406-49298745		0.163922505	0.0953555	0.068567005	4	204
chr16:1393574-1393878		0.684970994	0.788328978	-0.103357985	3	205
chr22:45064160-45065092	PRR5	0.313691527	0.222285982	0.091405545	5	206
chr7:5322681-5323193		0.659192763	0.568201444	0.090991319	2	207
chr4:169401351-169401725		0.087335801	0.142109302	-0.054773501	6	208
chr20:10198136-10198984	SNAP25	0.290967874	0.357805853	-0.066837978	3	209
chr19:48896891-48897199	GRIN2D	0.049576153	0.09334316	-0.043767007	5	210
chr3:39851026-39851820		0.130767778	0.206370395	-0.075602617	4	211
chr16:31580560-31581023	YBX3P1	0.637491758	0.580281373	0.057210384	5	212
chr11:2154034-2154387		0.693468067	0.634679474	0.058788593	5	213
chr1:149605515-149605903	RNVU1-20	0.239121685	0.350729923	-0.111608239	1	214
chr18:76693918-76694195		0.757706316	0.844440047	-0.086733731	3	215
chr20:53091734-53092993	DOK5	0.309919479	0.250505346	0.059414133	10	216
chr7:63498113-63498314		0.403830631	0.447074435	-0.043243804	4	217
chr10:133318029-133318324		0.53429014	0.606439666	-0.072149527	3	218
chr2:79220193-79220592		0.472360002	0.534480277	-0.062120275	4	219
chr2:162270889-162271413	TBR1	0.228046188	0.287358349	-0.059312161	3	220
chr14:92979727-92981228	RIN3	0.404452546	0.447575737	-0.043123191	8	221
chr12:128899814-128900065		0.560954392	0.486651561	0.074302831	3	222
chr20:61937483-61937738		0.766719232	0.888534941	-0.121815709	2	223
chr2:45161428-45163058		0.699201659	0.628515741	0.070685918	5	224
chr3:26664105-26664796	LRRC3B	0.308625745	0.364232434	-0.055606689	7	225
chr12:13154089-13154866	HEBP1	0.341074019	0.423120696	-0.082046677	6	226
chr19:58666024-58666833	ZNF329	0.276134241	0.33436387	-0.058229629	4	227
chr2:85554135-85555414	TGOLN2	0.059777768	0.111688422	-0.051910654	6	228
chr4:170948487-170948908		0.224952419	0.15228856	0.072663859	4	229
chr19:55865825-55866324	COX6B2	0.461052414	0.547565652	-0.086513238	7	230
chr1:7740144-7741117		0.368587243	0.31578629	0.052800952	7	231
chr9:71394794-71395492	FAM122A	0.107691327	0.150027325	-0.042335998	5	232
chr12:76741910-76742286	BBS10	0.209914991	0.089946095	0.119968897	5	233
chrX:152909014-152909214		0.432842341	0.485460431	-0.052618091	3	234
chr19:54057415-54058254		0.699213352	0.778246109	-0.079032757	3	235
chr11:3224525-3225077		0.268583633	0.319686504	-0.051102871	5	236
chr3:123751655-123753199		0.163514367	0.206969613	-0.043455245	7	237
chr10:13933483-13934184		0.446689684	0.488664444	-0.04197476	3	238
chr3:184016578-184017416	PSMD2	0.079612822	0.121579164	-0.041966342	6	239
chr18:67069934-67070171		0.691347222	0.640499855	0.050847367	4	240
chr11:13030331-13032584	RASSF10	0.531694021	0.631349462	-0.09965544	11	241
chr1:5793558-5793784		0.70178485	0.807298645	-0.105513795	1	242
chr17:72667196-72667710	RAB37	0.554975709	0.483960601	0.071015108	4	243
chr11:8009048-8009251		0.27724872	0.318904734	-0.041656014	2	244
chr16:84214836-84215036		0.908902674	0.804726373	0.104176301	2	245
chr20:59598844-59599305		0.507830981	0.549604156	-0.041773174	3	246
chr19:46367372-46367808	FOXA3;SYMPK	0.231541692	0.31501333	-0.083471638	3	247
chrY:14107138-14107480		0.765878592	0.596333359	0.169545233	1	248
chr13:102106166-102106488		0.280285047	0.190449392	0.089835655	2	249
chr16:34777875-34778144	RARRES2P8	0.640769184	0.59691563	0.043853553	3	250
chr22:22901387-22901698	PRAME	0.324846644	0.454627229	-0.129780585	5	251
chr18:59000684-59001692	CDH20	0.359592533	0.417527347	-0.057934814	6	252
chr12:131200510-131200726	RIMBP2	0.205733707	0.15093952	0.054794186	3	253
chr20:61147458-61147787	C20orf166	0.678448343	0.612454917	0.065993426	6	254
chr13:28540357-28541279		0.587370081	0.690818858	-0.103448777	2	255
chr16:5289583-5290386		0.474432793	0.544013002	-0.069580209	1	256
chr19:12476050-12476372	ZNF442	0.29020586	0.374740499	-0.084534639	3	257

chr19:22805801-22806721		0.627463339	0.671301779	-0.04383844	5	258
chr19:50762343-50762552		0.845577782	0.755312858	0.090264924	2	259
chr8:97657175-97657943	CPQ	0.242506419	0.295110542	-0.052604123	12	260
chr20:58507756-58509517	FAM217B;SYCP2	0.657330459	0.697719158	-0.040388699	8	261
chr8:56013657-56015761	XKR4	0.249499232	0.209255389	0.040243843	7	262
chr2:70485232-70485679		0.091531309	0.131762803	-0.040231494	3	263
chr20:33814546-33815131	MMP24	0.296722003	0.339843758	-0.043121755	1	264
chr22:30116082-30117160	CABP7	0.407350699	0.366626822	0.040723877	8	265
chr6:36410434-36411139	KCTD20;PXT1	0.045180325	0.085279927	-0.040099602	12	266
chr18:76150399-76151531		0.67940361	0.78097817	-0.10157456	2	267
chr14:36977519-36977996		0.420785667	0.475185753	-0.054400087	4	268
chr16:1480845-1481045	C16orf91	0.608877759	0.529772649	0.079105111	3	269
chr2:139537693-139538650	NXPH2	0.386416764	0.426324776	-0.039908013	7	270
chr20:54824313-54824584		0.639341173	0.693815901	-0.054474728	3	271
chr7:143058918-143060156	FAM131B	0.225354644	0.2651155	-0.039760856	12	272
chr6:13873766-13874262		0.599314334	0.528079072	0.071235262	4	273
chr18:56934834-56936827		0.64395331	0.705018592	-0.061065282	7	274
chr16:67464389-67465462	HSD11B2	0.173199412	0.133564783	0.039634629	9	275
chr1:23945942-23946295		0.047672015	0.087256505	-0.03958449	3	276
chr4:190959045-190960011	RARRES2P4	0.386922691	0.438802315	-0.051879624	3	277
chr16:21294981-21295414		0.139921906	0.240434659	-0.100512752	2	278
chr16:85269193-85269464		0.677643048	0.594205065	0.083437983	1	279
chrX:144902966-144903167		0.345155761	0.384583379	-0.039427618	3	280
chr4:21950086-21950346	KCNIP4	0.12937284	0.204001164	-0.074628324	3	281
chr22:48605158-48605507		0.738394082	0.655159009	0.083235074	3	282
chr3:156008992-156009320		0.536770326	0.594634848	-0.057864521	3	283
chr19:49559223-49560497		0.307967155	0.353320708	-0.045353553	4	284
chrX:31284505-31285019		0.478002823	0.563228841	-0.085226018	4	285
chr17:77715571-77716061		0.264834696	0.328276385	-0.063441689	3	286
chrX:152912492-152913719		0.554486869	0.605449782	-0.050962913	5	287
chr15:20148694-20150115		0.702455396	0.618704525	0.083750871	3	288
chrX:2825439-2825646		0.744878394	0.842696182	-0.097817788	2	289
chr20:57414596-57414896	GNAS	0.406402683	0.516694468	-0.110291786	2	290
chr5:127871959-127872263	SLC27A6	0.806711289	0.916096213	-0.109384924	3	291
chr13:113540351-113540558		0.496485109	0.576535828	-0.080050719	4	292
chr13:53424942-53425995		0.762207658	0.69522472	0.066982938	5	293
chr5:55776605-55777233		0.040575017	0.0792171	-0.038642083	3	294
chr10:57388069-57388528	PCDH15	0.33118679	0.377625254	-0.046438464	4	295
chr19:6822268-6822604		0.828653316	0.935888463	-0.107235147	2	296
chr4:185089688-185089989		0.17788305	0.121185629	0.056697421	3	297
chrX:39949373-39949976		0.515588965	0.409894202	0.105694763	2	298
chr1:17287291-17287684		0.213709516	0.252053002	-0.038343487	3	299
chrX:3760664-3762210		0.450414676	0.397995845	0.052418831	2	300
chr8:132052204-132054749	ADCY8	0.481743239	0.425159239	0.056584	13	301
chr19:4607080-4607350		0.664322799	0.600097212	0.064225587	4	302
chr16:1047495-1048070		0.527567577	0.479700508	0.047867069	3	303
chr18:75611919-75612142		0.145294544	0.078013498	0.067281046	2	304
chr8:131455249-131456285	ASAP1	0.163854556	0.201762635	-0.037908079	6	305
chr2:219773547-219774103		0.346754248	0.292426694	0.054327555	5	306
chr5:101632050-101632373	SLCO4C1	0.158952302	0.109300728	0.049651574	9	307
chrX:36975506-36976349		0.527266645	0.603387952	-0.076121307	4	308
chr1:54965024-54965391		0.314038123	0.351845178	-0.037807055	3	309
chr22:20790639-20792665	SCARF2	0.195112866	0.261607206	-0.06649434	16	310
chr17:27949430-27950277	CORO6	0.12820826	0.165991813	-0.037783554	3	311
chr5:2007316-2007879		0.620537102	0.69338499	-0.072847888	3	312
chr9:114937021-114937824	SUSD1	0.146737695	0.199229416	-0.052491721	4	313
chr10:118927022-118928132	MIR3663	0.7116284	0.636355755	0.075272645	5	314
chr3:98376317-98376542		0.072469006	0.110076445	-0.037607439	3	315
chr12:103350090-103350422	ASCL1	0.441059442	0.370676364	0.070383078	2	316
chr20:34652455-34653500		0.377248889	0.414603303	-0.037354415	4	317
chr9:130374109-130374885	STXBP1	0.300879496	0.379118857	-0.078239361	2	318
chr8:49427075-49427416		0.052446851	0.089608404	-0.037161553	2	319
chr7:121943868-121944538	FEZF1-AS1	0.275117708	0.330646688	-0.05552898	5	320
chr22:50982571-50982994		0.618115587	0.698364619	-0.080249032	2	321
chrX:7895078-7895608	PNPLA4	0.405110929	0.307046025	0.098064904	9	322

chr10:102778605-102778922		0.324372011	0.361482578	-0.037110566	4	323
chr9:29826527-29826736		0.605175118	0.67490027	-0.069725152	2	324
chr1:181287301-181287873		0.282488398	0.24546074	0.037027658	6	325
chrX:117629131-117629377	DOCK11	0.620700286	0.681412301	-0.060712015	4	326
chrX:106959379-106959914		0.393985086	0.445994985	-0.052009899	4	327
chrX:103173143-103173967	TMSB15B	0.333691731	0.396247878	-0.062556147	3	328
chr12:34488611-34489037		0.484202581	0.553548277	-0.069345696	3	329
chr9:69065082-69065964		0.422492824	0.476505169	-0.054012345	1	330
chr19:35633848-35634629	FXYP7;LGI4	0.269575173	0.318742444	-0.049167271	5	331
chr19:10627981-10628417	S1PR5	0.061442559	0.105423224	-0.043980665	2	332
chr3:26665951-26666164		0.479974518	0.535635815	-0.055661297	2	333
chr16:633868-634143		0.732591188	0.825746498	-0.09315531	2	334
chr7:65878464-65878977		0.538845262	0.467584493	0.071260769	4	335
chr10:37940423-37940674		0.810937671	0.755854748	0.055082923	3	336
chr2:176952696-176953297		0.706433852	0.770575928	-0.064142076	5	337
chrX:134655875-134656127	DDX26B-AS1	0.385273532	0.424866095	-0.039592563	3	338
chr8:81805956-81806327		0.295116877	0.331711191	-0.036595032	4	339
chr5:172665307-172666072		0.189129816	0.238817887	-0.049688071	4	340
chr8:40755165-40755404	ZMAT4	0.262868886	0.214462132	0.048406754	4	341
chr22:17083385-17083628		0.432843433	0.497798066	-0.064954633	3	342
chr11:120039602-120040210		0.289684206	0.326164396	-0.036480189	5	343
chr8:15094238-15095168		0.210535904	0.247001524	-0.036465621	3	344
chr3:40518518-40518848	ZNF619	0.118666293	0.186597408	-0.067931115	5	345
chrX:67718428-67719071	YIPF6	0.475756747	0.527622607	-0.05186586	10	346
chr17:38255275-38255896		0.374701292	0.307531126	0.067170166	4	347
chr8:57232371-57232795		0.656856242	0.724444052	-0.06758781	4	348
chr16:34407637-34407919	SLC25A1P4	0.609801639	0.550155768	0.059645871	4	349
chr4:55094322-55094593	PDGFRA	0.237562454	0.276934178	-0.039371725	3	350
chr2:210073774-210074294		0.782276748	0.869121629	-0.08684488	2	351
chr19:1324970-1325349		0.138565788	0.216467109	-0.077901321	3	352
chr21:15052411-15052644		0.709981317	0.632640891	0.077340426	1	353
chrX:132547568-132550284	GPC4	0.389810953	0.435323052	-0.045512098	10	354
chr8:85096760-85097247		0.302741871	0.338620468	-0.035878597	8	355
chr19:22700397-22701261		0.575605804	0.637817127	-0.062211323	3	356
chr9:38392510-38393187	ALDH1B1	0.169778694	0.110961506	0.058817188	4	357
chr14:65438413-65439363	RAB15	0.182944472	0.21873376	-0.035789287	8	358
chr10:711897-712395		0.486728054	0.547172551	-0.060444497	6	359
chr12:48577362-48578574	C12orf68	0.517246969	0.478163231	0.039083738	6	360
chrX:125714891-125715321		0.673654236	0.630647215	0.043007022	2	361
chr5:43000344-43000791		0.714763345	0.799220772	-0.084457428	4	362
chrX:105855029-105855297	CXorf57	0.452462945	0.504623383	-0.052160438	8	363
chr12:121022420-121022704		0.14246925	0.196084156	-0.053614906	3	364
chr2:80529678-80530846		0.285017868	0.201576286	0.083441582	5	365
chr17:29814615-29815662		0.15430298	0.189820941	-0.035517961	2	366
chr19:54040813-54041857		0.461173608	0.508548916	-0.047375307	9	367
chr17:39705046-39705332		0.249393659	0.284840956	-0.035447297	4	368
chr17:42015844-42016069		0.657316074	0.59906907	0.058247005	2	369
chr17:40558006-40558274		0.593341311	0.628731749	-0.035390438	3	370
chr10:3598476-3598930		0.582598139	0.656113742	-0.073515604	2	371
chr2:155554006-155556069	KCNJ3	0.406160576	0.369613115	0.036547461	12	372
chr3:172167527-172167866	GHSR	0.690271563	0.761933475	-0.071661912	4	373
chr17:9018997-9019207		0.096333001	0.13154026	-0.035207259	3	374
chr9:95896008-95897016	NINJ1	0.290154205	0.25424707	0.035907134	5	375
chr2:112895793-112897841	FBLN7	0.331309617	0.411409525	-0.080099908	4	376
chr7:62809610-62809812		0.721648188	0.645275145	0.076373043	1	377
chr7:157937615-157937841		0.462883861	0.517959937	-0.055076076	1	378
chr2:24300061-24300294		0.150433382	0.102888795	0.047544587	3	379
chr12:102036254-102036461		0.570340607	0.638957471	-0.068616864	3	380
chr9:127240132-127240456		0.333754982	0.375833615	-0.042078634	2	381
chr8:117950473-117950717	AARD	0.373144361	0.483931839	-0.110787477	2	382
chr17:19483306-19483687		0.852472102	0.764787702	0.087684399	4	383
chr10:42971196-42971834	LINC00839	0.38587795	0.350922052	0.034955898	4	384
chr11:68451360-68452846	GAL	0.790290924	0.699856839	0.090434085	10	385
chr16:28303974-28304770	SBK1	0.159541958	0.194461327	-0.034919369	3	386
chr1:149514272-149514592	RNVU1-19	0.288461704	0.253546444	0.03491526	2	387

chr3:68980784-68982035	FAM19A4	0.24883274	0.283719028	-0.034886289	10	388
chr19:54494609-54494816	CACNG6	0.160926778	0.195800489	-0.03487371	2	389
chr3:11034447-11035384	SLC6A1	0.390848869	0.435645186	-0.044796317	6	390
chr9:139734846-139735085		0.822851427	0.737144328	0.085707099	1	391
chr22:18957996-18958721	DGCR5	0.082261777	0.11700959	-0.034747813	3	392
chrX:82765443-82765776		0.712171423	0.648077518	0.064093905	3	393
chr20:32307818-32308120	PXMP4	0.393257871	0.536231452	-0.142973581	4	394
chr14:103557607-103558235		0.430755547	0.396145234	0.034610314	4	395
chr22:43547320-43548169	TSPO	0.407360363	0.463276602	-0.055916239	7	396
chr15:23157795-23158624		0.506340437	0.559787061	-0.053446624	3	397
chr12:54412991-54413346		0.077073131	0.127796318	-0.050723187	3	398
chrX:54834762-54835010		0.460905366	0.495945892	-0.035040526	2	399
chr1:236304759-236305025	GPR137B	0.519052019	0.464816437	0.054235582	4	400
chr19:52873085-52873572	ZNF880	0.277221626	0.185499113	0.091722513	7	401
chr15:69591247-69591754	PAQR5	0.03848336	0.072842008	-0.034358649	4	402
chr2:74881360-74882019	SEMA4F	0.238276985	0.186329486	0.051947499	4	403
chr17:78079569-78079833		0.754300478	0.682851172	0.071449305	5	404
chrX:136651179-136651656		0.38239284	0.41662567	-0.03423283	5	405
chr3:42922220-42922872		0.178393282	0.120302738	0.058090544	4	406
chr16:86528272-86529013		0.827843713	0.751644145	0.076199568	5	407
chr19:58070554-58071273	ZNF550	0.067244261	0.104531253	-0.037286991	4	408
chr22:26565200-26565986	SEZ6L	0.156399467	0.190547763	-0.034148296	2	409
chr16:1429051-1430104		0.176582471	0.219715695	-0.043133224	8	410
chr19:58555799-58556614	LETM1P2	0.822288864	0.751171136	0.071117728	4	411
chr4:3748225-3748581		0.117889363	0.179487771	-0.061598408	3	412
chr7:27162088-27162426		0.797755751	0.887339922	-0.089584171	3	413
chr12:63025589-63026213		0.1137908	0.151098129	-0.037307329	5	414
chr15:74218697-74220373	LOXL1;LOXL1-AS1	0.30610877	0.345950784	-0.039842014	16	415
chr22:46545481-46547412	PPARA	0.153117113	0.186957705	-0.033840592	4	416
chrX:113816090-113816409		0.510244634	0.46298582	0.047258814	4	417
chr10:134843466-134843776		0.837834916	0.7597561	0.078078816	2	418
chr5:2180252-2180467		0.755815748	0.840607406	-0.084791658	2	419
chr2:191399090-191399742	TMEM194B	0.192250623	0.282623755	-0.090373132	3	420
chr19:12163327-12163560		0.200602023	0.1669401	0.033661924	1	421
chr10:63212496-63213009	TMEM26	0.538151432	0.489600415	0.048551016	3	422
chr2:128165849-128166198		0.138468539	0.189591651	-0.051123113	4	423
chr1:33005424-33005739	ZBTB8A	0.086887505	0.053330453	0.033557053	2	424
chr17:7893331-7893702		0.103081481	0.136632113	-0.033550631	4	425
chr19:41857248-41857586	BCKDHA;TMEM91	0.093504179	0.135497588	-0.04199341	3	426
chr11:98891544-98891821	CNTN5	0.157213496	0.190706399	-0.033492903	8	427
chr7:148787422-148788601	ZNF786	0.095259088	0.12868436	-0.033425272	6	428
chr18:14178944-14179710	ANKRD20A5P	0.325235239	0.358640666	-0.033405427	3	429
chrX:118708294-118709240	UBE2A	0.51504432	0.569303896	-0.054259576	11	430
chr16:55357522-55359040	IRX6	0.138413631	0.174831673	-0.036418042	7	431
chr20:33865334-33865563	EDEM2;MMP24-AS1	0.08979777	0.123164648	-0.033366879	2	432
chr19:2428350-2428731	TIMM13	0.697547142	0.776276524	-0.078729382	4	433
chr3:196755678-196757374	MFI2	0.389403194	0.441540528	-0.052137334	6	434
chr16:25702956-25704631	HS3ST4	0.364273291	0.328755962	0.03551733	9	435
chr10:133449493-133449716		0.669627721	0.728151256	-0.058523535	4	436
chr2:51254523-51255498		0.78315637	0.863343692	-0.080187322	4	437
chr10:130339527-130339777		0.6926802	0.768367089	-0.075686889	5	438
chr1:88928284-88928760		0.349833923	0.394803562	-0.044969639	4	439
chr11:113906921-113907332		0.07857456	0.11296653	-0.03439197	3	440
chr18:77309696-77312226		0.72114492	0.799212598	-0.078067678	1	441
chr3:184243086-184243328		0.626773982	0.567881441	0.05889254	3	442
chr7:157455790-157456044		0.874463948	0.792945301	0.081518647	3	443
chr20:690576-691099		0.459973653	0.512446895	-0.052473243	3	444
chr1:10057122-10058108	RBP7	0.5325367	0.580391926	-0.047855227	8	445
chr2:16689509-16689822		0.238360851	0.32748139	-0.089120539	2	446
chr1:196577709-196578011	KCNT2	0.29846011	0.228430504	0.070029606	3	447
chr5:76115511-76116089		0.097410383	0.130463238	-0.033052854	5	448
chr12:48153330-48153551		0.136542192	0.10351642	0.033025772	2	449
chr5:140736822-140737058		0.702399057	0.642113458	0.060285599	3	450
chr19:6590341-6591072		0.516485415	0.598266971	-0.081781556	3	451
chr18:6920592-6920874		0.844594197	0.917801238	-0.073207041	3	452



chr2:99552186-99553831	KIAA1211L	0.394722628	0.427644168	-0.03292154	11	453
chr4:11430236-11431256	HS3ST1	0.321453508	0.280230662	0.041222846	10	454
chr9:66343504-66343760		0.661741033	0.597937399	0.063803634	1	455
chr19:3982825-3983190	SNORD37	0.778733353	0.850324465	-0.071591112	4	456
chr19:29218002-29218733		0.333747764	0.376000343	-0.042252579	5	457
chr3:158519510-158520329		0.182128182	0.215574734	-0.033446552	9	458
chr17:47979466-47979740		0.24853076	0.198309502	0.050221259	3	459
chr22:25816913-25817539		0.595279874	0.659506423	-0.064226549	3	460
chr11:132813563-132814395		0.282785923	0.315385568	-0.032599645	4	461
chr4:113626740-113627507		0.320370576	0.355812546	-0.03544197	4	462
chr6:30523287-30523519	PRR3	0.254962342	0.217186124	0.037776217	9	463
chr21:38362016-38362868	HLCS	0.296910804	0.262008516	0.034902288	7	464
chr22:29866327-29866652		0.130229963	0.162712274	-0.032482311	2	465
chr18:76765748-76766833		0.810110306	0.844170565	-0.034060258	5	466
chr9:131533780-131534695	ZER1	0.053936333	0.086390065	-0.032453732	5	467
chr11:64409878-64411253		0.424493692	0.490599692	-0.066105999	3	468
chr9:115708029-115708238		0.673851354	0.595880727	0.077970627	1	469
chr19:1734222-1734627		0.866452323	0.79731261	0.069139713	2	470
chr1:2876546-2876808		0.552836945	0.635936099	-0.083099154	2	471
chr5:134870741-134872051	NEUROG1	0.367887422	0.409530039	-0.041642617	17	472
chr9:112542132-112542667	AKAP2;PALM2-AKAP2	0.060752711	0.093003519	-0.032250808	1	473
chr8:1311388-1311626		0.663042516	0.731038619	-0.067996104	3	474
chr5:2111837-2112484		0.758921616	0.829930857	-0.071009241	7	475
chr12:30948549-30949757		0.149414704	0.181565586	-0.032150882	10	476
chr16:31453944-31454561	ZNF843	0.279924842	0.335812316	-0.055887474	3	477
chr7:948295-949168		0.389289407	0.353540693	0.035748715	2	478
chr1:13839506-13840613	LRRC38	0.529282757	0.561190358	-0.031907602	7	479
chrX:134655103-134655750	DDX26B-AS1	0.158892917	0.244385777	-0.08549286	1	480
chrX:148586553-148586984		0.391809044	0.430126168	-0.038317124	8	481
chr9:108418404-108418934		0.81691469	0.739350197	0.077564493	4	482
chr11:59382688-59382929		0.071380511	0.103141757	-0.031761247	3	483
chr16:71264361-71264659	HYDIN	0.065891017	0.128125655	-0.062234639	4	484
chrX:153094110-153094620		0.49608011	0.539983208	-0.043903097	3	485
chr7:140339998-140341136		0.470343871	0.502359409	-0.032015538	3	486
chr2:158453800-158454111		0.487468439	0.528826192	-0.041357753	4	487
chr16:30905550-30905783	BCL7C;MIR762	0.116507415	0.151247979	-0.034740564	3	488
chr2:242156852-242157835		0.737184099	0.666727436	0.070456663	2	489
chrX:63614958-63615423	MTMR8	0.465982893	0.503907046	-0.037924153	5	490
chr1:39044060-39044561		0.180064087	0.239891	-0.059826914	5	491
chr9:91605765-91606141	C9orf47;S1PR3	0.84724516	0.773011003	0.074234156	2	492
chr9:137997371-137997588		0.864009622	0.786369698	0.077639924	2	493
chr2:74781495-74782685	LOXL3	0.652039929	0.570105603	0.081934326	4	494
chrX:133507135-133507666	PHF6	0.382192897	0.419579833	-0.037386937	6	495
chr16:22959427-22959876		0.843348117	0.773394815	0.069953302	5	496
chr19:1725416-1726154		0.199327628	0.230754179	-0.031426552	5	497
chr6:62995856-62996228	KHDRBS2	0.320317567	0.280999468	0.0393181	8	498
chr9:69147117-69148171	PGM5P2	0.629207718	0.672257816	-0.043050097	2	499
chr11:71952113-71952528		0.800272334	0.709738966	0.090533369	3	500

**Supplementary Table S10. List of the 500 top-ranked, gene symbol-associated differentially methylated promoters after *TET* triple knockdown.**

gene_symbol	beta.GFP_siRNA	beta.GFP_scramble	difference	num.sites	rank
HAS3	0.627405663	0.380628042	0.246777621	6	1
RARRES2P5	0.451430795	0.730780484	-0.279349689	2	2
P4HA2	0.522194038	0.326062153	0.196131886	2	3
SMARCD3	0.438274867	0.273492898	0.164781969	1	4
IRF5	0.513060596	0.38025509	0.132805506	11	5
WDR59	0.490447068	0.341102533	0.149344534	4	6
OXCT1	0.55939244	0.409200929	0.150191511	11	7
RNU6-835P	0.670996225	0.452934671	0.218061554	1	8
SPANXA1	0.575277151	0.393644772	0.181632379	1	9
DOK7	0.585459882	0.448477239	0.136982643	11	10
RARRES2P9	0.265107525	0.398350781	-0.133243257	2	11
CMTM3	0.255229166	0.137111242	0.118117924	3	12
VCX3B	0.491770209	0.69717796	-0.205407751	2	13
CPT1A	0.699526938	0.499549048	0.19997789	3	14
SLC25A1P4	0.522522481	0.659570616	-0.137048135	5	15
GXYLT2	0.377215558	0.261845935	0.115369622	2	16
KIAA1549	0.50113987	0.386111498	0.115028372	4	17
UBQLN1	0.462660017	0.293654856	0.169005161	4	18
ACSM1	0.522226397	0.727018781	-0.204792384	1	19
HNRNPDP2	0.826573871	0.584769795	0.241804076	1	20
WIBG	0.818920765	0.61517116	0.203749605	4	21
GGCT	0.618579549	0.451710697	0.166868851	1	22
MIR4435-1HG	0.244189238	0.135228647	0.108960591	1	23
OR2L3	0.344214061	0.574729546	-0.230515485	1	24
TYR	0.49269879	0.668337144	-0.175638354	1	25
CCDC159	0.387744276	0.495276936	-0.10753266	2	26
MRPL36	0.208262359	0.096767782	0.111494578	9	27
OR4X2	0.312089001	0.596018714	-0.283929713	1	28
DECR1	0.828245792	0.627839657	0.200406135	10	29
KRTAP5-AS1	0.670096951	0.516449576	0.153647375	3	30
C15orf62	0.556317218	0.436813042	0.119504175	9	31
USP4	0.485335725	0.383528628	0.101807097	6	32
RN7SL444P	0.430046993	0.263306587	0.166740405	1	33
PLK5	0.648136359	0.546834481	0.101301877	6	34
TNRC6C-AS1	0.415549476	0.547538734	-0.131989257	1	35
HBE1	0.582506524	0.764790266	-0.182283742	2	36
GP2	0.276190957	0.502201253	-0.226010296	2	37
SERPINE2	0.362477049	0.23963647	0.122840579	7	38
CMPK2	0.555783862	0.455510221	0.100273641	3	39
LRAT	0.619540329	0.49856906	0.120971269	8	40
HIST1H2AD	0.49578106	0.394785591	0.100995469	12	41
HIST1H3D	0.49578106	0.394785591	0.100995469	12	42
OR9G1	0.210253643	0.400065424	-0.189811782	3	43
CD274	0.477537195	0.379600909	0.097936286	5	44
ADAMTSL1	0.767833671	0.602492428	0.165341243	2	45
SLC2A11	0.631453903	0.495871	0.135582903	4	46

OR2M4	0.377800089	0.545018802	-0.167218713	2	47
SPINK2	0.534520264	0.428129654	0.10639061	6	48
KCNA4	0.540792098	0.40787047	0.132921629	14	49
CIRH1A	0.654101875	0.5129905	0.141111375	1	50
IRF6	0.55948142	0.410976011	0.148505409	14	51
AACSP1	0.858017562	0.676037834	0.181979728	1	52
FBXO24	0.555998273	0.460059451	0.095938822	3	53
HIST1H2BF	0.482940758	0.383552185	0.099388573	11	54
CLCF1	0.568530164	0.476549692	0.091980471	13	55
ZFAND2A	0.187060629	0.090665342	0.096395287	7	56
CLIC3	0.535314804	0.443565043	0.091749761	4	57
COX20P2	0.253266074	0.149507768	0.103758306	2	58
HSPB8	0.670403414	0.578887264	0.09151615	10	59
OR2I1P	0.624654396	0.507861937	0.116792459	21	60
SSBP4	0.739263057	0.601950141	0.137312916	3	61
TRIM48	0.667996041	0.834000183	-0.166004142	2	62
SULT1C4	0.785331933	0.654312667	0.131019266	9	63
HIST1H1PS1	0.87834412	0.721146084	0.157198036	5	64
TRAV8-5	0.296269163	0.445392079	-0.149122916	2	65
SOX30	0.475740685	0.359511346	0.116229339	10	66
CDH8	0.194005718	0.357636381	-0.163630664	1	67
BRWD1-IT2	0.794562136	0.635134861	0.159427275	1	68
ITGB5-AS1	0.847591346	0.678011867	0.169579479	1	69
C1QTNF4	0.746164884	0.657096254	0.08906863	5	70
RBP7	0.678872194	0.553371812	0.125500382	11	71
RIPPLY2	0.467526817	0.36905679	0.098470027	12	72
MEOX2	0.655179402	0.448053774	0.207125628	13	73
GBP4	0.561335539	0.423300005	0.138035534	7	74
UBE2C	0.565287326	0.464654285	0.100633041	18	75
ANO1	0.491597839	0.387855037	0.103742801	11	76
PDE1B	0.601551733	0.513676434	0.087875299	7	77
ATP2C2	0.629911206	0.532787202	0.097124004	7	78
ROBO1	0.477161117	0.376733417	0.1004277	7	79
WDR86	0.481977442	0.39214589	0.089831553	5	80
USB1	0.827080679	0.682414038	0.144666641	4	81
MYCT1	0.80726857	0.652502804	0.154765766	1	82
FEZF1-AS1	0.734542581	0.622731313	0.111811268	5	83
PABPC4L	0.486533711	0.384221196	0.102312515	5	84
ATP6V0CP3	0.63368396	0.547014812	0.086669148	4	85
NAGK	0.88969995	0.723263378	0.166436572	1	86
MTATP8P2	0.408429503	0.322680122	0.085749381	1	87
EEF1A1P25	0.495042489	0.609339608	-0.114297119	1	88
MIR5684	0.831038862	0.67625437	0.154784493	1	89
ZNF597	0.626807016	0.515406588	0.111400428	12	90
CPAMD8	0.648133945	0.547478028	0.100655917	9	91
CPQ	0.413416776	0.291645524	0.121771252	14	92
MIR4801	0.24655939	0.415511659	-0.168952269	3	93
SPANXN5	0.674702873	0.783832274	-0.109129401	3	94
C5orf52	0.385648699	0.273316279	0.11233242	10	95
TTC39B	0.545483773	0.453634655	0.091849118	2	96

C1QTNF2	0.656241271	0.571788004	0.084453267	12	97
LINC00966	0.620160283	0.4903983	0.129761982	10	98
FBXO6	0.617484229	0.520164505	0.097319724	8	99
HNRNPH1	0.823957091	0.674670835	0.149286256	1	100
SLC37A3	0.692199045	0.565785794	0.126413251	5	101
SEMA4C	0.369894224	0.281387118	0.088507106	3	102
B4GALT6	0.451188089	0.343388048	0.107800041	3	103
CAPN1	0.770527591	0.631948906	0.138578685	1	104
CYP4F22	0.61692204	0.533794616	0.083127424	7	105
MUM1L1	0.218658938	0.314122614	-0.095463676	1	106
ZNF253	0.361553892	0.263629087	0.097924804	9	107
RNA5SP127	0.790324159	0.649536029	0.14078813	1	108
GPSM1	0.514221829	0.431462949	0.08275888	4	109
DPY19L2P2	0.583976333	0.48287203	0.101104303	13	110
C9orf66	0.751552611	0.618233782	0.133318828	1	111
FBLIM1	0.840783074	0.692675364	0.14810771	1	112
CYP4A22	0.48491709	0.576056714	-0.091139624	2	113
TSPAN18	0.562819949	0.461320167	0.101499782	2	114
ZSCAN1	0.81743212	0.696260055	0.121172065	11	115
ICA1	0.694179343	0.59908066	0.095098683	11	116
LINC00574	0.484665888	0.400651143	0.084014745	12	117
SP9	0.693262372	0.566333935	0.126928437	16	118
TGFBR3L	0.526641361	0.428056909	0.098584452	4	119
SERPINB4	0.364229852	0.445864279	-0.081634426	2	120
RNVU1-20	0.294279084	0.21268307	0.081596014	2	121
PPP1R26	0.710964459	0.627063367	0.083901093	3	122
PSMB10	0.564527445	0.454788062	0.109739383	5	123
ARHGAP31-AS1	0.397865917	0.315253573	0.082612343	6	124
TINCR	0.524257329	0.440908699	0.08334863	7	125
DUSP26	0.590337147	0.500434818	0.089902329	9	126
TIGD7	0.71144019	0.588832172	0.122608018	7	127
OR6Q1	0.102419209	0.212024585	-0.109605376	1	128
NAA60	0.645648898	0.545434584	0.100214314	12	129
CUL1	0.650269832	0.558397975	0.091871857	6	130
TNFRSF11A	0.410409026	0.312986882	0.097422144	8	131
RGS21	0.385533301	0.487657515	-0.102124214	1	132
LINC00152	0.230185838	0.091484864	0.138700974	1	133
MIR4277	0.728100758	0.614101739	0.113999019	2	134
BEAN1	0.394491538	0.305647477	0.08884406	5	135
MIR4740	0.839906888	0.720471437	0.119435452	7	136
SUMO2P6	0.755019311	0.627628364	0.127390947	1	137
ZNF385D	0.579357984	0.498551479	0.080806505	4	138
TCN2	0.667164665	0.555592345	0.11157232	9	139
DPPA4	0.769710385	0.650663815	0.11904657	6	140
OR13D1	0.251024733	0.469486786	-0.218462053	1	141
ZNF846	0.80330772	0.684301902	0.119005818	4	142
TRBV6-1	0.648395316	0.536044009	0.112351307	3	143
CREBZF	0.758418746	0.631887695	0.126531051	3	144
OR5H14	0.309457644	0.431463715	-0.12200607	2	145
RHOT1P3	0.364821158	0.488487313	-0.123666155	2	146

FHAD1	0.592971288	0.512549938	0.08042135	10	147
TJP1	0.750386834	0.652746057	0.097640778	4	148
PTGER2	0.475589468	0.396739382	0.078850086	8	149
B3GNT9	0.827141451	0.688347305	0.138794145	7	150
ATP2B2	0.549705165	0.458421746	0.09128342	3	151
LY6G6E	0.377400104	0.465441347	-0.088041242	8	152
ZNF619	0.430482083	0.322281102	0.108200981	8	153
MYH11	0.644309746	0.52753219	0.116777556	7	154
SLC19A3	0.69150497	0.587995282	0.103509688	9	155
RN7SKP190	0.859393837	0.718492561	0.140901276	1	156
PHLDB3	0.578543602	0.501345342	0.077198261	10	157
OR5AP2	0.49495496	0.628155823	-0.133200863	3	158
ZFP42	0.822915387	0.703350475	0.119564912	13	159
ZNF491	0.563242467	0.472925194	0.090317273	2	160
ATL3	0.803773081	0.681183825	0.122589257	11	161
TAS2R39	0.392656379	0.511757434	-0.119101055	3	162
RNU1-1	0.502400567	0.419996393	0.082404174	1	163
RN7SL805P	0.511092418	0.393292289	0.117800129	1	164
CTNNA1	0.730714854	0.612269784	0.118445071	1	165
EVA1C	0.313103366	0.236787936	0.07631543	6	166
PDE7A	0.246596737	0.16594437	0.080652367	4	167
OR51B2	0.358724574	0.499582715	-0.140858141	4	168
C9orf50	0.705054506	0.618075806	0.0869787	5	169
TUBBP5	0.570007868	0.483770586	0.086237282	2	170
COL15A1	0.663011668	0.565392414	0.097619255	3	171
LRRTM3	0.336622666	0.261024055	0.075598611	6	172
DENND2A	0.679828043	0.580334152	0.099493891	2	173
MYD88	0.42813918	0.340470394	0.087668786	14	174
PTPN5	0.677148534	0.587360152	0.089788383	3	175
ANKDD1B	0.741809404	0.625120547	0.116688857	5	176
SNTG1	0.747676465	0.627175876	0.120500589	6	177
ZNF784	0.217943996	0.14297058	0.074973416	9	178
MNDA	0.12210603	0.261374526	-0.139268496	2	179
TRMT1	0.244822944	0.158703658	0.086119287	5	180
FBXL15	0.826333787	0.70384321	0.122490577	9	181
PAH	0.677114043	0.580613605	0.096500437	12	182
NFAT5	0.410720624	0.301395554	0.10932507	5	183
ROM1	0.58196778	0.504125846	0.077841934	2	184
STMN1P1	0.084577645	0.215780999	-0.131203354	1	185
TMEM161BP1	0.203404285	0.129126154	0.074278131	1	186
ITGAX	0.485701264	0.398883653	0.086817611	5	187
ESRRG	0.712165809	0.611109451	0.101056358	14	188
SUZ12	0.269812557	0.184574525	0.085238032	7	189
BIN2P1	0.877045425	0.740057479	0.136987945	1	190
RIT1	0.316029316	0.242153975	0.073875341	7	191
ITGB2	0.687054309	0.583286008	0.1037683	5	192
NBL1	0.614656299	0.51846753	0.096188769	1	193
DSCAM	0.662124053	0.576795187	0.085328866	10	194
KCNJ12	0.730580377	0.629427375	0.101153001	8	195
RPP25	0.730002383	0.64117055	0.088831833	11	196

AS3MT	0.559637999	0.444059838	0.115578161	11	197
LINC00693	0.43981696	0.337047269	0.10276969	2	198
ZFP2	0.74422091	0.629997336	0.114223574	5	199
RN7SL718P	0.705530994	0.596119556	0.109411438	1	200
OR13F1	0.34882378	0.595845443	-0.247021663	1	201
CRK	0.602656511	0.675773953	-0.073117443	4	202
ZIC1	0.790760733	0.672525558	0.118235175	14	203
KCNN2	0.614696236	0.467168301	0.147527935	3	204
RAB19	0.752022673	0.640436874	0.111585798	9	205
SOWAHB	0.409968069	0.337064497	0.072903572	8	206
SDCBPP2	0.570522123	0.437003679	0.133518444	3	207
PES1	0.697084173	0.596074218	0.101009955	10	208
KCTD13	0.606163243	0.533397556	0.072765687	2	209
LRRFIP1P1	0.606043449	0.517194771	0.088848678	6	210
MIR383	0.436837762	0.546469589	-0.109631827	2	211
FAIM3	0.80515206	0.694104282	0.111047778	3	212
AWAT1	0.245195203	0.381472375	-0.136277172	1	213
MOB3C	0.660457014	0.565470322	0.094986692	8	214
RAB15	0.41378104	0.341593854	0.072187186	5	215
C19orf59	0.810896382	0.698231153	0.112665229	6	216
STX8	0.445586743	0.373466555	0.072120188	9	217
ELN	0.770119664	0.664385552	0.105734112	8	218
KIRREL3	0.452564718	0.381119629	0.071445089	8	219
COX6B2	0.462568207	0.377686146	0.084882061	13	220
LINC00665	0.402344161	0.330951752	0.071392409	6	221
VAV3	0.395960616	0.322278078	0.073682537	8	222
DARS	0.304477124	0.233106821	0.071370304	5	223
STXBP6	0.558074233	0.486705003	0.071369231	4	224
HEPH	0.171188065	0.286027581	-0.114839516	3	225
BCR	0.66325217	0.568028542	0.095223628	4	226
ASIC5	0.667383714	0.546131314	0.1212524	3	227
GOS2	0.554268103	0.462037791	0.092230312	12	228
BRWD1-AS1	0.435211757	0.350798188	0.084413569	2	229
SMKR1	0.3966098	0.318228246	0.078381554	3	230
TRABD2A	0.617582934	0.499018869	0.118564065	4	231
MKNK1	0.704038686	0.604552955	0.099485731	10	232
FOXN2	0.474699213	0.404034506	0.070664706	4	233
ISM2	0.544820698	0.474368785	0.070451913	9	234
LINC00682	0.563010092	0.445423551	0.117586541	5	235
IFIT3	0.549859902	0.453907664	0.095952239	3	236
VSTM4	0.435431304	0.36506841	0.070362894	8	237
TSPY26P	0.757697621	0.646978022	0.110719599	6	238
GPR62	0.824791469	0.706994498	0.117796971	4	239
BEND4	0.845211735	0.726569496	0.118642239	10	240
NHLRC4	0.798147705	0.704065353	0.094082352	9	241
PIGQ	0.798147705	0.704065353	0.094082352	9	242
ADCY1	0.661388229	0.559384796	0.102003433	6	243
DAOA	0.235893106	0.377464012	-0.141570906	3	244
NTSR1	0.573806207	0.493982435	0.079823773	8	245
UGT2B10	0.262270701	0.489231258	-0.226960557	1	246

LINC00544	0.787196681	0.672042197	0.115154484	1	247
C14orf39	0.824879479	0.69874806	0.126131419	6	248
TG	0.72884745	0.808094335	-0.079246885	5	249
SCAMP5	0.690253938	0.61140828	0.078845658	12	250
SEMA4G	0.268808553	0.19953787	0.069270682	6	251
MIR4783	0.575003355	0.495885758	0.079117597	4	252
MIR5193	0.866245672	0.740076421	0.126169251	1	253
APLNR	0.736947836	0.659936148	0.077011688	5	254
CASD1	0.568540587	0.47096995	0.097570637	4	255
ABCF1	0.243619881	0.17456394	0.069055941	31	256
HIST1H2AE	0.780889133	0.673734819	0.107154314	11	257
REEP1	0.559771169	0.486611027	0.073160142	12	258
ACAA1	0.380117371	0.31063283	0.069484541	13	259
FZD10-AS1	0.660758159	0.564640138	0.096118021	9	260
SH2D2A	0.49369166	0.409404685	0.084286975	3	261
ARL17B	0.38265798	0.31386518	0.0687928	1	262
PABPC1P1	0.675503276	0.577558812	0.097944464	1	263
ARMCX6	0.243886855	0.312651082	-0.068764228	8	264
AGPAT2	0.664437539	0.591623489	0.072814049	4	265
RGS20	0.403362682	0.489084344	-0.085721661	2	266
SLC2A3	0.672101794	0.576715748	0.095386046	7	267
GAD2	0.590262485	0.50613491	0.084127575	13	268
NCKAP5	0.613226169	0.542312737	0.070913432	8	269
STAB2	0.729741642	0.830940436	-0.101198795	6	270
SH3BP1	0.851293691	0.729049308	0.122244383	1	271
RHOA	0.290448244	0.222135602	0.068312642	2	272
SLC4A11	0.649739466	0.560624839	0.089114628	7	273
SPATA12	0.863053737	0.743584847	0.11946889	3	274
FUOM	0.707590778	0.634502828	0.07308795	12	275
KCNS3	0.760605843	0.631392762	0.12921308	9	276
PTPRN	0.732883738	0.640449712	0.092434026	7	277
SCNM1	0.67362423	0.59779299	0.07583124	6	278
TNFAIP8L2	0.67362423	0.59779299	0.07583124	6	279
FHDC1	0.640850951	0.547783178	0.093067773	5	280
SGIP1	0.823300341	0.706495554	0.116804788	7	281
HOXA7	0.864427146	0.746931751	0.117495395	12	282
GPR19	0.578890923	0.500525995	0.078364928	12	283
EBNA1BP2	0.796505166	0.669322625	0.127182541	3	284
SLC5A5	0.487536056	0.420144256	0.067391801	12	285
KLHL1	0.661622568	0.565022879	0.096599689	10	286
BOK-AS1	0.747303206	0.668859082	0.078444124	11	287
MEIS3	0.623674562	0.55240642	0.071268141	6	288
TAC1	0.751989538	0.606588251	0.145401287	10	289
ACOT11	0.179427136	0.112286456	0.06714068	9	290
ACOT12	0.835894941	0.71585213	0.120042811	5	291
HIST2H3DP1	0.593301653	0.509303427	0.083998226	1	292
DBX1	0.829175975	0.716952312	0.112223663	15	293
CYP11B1	0.516954597	0.583917842	-0.066963245	6	294
FAM150B	0.921030362	0.79424609	0.126784272	8	295
LINC00426	0.820586356	0.705268467	0.115317889	1	296

VAV3-AS1	0.585968054	0.50551712	0.080450934	5	297
MKLN1	0.37600072	0.309140259	0.066860461	11	298
OR51A2	0.30591452	0.481496131	-0.175581612	4	299
PCDHGA12	0.866696772	0.78162498	0.085071792	10	300
SPARC	0.797074967	0.695304447	0.101770519	9	301
CD72	0.21281394	0.146092428	0.066721512	4	302
ATP2C1	0.844065167	0.725919348	0.118145819	1	303
TENC1	0.466712937	0.400008477	0.06670446	4	304
WDR86-AS1	0.877723959	0.757634212	0.120089747	3	305
FAM184B	0.68829443	0.576842181	0.111452249	13	306
PRTFDC1	0.553929846	0.468700096	0.08522975	6	307
TNFRSF9	0.77499681	0.701372937	0.073623874	6	308
VWC2	0.791102615	0.642719122	0.148383492	9	309
C2orf70	0.809154881	0.699499893	0.109654988	14	310
MIR1273F	0.528023434	0.451673482	0.076349952	8	311
ECHDC3	0.827589522	0.722649721	0.1049398	10	312
TRAF1	0.722624749	0.653571561	0.069053188	4	313
ACSL6	0.484285908	0.412301578	0.07198433	8	314
PAPOLA	0.510477875	0.433942867	0.076535008	4	315
HLF	0.455954203	0.348352155	0.107602049	10	316
HIST1H2BG	0.791918998	0.688562291	0.103356707	12	317
HSD17B14	0.65528638	0.565398123	0.089888257	6	318
SLC9A3P3	0.697614121	0.810376597	-0.112762476	1	319
GPR114	0.859534755	0.740370151	0.119164604	3	320
LINC00276	0.362447607	0.470796469	-0.108348862	2	321
MIRLET7A2	0.340589569	0.475375576	-0.134786007	3	322
EEF1G	0.550547373	0.450469717	0.100077656	5	323
HMGB3P1	0.496773857	0.41051085	0.086263008	2	324
RORA	0.393440375	0.319684236	0.073756139	9	325
CITED4	0.684845832	0.590759156	0.094086676	11	326
DSCAML1	0.700520113	0.604238142	0.096281971	4	327
FAM19A1	0.337819775	0.53697208	-0.199152305	3	328
KIAA1161	0.391556577	0.32586042	0.065696157	5	329
SLC16A11	0.593937036	0.511532228	0.082404808	10	330
THBD	0.444307777	0.378614302	0.065693475	10	331
OR13C8	0.34724931	0.476119298	-0.128869988	1	332
SLFN12	0.696884062	0.599985653	0.096898409	9	333
YBX2	0.804319646	0.715249324	0.089070322	16	334
SLC38A7	0.620223344	0.551035669	0.069187674	5	335
MTFR1L	0.905941165	0.79043577	0.115505395	3	336
FAM122A	0.298608774	0.225558804	0.073049971	5	337
AK3	0.854949474	0.737468485	0.117480989	1	338
VN1R64P	0.410838689	0.535144462	-0.124305773	1	339
BACL2	0.633728692	0.550383894	0.083344798	10	340
VSNL1	0.513479141	0.400904622	0.112574519	3	341
RIOK3	0.446689741	0.38170748	0.064982261	7	342
UBN1	0.408232823	0.319907479	0.088325344	4	343
RCOR3	0.303963742	0.23903171	0.064932032	6	344
BSG	0.687604275	0.599849339	0.087754936	7	345
OR11H6	0.33496463	0.460399783	-0.125435153	1	346



RN7SL136P	0.449676355	0.323323002	0.126353353	1	347
IL1R1	0.849214558	0.733132023	0.116082536	1	348
PIK3CD	0.659489333	0.572357303	0.087132029	9	349
LRFN3	0.539087613	0.652606427	-0.113518814	1	350
C4orf50	0.719515635	0.833124271	-0.113608635	1	351
SP5	0.390084452	0.297887683	0.092196768	16	352
PLCB2	0.798628747	0.69781006	0.100818687	9	353
SOGA2P1	0.522453769	0.411737125	0.110716644	1	354
P2RX7	0.722695858	0.631884247	0.09081161	9	355
EBF4	0.704074678	0.63955867	0.064516008	4	356
RNU2-37P	0.835954089	0.71373792	0.122216168	5	357
SS18	0.194226183	0.121378905	0.072847278	8	358
GPR26	0.819624317	0.707770236	0.111854081	7	359
TICAM1	0.568669662	0.489600307	0.079069355	8	360
FABP5	0.686353548	0.576706914	0.109646634	11	361
CRIP3	0.544851152	0.467358312	0.07749284	9	362
GPR146	0.550761561	0.482477452	0.068284109	8	363
HIST1H2BPS2	0.571673726	0.467207607	0.104466118	16	364
MIR4736	0.804280899	0.696013629	0.10826727	3	365
ZNF442	0.276141438	0.212020302	0.064121137	8	366
SH3BGR13	0.825647368	0.713705817	0.111941551	5	367
DNAH8	0.873111752	0.756698952	0.1164128	3	368
ZNF85	0.461073672	0.397022056	0.064051617	10	369
RNU6-871P	0.291540538	0.382261083	-0.090720545	1	370
FBLL1	0.310580992	0.246685951	0.063895041	6	371
MIR4710	0.289720034	0.225846314	0.06387372	3	372
UBQLNL	0.339269032	0.499558035	-0.160289004	3	373
GRIK1	0.442251367	0.34243244	0.099818927	6	374
SNHG12	0.86603745	0.749526834	0.116510615	1	375
SYNE2	0.371206964	0.302659164	0.068547799	8	376
SEMA5A	0.552169652	0.475939147	0.076230505	9	377
MMD2	0.51622224	0.447996729	0.068225512	6	378
RNU7-20P	0.665616918	0.562242113	0.103374805	1	379
DMRT2	0.919659811	0.796482643	0.123177168	2	380
ZNF69	0.78277629	0.683078214	0.099698076	13	381
RAC2	0.476900989	0.409832331	0.067068658	7	382
FSTL3	0.729987244	0.641328505	0.088658739	7	383
HIST1H3H	0.671441716	0.602204476	0.06923724	9	384
DDAH1	0.574663984	0.659115348	-0.084451364	6	385
MIR509-2	0.343185798	0.230476963	0.112708836	1	386
HOXC9	0.571865768	0.479770692	0.092095076	9	387
SHANK2	0.487618973	0.406287686	0.081331287	5	388
MANSC4	0.735010759	0.665056624	0.069954135	4	389
MLYCD	0.180260281	0.117183029	0.063077253	3	390
IFI44	0.445539999	0.320774672	0.124765328	1	391
IGHVII-20-1	0.824584284	0.714859768	0.109724516	1	392
SLC15A4	0.297607584	0.234668291	0.062939293	12	393
TRIM38	0.459042246	0.39189467	0.067147576	8	394
RIC3	0.570231409	0.488255777	0.081975632	11	395
GRM5	0.178120336	0.301966008	-0.123845672	3	396

IFI30	0.595530509	0.511727157	0.083803352	6	397
RN7SKP89	0.104974709	0.246773718	-0.141799009	1	398
NOD2	0.542618775	0.45822506	0.084393714	3	399
IMPA1P	0.622529552	0.541018131	0.081511421	5	400
RNU6-8	0.131318335	0.068756447	0.062561888	4	401
FGF8	0.681230133	0.582328672	0.098901461	7	402
CSF1	0.505059708	0.442539976	0.062519732	6	403
C11orf21	0.826981867	0.71616187	0.110819997	4	404
SEMA7A	0.378570138	0.316157554	0.062412584	7	405
SAA3P	0.767999947	0.863675453	-0.095675506	3	406
C20orf112	0.352390016	0.289988558	0.062401458	4	407
ATXN2L	0.243863813	0.181567839	0.062295974	6	408
DUSP9	0.721788822	0.627965244	0.093823577	8	409
MYEOV2	0.689673042	0.627417844	0.062255198	27	410
LRRC37A7P	0.816792045	0.708947291	0.107844754	3	411
MIR3663	0.690615198	0.604906384	0.085708814	5	412
MYO16	0.327176447	0.441262441	-0.114085994	5	413
HIST1H2AL	0.56338411	0.461035861	0.10234825	15	414
RPS29P22	0.73650387	0.63954923	0.09695464	1	415
DUOX2	0.852109372	0.728159668	0.123949703	14	416
FAM83F	0.787928422	0.686330645	0.101597777	6	417
RASAL1	0.524882329	0.463196795	0.061685534	13	418
TGIF2LY	0.358422375	0.524527194	-0.166104819	2	419
PHACTR3	0.836228784	0.73307816	0.103150625	4	420
HSBP1L1	0.592337516	0.512859842	0.079477673	8	421
UCK1	0.527104502	0.441412038	0.085692464	5	422
HERC6	0.496964916	0.435339991	0.061624925	9	423
ANGPTL2	0.699642865	0.578088323	0.121554542	3	424
APCDD1L	0.679736232	0.588993773	0.090742459	11	425
TXNDC5	0.254287315	0.192808387	0.061478928	5	426
FAM213A	0.505668066	0.418681586	0.08698648	7	427
RHBDD1	0.672721706	0.55703782	0.115683885	7	428
KCNA5	0.745979332	0.652350456	0.093628876	6	429
SLC9A9	0.548330419	0.486956358	0.061374061	2	430
TBC1D14	0.380121773	0.317420036	0.062701736	10	431
ZNF423	0.549812072	0.480076712	0.06973536	6	432
DPY19L2P4	0.48141022	0.401390772	0.080019448	16	433
IGSF10	0.772646534	0.841206227	-0.068559693	6	434
LRRC16B	0.405644617	0.344412819	0.061231799	5	435
SNORA45	0.445971878	0.514411831	-0.068439952	4	436
PCDHGB6	0.815437264	0.721952013	0.093485251	6	437
NQO1	0.180235294	0.114544544	0.065690751	8	438
LIF	0.410057682	0.349128994	0.060928688	7	439
DNAH11	0.706825857	0.621112378	0.085713479	9	440
PDGFB	0.399557896	0.335424285	0.06413361	11	441
HIST1H2BO	0.688471757	0.597640401	0.090831356	14	442
C6orf226	0.401636952	0.340965356	0.060671595	12	443
COL4A2	0.6866036	0.625162409	0.061441191	2	444
ANKRD37	0.275221288	0.205292364	0.069928925	4	445
GRASP	0.814340563	0.713102923	0.10123764	8	446

SNORA35	0.21424092	0.341499474	-0.127258554	4	447
RNF144A-AS1	0.885930572	0.778635098	0.107295474	5	448
BBOX1	0.497218449	0.600940532	-0.103722083	4	449
ANKRD34C	0.373560477	0.292030414	0.081530063	8	450
OR5D13	0.336437279	0.493387455	-0.156950176	2	451
VCX2	0.68903071	0.796450067	-0.107419357	3	452
MDGA1	0.68656496	0.626514995	0.060049965	4	453
FAM163A	0.659395505	0.581270662	0.078124843	13	454
EMX1	0.536091718	0.458115619	0.077976099	8	455
DNTTIP2	0.427816465	0.368023	0.059793465	4	456
FAM5C	0.377217396	0.292693179	0.084524217	8	457
LHX2	0.457361195	0.387279701	0.070081494	2	458
ATP5LP7	0.816636211	0.712221698	0.104414514	2	459
HMGB3P27	0.816636211	0.712221698	0.104414514	2	460
TNFRSF13C	0.729585032	0.669867152	0.05971788	5	461
BARHL2	0.356592404	0.290342504	0.066249899	12	462
C9orf135-AS1	0.925987789	0.808794247	0.117193542	3	463
C1orf194	0.665744679	0.5829498	0.082794879	10	464
C21orf128	0.728185204	0.653210094	0.07497511	6	465
SRP72	0.137699012	0.078181015	0.059517997	6	466
GPRASP1	0.697014556	0.61164841	0.085366146	10	467
FOXB2	0.496492999	0.417882129	0.07861087	6	468
PLA2G7	0.395161232	0.327823224	0.067338008	18	469
TMEM140	0.591179045	0.526016824	0.065162221	11	470
FERMT2	0.51307464	0.453695629	0.059379011	6	471
MIR4513	0.893157797	0.779721542	0.113436255	1	472
NKX2-5	0.663973084	0.591190446	0.072782639	12	473
SYTL1	0.454499494	0.389241763	0.065257732	8	474
TRPM3	0.149682228	0.210255206	-0.060572978	4	475
STRA13	0.430842288	0.371587026	0.059255262	4	476
CHODL-AS1	0.194811444	0.355853066	-0.161041622	2	477
CLMP	0.862352772	0.760257566	0.102095205	10	478
PRTN3	0.784804071	0.697067404	0.087736667	8	479
SLC29A1	0.698406307	0.609842736	0.088563571	12	480
XKR5	0.692061276	0.617442891	0.074618385	11	481
RAP1GAP	0.574433172	0.511544661	0.062888512	8	482
APOOP5	0.439738772	0.553831864	-0.114093091	8	483
PPM1M	0.743635832	0.654564422	0.08907141	11	484
TCTEX1D4	0.706661004	0.631827895	0.074833109	7	485
IGFBPL1	0.701290995	0.635324776	0.065966218	4	486
PCDH17	0.320041519	0.247137122	0.072904397	6	487
UAP1L1	0.595341965	0.527014559	0.068327406	4	488
MIR3146	0.722407804	0.627763387	0.094644417	1	489
PHF19	0.46393964	0.404970964	0.058968677	6	490
OR14C36	0.294308369	0.407864746	-0.113556377	2	491
HIST1H3J	0.636108247	0.541434323	0.094673924	16	492
CGA	0.616854526	0.689773913	-0.072919387	3	493
HRC	0.722656638	0.648153933	0.074502705	6	494
HIST1H2APS4	0.83915072	0.734265272	0.104885448	16	495
RPL23AP78	0.912923938	0.802704088	0.11021985	2	496

CEACAM18	0.491517358	0.608166186	-0.116648828	4	497
TMEM154	0.63761152	0.539353702	0.098257818	9	498
LINC00460	0.801933354	0.729169492	0.072763862	7	499
ATP1A3	0.158174373	0.099734727	0.058439646	4	500

**Supplementary Table S11. List of the 500 top-ranked, gene symbol-associated differentially methylated gene bodies after *TET* triple knockdown.**

gene_symbol	beta.GFP_siRNA	beta.GFP_scramble	difference	num.sites	rank
RARRES2P5	0.371296702	0.630335355	-0.259038653	1	1
MIR3678	0.422579473	0.15118847	0.271391002	1	2
OXCT1-AS1	0.475758851	0.294603602	0.181155249	9	3
MIR4710	0.466140878	0.285173084	0.180967794	1	4
NSUN5P2	0.7388574	0.554709766	0.184147634	5	5
KRTAP5-5	0.272022226	0.440597404	-0.168575177	1	6
RARRES2P9	0.376919186	0.600236185	-0.223316999	1	7
OR51B2	0.44200018	0.686598145	-0.244597965	2	8
SNORD114-12	0.534356252	0.359871999	0.174484253	1	9
OR4L1	0.403942638	0.594660705	-0.190718067	1	10
SNORD115-48	0.433408437	0.658599551	-0.225191113	1	11
NAP1L3	0.557937014	0.382656951	0.175280063	2	12
SPANXA2-OT1	0.575277151	0.393644772	0.181632379	1	13
OR5H14	0.251469318	0.412683863	-0.161214546	1	14
SNORD38A	0.270286469	0.389080437	-0.118793968	1	15
HNRNPDP2	0.826573871	0.584769795	0.241804076	1	16
SLC25A1P4	0.522522481	0.659570616	-0.137048135	5	17
SMEK3P	0.275317216	0.530657816	-0.2553406	1	18
MIR374A	0.632229333	0.86030644	-0.228077107	1	19
ZNF626	0.434414043	0.305665353	0.12874869	1	20
OR5AP2	0.410615066	0.618832203	-0.208217137	1	21
OR4X2	0.312089001	0.596018714	-0.283929713	1	22
SNORD114-26	0.615596636	0.455128967	0.160467669	1	23
MBD3L2	0.609702782	0.816892638	-0.207189856	1	24
DNM1P50	0.410288468	0.642215188	-0.23192672	1	25
OR4S1	0.654068097	0.488586127	0.16548197	1	26
LINC00664	0.549853627	0.678951077	-0.12909745	3	27
CD274	0.462231452	0.359470174	0.102761278	3	28
MIR648	0.52371044	0.399042147	0.124668293	1	29
RN7SL832P	0.469549232	0.368525564	0.101023668	5	30
RHOT1P3	0.555447434	0.716516607	-0.161069173	1	31
CD300E	0.459117303	0.567617718	-0.108500415	3	32
IFI44	0.692783086	0.540085647	0.152697438	1	33
MIR4724	0.453431012	0.624707014	-0.171276002	1	34
IRF5	0.595697815	0.5003366	0.095361215	21	35
KIAA0125	0.188952991	0.291685577	-0.102732585	1	36
ISL1	0.514032258	0.394460174	0.119572084	27	37
ARL2	0.588421737	0.4948979	0.093523837	6	38
IGFL1	0.611509741	0.766367049	-0.154857308	3	39
RNASE6	0.734130018	0.601184613	0.132945405	3	40
OR2I1P	0.646591995	0.51502437	0.131567626	35	41
KRT18P13	0.685974907	0.859897409	-0.173922502	1	42
HIST1H2AL	0.60637817	0.464564059	0.141814112	7	43
C17orf50	0.476622351	0.387301543	0.089320808	4	44
KRTAP9-2	0.174010562	0.304226198	-0.130215636	1	45
HIST1H3D	0.550301564	0.447648196	0.102653367	8	46

SPANXN5	0.438957464	0.546618754	-0.10766129	4	47
DRAP1	0.550870664	0.462039512	0.088831153	4	48
ASCL4	0.725003662	0.602387798	0.122615864	8	49
HIST1H2AE	0.642732764	0.523954527	0.118778237	5	50
UBE2C	0.568000195	0.480324449	0.087675746	12	51
MIR125B1	0.318284026	0.406567608	-0.088283582	1	52
CCDC54	0.592851016	0.487300401	0.105550614	1	53
EHHADH-AS1	0.583076704	0.451189028	0.131887676	1	54
OR51I2	0.561200172	0.661738183	-0.100538011	2	55
ANKRD20A14P	0.612554454	0.742738929	-0.130184475	1	56
SLC2A3	0.472470291	0.345519383	0.126950908	3	57
G0S2	0.638637902	0.532759705	0.105878197	6	58
IL10RB-AS1	0.749480497	0.644478395	0.105002102	5	59
BARHL2	0.551900856	0.467587233	0.084313623	10	60
ZNF702P	0.607736696	0.520156526	0.08758017	17	61
NXPE4	0.48797618	0.593840584	-0.105864404	2	62
LINC00242	0.581942761	0.502166796	0.079775965	16	63
ABCA10	0.705940899	0.521642589	0.18429831	2	64
GPR112	0.456647354	0.540829135	-0.084181781	2	65
MIR34B	0.606859772	0.50309214	0.103767632	1	66
OR6Q1	0.102419209	0.212024585	-0.109605376	1	67
MIR4740	0.903307374	0.75067391	0.152633464	1	68
CLCF1	0.519493831	0.441062755	0.078431075	13	69
SOX1	0.73604157	0.638538816	0.097502755	16	70
ZNF718	0.41810905	0.525035982	-0.106926932	5	71
SLC31A2	0.663459203	0.52639935	0.137059853	5	72
CD70	0.698141548	0.599392721	0.098748827	11	73
MARCKSL1P2	0.903156347	0.754030442	0.149125905	1	74
OR52A1	0.473205979	0.572613572	-0.099407593	3	75
HIST1H2AD	0.632398494	0.526381703	0.106016791	2	76
HIST1H2BF	0.534490645	0.452054226	0.082436419	5	77
C6orf164	0.713877763	0.597036957	0.116840807	1	78
RARRES2P8	0.582138403	0.672387558	-0.090249155	3	79
ZNF253	0.599794678	0.496694673	0.103100006	5	80
PLK5	0.810420268	0.735436397	0.074983871	9	81
HIST1H1PS1	0.933383801	0.78523144	0.148152361	3	82
MIR1258	0.127532753	0.052663063	0.07486969	1	83
OMD	0.606209854	0.721301208	-0.115091354	1	84
VAV3-AS1	0.481981951	0.401228536	0.080753415	10	85
LIPG	0.472283811	0.397821212	0.074462599	17	86
OR8U1	0.308026452	0.464507587	-0.156481134	1	87
MIR30A	0.275784985	0.473697456	-0.19791247	1	88
KRTAP10-12	0.547729028	0.649709688	-0.10198066	1	89
PATZ1	0.66054142	0.586930578	0.073610842	9	90
GAD2	0.710545249	0.627789535	0.082755714	15	91
ARHGAP31-AS1	0.466907648	0.393697071	0.073210577	5	92
TUBB8P9	0.484069941	0.573834316	-0.089764375	1	93
CH25H	0.639566818	0.548721863	0.090844954	5	94
RNF224	0.266392626	0.193398704	0.072993922	2	95
BSX	0.732321133	0.636706064	0.095615069	14	96

ANKDD1B	0.621660409	0.544466929	0.07719348	10	97
MAGI1-AS1	0.581603825	0.654141098	-0.072537272	2	98
C1orf68	0.532877214	0.637351893	-0.10447468	1	99
RIPPLY2	0.588069722	0.499193343	0.088876379	7	100
SLFN13	0.697440649	0.61859576	0.078844889	8	101
CHODL-AS1	0.450628008	0.575317198	-0.124689191	1	102
TGFBR3L	0.640134379	0.568028121	0.072106259	8	103
MIR663B	0.899294699	0.761423895	0.137870803	1	104
SEPN1	0.683045113	0.611218565	0.071826548	6	105
PTGR1	0.588839604	0.509616864	0.07922274	4	106
DECR1	0.83809195	0.705997599	0.132094351	6	107
ASCL1	0.677114043	0.580613605	0.096500437	12	108
NEURL2	0.675352082	0.58965473	0.085697352	8	109
LINC00677	0.3504436	0.276993782	0.073449818	1	110
SH3BGR3	0.431348382	0.360196055	0.071152327	9	111
TRAT1	0.260941823	0.403044926	-0.142103103	1	112
KRTAP13-3	0.178955271	0.3279866	-0.149031329	2	113
C10orf71-AS1	0.647492953	0.734739241	-0.087246288	7	114
HMX3	0.767920905	0.661571439	0.106349466	11	115
TRIM74	0.949169724	0.808664335	0.140505389	1	116
OR13F1	0.34882378	0.595845443	-0.247021663	1	117
ZDHHC20P4	0.782012358	0.684301236	0.097711122	2	118
BNIP3P1	0.614610691	0.499083291	0.115527401	1	119
EGFL6	0.815725694	0.699805666	0.115920028	6	120
SSX6	0.855967859	0.730884876	0.125082982	1	121
DUSP26	0.677488494	0.595819875	0.081668619	11	122
MIR4655	0.842110068	0.719087316	0.123022752	1	123
MAST4-AS1	0.379657843	0.196805441	0.182852402	1	124
IL17RB	0.737311722	0.646102745	0.091208978	5	125
IGFL4	0.51050482	0.636572551	-0.126067731	8	126
SPAG4	0.431189438	0.362766398	0.06842304	12	127
LINC00877	0.702786402	0.624414694	0.078371708	15	128
CTSE	0.806552848	0.69897062	0.107582228	3	129
PABPC1P1	0.675503276	0.577558812	0.097944464	1	130
LINC00152	0.698060979	0.629775072	0.068285907	3	131
GBP4	0.506528942	0.413354941	0.093174	8	132
ANKRD18EP	0.244070825	0.386553242	-0.142482417	1	133
RASD1	0.656223856	0.588080359	0.068143498	6	134
OR4C15	0.278943405	0.526750446	-0.247807042	1	135
MIR146A	0.578964304	0.646596061	-0.067631757	4	136
LINC00113	0.317898832	0.46974829	-0.151849458	1	137
PNLIPRP3	0.339638275	0.438763872	-0.099125597	1	138
IFITM1	0.78471694	0.692671445	0.092045495	9	139
LINC00620	0.660607707	0.59276735	0.067840357	11	140
GALNT4	0.807729215	0.717774854	0.089954361	2	141
LCE2A	0.201914135	0.299977353	-0.098063218	3	142
ZNF85	0.405320059	0.318247508	0.087072552	6	143
TCN2	0.6756747	0.586378747	0.089295953	10	144
HIST1H2BI	0.838418938	0.721658012	0.116760926	9	145
SOX10	0.908208054	0.841857321	0.066350734	11	146

GPR151	0.249807064	0.397434209	-0.147627145	1	147
TMCO5B	0.846367824	0.729329157	0.117038667	1	148
ZFP36L2	0.406364664	0.34044461	0.065920054	15	149
HELT	0.750413192	0.647023203	0.103389989	14	150
DHH	0.719040191	0.621735376	0.097304815	17	151
C8orf56	0.724788279	0.636925476	0.087862803	12	152
ZNF75A	0.787322827	0.68940989	0.097912937	7	153
UGT2B10	0.262270701	0.489231258	-0.226960557	1	154
SIGLEC17P	0.774300339	0.642356397	0.131943942	1	155
OR4S2	0.355247561	0.550900911	-0.19565335	1	156
ANKRD36BP2	0.790914889	0.692875067	0.098039822	6	157
NBN	0.63933398	0.55241431	0.086919671	24	158
SNORD64	0.467098066	0.630989884	-0.163891818	2	159
MBD3L5	0.780855012	0.902938336	-0.122083324	1	160
ARL11	0.760164622	0.669028443	0.09113618	7	161
DPY19L2P4	0.542307109	0.456629367	0.085677742	3	162
VPS9D1-AS1	0.886390495	0.776898782	0.109491713	5	163
MIR184	0.877820999	0.759683484	0.118137515	1	164
MIR1914	0.901426725	0.780148334	0.121278391	1	165
LINC00575	0.558573664	0.697128579	-0.138554915	1	166
EDN1	0.620129533	0.550486574	0.069642959	3	167
SOX14	0.782000372	0.675162453	0.106837919	5	168
MIR501	0.800894794	0.685803086	0.115091709	1	169
LINC00665	0.528919411	0.463929954	0.064989457	5	170
SNORD3D	0.225060269	0.160985699	0.06407457	2	171
HIST1H3A	0.759078824	0.658316123	0.100762701	3	172
KRTAP4-5	0.622929814	0.718212358	-0.095282544	1	173
URAHP	0.718892991	0.632878425	0.086014566	5	174
TRBJ2-3	0.560906522	0.476448751	0.084457771	1	175
OXTR	0.753384616	0.688020795	0.065363821	14	176
RPS29P22	0.73650387	0.63954923	0.09695464	1	177
GRAP2	0.830195905	0.721556973	0.108638932	2	178
C2orf50	0.713532824	0.641878496	0.071654328	5	179
UCN2	0.745414016	0.83876877	-0.093354754	3	180
HIST1H2BO	0.698628449	0.610106748	0.088521701	6	181
MROH6	0.57619075	0.513819803	0.062370946	21	182
FGFBP2	0.783885657	0.70241673	0.081468927	10	183
CD163	0.558732453	0.642498208	-0.083765754	1	184
GALNT14	0.668326034	0.606195838	0.062130196	24	185
ANKRD20A7P	0.526995581	0.457992684	0.069002897	2	186
SLC22A20	0.749915759	0.661378668	0.08853709	7	187
ACCS	0.636679285	0.549050039	0.087629246	11	188
MIR548B	0.661161748	0.576092738	0.08506901	1	189
ZNF730	0.445000197	0.349520957	0.09547924	9	190
CD46P1	0.654146479	0.592769365	0.061377114	5	191
USP4	0.380960994	0.319630653	0.06133034	12	192
INCA1	0.530881625	0.469672717	0.061208908	7	193
BCRP8	0.567522563	0.490655948	0.076866615	4	194
C19orf59	0.826908875	0.732378617	0.094530258	7	195
SULT1C4	0.71266476	0.617612113	0.095052647	4	196



HCST	0.731430547	0.65351235	0.077918197	2	197
PHOSPHO1	0.697418332	0.613350682	0.08406765	11	198
DEFB125	0.375390026	0.464201456	-0.08881143	2	199
ADAM28	0.77625242	0.698875968	0.077376452	4	200
SP100	0.886488599	0.776503051	0.109985549	6	201
ATP5LP7	0.755789951	0.66103973	0.094750221	1	202
TCF24	0.432834901	0.361853067	0.070981834	10	203
OR13C8	0.34724931	0.476119298	-0.128869988	1	204
OR6K6	0.257046351	0.401930025	-0.144883674	2	205
DUOXA2	0.865036788	0.76083219	0.104204598	15	206
TMEM238	0.87492858	0.766168399	0.108760181	3	207
KLF2	0.620435476	0.550155305	0.070280171	7	208
CCDC78	0.660362426	0.583832246	0.07653018	11	209
AMOT	0.540531018	0.618600114	-0.078069096	12	210
C7orf69	0.77427217	0.850154152	-0.075881982	4	211
RNF126P1	0.891091178	0.781415147	0.109676031	5	212
GPR97	0.833709886	0.749407625	0.084302261	3	213
RUVBL1-AS1	0.854005528	0.749860128	0.104145399	7	214
ZIC4	0.79749159	0.695917213	0.101574377	65	215
C20orf201	0.715893612	0.627343777	0.088549835	1	216
NT5C1A	0.790719149	0.731546031	0.059173118	5	217
MBOAT4	0.68359969	0.546443384	0.137156306	1	218
IL11	0.538997558	0.479991929	0.059005628	6	219
PHLDA1	0.268937572	0.210000863	0.058936708	8	220
FPR3	0.837707074	0.733781271	0.103925803	3	221
SLFN12	0.698788799	0.614994678	0.083794121	12	222
ZNF597	0.676892355	0.588663434	0.088228921	8	223
CNN2P7	0.700738847	0.798155267	-0.09741642	1	224
SNORA57	0.850358841	0.746836232	0.103522609	1	225
TMBIM1	0.557397712	0.495834549	0.061563163	13	226
KRTAP15-1	0.177728157	0.316648835	-0.138920678	1	227
TSTD1	0.7957507	0.706860436	0.088890264	8	228
LRRC52	0.801043141	0.721345611	0.07969753	7	229
DEFB122	0.745590747	0.848001828	-0.102411081	1	230
TAGLN3	0.854220513	0.744487117	0.109733395	16	231
MIR365A	0.93612387	0.82375336	0.11237051	1	232
TMEM233	0.571630792	0.49666714	0.074963652	12	233
BPIFA3	0.890482549	0.78364568	0.106836869	1	234
SNORD116-1	0.299401909	0.477590116	-0.178188207	2	235
SIX2	0.876108178	0.774324597	0.101783581	14	236
B3GNT9	0.899586701	0.797590006	0.101996695	9	237
ENO2	0.541404809	0.483848097	0.057556712	15	238
KRTAP3-3	0.566222632	0.631205955	-0.064983323	2	239
HOXB5	0.553893143	0.473435724	0.080457419	24	240
OR4F5	0.756368899	0.665798433	0.090570466	1	241
SETDB1	0.515109152	0.457686177	0.057422975	5	242
CTSW	0.887999661	0.782373574	0.105626087	3	243
SNORA69	0.207048927	0.387104346	-0.18005542	1	244
C6orf183	0.595620707	0.693708169	-0.098087463	2	245
MEIS1-AS2	0.852617341	0.723733258	0.128884083	9	246

ZNF66	0.210000697	0.267286504	-0.057285807	1	247
PNPLA4	0.441556025	0.3678369	0.073719125	13	248
KRTAP1-3	0.788951097	0.895594835	-0.106643738	1	249
MIR574	0.765879019	0.649644026	0.116234994	1	250
MT1E	0.880418618	0.776323018	0.1040956	6	251
CEBPD	0.485841708	0.424243855	0.061597853	9	252
ZNRF1	0.679524354	0.613101715	0.066422639	20	253
AGFG2	0.604550767	0.539470683	0.065080084	6	254
SPARC	0.848389026	0.761606232	0.086782794	12	255
MIR138-1	0.892727259	0.787352115	0.105375144	1	256
RN7SKP89	0.104974709	0.246773718	-0.141799009	1	257
TMEM140	0.79842021	0.719686529	0.078733681	9	258
MIR9-3	0.870200637	0.754322127	0.11587851	2	259
OTOL1	0.192073979	0.316247165	-0.124173186	2	260
KRT84	0.702165032	0.778985797	-0.076820765	3	261
C1QTNF2	0.631104279	0.574813483	0.056290796	6	262
CD34	0.667174663	0.5971126	0.070062063	14	263
C1orf56	0.614455871	0.558273858	0.056182014	7	264
TEX26	0.842309511	0.756899987	0.085409524	3	265
KCNC2	0.574667027	0.477330566	0.097336461	15	266
ATL3	0.761029576	0.675985294	0.085044282	21	267
FOXD4L1	0.696044806	0.609833658	0.086211148	5	268
KRTAP10-2	0.728587576	0.644181489	0.084406087	1	269
C19orf45	0.785525817	0.716920645	0.068605172	12	270
OR51F1	0.193699846	0.390898716	-0.197198871	1	271
SH2D1B	0.708799263	0.641963839	0.066835424	3	272
OR10R2	0.736787206	0.832561186	-0.09577398	1	273
LHX5	0.731845953	0.651225443	0.08062051	37	274
LINC00568	0.157464866	0.097949715	0.059515152	2	275
CLPSL2	0.179644198	0.091394491	0.088249706	1	276
FKBP11	0.732925257	0.650857515	0.082067742	19	277
CYP4A22-AS1	0.680169161	0.747407829	-0.067238667	4	278
BTC	0.729505203	0.646278464	0.08322674	6	279
C16orf86	0.71481248	0.658980224	0.055832256	5	280
MTND2P28	0.394288225	0.339051696	0.055236529	1	281
OR1S1	0.621446865	0.743326071	-0.121879206	1	282
CLIC3	0.692781369	0.637579312	0.055202058	7	283
ZNF878	0.573714718	0.499648285	0.074066433	8	284
ZIC1	0.812040644	0.716344792	0.095695852	125	285
SRRD	0.775053569	0.719877964	0.055175604	5	286
C1orf194	0.518990006	0.461914312	0.057075694	10	287
C1QA	0.810666506	0.740965061	0.069701445	5	288
SSTR1	0.540593956	0.448156009	0.092437947	14	289
MIXL1	0.701017921	0.625063956	0.075953965	5	290
C3orf80	0.426153869	0.359608798	0.066545071	5	291
OR6K3	0.172863936	0.366433603	-0.193569666	1	292
MBLAC1	0.371216648	0.316432411	0.054784237	7	293
TCF21	0.812436116	0.72416286	0.088273257	20	294
ARAP1-AS2	0.655632757	0.739497289	-0.083864532	1	295
IFITM2	0.775661851	0.700505902	0.075155948	22	296

PRTN3	0.762863697	0.698723227	0.064140469	14	297
RHOT1P2	0.578292671	0.661853422	-0.083560751	1	298
OR51G1	0.281028392	0.416956467	-0.135928075	1	299
ZNF319	0.779448969	0.716132986	0.063315984	11	300
PPAP2C	0.856064482	0.773997435	0.082067047	13	301
OR5D13	0.336437279	0.493387455	-0.156950176	2	302
KIRREL3-AS3	0.479883533	0.416214058	0.063669476	9	303
NKX2-5	0.583210771	0.51554489	0.067665881	15	304
WDR5B	0.157972807	0.093171263	0.064801544	3	305
GNAT1	0.724357111	0.660802681	0.06355443	7	306
CNTN4-AS1	0.59532262	0.717451551	-0.122128931	3	307
RLN2	0.588487338	0.518006559	0.070480778	2	308
ULBP1	0.638072784	0.558354977	0.079717807	12	309
ATXN8OS	0.673903504	0.57931575	0.094587754	12	310
MIR518C	0.141911868	0.258660866	-0.116748998	1	311
RAC2	0.585248814	0.513338877	0.071909937	6	312
LINC00596	0.086816244	0.177746874	-0.09093063	1	313
SIX3-AS1	0.902726974	0.803700959	0.099026015	7	314
IFI30	0.407579499	0.354109377	0.053470122	13	315
MIR330	0.151762802	0.098499971	0.053262831	1	316
MIR106B	0.87321627	0.779855105	0.093361165	2	317
IGF2-AS	0.597810805	0.535315804	0.062495001	35	318
TSPY11P	0.29754117	0.242226944	0.055314226	1	319
TRAF3IP2	0.547443045	0.494345716	0.053097328	23	320
ENDOG	0.658068344	0.605025221	0.053043122	3	321
C21orf128	0.841705704	0.788688219	0.053017485	5	322
HSPB1	0.635031731	0.557652289	0.077379441	12	323
TRBJ2-6	0.920383865	0.817130117	0.103253748	1	324
ILVBL	0.637408277	0.578628675	0.058779602	9	325
HAS3	0.812603846	0.742136722	0.070467124	24	326
DGAT1	0.56459272	0.497513611	0.067079109	6	327
HAUS3	0.506127809	0.558906219	-0.052778411	4	328
BOK	0.780610094	0.727864334	0.05274576	12	329
FAM72D	0.136009971	0.29192288	-0.155912909	1	330
FGF14-AS2	0.532427141	0.594040525	-0.061613384	5	331
C9orf96	0.59434705	0.538478857	0.055868193	6	332
HIST1H2APS4	0.743194504	0.664638717	0.078555788	3	333
FOXD4L5	0.716300569	0.638042846	0.078257723	1	334
TREH	0.73545125	0.68281665	0.0526346	5	335
GPR62	0.863190678	0.772985145	0.090205533	6	336
C15orf62	0.799875905	0.721432791	0.078443115	3	337
OR6C74	0.20178514	0.386853112	-0.185067972	1	338
C9orf135-AS1	0.932620149	0.833979104	0.098641045	3	339
RPSAP58	0.397848286	0.298794814	0.099053472	3	340
CD79B	0.852730712	0.762527354	0.090203358	7	341
SMKR1	0.776560609	0.707878011	0.068682598	5	342
KCNJ9	0.712400312	0.6378261	0.074574212	10	343
HIST1H3F	0.903297779	0.805301293	0.097996486	4	344
OR5T1	0.31749569	0.445008557	-0.127512867	2	345
RAB15	0.48288042	0.428651457	0.054228962	13	346

PYCARD	0.879700021	0.776012159	0.103687863	15	347
MIR140	0.935662406	0.835269031	0.100393375	1	348
FOXD2-AS1	0.809381909	0.726745531	0.082636377	11	349
IRX1	0.517234101	0.443070746	0.074163355	16	350
LRRFIP1P1	0.750623508	0.679710092	0.070913415	7	351
ADRB1	0.615152335	0.549501199	0.065651136	7	352
UCP1	0.799716827	0.7042795	0.095437327	6	353
KRTAP10-4	0.901376807	0.805137521	0.096239286	1	354
HM13-AS1	0.523908725	0.472234947	0.051673777	4	355
SDC4P	0.752530912	0.672164038	0.080366874	1	356
RGS13	0.62205185	0.724602987	-0.102551137	3	357
TECTB	0.784213613	0.863033525	-0.078819913	2	358
LIME1	0.841163554	0.754532761	0.086630793	16	359
TAC1	0.66697097	0.538571504	0.128399466	10	360
TREX1	0.837401385	0.750988308	0.086413078	11	361
UPK1A-AS1	0.743652397	0.657557856	0.08609454	2	362
ZNF671	0.78458741	0.710644846	0.073942563	7	363
KRTAP5-1	0.878291497	0.785468271	0.092823226	1	364
FAM215A	0.908982632	0.813955911	0.095026721	2	365
PCDH8P1	0.838308822	0.754942028	0.083366795	9	366
WNT10A	0.637508212	0.586560298	0.050947915	31	367
SUMO3	0.704100451	0.653171275	0.050929176	9	368
LINC00525	0.488972232	0.319095233	0.169876999	1	369
NPBWR1	0.696928058	0.590980763	0.105947295	15	370
SLC25A22	0.670792538	0.620046996	0.050745542	22	371
HIST1H1D	0.565889724	0.466023727	0.099865997	3	372
LBX2-AS1	0.707384176	0.637926561	0.069457615	15	373
EIF4EBP3	0.872065596	0.775871479	0.096194117	4	374
MED18	0.457862737	0.406828324	0.051034413	6	375
HOXD1	0.605843495	0.52187135	0.083972145	8	376
OR2T10	0.399448631	0.523498865	-0.124050234	1	377
SNORD116-9	0.715447506	0.798754223	-0.083306718	1	378
SLITRK5	0.605128756	0.54192073	0.063208026	20	379
LRRC32	0.796240626	0.720905358	0.075335268	18	380
SNAI3	0.751464174	0.701276482	0.050187693	11	381
LINC00923	0.904890751	0.79145062	0.11344013	2	382
FBXO6	0.664264839	0.605603362	0.058661477	10	383
TRIM48	0.740102925	0.82570408	-0.085601155	1	384
C11orf68	0.606586822	0.556550601	0.05003622	12	385
ZC3H12A	0.716023845	0.656065808	0.059958037	12	386
LINC00619	0.904387083	0.810945988	0.093441094	1	387
C21orf90	0.88617411	0.802100177	0.084073933	2	388
SPIN3	0.505241614	0.55502979	-0.049788176	5	389
DMRTC1	0.803454904	0.720560478	0.082894426	1	390
GSTTP2	0.78373972	0.85545354	-0.07171382	2	391
PARD3-AS1	0.404066763	0.345858801	0.058207962	3	392
NEUROD2	0.544077883	0.482432267	0.061645616	29	393
TMEM141	0.490766113	0.441190215	0.049575898	10	394
LHX3	0.795282059	0.723911431	0.071370628	25	395
FABP5	0.485141572	0.39876787	0.086373702	13	396

IRX4	0.731656027	0.65784357	0.073812457	38	397
FTMT	0.648292586	0.742618934	-0.094326347	2	398
ITGA5	0.456449233	0.403491794	0.052957439	12	399
SLC51B	0.788954721	0.718006798	0.070947923	11	400
LINC00654	0.826407487	0.742159604	0.084247883	2	401
HIST1H2BE	0.798998789	0.717121767	0.081877022	3	402
MIR3655	0.080864982	0.130177454	-0.049312472	1	403
HIST1H2AI	0.336602573	0.28730451	0.049298063	4	404
SIGLEC8	0.419533631	0.527815909	-0.108282279	3	405
SLC16A13	0.752992577	0.686103243	0.066889334	4	406
ZBTB26	0.70974088	0.66050329	0.04923759	3	407
PLIN4	0.930197839	0.842516677	0.087681162	3	408
KREMEN1	0.790489862	0.723268209	0.067221653	8	409
PROM1	0.77523251	0.710946563	0.064285947	33	410
SNAP29	0.487565882	0.43736957	0.050196312	7	411
RPP25	0.600809293	0.540012287	0.060797006	7	412
LTB	0.623069396	0.561895381	0.061174015	30	413
BARHL1	0.882998355	0.79303056	0.089967795	14	414
MIR663A	0.717735249	0.659091092	0.058644157	16	415
SSMEM1	0.677739834	0.75705203	-0.079312196	3	416
CYTH4	0.733362069	0.660181869	0.0731802	9	417
WWC2-AS2	0.602816181	0.544021605	0.058794576	6	418
CLUHP4	0.479078469	0.661712548	-0.182634079	1	419
TMC6	0.7155544	0.658502781	0.057051619	27	420
MATK	0.513110656	0.456147633	0.056963024	21	421
CCL8	0.837127409	0.76093496	0.07619245	2	422
TMSB4X	0.141991768	0.250225784	-0.108234016	3	423
SELL	0.734439438	0.645267923	0.089171515	4	424
RNA5SP155	0.913354374	0.821046744	0.09230763	1	425
TMEM72	0.581708567	0.508192497	0.07351607	5	426
MIR142	0.868530545	0.784030211	0.084500334	8	427
MAP7D2	0.72137886	0.659951208	0.061427653	12	428
MAT1A	0.686557235	0.735100934	-0.048543698	4	429
STK24-AS1	0.526609392	0.478105243	0.04850415	4	430
MEIS1-AS1	0.862430269	0.74242495	0.12000532	12	431
XIAP	0.522142802	0.47337135	0.048771452	16	432
CNTNAP3B	0.849353078	0.771308517	0.078044561	3	433
OR1Q1	0.553836733	0.639890806	-0.086054073	2	434
RIPK3	0.875245906	0.788908158	0.086337748	9	435
EN1	0.741182948	0.647779402	0.093403547	30	436
POU3F1	0.643249208	0.584638402	0.058610806	12	437
ZNF619	0.557771623	0.471097224	0.086674399	8	438
SPATA41	0.840848018	0.763250883	0.077597134	8	439
DFNB59	0.55675962	0.461587964	0.095171656	5	440
NTF4	0.656133089	0.597030122	0.059102966	17	441
BHLHE22	0.375102531	0.282629845	0.092472686	7	442
TNFSF12	0.665920667	0.595216667	0.070704	20	443
VMO1	0.879603885	0.79247634	0.087127545	7	444
HIST1H3H	0.778304841	0.701454236	0.076850605	3	445
THBD	0.680306863	0.615545875	0.064760988	10	446

CTSZ	0.777727591	0.71110444	0.066623151	10	447
LINC00939	0.096799059	0.289771453	-0.192972394	1	448
PPM1M	0.780321632	0.714571818	0.065749814	10	449
PRB4	0.368875312	0.467936763	-0.099061451	2	450
LBX2	0.825701387	0.745640491	0.080060896	22	451
CD86	0.860821191	0.791264398	0.069556792	12	452
HIST1H2BK	0.764721157	0.700596799	0.064124358	16	453
HCG9P5	0.314802917	0.267222436	0.047580482	5	454
DEXI	0.563333292	0.515780304	0.047552988	7	455
ATP6V0CP3	0.776110908	0.704191049	0.071919859	3	456
FBLN1	0.676877776	0.629389296	0.04748848	12	457
TMPRSS13	0.729871399	0.777329571	-0.047458172	6	458
SPATA2P1	0.31827068	0.422796377	-0.104525697	1	459
ZNF415	0.638795263	0.577300469	0.061494794	10	460
RAMP2-AS1	0.805274248	0.736137762	0.069136486	6	461
EMX1	0.756338389	0.681139842	0.075198547	29	462
KIAA1324	0.775205627	0.705480844	0.069724783	15	463
NKAIN1P1	0.818857013	0.738085605	0.080771407	2	464
APOL1	0.715500791	0.649329902	0.066170889	5	465
RBP7	0.630382445	0.567109569	0.063272875	8	466
RMND1	0.603263123	0.556075101	0.047188022	7	467
FAM195B	0.484104734	0.436830343	0.047274392	6	468
LAT	0.857455813	0.775053575	0.082402238	9	469
BPESC1	0.707125645	0.647992988	0.059132656	3	470
DEFB118	0.464512851	0.412505863	0.052006987	2	471
TSPY15P	0.469421164	0.520588662	-0.051167498	1	472
CHD1L	0.433125177	0.386282179	0.046842997	13	473
FAM71E2	0.693958142	0.647121538	0.046836603	20	474
KRT27	0.787284657	0.731451227	0.05583343	8	475
CSF1	0.503268515	0.456449265	0.04681925	12	476
HOXD4	0.912110563	0.824143147	0.087967416	13	477
PAPPA-AS2	0.257504549	0.329156147	-0.071651598	1	478
ANXA2R	0.206410829	0.159742593	0.046668236	23	479
OR2M3	0.272163805	0.424095015	-0.15193121	3	480
RAB21	0.356090576	0.309615707	0.046474869	8	481
CLDN3	0.787974227	0.712706908	0.07526732	4	482
CD52	0.870731184	0.787498054	0.083233129	7	483
TNFSF13	0.561670526	0.472098024	0.089572502	6	484
ZNF727	0.162167593	0.255780779	-0.093613186	4	485
CCNO	0.503261795	0.424650652	0.078611144	13	486
RNASEH1P2	0.920813517	0.834705999	0.086107518	2	487
PRKACG	0.557333229	0.603564953	-0.046231724	2	488
SLC22A17	0.68610379	0.63988256	0.04622123	16	489
AGPAT2	0.723265354	0.666486674	0.056778681	9	490
IL2RB	0.796930192	0.727335483	0.069594709	9	491
CFC1B	0.866649932	0.78304327	0.083606662	1	492
IZUMO1	0.783170874	0.737008147	0.046162728	7	493
DNAJC17	0.692444517	0.644076764	0.048367753	22	494
APOA1	0.748785623	0.696081791	0.052703832	9	495
PCDHGC5	0.829638821	0.755089907	0.074548914	14	496

SLC7A5P1	0.455811522	0.409747901	0.046063621	2	497
PRLHR	0.787330389	0.710862515	0.076467874	8	498
ANKRD26P3	0.802559195	0.746337174	0.056222021	4	499
FGF17	0.839561462	0.76234902	0.077212441	11	500

**Supplementary Table S12. List of the 500 top-ranked, differentially methylated CGIs after *TET* triple knockdown.**

For CGIs overlapping with 2 kb promoter regions, corresponding promoter gene symbols are provided.

CGI	promoter_overlap	beta.GFP_siRNA	beta.GFP_scramble	difference	num.sites	rank
chr7:138666359-138666972	KIAA1549	0.489669095	0.265051096	0.224618	2	1
chr1:149605515-149605903	RNVU1-20	0.361994384	0.160476523	0.201517861	1	2
chr4:3464800-3465440	DOK7	0.530252206	0.357766806	0.172485399	8	3
chr9:103791945-103792173		0.592916636	0.346410793	0.246505843	2	4
chr3:46933747-46934293		0.766497096	0.511601366	0.25489573	5	5
chr9:34377402-34377610	KIAA1161	0.436128902	0.274696406	0.161432495	2	6
chr17:54674874-54675232		0.400776177	0.263999798	0.136776378	4	7
chr14:26674164-26674478		0.673964325	0.541186619	0.132777705	4	8
chr12:47224913-47225664		0.692618476	0.471692535	0.220925941	4	9
chr3:46887629-46887919		0.710075536	0.476483867	0.23359167	2	10
chr12:108168987-108169570		0.622011859	0.44593321	0.176078649	4	11
chr4:155547985-155548322	LRAT	0.418931194	0.239848867	0.179082327	5	12
chr1:15573621-15573953	FHAD1	0.389119751	0.239083461	0.15003629	4	13
chr8:117950473-117950717	AARD	0.509981124	0.321085221	0.188895903	2	14
chr16:66460504-66460850	BEAN1	0.400427933	0.254246521	0.146181412	2	15
chr12:131199825-131200157		0.578978284	0.427105293	0.151872991	3	16
chr11:1592499-1592810	KRTAP5-AS1;DUSP8	0.596487917	0.415102353	0.181385564	2	17
chr19:42501262-42501486	ATP1A3	0.244210877	0.109212808	0.134998069	2	18
chr13:28540357-28541279		0.717871695	0.510745901	0.207125793	2	19
chr19:45947711-45948047		0.695483123	0.538320425	0.157162697	3	20
chr6:19691911-19692305		0.820811335	0.597481627	0.223329708	4	21
chr18:47087880-47088528		0.289102376	0.162691444	0.126410932	9	22
chr2:75787130-75787420		0.597771015	0.407713056	0.190057959	3	23
chr5:50685454-50686148		0.778374275	0.568692374	0.209681901	4	24
chr10:72218131-72218484		0.332018859	0.201900988	0.130117871	2	25
chr12:54811982-54812202		0.665139504	0.472591149	0.192548355	2	26
chr9:72026904-72027428		0.916460393	0.654077341	0.262383052	1	27
chr19:1523706-1524565	PLK5	0.496793725	0.352935032	0.143858693	4	28
chr3:72788073-72788416		0.482021201	0.242749969	0.239271232	3	29
chr2:220173871-220174283	PTPRN	0.594928427	0.434395655	0.160532771	4	30
chr7:128577819-128578756	IRF5	0.397240703	0.28041728	0.116823423	12	31
chr5:134824932-134825224		0.427599045	0.305573907	0.122025138	1	32
chr9:46861917-46862270		0.712962808	0.515882238	0.19708057	1	33
chr3:158519510-158520329		0.280878515	0.136227907	0.144650608	9	34
chr7:32110064-32110910		0.361857837	0.243268098	0.118589739	5	35
chr17:33775295-33775794	SLFN13	0.571281868	0.444332884	0.126948983	5	36
chr14:76597649-76597911		0.621806102	0.465522943	0.156283158	2	37
chr9:44419920-44420345		0.657299331	0.481366016	0.175933315	1	38
chr17:34091137-34091919		0.330429591	0.217511091	0.1129185	3	39
chr11:47615711-47616055	C1QTNF4	0.426409157	0.169088109	0.257321048	1	40
chr11:64781451-64782385	ARL2;SNX15	0.225415587	0.113467779	0.111947808	4	41
chr11:18067717-18067928		0.797203056	0.615710838	0.181492218	2	42
chr5:41869664-41870876	OXCT1-AS1;OXCT1	0.401641729	0.249222756	0.152418972	10	43
chr20:34652455-34653500		0.465441932	0.350387702	0.11505423	4	44
chr2:170220773-170221114		0.306156333	0.187032545	0.119123788	4	45
chr1:243264941-243265196		0.530066324	0.394819713	0.135246611	1	46
chr8:91013142-91014266	DECR1	0.833483767	0.62893995	0.204543817	10	47
chr20:56323974-56324254		0.499555128	0.355562791	0.143992337	3	48
chr14:36977519-36977996		0.505561781	0.373965057	0.131596724	4	49
chr12:49485767-49485977		0.560793552	0.451501029	0.109292524	3	50
chr13:92051154-92051716	GPC5	0.476273763	0.354907247	0.121366516	4	51
chr6:58180155-58180443		0.681169373	0.513933503	0.167235871	1	52
chr12:56325775-56326223	WIBG	0.418962423	0.288705036	0.130257387	6	53
chr2:79220193-79220592		0.550802352	0.418936717	0.131865635	4	54
chr5:74907287-74907770	ANKDD1B	0.840941225	0.656041974	0.184899251	3	55
chr19:2540907-2541138		0.5780065	0.75146714	-0.173460639	3	56
chr9:88137610-88137985		0.737524932	0.56708562	0.170439313	2	57
chr1:91182510-91182857	BARHL2	0.506551433	0.399163332	0.107388101	5	58
chr9:77112713-77113583	RORB	0.41301017	0.276933826	0.136076345	2	59
chr8:144653775-144653976		0.229902421	0.123366068	0.106536353	4	60
chr3:133747921-133748266		0.750369212	0.571494494	0.178874718	2	61
chr11:30038523-30038823	KCNA4	0.453007891	0.28065993	0.172347961	9	62
chr11:68611251-68611807	CPT1A	0.760582441	0.600699271	0.15988317	5	63
chr1:209979317-209979666	IRF6	0.518263729	0.333455662	0.184808067	8	64
chr6:84562821-84563758	RIPPLY2	0.40420047	0.292196265	0.112004205	10	65
chr17:46690391-46691055		0.546559564	0.421851856	0.124707708	2	66
chr6:50692150-50692375		0.441849267	0.274005194	0.167844073	3	67
chr15:60690709-60690930		0.664864397	0.517122611	0.147741785	2	68
chr5:50694985-50695352		0.750439709	0.582932993	0.167506716	3	69
chr9:29826527-29826736		0.590302493	0.721791151	-0.131488658	2	70



chr5:115912002-115912384	SEMA6A	0.680177506	0.562107212	0.118070294	4	71
chr2:31360322-31361821		0.415570428	0.311671655	0.103898773	12	72
chr17:16487651-16487884		0.77222646	0.611450432	0.160776029	3	73
chr9:35111268-35111504		0.264165589	0.146842162	0.117323427	1	74
chr10:104629039-104629479	AS3MT	0.458523508	0.297522996	0.161000512	7	75
chr16:30042308-30042612		0.720306738	0.567982868	0.15232387	3	76
chrX:3630407-3630620		0.755988997	0.571469357	0.18451964	4	77
chr16:67188614-67189652		0.702827956	0.600111036	0.10271692	3	78
chr8:49293202-49293547		0.605436362	0.483534486	0.121901876	3	79
chr6:29521111-29521833	OR2I1P	0.625419509	0.491876913	0.133542596	32	80
chr9:115708029-115708238		0.678785934	0.533593633	0.1451923	1	81
chr1:39044060-39044561		0.294757431	0.163667907	0.131089524	5	82
chr1:217311468-217311773	ESRRG	0.712178438	0.564405623	0.147772814	4	83
chr20:44440947-44441655	UBE2C	0.535132739	0.426932684	0.108200054	16	84
chr1:209848444-209849428	GOS2	0.498941568	0.354511499	0.144430069	8	85
chr12:113592204-113592620		0.866212447	0.687594219	0.178618228	4	86
chr7:948295-949168		0.447678732	0.321163469	0.126515264	2	87
chr11:8009048-8009251		0.372745771	0.271435333	0.101310438	2	88
chr8:10586614-10586886		0.815336007	0.648103403	0.167232604	4	89
chr20:57797224-57797441		0.511784085	0.410488077	0.101296009	2	90
chr8:33456916-33457515	DUSP26	0.559122479	0.440413866	0.118708613	6	91
chr9:32572997-32573227	NDUFB6	0.208203095	0.082953234	0.125249861	1	92
chr16:34407637-34407919	SLC25A1P4	0.563682063	0.67108939	-0.107407326	4	93
chr4:991239-991625		0.74757208	0.600427626	0.147144454	2	94
chr19:23257958-23258518	ZNF730	0.391885958	0.276817162	0.115068796	3	95
chr16:74734153-74734572	MLKL	0.643962714	0.51662921	0.127333505	4	96
chr3:22413493-22414365	ZNF385D	0.491406272	0.377251436	0.114154837	6	97
chr5:33892192-33892403	ADAMTS12	0.616054546	0.491010439	0.125044107	1	98
chr9:33044246-33044612		0.67624309	0.539364841	0.136878248	1	99
chr18:61603401-61604244		0.410038574	0.29214163	0.117896944	5	100
chr10:133849677-133850826		0.595048922	0.493504506	0.101544417	7	101
chr1:21948675-21949263		0.535700428	0.43190539	0.103795038	3	102
chr10:130339527-130339777		0.791894202	0.64068077	0.151213432	5	103
chr9:129677707-129678009		0.255044604	0.151094746	0.103949858	2	104
chr17:38935800-38936093		0.669273019	0.556766742	0.112506277	4	105
chr19:9903582-9903990	ZNF846	0.759669543	0.612808028	0.146861515	3	106
chr16:31453944-31454561	ZNF843	0.356568308	0.258135393	0.098432915	3	107
chr4:570951-571768		0.705690355	0.567089174	0.138601181	7	108
chr4:10462833-10463689		0.722237393	0.573611067	0.148626326	6	109
chr1:11724114-11724885	FBXO6	0.568480374	0.462571519	0.105908855	7	110
chr7:123172733-123173231		0.231416491	0.133844979	0.097571511	1	111
chr16:75033042-75034207	ZNRF1;WDR59	0.313722565	0.216235514	0.09748705	5	112
chr6:33181011-33181256		0.594446013	0.478536327	0.115909687	7	113
chr1:91172103-91172771		0.595957755	0.478856486	0.117101269	5	114
chr16:3493099-3493569	NAA60;ZNF597	0.596386274	0.477308666	0.119077608	6	115
chr6:26689804-26690092		0.699054913	0.563660255	0.135394658	2	116
chr1:98510967-98511710		0.287977907	0.18388667	0.104091238	6	117
chrX:9863528-9863822		0.786832652	0.895718137	-0.108885485	4	118
chr19:18220765-18221445		0.41346649	0.304727865	0.108738625	3	119
chr1:10057122-10058108	RBP7	0.602307166	0.49394722	0.108359946	8	120
chr1:20692583-20693534		0.647503555	0.517964114	0.129539441	5	121
chr16:68678687-68680149		0.739232515	0.600230374	0.139002141	5	122
chr10:94831513-94832312	CYP26A1	0.739326087	0.5994298	0.139896287	3	123
chr6:170190112-170190712	LINC00574	0.327439316	0.209118703	0.118320613	6	124
chr9:130980901-130981317		0.608560306	0.48808132	0.120478986	2	125
chr7:1084388-1084595	GPR146	0.294098849	0.172702686	0.121396163	2	126
chr14:100259161-100259542		0.88963529	0.724201779	0.165433512	4	127
chr16:88449290-88450382		0.59311526	0.482626526	0.110488734	5	128
chr2:5813483-5813710		0.634094976	0.513003776	0.121091201	2	129
chr9:138606404-138606934		0.535490573	0.402762551	0.132728022	2	130
chr13:21900426-21900637		0.85937044	0.700211919	0.159158521	3	131
chr12:113914441-113914657		0.812385904	0.631939178	0.180446726	3	132
chr17:46673533-46674181		0.615240833	0.498395439	0.116845394	3	133
chr7:121943868-121944538	FEZF1-AS1	0.357081876	0.25918423	0.097897645	5	134
chr19:59010485-59011011		0.541704055	0.440876437	0.100827618	4	135
chr7:5526390-5526693		0.770608369	0.624668705	0.145939664	1	136
chr5:43000344-43000791		0.820775416	0.667799179	0.152976237	4	137
chr8:97657175-97657943	CPQ	0.352082693	0.213228514	0.138854179	12	138
chr8:50822271-50822860	SNTG1	0.870178682	0.708070855	0.162107827	4	139
chr15:41952536-41953222		0.563272821	0.458468521	0.1048043	3	140
chr19:53360202-53360460	ZNF28;ZNF468	0.520075242	0.421327604	0.098747638	1	141
chr11:63438302-63439314	ATL3	0.724720946	0.589658898	0.135062048	13	142
chr14:25518425-25519612	STXBP6	0.435493018	0.332694574	0.102798444	3	143

chr5:157098264-157099041	C5orf52;SOX30	0.463018565	0.322368132	0.140650433	8	144
chr19:58545116-58545897	ZSCAN1	0.808435379	0.680400552	0.128034827	10	145
chr1:54965024-54965391		0.365940134	0.271343909	0.094596225	3	146
chr19:16528759-16529029		0.71841881	0.61926961	0.0991492	3	147
chr5:75377899-75378189	SV2C	0.603093855	0.498943581	0.104150274	4	148
chr6:26197071-26197537		0.525680597	0.422325927	0.103354669	4	149
chr17:33814235-33814947		0.767358499	0.616700369	0.150658131	6	150
chr2:176950596-176950846		0.720838088	0.59743971	0.123398378	3	151
chr16:81437205-81437542		0.107874852	0.226857671	-0.118982819	2	152
chr5:50265086-50265737		0.759965475	0.618424929	0.141540546	4	153
chr13:31019861-31020137		0.42661866	0.319447776	0.107170884	2	154
chr7:41745179-41745462		0.658434618	0.537794362	0.120640256	3	155
chr16:1463763-1464716	UNKL	0.389296499	0.289329284	0.099967214	3	156
chr2:26396103-26397204	GAREML	0.631144573	0.532084978	0.099059595	4	157
chr16:49309124-49309353		0.82186964	0.674286275	0.147583365	2	158
chr19:54024646-54024923	ZNF331	0.494821696	0.401369479	0.093452217	4	159
chr2:228582486-228582821	SLC19A3	0.671148433	0.557058388	0.114090045	8	160
chr21:42218490-42219222	DSCAM	0.603897287	0.496812783	0.107084503	8	161
chr15:45480702-45480922		0.623432965	0.517804165	0.1056288	2	162
chr4:155254131-155254603		0.896700984	0.740879097	0.155821887	4	163
chr20:34204988-34205269		0.608412736	0.50469054	0.103722196	4	164
chr5:139076543-139077179		0.324271483	0.20930927	0.114962213	5	165
chr9:129088647-129088994	MVB12B	0.740173982	0.606853911	0.133320071	1	166
chr19:1795923-1797001		0.715819516	0.622809563	0.093009952	4	167
chr14:103557607-103558235		0.446431761	0.353618747	0.092813014	4	168
chr1:87797369-87797884		0.394097579	0.301304483	0.092793096	4	169
chr18:43355319-43355698		0.67559331	0.553595178	0.121998132	3	170
chr19:3671903-3672121		0.675925895	0.554009791	0.121916104	2	171
chr12:54387826-54388732	HOXC9	0.697779773	0.571604935	0.126174838	5	172
chr12:54408427-54408713		0.866775081	0.713599725	0.153175356	2	173
chr5:50683286-50683615		0.779110346	0.639402842	0.139707504	4	174
chr8:142528186-142529029		0.638528481	0.517394148	0.121134333	3	175
chr18:77724353-77724836	HSBP1L1	0.414913268	0.3184867	0.096426568	5	176
chrX:102884437-102884677		0.648342267	0.527310356	0.121031912	2	177
chr2:200524002-200524204	SEPHS1P6	0.578571329	0.482530214	0.096041115	3	178
chr7:155325812-155326357	CNPY1	0.695700311	0.57522122	0.120479091	4	179
chr7:102920310-102921514	DPY19L2P2	0.5546664	0.457804239	0.096862161	13	180
chr17:1808573-1808773		0.830428585	0.68904125	0.141387335	3	181
chr6:43276420-43276659	CRIP3	0.574102563	0.472206634	0.101895929	6	182
chr2:230135709-230136004	PID1	0.305769338	0.205181721	0.100587617	4	183
chr3:50275394-50275645		0.659729352	0.546299887	0.113429465	4	184
chr5:80689819-80690228	ACOT12	0.893815866	0.739881003	0.153934863	3	185
chr10:100227439-100227832		0.691509679	0.577138324	0.114371355	3	186
chr19:53496733-53497028		0.450618487	0.358048566	0.092569922	5	187
chr22:19701515-19701891	SEPT5	0.802531276	0.673868973	0.128662303	5	188
chr10:94459255-94459591		0.30132538	0.186535068	0.114790312	4	189
chr17:30263762-30264515	SUZ12	0.159969879	0.064280853	0.095689027	6	190
chr3:40518518-40518848	ZNF619	0.266859094	0.119338042	0.147521052	5	191
chr4:16084196-16085735	PROM1	0.682786106	0.580925575	0.101860531	11	192
chr11:123065427-123066184	CLMP	0.743900502	0.620883381	0.123017121	4	193
chr8:65492936-65494452	BHLHE22	0.25135984	0.12539966	0.12596018	4	194
chr22:43165948-43166287		0.672628067	0.523643649	0.148984417	2	195
chr19:53696030-53696650	ZNF665	0.831151852	0.696882685	0.134269167	6	196
chr1:18436552-18437673		0.409019999	0.312861332	0.096158668	5	197
chr16:29477390-29478502		0.72647444	0.602242695	0.124231745	1	198
chr6:85482570-85484718		0.599866466	0.507395214	0.092471252	13	199
chr17:7197432-7198417	YBX2	0.7565119	0.648461782	0.108050117	12	200
chr8:145637966-145639182		0.72266754	0.632324581	0.090342959	6	201
chr16:31548738-31549184		0.851440454	0.714257507	0.137182947	3	202
chr7:27227521-27229043		0.677965603	0.564281499	0.113684103	4	203
chr20:58152281-58152847	PHACTR3	0.83297969	0.698186991	0.134792698	3	204
chr3:46607347-46607806		0.810864787	0.681186651	0.129678136	3	205
chr1:161008378-161008830	TSTD1	0.742973605	0.618707359	0.124266247	8	206
chr18:73627918-73628658		0.758353059	0.619777202	0.138575857	3	207
chr15:72476677-72476969		0.757897957	0.641050897	0.116847061	4	208
chr12:54071054-54071265	ATP5G2	0.482087843	0.39240749	0.089680352	5	209
chr22:19156978-19157413		0.759057175	0.62493411	0.134123064	3	210
chr10:112431836-112432426		0.361349464	0.180618597	0.180730867	7	211
chr14:38678246-38680937		0.600438833	0.489484713	0.11095412	10	212
chr22:43505952-43506167	BIK	0.795747866	0.673332702	0.122415164	3	213
chr22:21311337-21312201		0.789945792	0.662834291	0.127111501	4	214
chr18:13801000-13801223		0.20607336	0.116829764	0.089243596	3	215
chr17:37764093-37764304		0.589902036	0.496553091	0.093348946	7	216

chr9:135039674-135039978		0.856813032	0.714853453	0.141959579	2	217
chr6:26199198-26199466	HIST1H2BF;HIST1H2AD;HIST1H3D	0.632398494	0.526381703	0.106016791	2	218
chr6:13873766-13874262		0.577867869	0.486168552	0.091699317	4	219
chr5:54528096-54528404		0.73023903	0.620202114	0.110036916	4	220
chr10:26504384-26507434	GAD2	0.641064887	0.549487525	0.091577362	18	221
chr12:133195923-133196556		0.734979371	0.627156013	0.107823359	3	222
chr9:122131087-122132214	DBC1	0.730249007	0.617173783	0.113075223	6	223
chr2:105760110-105761018		0.470517848	0.367071299	0.103446549	4	224
chr12:115130009-115130242		0.815762358	0.683311299	0.132451059	1	225
chr6:33396051-33396296		0.713263052	0.600226913	0.113036139	9	226
chr20:30135077-30135292		0.723711675	0.607303077	0.116408598	7	227
chr10:13933483-13934184		0.502073707	0.414891198	0.087182509	3	228
chr3:121902743-121903645	CASR	0.868594675	0.730333504	0.138261171	4	229
chr17:7108305-7108654		0.564830416	0.472010028	0.092820388	3	230
chr5:141293785-141294049		0.711986104	0.597917218	0.114068886	4	231
chrX:13587649-13588221	EGFL6	0.850111391	0.718591851	0.131519539	4	232
chr9:94903573-94903827	LINC00475	0.812218186	0.682836241	0.129381945	1	233
chr20:1783825-1784552		0.677506835	0.568781457	0.108725379	4	234
chr3:184321784-184322277		0.831934237	0.700421926	0.131512312	3	235
chr10:91294948-91295925		0.602080103	0.515305487	0.086774616	12	236
chr2:26785115-26785687	C2orf70	0.772731363	0.649884828	0.122846535	10	237
chr1:109656096-109656611	KIAA1324;C1orf194	0.598168611	0.502215712	0.095952899	5	238
chr11:32008803-32009044		0.778347067	0.657838352	0.120508715	3	239
chr9:123690772-123691675	TRAF1	0.646856748	0.559576445	0.087280303	3	240
chr18:2905951-2907348		0.808466657	0.690691766	0.11777489	6	241
chr1:16543684-16544307		0.460368833	0.374036708	0.086332125	5	242
chr16:2907575-2907836	PRSS22	0.808822534	0.686379331	0.122443203	2	243
chr8:72917306-72917641		0.859179683	0.723777031	0.135402652	3	244
chr9:138156711-138156983		0.701888519	0.856081342	-0.154192823	1	245
chr9:141044509-141045113	TUBBP5	0.570007868	0.483770586	0.086237282	2	246
chr10:135170646-135171954	FUOM	0.68795095	0.601823736	0.086127214	11	247
chr22:50468455-50469353		0.284404513	0.198418065	0.085986448	3	248
chr12:57635241-57635572	NDUFA4L2	0.893732127	0.755384687	0.138347439	2	249
chr19:36164078-36164286	UPK1A-AS1	0.901972441	0.760498322	0.14147412	1	250
chr10:23487758-23488543		0.566174402	0.480364143	0.085810258	4	251
chr16:1120154-1120441		0.179889619	0.265628765	-0.085739146	1	252
chr6:105388191-105389545	LINC00577	0.785625872	0.689926802	0.095699069	7	253
chr13:88329395-88329885		0.650826727	0.534953334	0.115873392	3	254
chr14:21537083-21537355	ARHGEF40	0.696494324	0.587535691	0.108958633	1	255
chr18:59992070-59993556	TNFRSF11A	0.368175131	0.282547636	0.085627495	9	256
chr16:3355021-3356012	ZNF75A;TIGD7	0.712434003	0.604294825	0.108139178	7	257
chr7:8301032-8302252	ICA1	0.357181513	0.266035559	0.091145954	10	258
chr13:28363744-28364269		0.878771563	0.743014469	0.135757094	3	259
chr2:149645537-149645834		0.613823281	0.516406449	0.097416832	3	260
chr17:16310307-16310914		0.58550408	0.500019018	0.085485062	3	261
chr11:111385338-111385712	C11orf88	0.663155557	0.557890994	0.105264562	6	262
chr16:68563760-68564281	ZFP90	0.552038523	0.466557098	0.085481425	6	263
chr7:103086345-103086840	SLC26A5	0.478467674	0.393076885	0.085390789	5	264
chr17:56326686-56327262		0.694373566	0.600232032	0.094141534	3	265
chr21:46351329-46352911	ITGB2	0.709169364	0.602545769	0.106623595	6	266
chr2:219757459-219758001		0.361278125	0.276112024	0.085166101	4	267
chr20:4202149-4202765		0.60962924	0.516537857	0.093091383	3	268
chr5:134914179-134914981	CXCL14	0.838011577	0.711009932	0.127001645	4	269
chr2:119599060-119599299		0.879647177	0.733794304	0.145852873	1	270
chr1:116710838-116711260		0.739216925	0.626933376	0.11228355	3	271
chr19:45954066-45954504		0.402179384	0.297364642	0.104814742	2	272
chr2:97173852-97174485	NEURL3	0.737333559	0.630403236	0.106932354	10	273
chr14:60336952-60337461	RTN1	0.593864571	0.480930244	0.112934327	3	274
chr3:125075916-125076481		0.546598514	0.439430073	0.107168441	4	275
chr10:31422710-31423316		0.518271273	0.398340639	0.119930634	3	276
chr1:217262999-217263214		0.792983634	0.671683809	0.121299825	1	277
chr9:115652447-115653448	SLC46A2	0.869214062	0.739607208	0.129606855	2	278
chr13:113540351-113540558		0.603915751	0.461294119	0.142621632	4	279
chr12:69327022-69327532		0.711857055	0.605493183	0.106363872	4	280
chr15:57025348-57026150		0.654186475	0.570009015	0.08417746	6	281
chr5:114937614-114938149		0.620454874	0.527405578	0.093049296	6	282
chr4:75719102-75719740	BTC	0.655038651	0.52329564	0.131743012	4	283
chr15:75248278-75249922	SCAMP5;RPP25	0.663781269	0.577867303	0.085913966	11	284
chr13:29105412-29105676		0.758551715	0.645155309	0.113396406	3	285
chr11:64038965-64039306		0.476993547	0.364817657	0.11217589	4	286
chr11:18742691-18743513		0.593877007	0.50725149	0.086625517	3	287
chr2:242498014-242499274	BOK;BOK-AS1	0.637534819	0.542803678	0.094731141	7	288
chr4:1049653-1049923		0.838824155	0.724313743	0.114510412	3	289

chr19:52674328-52674855	ZNF836	0.227424804	0.144091865	0.083332939	3	290
chr17:46669435-46669811		0.803691333	0.666862917	0.136828416	8	291
chr6:168841439-168841699	SMOC2	0.813947368	0.691416397	0.12253097	4	292
chr16:3639093-3639306		0.789256998	0.670347658	0.11890934	1	293
chr9:123605044-123605585	PSMD5	0.865542479	0.732885531	0.132656948	4	294
chr14:106025534-106026386		0.700229949	0.594820899	0.10540905	1	295
chr12:120031495-120033212	TMEM233	0.54575779	0.44888556	0.096872229	9	296
chr19:46181221-46181455		0.862714402	0.732688471	0.130025931	4	297
chr22:29467292-29467817	KREMEN1	0.724908236	0.620091308	0.104816928	2	298
chr5:114514717-114516220	TRIM36	0.488066498	0.402489732	0.085576766	10	299
chr14:24020003-24020251		0.428334079	0.32065738	0.107676699	3	300
chr9:139580970-139582615	AGPAT2	0.59748068	0.514678838	0.082801842	4	301
chr19:11959578-11960064	ZNF439	0.781482306	0.63555318	0.145929126	2	302
chr17:42835777-42836242	ADAM11	0.768516656	0.66554722	0.102969436	3	303
chrY:4870745-4871225		0.543484464	0.384185967	0.159298497	1	304
chr3:62354292-62355012	PTPRG-AS1	0.853053721	0.733320068	0.119733653	4	305
chr7:77669671-77670057		0.811595769	0.694568445	0.117027324	3	306
chr10:11784408-11784937	ECHDC3	0.818181777	0.701961276	0.1162205	3	307
chr11:62476771-62477481	BSCL2	0.596752439	0.507344136	0.089408303	9	308
chr19:58554355-58554587	LETM1P2	0.903272305	0.775199322	0.128072983	3	309
chr16:34430776-34431004		0.580299739	0.666839431	-0.086539692	3	310
chr13:95359642-95359874		0.72504249	0.618749851	0.106292639	2	311
chr2:127783082-127783311		0.622450691	0.518800981	0.103649711	3	312
chrX:101906002-101907017	GPRASP1	0.658612515	0.563297699	0.095314817	10	313
chr6:168079012-168079213		0.751219737	0.639175349	0.112044388	3	314
chr3:156008992-156009320		0.585607852	0.49080211	0.094805742	3	315
chr20:49548195-49548525	ADNP	0.75616286	0.645114806	0.111048054	3	316
chr3:13696628-13697127		0.629209755	0.535211946	0.093997808	2	317
chr10:81892223-81892640		0.65099996	0.556355773	0.094644186	3	318
chr2:88469692-88470386	THNSL2	0.651899758	0.555954835	0.095944923	4	319
chr12:75601082-75601752		0.738726622	0.585882982	0.15284364	3	320
chr19:47139338-47139547	GNG8	0.856573868	0.733230722	0.123343146	3	321
chr9:39078690-39079006		0.813739754	0.694586287	0.119153468	1	322
chr12:54089212-54089413		0.837175048	0.714704895	0.122470153	1	323
chr7:38350921-38351331		0.644570025	0.494141896	0.150428129	5	324
chr13:36728963-36729267		0.806910545	0.695009561	0.111900984	5	325
chr8:142425441-142425716		0.316795821	0.235334064	0.081461757	3	326
chr11:64993281-64993484		0.647206335	0.55741035	0.089795985	2	327
chr16:90148484-90148793		0.36416179	0.272028456	0.092133334	3	328
chrY:14107138-14107480		0.669797091	0.838528942	-0.168731851	1	329
chr1:159158229-159158498		0.564270615	0.429388811	0.134881804	2	330
chr14:29254366-29255069		0.874133796	0.752445861	0.121687935	5	331
chr16:51189801-51190260		0.114043645	0.233265606	-0.119221961	5	332
chr7:21582444-21583313	DNAH11	0.676406119	0.579528427	0.096877693	8	333
chr6:150246753-150247257		0.753464717	0.660217426	0.093247291	4	334
chr4:188916606-188916876	ZFP42	0.845042466	0.725835335	0.119207131	8	335
chr1:181454975-181455261		0.551744185	0.462403687	0.089340498	4	336
chr13:28534433-28535560		0.669950137	0.571660255	0.098289882	5	337
chr2:43037868-43038564		0.655786708	0.559977133	0.095809576	4	338
chr12:122016171-122017693		0.886376139	0.763245481	0.123130658	5	339
chr3:134369465-134370242	KY	0.744720079	0.636383481	0.108336598	12	340
chr7:75909704-75909906		0.879398859	0.752309545	0.127089314	1	341
chr6:30068493-30068794		0.835473341	0.715332732	0.120140609	6	342
chr7:27283409-27283614		0.862187365	0.73890642	0.123280946	3	343
chr19:8407675-8408338	KANK3	0.607529645	0.521217089	0.086312556	10	344
chr1:32892429-32892835	LRR37A12P	0.653500214	0.559027301	0.094472913	1	345
chr6:50810643-50810994		0.821644786	0.709734359	0.111910427	4	346
chr2:128180295-128181381	MIR4783	0.653932062	0.5592146	0.094717462	6	347
chr20:30618794-30619138		0.815941017	0.71979872	0.096142297	4	348
chr3:129345668-129346521		0.797789668	0.696194825	0.101594842	4	349
chr7:156409024-156409294		0.76946695	0.662513457	0.106953493	3	350
chr20:26188639-26190348		0.695478927	0.609332821	0.086146105	12	351
chr1:22889596-22890096	EPHA8	0.441886284	0.35284253	0.089043754	4	352
chr12:131783094-131784199	RNA5SP376	0.74519859	0.57518604	0.170012549	1	353
chr1:221054555-221054888	HLA-AS1	0.857142603	0.735686309	0.121456294	3	354
chr7:112031476-112032181		0.403743318	0.323617357	0.080125961	2	355
chr3:52279602-52280140	PPM1M	0.690418174	0.5947904	0.095627773	8	356
chr11:32460587-32461004		0.890303631	0.768970859	0.121332772	4	357
chr19:53635626-53636230	ZNF415	0.612848774	0.501561345	0.111287428	6	358
chr3:129323916-129325332	PLXND1	0.556915197	0.477024734	0.079890464	5	359
chr2:207506775-207507422		0.679513581	0.571143159	0.108370421	6	360
chr3:27756213-27756422		0.846169268	0.71639104	0.129778228	3	361
chr17:38599670-38600306	IGFBP4	0.649207026	0.550618289	0.098588737	3	362

chr6:43970074-43970922		0.340434516	0.260931171	0.079503345	4	363
chr9:139872238-139873143	PTGDS	0.839489417	0.725613044	0.113876373	4	364
chr6:50787287-50788091		0.764882223	0.65630322	0.108579004	4	365
chr11:17497464-17498626	ABCC8	0.440577051	0.356146651	0.0844304	12	366
chr6:75911580-75912133		0.72455984	0.62214454	0.1024153	4	367
chr1:166916866-166917215		0.681654527	0.572842326	0.108812202	3	368
chr16:30216739-30217851		0.672482483	0.570366932	0.102115552	1	369
chr19:49931204-49931804		0.585574984	0.492404482	0.093170502	2	370
chr3:139396339-139396882	NMNAT3	0.623721096	0.53803664	0.085684456	4	371
chr14:38060842-38062119		0.763993896	0.659398592	0.104595304	4	372
chr6:26217212-26217521	HIST1H2AE;HIST1H2BG	0.636860194	0.547186289	0.089673905	3	373
chr7:6566067-6566650		0.788932416	0.682710276	0.10622214	3	374
chr15:51633725-51634318	GLDN	0.743359743	0.642007107	0.101352636	4	375
chr14:23821088-23822106	SLC22A17	0.463535844	0.382448804	0.08108704	8	376
chr9:130616620-130616858	ENG	0.820517546	0.705463984	0.115053561	1	377
chr5:140767197-140767695	PCDHGB4	0.550233032	0.46285852	0.087374512	7	378
chr1:151300523-151300724	PI4KB	0.55083478	0.465223852	0.085610928	3	379
chr16:84029457-84029710		0.875734526	0.757923172	0.117811353	4	380
chr1:149871080-149871946		0.622078789	0.528531768	0.093547021	7	381
chr5:178322714-178323538	ZFP2	0.774621141	0.662995063	0.111626079	6	382
chr6:117591534-117592279		0.832995226	0.715939971	0.117055255	4	383
chr20:62947649-62948464		0.212269099	0.095676352	0.116592747	3	384
chr13:30982288-30982827		0.205562009	0.127083196	0.078478813	3	385
chr6:27858167-27858564		0.840942221	0.720796186	0.120146035	3	386
chr15:45408574-45409528		0.857192431	0.743487014	0.113705417	4	387
chr1:45308544-45309159	PTCH2	0.175885166	0.097483234	0.078401932	4	388
chr3:9595186-9595533	LHFPL4	0.563073117	0.481007651	0.082065466	2	389
chr12:106975196-106975714	RFX4	0.602048704	0.51533251	0.086716194	3	390
chr14:85997469-85998637		0.482749551	0.389664446	0.093085106	6	391
chr14:78432386-78432804		0.757266187	0.646575175	0.110691012	3	392
chr11:789872-790133	CEND1	0.073549491	0.151849627	-0.078300136	2	393
chr2:110872946-110873587		0.700983909	0.590166714	0.110817195	4	394
chr1:211589678-211590293	SNX25P1	0.612073584	0.533816902	0.078256681	3	395
chr9:23822413-23822667		0.938541054	0.808321018	0.130220036	1	396
chr12:7046238-7047257		0.441987669	0.363814595	0.078173074	4	397
chr2:173099483-173100098		0.604708625	0.508617298	0.096091326	4	398
chr19:39894559-39894768		0.584663861	0.501557598	0.083106263	4	399
chr17:21279507-21281574	KCNJ12	0.767328225	0.666488852	0.100839373	16	400
chr7:852961-853230		0.442475849	0.342813482	0.099662367	3	401
chr18:29303961-29304254	LRRC37A7P	0.784200138	0.672413456	0.111786682	2	402
chr8:1094751-1094967		0.821261277	0.709307351	0.111953926	3	403
chr15:51387533-51387755		0.887243568	0.765093306	0.122150263	4	404
chr2:220377744-220377946	ASIC4	0.753040939	0.650153509	0.10288743	3	405
chr19:10542663-10543120		0.797329665	0.688287152	0.109042512	2	406
chr1:205537752-205538443	MFSD4	0.614111079	0.536497451	0.077613628	7	407
chr12:113917395-113918107		0.645677319	0.541867026	0.103810293	6	408
chr9:115913082-115913807	SLC31A2	0.494988491	0.306273433	0.188715058	3	409
chr4:3485964-3486381		0.722346594	0.626568646	0.095777948	4	410
chr2:172951290-172952159		0.883075343	0.76258133	0.120494013	5	411
chr4:174448334-174448845	HAND2-AS1	0.909816654	0.78850854	0.121308114	4	412
chr7:993402-994574	ADAP1	0.364066801	0.283578869	0.080487932	2	413
chr7:131242694-131243006	PODXL	0.7178563	0.620353573	0.097502727	3	414
chr9:503937-505722		0.646648005	0.535936646	0.110711359	5	415
chr19:2462065-2462442		0.882458658	0.762206601	0.120252057	2	416
chr2:119602617-119604486		0.749005197	0.647900885	0.101104311	13	417
chr19:49340489-49340774	HSD17B14	0.703103142	0.60859633	0.094506811	4	418
chr16:31008833-31009036		0.786251236	0.678530291	0.107720945	2	419
chr3:160822495-160823260	NMD3;B3GALNT1	0.70533334	0.605168949	0.100164391	8	420
chr4:185939223-185942747	HELT	0.654833452	0.561926001	0.092907452	28	421
chr20:21000766-21001280		0.902833992	0.787097872	0.11573612	3	422
chr11:124628368-124629590		0.857492023	0.747923346	0.109568678	3	423
chr18:76069223-76069699		0.59255707	0.710695565	-0.118138495	4	424
chr15:83001661-83002634		0.302843779	0.226212743	0.076631035	1	425
chr15:96904723-96905050		0.896458556	0.77643429	0.120024266	3	426
chr6:27833121-27833406	HIST1H2AL;HIST1H2BPS2	0.57725782	0.482647606	0.094610214	4	427
chr3:170303533-170303768	SLC7A14	0.608322381	0.525773042	0.082549338	3	428
chr6:38682950-38683265	DNAH8	0.873111752	0.756698952	0.1164128	3	429
chr17:77903888-77904397		0.542293621	0.465916528	0.076377092	5	430
chr2:132182328-132183101	GNAQP1	0.772669731	0.659035557	0.113634174	3	431
chr3:126108020-126108488		0.312541669	0.236243581	0.076298088	3	432
chr16:49314038-49316543	CBLN1	0.618186304	0.516737512	0.101448792	10	433
chr1:87617693-87617986		0.830402604	0.716772188	0.113630416	4	434
chrX:136134511-136135269		0.792743252	0.686479011	0.106264242	3	435

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chr1:50882434-50882660		0.919787034	0.795873746	0.123913288	1	437
chr11:119612092-119612476		0.371172314	0.273866116	0.097306198	3	438
chr16:67208068-67208678		0.398275108	0.322261287	0.076013821	3	439
chr16:56650982-56651384	MT1L	0.78231176	0.651850616	0.130461145	4	440
chr20:44685772-44687610		0.821609114	0.711453594	0.11015552	4	441
chr14:89493136-89494382		0.710711477	0.632594569	0.078116908	5	442
chr11:126873092-126873809	KIRREL3-AS3;KIRREL3	0.300639377	0.224868294	0.075771083	6	443
chr10:16561605-16563822	C1QL3	0.654757659	0.578504574	0.076253085	8	444
chr10:135203102-135203316		0.851155789	0.738412247	0.112743542	2	445
chr12:7023262-7024089	ENO2	0.478276232	0.402653545	0.075622687	11	446
chr2:177042752-177043444		0.641660539	0.553053362	0.088607177	5	447
chr7:976648-976894		0.735560329	0.849041004	-0.113480675	1	448
chr4:42152767-42154984	BEND4	0.547984959	0.417005617	0.130979342	12	449
chrX:36975506-36976349		0.630525776	0.54710624	0.083419536	4	450
chr10:135039938-135040196		0.874322165	0.758629456	0.115692708	3	451
chr3:50230431-50232344		0.732842335	0.647868615	0.08497372	5	452
chr9:14346266-14348149		0.874381499	0.742629794	0.131751705	3	453
chr2:175204844-175207553		0.731188812	0.627326481	0.103862331	13	454
chr15:98971491-98971876		0.162551762	0.087323407	0.075228355	3	455
chr17:58212843-58213193		0.649583193	0.562646261	0.086936932	5	456
chr5:172068287-172069174	NEURL1B	0.815896258	0.714900267	0.100995991	3	457
chr8:124172801-124173541		0.892191803	0.774557789	0.117634015	5	458
chr1:9242168-9243827		0.781596229	0.685546422	0.096049807	7	459
chr6:106958233-106958718	AIM1	0.798678302	0.694013287	0.104665016	5	460
chr6:28457569-28457926		0.894088854	0.756489076	0.137599779	2	461
chr11:111383169-111383892	MIR34B;BTG4;MIR34C	0.650437116	0.543408314	0.107028802	8	462
chr12:65514879-65515863	WIF1	0.700438927	0.619224792	0.081214135	7	463
chr5:95768875-95769080		0.593141311	0.502538914	0.090602397	7	464
chr10:43361553-43362350		0.696799923	0.609811215	0.086988707	5	465
chr16:85203158-85203941		0.761411793	0.660427595	0.100984198	2	466
chr18:77280145-77280414		0.925305304	0.803567685	0.121737619	3	467
chr12:52701963-52702560		0.615304161	0.504341501	0.110962659	5	468
chr12:12849068-12849270	GPR19	0.579607005	0.504693255	0.074913749	7	469
chr3:147142182-147142391		0.904820191	0.785469508	0.119350683	3	470
chr4:169799087-169799625		0.873097951	0.743466465	0.129631486	3	471
chr1:18971730-18972097		0.897806561	0.780065351	0.11774121	3	472
chr20:61339859-61341220	NTSR1	0.645822465	0.570379098	0.075443367	9	473
chr9:140040092-140040698		0.805777212	0.699393666	0.106383546	1	474
chr8:65281904-65283043		0.71542011	0.591577592	0.123842518	5	475
chr20:57581903-57582595	CTSZ	0.72173558	0.628749246	0.092986334	9	476
chr14:89017661-89017972		0.666607879	0.578794445	0.087813435	2	477
chr17:35289389-35289623		0.723258974	0.6289898	0.094269174	2	478
chr7:129142172-129143038	SMKR1	0.530313055	0.453210692	0.077102363	4	479
chr2:233925092-233925318	INPP5D	0.835791562	0.715852138	0.119939424	2	480
chr2:66652692-66654218		0.59660553	0.489329213	0.107276317	6	481
chr10:118927022-118928132	MIR3663	0.690615198	0.604906384	0.085708814	5	482
chr20:57463653-57467739		0.613647028	0.524434376	0.089212653	54	483
chrX:152909014-152909214		0.508496088	0.434281358	0.07421473	3	484
chr19:1766145-1766364		0.675019917	0.572525102	0.102494816	2	485
chr15:75470912-75471212		0.72355907	0.624988409	0.098570661	4	486
chr11:22454301-22454518		0.879734971	0.767391422	0.112343549	3	487
chr1:75595814-75596162		0.868569963	0.738878972	0.129690992	3	488
chr12:50297581-50297988	FAIM2	0.814068042	0.707348146	0.106719896	6	489
chr2:8723856-8724093		0.690193114	0.589023586	0.101169528	3	490
chr3:196255496-196256013		0.906197033	0.788385903	0.11781113	4	491
chr8:2480426-2480920		0.604714002	0.530778172	0.073935829	3	492
chr5:172386894-172387102		0.523979503	0.450134768	0.073844736	3	493
chr19:8674333-8674764		0.320282825	0.404336011	-0.084053186	2	494
chr15:90293222-90294733	MRPL15P1;MESP1	0.605910302	0.526627441	0.079282861	9	495
chr7:97361133-97363018	TAC1	0.650259168	0.487890135	0.162369033	10	496
chrX:53713069-53713794	HUWE1	0.45369692	0.374626156	0.079070763	7	497
chr4:379900-380399		0.719830013	0.622317142	0.097512871	4	498
chr1:43832815-43833073		0.846196165	0.738682038	0.107514126	3	499
chr7:27231806-27233097		0.640724984	0.557625015	0.083099969	7	500

**Supplementary Table S13. Statistical overrepresentation test of top-ranked, differentially methylated promoters, gene bodies and CGIs.**  
 This table is related to Fig. 3. The top-ranked, differentially methylated promoters, gene bodies and CGIs that showed a methylation decrease after *TET1* overexpression or a methylation increase after *TET* triple knockdown were analyzed using the PANTHER Overrepresentation Test with default settings.

Analysis Type: PANTHER Overrepresentation Test (release 20150430)  
 Annotation Version and Release Date: PANTHER version 10.0 Released 2015-05-15  
 Bonferroni correction for multiple testing  
 Annotation Data Set: PANTHER GO-Slim Biological Process

Reference List:  
 Homo sapiens (all genes in database)  
 Mapped IDs:  
 Unmapped IDs:

Reference list  
 20814  
 0

Displaying only results with P<0.05

Homo sapiens (REF)	<i>TET1</i> overexpression												<i>TET</i> triple knockdown												
	Top-ranked 416 hypomethylated promoters (297 mapped IDs)				Top-ranked 416 hypomethylated gene bodies (306 mapped IDs)				Top-ranked 375 hypomethylated CGIs (159 promoter associations, 137 mapped IDs)				Top-ranked 424 hypermethylated promoters (341 mapped IDs)				Top-ranked 381 hypermethylated gene bodies (281 mapped IDs)				Top-ranked 486 hypermethylated CGIs (213 promoter associations, 182 mapped IDs)				
#	expected	Fold Enrichment	+/-	P value	#	expected	Fold Enrichment	+/-	P value	#	expected	Fold Enrichment	+/-	P value	#	expected	Fold Enrichment	+/-	P value	#	expected	Fold Enrichment	+/-	P value	
<b>PANTHER GO-Slim Biological Process</b>																									
sensory perception of smell	30				5	.44	> 5		+ 2.08E-02																
sensory perception of chemical stimulus	133	9	1.90	4.74	+ 3.32E-02	16	1.96	> 5	+ 5.66E-08																
sensory perception	455				26	6.69	3.89		+ 1.41E-06																
neurological system process	1064				37	15.64	2.37		+ 3.05E-04																
system process	1296				41	19.05	2.15		+ 8.15E-04																
response to stimulus	2170				59	31.90	1.85		+ 6.22E-04																
immune system process	1391									41	22.79	1.80		+ 4.86E-02											
regulation of biological process	2846														69	38.42	1.80		+ 1.68E-04						
biological regulation	3918														80	52.90	1.51		+ 1.24E-02						
regulation of transcription from RNA polymerase II promoter	1319														38	17.81	2.13		+ 2.15E-03						
system development	1271														34	17.16	1.98		+ 2.77E-02						
regulation of nucleobase-containing compound metabolic process	1700														43	22.95	1.87		+ 1.19E-02						

**Supplementary Table S14. List of promoters consistently identified among the 500 top-ranked, differentially methylated promoters after induced overexpression of *TET1* and *TET* triple knockdown.**

This table is related to Fig. 3 comprising the overlap between the *TET1* overexpression and *TET* triple knockdown experiments.

gene_symbol	beta.TET1+Dox	beta.TET1-Dox	TET1_difference	TET1_num.sites	beta.GFP_siRNA	beta.GFP_scramble	knockdown_difference	knockdown_num.sites
ACAA1	0.33402133	0.402702498	-0.068681167	13	0.380117371	0.31063283	0.069484541	13
ARMCX6	0.204246765	0.282291302	-0.078044537	8	0.243886855	0.312651082	-0.068764228	8
C1QTNF4	0.654737713	0.720644388	-0.065906675	5	0.746164884	0.657096254	0.08906863	5
C4orf50	0.811258733	0.700638669	0.110620065	1	0.719515635	0.833124271	-0.113608635	1
CIRH1A	0.546355042	0.644709125	-0.098354082	1	0.654101875	0.5129905	0.141111375	1
CLCF1	0.49492381	0.54273789	-0.04781408	13	0.568530164	0.476549692	0.091980471	13
COX20P2	0.142533866	0.218190525	-0.075656658	2	0.253266074	0.149507768	0.103758306	2
COX6B2	0.381588895	0.450391158	-0.068802263	13	0.462568207	0.377686146	0.084882061	13
CPQ	0.321350615	0.361370538	-0.040019923	14	0.413416776	0.291645524	0.121771252	14
CPT1A	0.556098075	0.693028314	-0.136930239	3	0.699526938	0.499549048	0.19997789	3
CRK	0.67395123	0.598618494	0.075332736	4	0.602656511	0.675773953	-0.073117443	4
CYP11B1	0.491275045	0.549272259	-0.057997214	6	0.516954597	0.583917842	-0.066963245	6
CYP4A22	0.467276449	0.542546126	-0.075269677	2	0.48491709	0.576056714	-0.091139624	2
CYP4F22	0.511350166	0.600366895	-0.089016729	7	0.61692204	0.533794616	0.083127424	7
DOK7	0.471055401	0.548305757	-0.077250356	11	0.585459882	0.448477239	0.136982643	11
DUSP26	0.528877195	0.595269906	-0.066392711	9	0.590337147	0.500434818	0.089902329	9
EEF1G	0.455468399	0.525494553	-0.070026154	5	0.550547373	0.450469717	0.100077656	5
FAM122A	0.235431315	0.274791109	-0.039359794	5	0.298608774	0.225558804	0.073049971	5
FAM19A1	0.368223896	0.412008588	-0.043784693	3	0.337819775	0.53697208	-0.199152305	3
GGCT	0.468707162	0.558132768	-0.089425606	1	0.618579549	0.451710697	0.166868851	1
GPR62	0.724576193	0.822070389	-0.097494196	4	0.824791469	0.706994498	0.117796971	4
GXYLT2	0.282071756	0.324148456	-0.0420767	2	0.377215558	0.261845935	0.115369622	2
HNRNPDP2	0.56156639	0.756302233	-0.194735843	1	0.826573871	0.584769795	0.241804076	1
IFI44	0.190210932	0.409157366	-0.218946433	1	0.445539999	0.320774672	0.124765328	1
LINC00152	0.090986619	0.149973451	-0.058986831	1	0.230185838	0.091484864	0.138700974	1
LRAT	0.538414712	0.599761928	-0.061347216	8	0.619540329	0.49856906	0.120971269	8
MIR3663	0.7116284	0.636355755	0.075272645	5	0.690615198	0.604906384	0.085708814	5
MIR509-2	0.128498339	0.25125834	-0.122760001	1	0.343185798	0.230476963	0.112708836	1
MYD88	0.367254643	0.453860153	-0.086605511	14	0.42813918	0.340470394	0.087668786	14
NAA60	0.569726458	0.628856609	-0.059130151	12	0.645648898	0.545434584	0.100214314	12
NQO1	0.117283628	0.157101141	-0.039817513	8	0.180235294	0.114544544	0.065690751	8
OR2L3	0.30883153	0.47607148	-0.16723995	1	0.344214061	0.574729546	-0.230515485	1
OXCT1	0.437022727	0.50771127	-0.070688543	11	0.55939244	0.409200929	0.150191511	11
RARRES2P9	0.376391238	0.29120189	0.085189348	2	0.265107525	0.398350781	-0.133243257	2
RN7SL718P	0.614410101	0.710849891	-0.09643979	1	0.705530994	0.596119556	0.109411438	1
RN7SL805P	0.39323438	0.476962616	-0.083728237	1	0.511092418	0.393292289	0.117800129	1
RNU6-835P	0.434682969	0.636897619	-0.20221465	1	0.670996225	0.452934671	0.218061554	1
RNU6-871P	0.291973039	0.345505494	-0.053532455	1	0.291540538	0.382261083	-0.090720545	1
SCNM1	0.596380946	0.668133561	-0.071752616	6	0.67362423	0.59779299	0.07583124	6
SEMA4C	0.366808358	0.318532672	0.048275686	3	0.369894224	0.281387118	0.088507106	3
SLC2A3	0.591014614	0.662066054	-0.07105144	7	0.672101794	0.576715748	0.095386046	7
SMARCD3	0.411091042	0.31552861	0.095562432	1	0.438274867	0.273492898	0.164781969	1
SPANXA1	0.377170654	0.604684169	-0.227513514	1	0.575277151	0.393644772	0.181632379	1
SUMO2P6	0.644989824	0.743875575	-0.098885751	1	0.755019311	0.627628364	0.127390947	1
SYTL1	0.401682955	0.454068452	-0.052385497	8	0.454499494	0.389241763	0.065257732	8
TGFBR3L	0.45352614	0.503323177	-0.049797037	4	0.526641361	0.428056909	0.098584452	4
TNFAIP8L2	0.596380946	0.668133561	-0.071752616	6	0.67362423	0.59779299	0.07583124	6
TRAV8-5	0.27917838	0.327653481	-0.048475101	2	0.296269163	0.445392079	-0.149122916	2
UBQLNL	0.257735609	0.402688267	-0.144952658	3	0.339269032	0.499558035	-0.160289004	3
UGT2B10	0.216353361	0.373730151	-0.15737679	1	0.262270701	0.489231258	-0.226960557	1
WDR86	0.41709132	0.46556177	-0.048470451	5	0.481977442	0.39214589	0.089831553	5
ZNF597	0.543079797	0.609847164	-0.066767366	12	0.626807016	0.515406588	0.111400428	12
ZNF619	0.328104223	0.370794843	-0.042690621	8	0.430482083	0.322281102	0.108200981	8



**Supplementary Table S15. List of gene bodies consistently identified among the 500 top-ranked, differentially methylated gene bodies after induced overexpression of *TET1* and *TET* triple knockdown.**

This table is related to Fig. 3 comprising the overlap between the *TET1* overexpression and *TET* triple knockdown experiments.

gene_symbol	beta.TET1+Dox	beta.TET1-Dox	TET1_difference	TET1_num.sites	beta.GFP_siRNA	beta.GFP_scramble	knockdown_difference	knockdown_num.sites
ABCA10	0.535260991	0.671412314	-0.136151323	2	0.705940899	0.521642589	0.18429831	2
ANKRD18EP	0.211236362	0.315042136	-0.103805774	1	0.244070825	0.386553242	-0.142482417	1
ARHGAP31-AS1	0.41066884	0.453971879	-0.043303039	5	0.466907648	0.393697071	0.073210577	5
C6orf164	0.618121124	0.679469908	-0.061348784	1	0.713877763	0.597036957	0.116840807	1
CCL8	0.759711522	0.835377091	-0.075665569	2	0.837127409	0.76093496	0.07619245	2
CD163	0.649384596	0.544308805	0.105075791	1	0.558732453	0.642498208	-0.083765754	1
CNTN4-AS1	0.722850149	0.589800326	0.133049823	3	0.59532262	0.717451551	-0.122128931	3
DNM1P50	0.398751655	0.532782057	-0.134030402	1	0.410288468	0.642215188	-0.23192672	1
DUSP26	0.627180164	0.674729867	-0.047549703	11	0.677488494	0.595819875	0.081668619	11
ENDOG	0.597341651	0.64928922	-0.051947568	3	0.658068344	0.605025221	0.053043122	3
GPR112	0.425510218	0.495628046	-0.070117828	2	0.456647354	0.540829135	-0.084181781	2
HIST1H2AI	0.290981254	0.329098503	-0.03811725	4	0.336602573	0.28730451	0.049298063	4
HIST1H2AL	0.489764861	0.591924222	-0.102159361	7	0.60637817	0.464564059	0.141814112	7
HNRNPDP2	0.56156639	0.756302233	-0.194735843	1	0.826573871	0.584769795	0.241804076	1
IFI44	0.550823843	0.749275687	-0.198451845	1	0.692783086	0.540085647	0.152697438	1
IGFL1	0.722117696	0.618978303	0.103139393	3	0.611509741	0.766367049	-0.154857308	3
IL10RB-AS1	0.73149031	0.696301369	0.03518894	5	0.749480497	0.644478395	0.105002102	5
KIAA0125	0.185505799	0.261840107	-0.076334308	1	0.188952991	0.291685577	-0.102732585	1
KRTAP1-3	0.783952173	0.88561266	-0.101660487	1	0.788951097	0.895594835	-0.106643738	1
LINC00525	0.427171501	0.296143754	0.131027747	1	0.488972232	0.319095233	0.169876999	1
MAST4-AS1	0.15643913	0.260674784	-0.104235654	1	0.379657843	0.196805441	0.182852402	1
MBOAT4	0.681341303	0.466859742	0.214481562	1	0.68359969	0.546443384	0.137156306	1
MIR3678	0.181013651	0.303421423	-0.122407772	1	0.422579473	0.15118847	0.271391002	1
MIR4710	0.351035927	0.399263277	-0.048227349	1	0.466140878	0.285173084	0.180967794	1
MIR4724	0.352491041	0.519825852	-0.167334811	1	0.453431012	0.624707014	-0.171276002	1
MIR518C	0.108387866	0.16645225	-0.058064384	1	0.141911868	0.258660866	-0.116748998	1
MIR648	0.374557592	0.50826036	-0.133702768	1	0.52371044	0.399042147	0.124668293	1
OR4F5	0.631094079	0.704142746	-0.073048667	1	0.756368899	0.665798433	0.090570466	1
OR4S2	0.295539077	0.392350061	-0.096810984	1	0.355247561	0.550900911	-0.19565335	1
OR4X2	0.558089881	0.383374686	0.174715195	1	0.312089001	0.596018714	-0.283929713	1
OXCT1-AS1	0.326376411	0.412767809	-0.086391398	9	0.475758851	0.294603602	0.181155249	9
PNPLA4	0.444095975	0.378720719	0.065375256	13	0.441556025	0.3678369	0.073719125	13
PTGR1	0.520547184	0.606669851	-0.086122667	4	0.588839604	0.509616864	0.07922274	4
RARRES2P9	0.575452245	0.430186482	0.145265763	1	0.376919186	0.600236185	-0.223316999	1
RHOT1P2	0.651137259	0.589422372	0.061714887	1	0.578292671	0.661853422	-0.083560751	1
RNASE6	0.645825714	0.710266452	-0.064440738	3	0.734130018	0.601184613	0.132945405	3
SDC4P	0.725687942	0.663786077	0.061901865	1	0.752530912	0.672164038	0.080366874	1
SH2D1B	0.588298656	0.662289944	-0.073991288	3	0.708799263	0.641963839	0.066835424	3
SLC2A3	0.3552381	0.438416279	-0.083178179	3	0.472470291	0.345519383	0.126950908	3
SNORA69	0.178096415	0.344683956	-0.166587541	1	0.207048927	0.387104346	-0.18005542	1
SNORD3D	0.161783585	0.202076184	-0.040292599	2	0.225060269	0.160985699	0.06407457	2
SPANXA2-OT1	0.377170654	0.604684169	-0.227513514	1	0.575277151	0.393644772	0.181632379	1
SSMEM1	0.735856773	0.684907626	0.050949147	3	0.677739834	0.75705203	-0.079312196	3
SSX6	0.708776545	0.805925415	-0.09714887	1	0.855967859	0.730884876	0.125082982	1
TRAT1	0.197950643	0.34080076	-0.142850118	1	0.260941823	0.403044926	-0.142103103	1
TSPY11P	0.208383156	0.257553544	-0.049170388	1	0.29754117	0.242226944	0.055314226	1
TUBB8P9	0.477809657	0.542452902	-0.064643246	1	0.484069941	0.573834316	-0.089764375	1
UGT2B10	0.216353361	0.373730151	-0.15737679	1	0.262270701	0.489231258	-0.226960557	1
ZNF597	0.611742957	0.665626381	-0.053883424	8	0.676892355	0.588663434	0.088228921	8
ZNF619	0.467897022	0.508572727	-0.040675705	8	0.557771623	0.471097224	0.086674399	8
ZNF66	0.268521463	0.23486394	0.033657524	1	0.210000697	0.267286504	-0.057285807	1

**Supplementary Table S16. List of CGIs consistently identified among the 500 top-ranked, differentially methylated CGIs after induced overexpression of *TET1* and *TET* triple knockdown.**

This table is related to Fig. 3 comprising the overlap between the *TET1* overexpression and *TET* triple knockdown experiments. For CGIs overlapping with 2 kb promoter regions, corresponding promoter gene symbols are provided.

CGI	promoter_overlap	beta.TET1+Dox	beta.TET1-Dox	TET1_difference	TET1_num.sites	beta.GFP_siRNA	beta.GFP_scramble	knockdown_difference	knockdown_num.sites
chr1:10057122-10058108	RBP7	0.5325367	0.580391926	-0.047855227	8	0.602307166	0.49394722	0.108359946	8
chr1:149605515-149605903	RNVU1-20	0.239121685	0.350729923	-0.111608239	1	0.361994384	0.160476523	0.201517861	1
chr1:39044060-39044561		0.180064087	0.239891	-0.059826914	5	0.294757431	0.163667907	0.131089524	5
chr1:54965024-54965391		0.314038123	0.351845178	-0.037807055	3	0.365940134	0.271343909	0.094596225	3
chr10:112431836-112432426		0.183934701	0.272102573	-0.088167872	7	0.361349464	0.180618597	0.180730867	7
chr10:118927022-118928132	MIR3663	0.7116284	0.636355755	0.075272645	5	0.690615198	0.604906384	0.085708814	5
chr10:130339527-130339777		0.6926802	0.768367089	-0.075686889	5	0.791894202	0.64068077	0.151213432	5
chr10:13933483-13934184		0.446689684	0.488664444	-0.04197476	3	0.502073707	0.414891198	0.087182509	3
chr10:31422710-31423316		0.417412862	0.541521967	-0.124109105	3	0.518271273	0.398340639	0.119930634	3
chr11:47615711-47616055	C1QTNF4	0.173370704	0.377760502	-0.204389798	1	0.426409157	0.169088109	0.257321048	1
chr11:8009048-8009251		0.27724872	0.318904734	-0.041656014	2	0.372745771	0.271435333	0.101310438	2
chr12:54811982-54812202		0.474306653	0.604253639	-0.129946986	2	0.665139504	0.472591149	0.192548355	2
chr13:113540351-113540558		0.496485109	0.576535828	-0.080050719	4	0.603915751	0.461294119	0.142621632	4
chr13:28540357-28541279		0.587370081	0.690818858	-0.103448777	2	0.717871695	0.510745901	0.207125793	2
chr14:103557607-103558235		0.430755547	0.396145234	0.034610314	4	0.446431761	0.353618747	0.092813014	4
chr14:24020003-24020251		0.307096299	0.411948781	-0.104852482	3	0.428334079	0.32065738	0.107676699	3
chr14:36977519-36977996		0.420785667	0.475185753	-0.054400087	4	0.505561781	0.373965057	0.131596724	4
chr16:31453944-31454561	ZNF843	0.279924842	0.335812316	-0.055887474	3	0.356568308	0.258135393	0.098432915	3
chr16:34407637-34407919	SLC25A1P4	0.609801639	0.550155768	0.059645871	4	0.563682063	0.67108939	-0.107407326	4
chr16:3493099-3493569	NAA60;ZNF597	0.504377529	0.58435585	-0.079978321	6	0.596386274	0.477308666	0.119077608	6
chr16:67208068-67208678		0.31323473	0.435778555	-0.122543825	3	0.398275108	0.322261287	0.076013821	3
chr19:42501262-42501486	ATP1A3	0.135328605	0.193110878	-0.057782272	2	0.244210877	0.109212808	0.134998069	2
chr2:79220193-79220592		0.472360002	0.534480277	-0.062120275	4	0.550802352	0.418936717	0.131865635	4
chr20:34652455-34653500		0.377248889	0.414603303	-0.037354415	4	0.465441932	0.350387702	0.11505423	4
chr20:62947649-62948464		0.087877352	0.179149916	-0.091272564	3	0.212269099	0.095676352	0.116592747	3
chr3:156008992-156009320		0.536770326	0.594634848	-0.057864521	3	0.585607852	0.49080211	0.094805742	3
chr3:158519510-158520329		0.182128182	0.215574734	-0.033446552	9	0.280878515	0.136227907	0.144650608	9
chr3:40518518-40518848	ZNF619	0.118666293	0.186597408	-0.067931115	5	0.266859094	0.119338042	0.147521052	5
chr3:72788073-72788416		0.239107279	0.444377539	-0.205270261	3	0.482021201	0.242749969	0.239271232	3
chr4:155547985-155548322	LRAT	0.289842796	0.39142277	-0.101579974	5	0.418931194	0.239848867	0.179082327	5
chr4:3464800-3465440	DOK7	0.397006168	0.483601637	-0.086595468	8	0.530252206	0.357766806	0.172485399	8
chr5:139076543-139077179		0.202190646	0.297694396	-0.09550375	5	0.324271483	0.20930927	0.114962213	5
chr5:41869664-41870876	OXCT1;OXCT1-AS1	0.269529422	0.368284204	-0.098754782	10	0.401641729	0.249222756	0.152418972	10
chr5:43000344-43000791		0.714763345	0.799220772	-0.084457428	4	0.820775416	0.667799179	0.152976237	4
chr6:13873766-13874262		0.599314334	0.528079072	0.071235262	4	0.577867869	0.486168552	0.091699317	4
chr6:27833121-27833406	HIST1H2AL;HIST1H2BPS2	0.491216466	0.587251818	-0.096035352	4	0.57725782	0.482647606	0.094610214	4
chr7:121943868-121944538	FEZF1-AS1	0.275117708	0.330646688	-0.05552898	5	0.357081876	0.25918423	0.097897645	5
chr7:138666359-138666972	KIAA1549	0.302695218	0.397387429	-0.094692211	2	0.489669095	0.265051096	0.224618	2
chr7:948295-949168		0.389289407	0.353540693	0.035748715	2	0.447678732	0.321163469	0.126515264	2
chr8:117950473-117950717	AARD	0.373144361	0.483931839	-0.110787477	2	0.509981124	0.321085221	0.188895903	2
chr8:33456916-33457515	DUSP26	0.460878488	0.559418338	-0.098539849	6	0.559122479	0.440413866	0.118708613	6
chr8:97657175-97657943	CPQ	0.242506419	0.295110542	-0.052604123	12	0.352082693	0.213228514	0.138854179	12
chr9:115708029-115708238		0.673851354	0.595880727	0.077970627	1	0.678785934	0.533593633	0.1451923	1
chr9:129677707-129678009		0.171626484	0.240156164	-0.06852968	2	0.255044604	0.151094746	0.103949858	2
chr9:138156711-138156983		0.882406975	0.726715518	0.155691457	1	0.701888519	0.856081342	-0.154192823	1
chr9:29826527-29826736		0.605175118	0.67490027	-0.069725152	2	0.590302493	0.721791151	-0.131488658	2
chr9:32572997-32573227	NDUFB6	0.07266985	0.147935283	-0.075265433	1	0.208203095	0.082953234	0.125249861	1
chr9:35111268-35111504		0.149083957	0.216414274	-0.067330317	1	0.264165589	0.146842162	0.117323427	1
chrX:152909014-152909214		0.432842341	0.485460431	-0.052618091	3	0.508496088	0.434281358	0.07421473	3
chrX:36975506-36976349		0.527266645	0.603387952	-0.076121307	4	0.630525776	0.54710624	0.083419536	4
chrY:14107138-14107480		0.765878592	0.596333359	0.169545233	1	0.669797091	0.838528942	-0.168731851	1

**Supplementary Table S17. Statistical overrepresentation test of promoters, gene bodies and CGIs showing reciprocal methylation changes after *TET1* overexpression and *TET* triple knockdown.**  
 This table is related to **Fig. 3**. Promoters, gene bodies and CGIs with reciprocal methylation changes were analyzed using the PANTHER Overrepresentation Test with default settings.

Analysis Type: PANTHER Overrepresentation Test (release 20150430)  
 Annotation Version and Release Date: PANTHER version 10.0 Released 2015-05-15  
 Bonferroni correction for multiple testing  
 Annotation Data Set: PANTHER GO-Slim Biological Process

Reference List:  
 Homo sapiens (all genes in database)  
 Mapped IDs:  
 Unmapped IDs:

Reference list  
 20814  
 0

Displaying only results with P<0.05

**PANTHER GO-Slim Biological Process**

Reciprocal methylation changes after <i>TET1</i> overexpression / <i>TET</i> triple knockdown															
Homo sapiens (REF)	38 reciprocal promoters (30 mapped IDs)					26 reciprocal gene bodies (15 mapped IDs)					42 reciprocal CGIs (20 promoter associations, 15 mapped IDs)				
#	#	expected	Fold Enrichment	+/-	P value	#	expected	Fold Enrichment	+/-	P value	#	expected	Fold Enrichment	+/-	P value

Supplementary Table S18. List of deregulated transcripts after induced overexpression of *TET1*.

gene_symbol	probe_set	TET1_#1_fold_change	TET1_#1_change_p-value	TET1_#2_fold_change	TET1_#2_change_p-value	TET1_#3_fold_change	TET1_#3_change_p-value
---	238571_at	-1.41	0.999973	-1.32	0.999759	-1.32	0.998168
ARRDC4	225283_at	1.15	0.000023	1.23	0.000035	1.23	0.000774
ASMTL	36553_at	1.41	0.000005	1.41	0.000018	1.52	0.000004
CDCA3	221436_s_at	1.23	0.00002	1.32	0.000273	1.15	0.000214
COPZ1	222386_s_at	1.23	0.000214	1.32	0.00002	1.32	0.00004
DUSP5P	1553299_at	1.23	0.001077	1.23	0.00013	1.23	0.00004
FTL	212788_x_at	1.15	0.00013	1.23	0.00002	1.23	0.000147
FTL	213187_x_at	1.15	0.001077	1.32	0.000147	1.32	0.000273
GPC6	227059_at	-1.23	0.999899	-1.74	0.999948	-1.32	0.999727
HADHA	208629_s_at	-1.32	0.999811	-1.32	0.99997	-1.32	0.99997
HOXA13	238808_at	-1.32	0.999965	-1.41	0.99998	-1.41	0.99994
HOXA13	231786_at	-1.41	0.999922	-1.41	0.999654	-1.41	0.999759
LAMA4	202202_s_at	-1.52	0.999562	-1.41	0.999727	-1.32	0.99965
LGALS1	201105_at	1.62	0.000346	1.41	0.001651	1.41	0.000027
LOC100506517	221589_s_at	1.23	0.000552	1.23	0.000865	1.32	0.001201
LPHN1	47560_at	-1.23	0.998526	-1.52	0.99996	-1.41	0.99981
MXD1	226275_at	1.32	0.001832	1.62	0.001077	1.52	0.001832
PHF3	217951_s_at	-1.32	0.998923	-1.41	0.99987	-1.41	0.999833
RAB27B	228708_at	-1.74	0.99998	-1.41	0.999034	-1.52	0.999727
SPEN	201996_s_at	-1.52	0.999922	-1.62	0.99998	-1.32	0.999886
SUPT16H	233827_s_at	-1.52	0.999965	-1.74	0.99998	-1.41	0.99998
TMTC3	1560017_at	-1.32	0.999932	-1.62	0.99998	-1.41	0.999811
TRAPPC6A	204985_s_at	1.32	0.00004	1.32	0.001651	1.23	0.000273
WIPI1	213836_s_at	1.62	0.000023	1.32	0.000492	1.74	0.000389

Supplementary Table S19. List of deregulated transcripts after *TET* triple knockdown.

gene_symbol	probe_set	GFP_#1_fold_change	GFP_#1_change_p-value	GFP_#2_fold_change	GFP_#2_change_p-value	GFP_#3_fold_change	GFP_#3_change_p-value
	---	1.87	0.00003	1.32	0.000214	1.74	0.000035
	232130_at	1.41	0.001832	1.32	0.000078	1.41	0.000618
	243023_at	1.32	0.000389	1.74	0.00002	1.52	0.00002
	228750_at	-1.23	0.99998	-1.23	0.99998	-1.32	0.99998
	242787_at	-1.32	0.999853	-1.32	0.99998	-1.41	0.99998
	226883_at	-1.52	0.998799	-1.52	0.999965	-2.00	0.99998
	1560739_a_at	1.32	0.00003	1.41	0.000552	1.52	0.00003
	238156_at	-1.32	0.99965	-1.32	0.999973	-1.52	0.99998
	231576_at	-3.03	0.99996	-4.59	0.99994	-3.73	0.99998
	214862_x_at	1.23	0.00002	1.23	0.000438	1.41	0.00002
	1554007_at	-1.62	0.999977	-1.62	0.998664	-1.62	0.99998
AACS	218434_s_at	-2.00	0.99998	-1.87	0.99998	-1.87	0.99998
ACPL2	226925_at	1.32	0.00002	1.41	0.000046	1.52	0.00002
ADAM1	228925_at	-1.32	0.998514	-1.15	0.998349	-1.32	0.999448
ADNP	226426_at	1.23	0.00002	1.23	0.000027	1.52	0.000865
AFG3L1P	1552287_s_at	1.23	0.000023	1.32	0.00002	1.23	0.000147
AMMECR1	204976_s_at	-1.74	0.99998	-1.87	0.99997	-1.52	0.99998
ANO6	224906_at	-1.23	0.999448	-1.15	0.999654	-1.41	0.99998
ARRDC4	225283_at	-1.23	0.999654	-1.32	0.999948	-1.23	0.999811
ATF3	202672_s_at	-1.52	0.999977	-2.00	0.99998	-1.52	0.99998
ATP11A	230875_s_at	1.23	0.000774	1.32	0.001832	1.41	0.001201
ATP2B4	212136_at	-1.23	0.999977	-1.32	0.99998	-1.41	0.99998
BAG2	209406_at	-1.23	0.999654	-1.41	0.999973	-1.32	0.99998
BBX	223135_s_at	-1.32	0.999693	-1.41	0.99998	-1.32	0.999954
BBX	213016_at	-1.32	0.999508	-1.32	0.999853	-1.41	0.99998
BBX	232008_s_at	-1.32	0.999693	-1.41	0.999977	-1.62	0.99997
BBX	213015_at	-1.41	0.999911	-1.41	0.99998	-1.52	0.99998
BBX	226331_at	-1.23	0.998168	-1.52	0.99998	-1.62	0.99998
BICD1	1554020_at	-1.41	0.99998	-1.32	0.99998	-1.52	0.99998
BLMH	202179_at	-1.32	0.99998	-1.32	0.99996	-1.32	0.99998
BRI3BP	225716_at	-1.62	0.99997	-1.32	0.99998	-1.41	0.99998
BUB3	201456_s_at	-1.62	0.99987	-1.41	0.99998	-1.41	0.99998
BUB3	201458_s_at	1.52	0.000189	1.52	0.000088	1.41	0.000114
C11orf70	224463_s_at	-1.74	0.99998	-1.23	0.99987	-1.52	0.99998
C11orf96	227099_s_at	-1.62	0.999932	-1.41	0.999899	-1.74	0.999922
C1orf122	225480_at	1.52	0.00002	1.41	0.001077	1.62	0.00002
C1orf53	1558508_a_at	1.32	0.000966	1.74	0.001486	1.62	0.000438
C1orf53	1558507_at	1.52	0.000147	1.87	0.000078	1.87	0.00004
C1orf63	209006_s_at	-1.52	0.998799	-1.87	0.99994	-1.52	0.99998
C3orf80	236738_at	1.23	0.001201	1.32	0.000307	1.23	0.000027
C6orf228	227124_at	1.32	0.000023	1.32	0.001486	1.23	0.00002
C7orf60	228149_at	1.62	0.000101	1.62	0.00002	1.74	0.00004
C8orf48	236634_at	-1.62	0.99965	-1.52	0.999922	-1.62	0.99998
CCDC25	222525_s_at	-1.62	0.99998	-1.87	0.999977	-1.87	0.99997
CCNB2	202705_at	-1.52	0.99998	-1.41	0.99998	-1.41	0.99998
CCND2	200953_s_at	1.15	0.001077	1.52	0.00013	1.52	0.000241
CCNE2	211814_s_at	-1.23	0.998664	-1.32	0.99996	-1.32	0.99998
CCNY	224647_at	-1.23	0.999886	-1.32	0.999226	-1.23	0.999977
CD24	209771_x_at	-1.32	0.999727	-1.32	0.999786	-1.32	0.99998
CD302 /// LY75-CD302	203799_at	-1.32	0.999786	-1.41	0.99998	-1.41	0.99998
CDK6	224851_at	-1.41	0.99998	-1.41	0.999977	-1.41	0.99998
CDK6	224847_at	-1.23	0.99998	-1.41	0.99997	-1.32	0.99998
CEBPG	204203_at	-1.41	0.999973	-1.23	0.999382	-1.41	0.99998
CEBPG	225527_at	-1.52	0.99998	-1.52	0.99998	-1.41	0.99998
CEP55	218542_at	-1.52	0.99986	-1.62	0.99998	-1.62	0.99986
CLDND1	1554149_at	-1.74	0.99998	-1.52	0.99998	-1.52	0.99998
CLDND1	208925_at	-1.41	0.99998	-1.23	0.999562	-1.23	0.99998
CNOT7	218250_s_at	-1.41	0.99994	-1.41	0.99998	-1.52	0.99998
CNOT7	225053_at	1.32	0.000078	1.52	0.00002	1.41	0.00002
COL2A1	213492_at	-1.32	0.999654	-1.15	0.998514	-1.32	0.999135
CREB3L4	226455_at	1.41	0.000273	1.32	0.000088	1.52	0.00013
CREBZF	202978_s_at	-1.32	0.999654	-1.74	0.99996	-1.52	0.999308
CUX1	227069_at	-1.41	0.999954	-1.62	0.99994	-1.62	0.99998
CUX1	225935_at	-1.52	0.999948	-1.52	0.99998	-1.52	0.999911
CUX1	214743_at	-1.52	0.999966	-1.62	0.999996	-1.74	0.999988
CYLD	39582_at	-1.62	0.999833	-1.52	0.999899	-1.74	0.999899
CYLD	213295_at	-1.41	0.998168	-1.41	0.999899	-1.41	0.99998
DLL1	224215_s_at	1.41	0.00002	1.52	0.00002	1.32	0.00002
DPCD	226009_at	1.41	0.00002	1.41	0.00002	1.23	0.00002
DPCD	1553976_a_at	-1.23	0.998799	-1.32	0.999974	-1.32	0.99998
DSC2	226817_at	-1.52	0.999727	-1.74	0.99987	-1.62	0.999853
DUSP7	213848_at	-1.52	0.999973	-1.52	0.999932	-1.62	0.999911
EDEM1	203279_at	1.32	0.000052	1.32	0.001486	1.41	0.00002
EGR1	201694_s_at	1.32	0.001651	1.74	0.000389	1.32	0.000307
EIF2AK1	217735_s_at	-1.62	0.999948	-1.87	0.999811	-1.62	0.999899
EIF4E2 /// LOC100507948	226734_at	-1.52	0.99998	-1.41	0.99998	-1.32	0.999922
ELK4	225159_s_at	-1.41	0.999899	-1.32	0.99998	-1.32	0.99998
ENTPD4	204076_at	-1.23	0.999654	-1.32	0.998514	-1.52	0.99998
EPB41L5	225855_at	1.23	0.000307	1.23	0.000865	1.32	0.000023
EPC2	225838_at	-2.46	0.998923	-2.14	0.999727	-2.00	0.999977
ERBB3	202454_s_at	-2.46	0.999811	-2.30	0.99998	-2.14	0.99998
ERBB3	226213_at	-1.41	0.999135	-2.00	0.999965	-1.62	0.99998
ERGIC2	240172_at	-1.32	0.999693	-1.52	0.99998	-1.41	0.99998
ERO1LB	231944_at	-1.32	0.999786	-1.41	0.999973	-1.41	0.998664
FAM190B	1554132_a_at	-1.52	0.99965	-1.74	0.99998	-1.52	0.99987
FAM190B	209379_s_at	-1.32	0.999853	-1.15	0.999226	-1.41	0.99996
FKBP4	200894_s_at	-1.62	0.99965	-1.32	0.999911	-1.62	0.999886
FKBP4	200895_s_at	-1.41	0.999948	-1.52	0.999973	-1.32	0.99998
FXR1	230201_at	-1.32	0.999833	-1.32	0.99987	-1.32	0.99987
GABRB3	227690_at	-1.41	0.999727	-1.23	0.999308	-1.32	0.99997
GOSR2	243880_at	-1.32	0.99987	-1.41	0.999954	-1.41	0.99998
GUK1	200075_s_at	1.62	0.00002	1.41	0.00013	1.74	0.00006
HCFC2	235264_at	-1.23	0.99999	-1.23	0.999954	-1.32	1
HEY1	44783_s_at	1.32	0.000035	1.41	0.000147	1.23	0.000618
HIST1H3H	206110_at	-1.41	0.999977	-1.52	0.99996	-1.74	0.99998
HMGGB3	225601_at	1.41	0.000027	1.62	0.000052	1.52	0.00004
HNRNPA1	222040_at	1.23	0.001651	1.52	0.00002	1.41	0.00002
HNRNPA2B1	225107_at	1.15	0.001077	1.32	0.000346	1.41	0.000023
HNRNPU-AS1	225786_at	-1.23	0.998168	-1.15	0.998799	-1.32	0.999899
HOK1	225792_at	1.15	0.00006	1.32	0.000438	1.23	0.000492
HOXA13	238571_at	1.23	0.00002	1.32	0.00002	1.41	0.000023
HOXA5	213844_at	-1.32	0.999727	-1.32	0.99998	-1.32	0.99998
ID4	209291_at	-1.32	0.999948	-1.41	0.99997	-1.32	0.999034
IFT81	219372_at	1.74	0.00003	2.14	0.000046	2.30	0.000214
IL8	202859_x_at	1.62	0.00002	1.52	0.000865	1.74	0.00006
ITGA8	239092_at	-1.52	0.999034	-1.32	0.99997	-1.52	0.999932
JHDM1D	221778_at	-1.32	0.99994	-1.52	0.99987	-1.52	0.999922
KBTBD2	223584_s_at	-1.41	0.999382	-1.87	0.999911	-1.62	0.999562
KBTBD8	239835_at	-1.32	0.99987	-1.23	0.998168	-1.23	0.999948
KIAA0020	203712_at						

KIAA0494	201778_s_at	-1.87	0.999759	-1.62	0.999853	-1.74	0.999759
KIAA1704	229891_x_at	-1.23	0.998514	-1.32	0.99998	-1.41	0.99998
KISS1R	242517_at	-1.62	0.999973	-1.32	0.999727	-1.87	0.99996
KLHL9	213233_s_at	-1.23	0.999932	-1.15	0.998349	-1.15	0.998168
KPNA5	229317_at	-1.52	0.999508	-1.74	0.99998	-1.41	0.99996
KPNA5	227934_at	-1.62	0.999977	-1.41	0.99998	-1.52	0.99998
KRT222	244111_at	1.52	0.00002	1.41	0.001486	2.00	0.000101
LHFP	218656_s_at	-1.87	0.99998	-1.87	0.99998	-2.14	0.99998
LINC00094	203245_s_at	1.23	0.000214	1.41	0.000774	1.23	0.000307
LOC100652805 /// LOC100653302 /// PGK1	227068_at	-1.41	0.999886	-1.32	0.999973	-1.32	0.999977
LONRF3	242931_at	-1.32	0.999693	-1.32	0.99998	-1.32	0.99998
LPIN1	212274_at	-1.23	0.999308	-1.23	0.999508	-1.41	0.999922
LRIG1	211596_s_at	-1.41	0.999833	-1.41	0.998799	-1.41	0.999911
LRP8	228955_at	-1.41	0.999965	-1.62	0.99987	-1.41	0.999811
MAFB	218559_s_at	-1.23	0.999911	-1.32	0.999886	-1.41	0.999786
MAP3K7	206854_s_at	-1.41	0.999727	-1.62	0.99998	-1.41	0.99998
MAP3K7	206853_s_at	-1.41	0.999853	-1.41	0.999965	-1.52	0.999977
MAPK1	1552263_at	-2.14	0.99998	-2.64	0.99998	-2.83	0.99998
MGAT4A	226039_at	-1.32	0.999693	-1.23	0.999135	-1.32	0.999759
MICA	205904_at	-1.41	0.99994	-1.74	0.999932	-1.74	0.999786
MIR4680 /// PDCD4	212594_at	-1.32	0.999833	-2.14	0.99998	-2.00	0.999948
MKI67	212022_s_at	-1.32	0.99998	-1.32	0.999948	-1.32	0.999977
MLLT4	224685_at	-1.52	0.99998	-1.52	0.99998	-1.41	0.999965
MNS1	219703_at	1.32	0.00004	1.41	0.000492	1.41	0.00003
MORN2	226790_at	1.52	0.000023	1.41	0.00002	1.41	0.000035
MTMR2	203211_s_at	-1.41	0.99998	-1.62	0.99998	-1.41	0.99998
MTMR2	214649_s_at	-1.41	0.99998	-1.41	0.999911	-1.52	0.999973
MTMR9	204837_at	-1.74	0.99998	-1.74	0.99997	-1.74	0.99998
MTMR9	213278_at	-1.87	0.99998	-1.62	0.999922	-1.87	0.99998
NACC2	212993_at	1.23	0.000046	1.32	0.000438	1.41	0.00002
NAPEPLD	226041_at	1.62	0.00002	1.32	0.000438	1.87	0.000078
NDUFA8	218160_at	-1.41	0.999973	-1.23	0.999811	-1.41	0.99998
NFATC2IP	212808_at	-1.41	0.999973	-1.52	0.999308	-1.32	0.99994
NFATC2IP	217527_s_at	-1.41	0.99997	-1.52	0.99998	-1.41	0.999973
NFATC2IP	229235_at	-1.52	0.999899	-1.87	0.99998	-1.41	0.99998
NFATC2IP	217526_at	-1.62	0.99997	-1.41	0.99997	-1.41	0.999833
NHLRC3	227040_at	-1.41	0.999833	-1.62	0.999922	-1.23	0.999135
NKAIN2	242002_at	1.74	0.00002	1.87	0.000046	1.52	0.00013
NPTX2	213479_at	-1.32	0.999833	-1.41	0.999911	-1.62	0.999899
NTS	206291_at	1.23	0.000241	1.62	0.000114	1.74	0.000114
NUSAP1	218039_at	-1.41	0.99998	-1.32	0.99998	-1.32	0.99998
NUSAP1	219978_s_at	-1.52	0.99998	-1.15	0.999899	-1.32	0.99998
OCLN	231022_at	1.41	0.000114	1.41	0.000147	1.32	0.000307
ORC4	203351_s_at	-1.52	0.99997	-1.41	0.99998	-1.52	0.99998
PAFAH1B2	224777_s_at	-1.32	0.999954	-1.23	0.999973	-1.32	0.99998
PCDH7	228640_at	1.32	0.00002	1.32	0.000088	1.23	0.00002
PKD3	228959_at	-1.41	0.999562	-1.23	0.998923	-1.32	0.999948
PGGT1B	235615_at	-1.52	0.999922	-1.52	0.99998	-1.52	0.99998
PGM2L1	229256_at	1.32	0.000023	1.52	0.000114	1.62	0.00002
PGM2L1	229553_at	1.23	0.000052	1.32	0.000865	1.52	0.00002
PHLPP2	213407_at	-1.41	0.999922	-1.41	0.999973	-1.32	0.99997
PIGV	51146_at	-1.32	0.99978	-1.23	0.999969	-1.32	0.999765
PPP2R2A	228013_at	-1.32	0.99998	-1.32	0.999965	-1.41	0.99998
PPP2R2C	228010_at	-1.32	0.999977	-1.32	0.999911	-1.32	0.99998
PRKACB	202741_at	1.15	0.001486	1.32	0.000692	1.15	0.000273
PRKAG2	218292_s_at	-1.52	0.999973	-1.23	0.998514	-1.41	0.999948
PRRX1	238852_at	1.62	0.00002	1.52	0.000966	1.74	0.000307
PSMA5	230300_at	1.52	0.00002	1.32	0.000189	1.52	0.00002
PSMG1	203405_at	-1.52	0.999965	-1.52	0.99998	-1.41	0.99997
PTPRZ1	204469_at	1.74	0.001336	1.62	0.000189	1.74	0.000088
RAB11FIP4	225739_at	-1.32	0.999508	-1.41	0.999654	-1.74	0.999786
RAB27A	222294_s_at	-1.32	0.998168	-1.41	0.999654	-1.62	0.998923
RAB39B	238695_s_at	1.52	0.00003	1.32	0.000552	1.41	0.000438
RAI2	219440_at	1.52	0.00002	2.00	0.00002	2.14	0.00002
RASEF	1553185_at	1.52	0.000027	1.32	0.001201	1.62	0.00006
RASEF	1553186_x_at	1.41	0.000046	1.41	0.000273	1.62	0.00002
RBFOX2	212104_s_at	-1.41	0.999759	-1.32	0.999977	-1.52	0.99998
RBFOX2	216215_s_at	-1.52	0.999973	-1.32	0.999562	-1.32	0.999886
REEP3	225785_at	-1.52	0.99987	-1.87	0.99998	-1.32	0.99996
REXO4	218767_at	-1.52	0.99998	-1.41	0.999977	-1.74	0.99998
RG52	202388_at	1.32	0.000088	1.41	0.000147	1.41	0.000027
RLIM	225416_at	-1.41	0.999693	-1.32	0.999932	-1.32	0.99998
ROBO1	213194_at	1.32	0.00002	1.41	0.000692	1.52	0.00002
RPN2	213399_x_at	-1.62	0.99998	-1.41	0.99998	-1.62	0.99998
RPN2	213491_x_at	-1.62	0.99998	-1.41	0.99998	-1.62	0.99998
RPN2	208689_s_at	-1.74	0.99998	-1.52	0.99998	-1.62	0.99998
RPS6KB1	226660_at	-1.52	0.99996	-1.32	0.99998	-1.41	0.99998
RTN1	203485_at	1.41	0.00002	1.41	0.000307	1.74	0.00003
SAMHD1	234987_at	1.23	0.00003	1.32	0.000273	1.41	0.00002
SEPP1	201427_s_at	1.62	0.000023	2.14	0.00002	2.00	0.00002
SESTD1	226763_at	-1.32	0.998799	-1.15	0.998923	-1.32	0.999786
SLC30A5	218989_x_at	-1.52	0.999693	-1.52	0.99998	-1.32	0.99998
SLC33A1	203164_at	-1.32	0.99997	-1.32	0.99987	-1.32	0.999886
SLC44A5	1569112_at	1.23	0.000438	1.52	0.00006	1.32	0.000147
SNX12	224684_at	1.32	0.000046	1.62	0.000052	1.52	0.000027
SNX5	217792_at	-1.32	0.999922	-1.15	0.998168	-1.23	0.999226
SORBS2	225728_at	1.41	0.001336	1.41	0.000389	1.41	0.000088
SPTBN1	226342_at	-1.32	0.999922	-1.41	0.999226	-1.23	0.998664
SPTSSA	212460_at	-1.52	0.999811	-1.87	0.99998	-1.62	0.99998
SPTSSA	213508_at	-1.62	0.99998	-1.74	0.99998	-2.14	0.99998
SRPK2	1558254_s_at	-1.32	0.99994	-1.23	0.999226	-1.32	0.999922
SRPK2	203182_s_at	-1.32	0.999899	-1.32	0.99998	-1.32	0.999886
STK40	223852_s_at	-1.32	0.999886	-1.62	0.998168	-1.74	0.999226
SUDS3	233841_s_at	-1.62	0.99998	-1.41	0.999508	-1.23	0.999382
SUMO3	200740_s_at	1.15	0.000114	1.32	0.000214	1.23	0.000023
SYNRG	222715_s_at	-1.23	0.999811	-1.23	0.999135	-1.32	0.999034
SYNRG	221937_at	-1.52	0.999611	-1.32	0.999693	-1.32	0.999911
SYNRG	64418_at	-1.52	0.999963	-1.41	0.999932	-1.32	0.999982
TBCEL	227395_at	-1.87	0.99998	-1.74	0.999932	-1.74	0.999977
THRB	228716_at	1.32	0.000241	1.23	0.001832	1.23	0.000068
TIPRL	214773_x_at	-1.41	0.99998	-1.41	0.99998	-1.23	0.99998
TM7SF2	210130_s_at	1.32	0.000346	1.62	0.001077	1.32	0.001077
TMEFF2	223557_s_at	1.74	0.000692	1.32	0.000214	1.74	0.00003
TMEM17	1557137_at	1.32	0.000167	1.52	0.000618	1.32	0.001832
TMEM64	225972_at	-1.62	0.99998	-1.74	0.99998	-1.62	0.999727
TMEM66	200847_s_at	-1.23	0.999034	-1.32	0.999786	-1.15	0.999226
TMF1	214948_s_at	-1.32	0.999786	-1.23	0.999886	-1.23	0.999965
TNRC6B	229036_at	1.52	0.000552	1.41	0.001651	1.23	0.00006
TP53I3	210609_s_at	1.41	0.000389	1.87	0.000035	1.87	0.000147
TRIB3	218145_at	-1.52	0.999922	-1.41	0.999886	-1.62	0.99998
TSEN15	225399_at	-1.15	0.998923	-1.23	0.999382	-1.23	0.999932
TSPAN2	227236_at	2.00	0.000214	2.83	0.000214	2.14	0.000078

TSPYL4	212928_at	1.52	0.00002	1.62	0.000618	1.74	0.00002
TTC30A	213679_at	1.32	0.001832	1.62	0.000167	1.74	0.000023
UBE2QL1	226612_at	-1.52	0.99998	-1.32	0.999448	-1.62	0.99998
UBE3C	201817_at	-1.52	0.999693	-1.62	0.99998	-1.62	0.99998
UCP2	208998_at	1.23	0.001832	1.32	0.00006	1.23	0.00002
UGT8	228956_at	-1.23	0.998168	-1.32	0.99998	-1.23	0.999727
USP36	220370_s_at	-1.32	0.999308	-1.23	0.998799	-1.32	0.999973
VCAN	211571_s_at	1.32	0.000346	1.32	0.001651	1.41	0.00002
VCAN	204620_s_at	1.23	0.00004	1.32	0.000618	1.32	0.00002
VTA1	224437_s_at	-1.74	0.99997	-1.74	0.99998	-1.52	0.99998
VTA1	223022_s_at	-1.74	0.99998	-1.41	0.999977	-1.62	0.99998
VTA1	223021_x_at	-2.00	0.99998	-1.62	0.99998	-1.74	0.99998
VTI1B	225926_at	-1.32	0.99994	-1.52	0.999786	-1.52	0.99987
VTI1B	225928_at	-1.41	0.999611	-1.41	0.999899	-1.62	0.999786
WDR46	209196_at	-1.41	0.999382	-1.52	0.999922	-1.87	0.999932
WDR67	1556429_a_at	-1.62	0.999977	-1.32	0.999759	-1.62	0.99996
WDR90	227894_at	1.32	0.000052	1.32	0.001651	1.23	0.000692
ZBTB4	225629_s_at	1.32	0.000389	1.23	0.000774	1.41	0.000052
ZDHC2	222731_at	-1.32	0.999611	-1.62	0.99998	-1.32	0.999973
ZDHC6	218249_at	1.15	0.000774	1.32	0.000692	1.41	0.00002
ZFAND1	218919_at	-1.41	0.999833	-1.41	0.999977	-1.52	0.99998
ZNF678	242923_at	-1.62	0.99998	-1.74	0.99998	-1.62	0.99998
ZNF678	232028_at	-1.74	0.999977	-1.52	0.999977	-1.52	0.99998
ZNF678	230534_at	-2.14	0.99998	-1.74	0.99998	-2.14	0.99998

**Supplementary Table S20. Statistical overrepresentation test of deregulated genes after *TET1* overexpression and *TET* triple knockdown.**

Deregulated genes were analyzed using the PANTHER Overrepresentation Test with default settings.

Analysis Type: PANTHER Overrepresentation Test (release 20150430)  
 Annotation Version and Release Date: PANTHER version 10.0 Released 2015-05-15  
 Bonferroni correction for multiple testing  
 Annotation Data Set: PANTHER GO-Slim Biological Process

Reference List:  
 Homo sapiens (all genes in database)

Reference list  
 20814  
 0

Mapped IDs:  
 Unmapped IDs:

Displaying only results with P<0.05

**PANTHER GO-Slim Biological Process**

	<i>TET1</i> overexpression	<i>TET</i> triple knockdown
Homo sapiens (REF)	21 deregulated genes (19 mapped IDs)	191 deregulated genes (179 mapped IDs)
#	# expected Fold Enrichment +/- P value	# expected Fold Enrichment +/- P value



**Supplementary Table S21. List of the top 500 *de novo* 5hmC-gaining promoters after induced overexpression of *TET1* .**

These promoters did not show any 5hmC reads above the threshold of 5 reads per 5hmC site in uninduced control cells but showed increased 5hmC levels after induced overexpression of *TET1* . Read numbers above the threshold were accumulated per promoter region.

gene_symbol	RRHP_+Dox_reads	RRHP_5hmC_sites	rank
MIR4750	167	9	1
FBXL22	156.5	7	2
MATN2	155	9	3
HSBP1L1	141	9	4
SEPT5	139.5	11	5
LRP8	139	9	6
RPL13A	138.5	5	7
LBX2	138	12	8
CBLC	137	11	9
CYBA	131	8	10
RSPH6A	130.5	10	11
ARHGEF1	128	13	12
GRIN2D	127	6	13
DNASE1L2	126	9	14
SH2D6	125.5	6	15
ANKRD33	121	6	16
ABTB1	120	9	17
SH2B2	120	7	18
WDR86-AS1	119.5	8	19
FOXE1	119	11	20
COMP	118	10	21
PNPLA5	117.5	7	22
FAM166B	115.5	8	23
SPATA2L	115.5	6	24
ADCY2	114.5	10	25
ONECUT1	113	11	26
POLR2G	112.5	7	27
TBC1D10C	109.5	9	28
TSPAN18	108.5	6	29
NR2E1	107.5	6	30
PARVA	107	3	31
TOP2A	107	6	32
FUT2	105.5	5	33
HMGB2P1	105.5	4	34
TNFRSF25	105	7	35
NPR2	104.5	9	36
DNM1L	103.5	6	37
DRD4	103.5	8	38
NGFR	103.5	5	39
PICK1	103	7	40
DRD1	102.5	8	41
ELFN2	101	5	42

JPH3	101	5	43
DEF8	100	6	44
JRK	100	9	45
GATA5	99.5	9	46
ITGB4	99.5	7	47
TMEM8C	99	7	48
DTX1	98.5	10	49
KLHL35	98.5	8	50
SHISA5	98.5	5	51
CHST13	98	7	52
PVRL1	98	6	53
SNX4	96.5	7	54
TFDP1	96.5	10	55
GPR132	96	6	56
DNAH3	95	4	57
SNORD23	95	8	58
ABHD15	94	8	59
CDKN1C	94	5	60
ELANE	94	12	61
GPER	94	7	62
CYP2T3P	92.5	5	63
FAM27E2	92.5	6	64
ZG16B	92.5	8	65
MCF2L	91.5	5	66
ELF4	91	5	67
METTL21A	90	7	68
PEBP1P1	90	5	69
THEG	90	7	70
GNPTG	89.5	7	71
MTND5P2	89.5	9	72
TUBGCP5	89.5	6	73
FAM49B	89	5	74
MRGPRG-AS1	88.5	5	75
MYCNOS	88.5	6	76
NKX2-2	88	8	77
B3GNT9	87.5	8	78
CYS1	87.5	7	79
CEBPB	87	4	80
TTC34	87	8	81
GBX2	86.5	8	82
KRTAP2-1	86.5	9	83
PYGM	86.5	6	84
C1orf94	85.5	6	85
SPINT1	85.5	5	86
TRA2A	85.5	5	87
KL	85	6	88
LINC00955	85	7	89
TMEM180	85	3	90
PCAT7	84.5	7	91
TOMM6	84	4	92

CYP20A1	83.5	6	93
CA9	83	4	94
PRKCG	83	4	95
RAPGEF4	83	4	96
MFSD4	82.5	8	97
RBBP8NL	82.5	4	98
USP7	82.5	6	99
SPON2	82	8	100
ZNF879	82	5	101
CELF4	81.5	3	102
DUOX1	81.5	11	103
MYH11	81.5	6	104
ESRP1	81	10	105
MYOD1	81	7	106
SOX1	81	8	107
GMPPA	80.5	6	108
ACAN	80	7	109
C21orf88	80	4	110
CETP	80	6	111
NECAB1	80	5	112
RDH8	80	4	113
SV2A	80	2	114
FRMD4B	79.5	3	115
AOX1	79	5	116
IHH	79	8	117
SLC52A2	79	5	118
MARCH8	78.5	3	119
PREX1	78.5	5	120
MIR3615	78	5	121
ARFRP1	77.5	3	122
C11orf24	77	4	123
MYPOP	77	5	124
NEURL3	77	7	125
NEK6	76	3	126
ARX	75.5	6	127
CHP2	75.5	5	128
LINC00839	75.5	6	129
VWA2	75.5	5	130
ZFP90	75.5	5	131
CACNG5	75	5	132
GLB1L2	75	3	133
SIGLEC11	75	6	134
FZD9	74.5	6	135
GLUD2	74.5	6	136
HES6	74.5	4	137
NDRG4	74.5	2	138
NPAS3	74.5	5	139
TUSC2	74.5	4	140
C1orf127	74	5	141
OTOF	74	7	142

CARNS1	73.5	4	143
SCRN1	73	3	144
C1orf210	72.5	6	145
COL26A1	72.5	5	146
FBXL20	72.5	6	147
KCNG2	72.5	6	148
NDUFA3	72.5	7	149
PAPSS1	72.5	3	150
TNFRSF4	72.5	6	151
TOX3	72.5	4	152
GAPDHP24	72	7	153
WNT7A	72	2	154
CHRNA4	71.5	7	155
EDN2	71.5	3	156
ZNF205-AS1	71.5	6	157
CLCN7	71	7	158
CLDND2	71	5	159
HCG4P3	71	5	160
LRRC14	71	4	161
MIR328	71	6	162
MXD4	71	4	163
SRP68P2	71	4	164
STAB1	71	6	165
KCNG1	70.5	7	166
MEGF6	70.5	4	167
MYO5A	70.5	5	168
P2RY11	70.5	6	169
RN7SL219P	70.5	6	170
RNU6-96P	70.5	8	171
TADA2B	70.5	3	172
TMSB15A	70.5	4	173
ZNF611	70.5	4	174
CHRND	70	5	175
DNM1P51	70	7	176
FLRT1	70	5	177
LINC00453	70	6	178
GTF2IRD2B	69.5	5	179
MIR298	69.5	6	180
NAV1	69.5	8	181
SMARCA4	69.5	6	182
TDRD9	69.5	7	183
CACNA1H	69	5	184
NXPH2	69	4	185
PKNOX2	69	2	186
TLX2	69	6	187
ARHGEF4	68.5	7	188
CD8BP	68.5	7	189
EEF1B2	68.5	4	190
RNU4-52P	68.5	7	191
ACER2	68	6	192

ALS2CL	68	5	193
AUP1	68	2	194
GJB2	68	4	195
PSMC6	68	5	196
ZFYVE26	68	5	197
ANKDD1A	67.5	2	198
C20orf166-AS1	67.5	5	199
GSTTP2	67	3	200
KRT78	67	4	201
PARD6B	67	4	202
TOMM20L	67	2	203
GALNT18	66.5	3	204
NPC1L1	66.5	4	205
PLEKHB1	66.5	3	206
QPR1	66.5	7	207
CAMSAP3	66	3	208
CFDP1	66	4	209
CRABP1	66	7	210
EIF4G1	66	6	211
HMX1	66	8	212
PGP	66	4	213
PRTFDC1	66	6	214
RSPH10B2	66	7	215
VPS29	66	4	216
YIF1A	66	7	217
CHD5	65.5	5	218
EDAR	65.5	5	219
FOXK1	65.5	7	220
MIR625	65.5	6	221
MUC12	65.5	4	222
PLIN4	65.5	7	223
DOCK8	65	5	224
LYPD2	65	6	225
NT5DC2	65	4	226
SHISA9	65	4	227
WFDC2	65	8	228
BBS10	64.5	4	229
DHODH	64.5	4	230
RRN3P1	64.5	4	231
SIGLEC10	64.5	4	232
TMED4	64.5	3	233
CASC4P1	64	5	234
CCDC11	64	2	235
COL4A5	64	7	236
MAT1A	64	2	237
MLST8	64	4	238
PGAP1	64	5	239
SNRPD1	64	7	240
ST14	64	6	241
ABLIM2	63.5	5	242

B4GALT1	63.5	4	243
ESPNL	63.5	5	244
GREM1	63.5	7	245
MAP2K3	63.5	5	246
RNU6-51P	63.5	6	247
SCFD1	63.5	5	248
AHTA2	63	3	249
CNFN	63	5	250
IKBKE	63	4	251
MAP1LC3B2	63	4	252
NOTO	63	5	253
SNORA27	63	5	254
RPS2P52	62.5	8	255
ST8SIA6	62.5	5	256
KCNA4	62	4	257
NKX6-2	62	5	258
NPFFR1	62	6	259
PSMD2	62	3	260
RN7SL40P	62	6	261
ARHGEF16	61.5	4	262
ENDOG	61.5	6	263
TAGAP	61.5	4	264
CCDC74B-AS1	61	6	265
F3	61	4	266
FGF4	61	8	267
FKBP6	61	5	268
ITIH3	61	4	269
SPI1	61	3	270
TSGA10IP	61	7	271
BTBD3	60.5	4	272
FBRSL1	60.5	6	273
FGF8	60.5	5	274
GLRX3	60.5	2	275
HTRA3	60.5	3	276
MIR194-2	60.5	4	277
MIR3132	60.5	4	278
PTPRJ	60.5	4	279
SLC25A48	60.5	6	280
TSEN54	60.5	1	281
ADAMTSL2	60	5	282
ALDH3B1	60	5	283
AMIGO1	60	6	284
BIRC5	60	4	285
DDN	60	3	286
SH2D4A	60	2	287
TCEA1	60	7	288
ZNF556	60	6	289
CD320	59.5	5	290
MIR5093	59.5	4	291
NUP210P3	59.5	4	292

PPM1M	59.5	6	293
PTPN18	59.5	4	294
RNASEL	59.5	4	295
SCRIB	59.5	3	296
C7orf49	59	3	297
CHRM3	59	6	298
DOC2A	59	5	299
RASL11B	59	4	300
RSAD2	59	5	301
ZNF184	59	6	302
AKT1	58.5	2	303
C7orf26	58.5	6	304
CAPN5	58.5	3	305
CD81	58.5	5	306
GRK7	58.5	4	307
RPL14	58.5	2	308
ATP11A-AS1	58	6	309
C5orf15	58	3	310
FANCG	58	4	311
MIR146B	58	4	312
MXD3	58	4	313
OAZ2	58	6	314
RARRES2P4	58	3	315
RNA5SP497	58	6	316
SNHG6	58	4	317
DBX1	57.5	9	318
MUS81	57.5	5	319
NPAS2	57.5	4	320
OLFM2	57.5	6	321
RN7SL59P	57.5	2	322
RNF14	57.5	5	323
SNRNP200	57.5	1	324
TATDN3	57.5	1	325
ABHD5	57	3	326
MAFK	57	4	327
NMUR1	57	4	328
RN7SL121P	57	5	329
RNU6-318P	57	4	330
C2orf62	56.5	4	331
KCNS1	56.5	6	332
NXF1	56.5	2	333
PTPRN	56.5	3	334
TAPT1	56.5	4	335
VAC14-AS1	56.5	4	336
ZNF696	56.5	6	337
C11orf16	56	4	338
CACNG8	56	5	339
IKZF1	56	6	340
TBL2	56	4	341
ABCC6P2	55.5	6	342

H3F3BP1	55.5	2	343
MIR4691	55.5	7	344
PTBP1	55.5	5	345
SLC15A4	55.5	4	346
SLC35G5	55.5	6	347
CHTF8P1	55	2	348
FUT1	55	5	349
IGFL4	55	3	350
INHBB	55	6	351
RN7SL9P	55	4	352
ZBTB45	55	5	353
ADCY10P1	54.5	4	354
ETNK2	54.5	5	355
GIPC3	54.5	5	356
LINC00398	54.5	5	357
NAMPT	54.5	3	358
RECK	54.5	5	359
RNU1-134P	54.5	4	360
RPS27L	54.5	2	361
CAMSAP1	54	4	362
DPY19L2P1	54	4	363
FANCD2	54	3	364
HRC	54	4	365
MYO1G	54	4	366
POLR1E	54	5	367
RNA5SP379	54	3	368
RNU6-28P	54	3	369
TMEM72-AS1	54	4	370
BCAR1	53.5	3	371
C19orf73	53.5	4	372
CD99L2	53.5	5	373
CLU	53.5	5	374
ICAM2	53.5	4	375
KCTD19	53.5	1	376
LRP4	53.5	3	377
MAPK8IP1	53.5	5	378
MIR142	53.5	5	379
RN7SL68P	53.5	4	380
C3orf37	53	2	381
CNOT1	53	6	382
FAM83H	53	1	383
GPRC5B	53	4	384
LRPAP1	53	5	385
SCRT1	53	4	386
ZNF552	53	5	387
C20orf112	52.5	2	388
LINC00885	52.5	3	389
LINC00942	52.5	4	390
STAM	52.5	6	391
TFE3	52.5	5	392



ADRA2B	52	4	393
ASIC3	52	3	394
HTR5BP	52	8	395
LINC00543	52	5	396
MIR136	52	5	397
ST3GAL5	52	5	398
ZCCHC10	52	1	399
DRC1	51.5	2	400
MAK16	51.5	2	401
MFSD6L	51.5	3	402
ZNF252P	51.5	5	403
ABHD17AP1	51	4	404
ALAS1	51	3	405
C2orf61	51	3	406
NPRL3	51	6	407
NRADDP	51	3	408
PRF1	51	3	409
RNU6-1095P	51	3	410
RNU6-199P	51	4	411
RNU7-193P	51	4	412
SNRPGP3	51	6	413
TRAV1-1	51	2	414
HMG20B	50.5	4	415
LMX1B	50.5	6	416
LRP1	50.5	3	417
MIR365B	50.5	5	418
MROH5	50.5	4	419
NRBP2	50.5	2	420
RNA5SP101	50.5	4	421
SIRPB2	50.5	3	422
WDR34	50.5	5	423
B3GNT7	50	2	424
C10orf137	50	5	425
ECHDC3	50	4	426
MACROD1	50	3	427
MYH14	50	5	428
PDCD5	50	3	429
TESC	50	3	430
C12orf10	49.5	4	431
C8orf46	49.5	2	432
CKBP1	49.5	5	433
DLG5-AS1	49.5	1	434
DTYMK	49.5	2	435
PCBP3	49.5	5	436
RAX	49.5	5	437
SIGIRR	49.5	6	438
SYN3	49.5	4	439
SYT3	49.5	4	440
VTI1BP2	49.5	5	441
ZC3H8	49.5	4	442

CST7	49	2	443
FAM90A18P	49	2	444
GSC2	49	3	445
HEY1	49	1	446
HSPA4L	49	4	447
KRTAP5-14P	49	4	448
LAMA1	49	2	449
MIR4448	49	4	450
PGPEP1	49	5	451
SEPT7P9	49	5	452
SPSB1	49	4	453
ZNF555	49	2	454
A2ML1-AS1	48.5	5	455
CERS1	48.5	3	456
CHST10	48.5	2	457
DCHS1	48.5	4	458
FAM69C	48.5	5	459
GINS3	48.5	3	460
LINC00954	48.5	3	461
MIR27B	48.5	5	462
MIR4739	48.5	5	463
NDUFB10	48.5	2	464
OCIAD2	48.5	4	465
PSMB8	48.5	2	466
SNTB2	48.5	4	467
TLN2	48.5	5	468
WT1	48.5	4	469
ZDHHC8P1	48.5	3	470
ARHGDIG	48	3	471
BSCL2	48	4	472
GRM4	48	5	473
IRF6	48	1	474
MYSM1	48	3	475
RNA5SP378	48	4	476
RNU1-129P	48	5	477
SERTM1	48	3	478
SPEG	48	4	479
TICAM1	48	6	480
TMEM145	48	3	481
ZNF259	48	3	482
ABCC6	47.5	4	483
BHLHA15	47.5	4	484
CHST11	47.5	4	485
CRABP2	47.5	3	486
HLA-J	47.5	5	487
LCN1P1	47.5	4	488
LSMEM2	47.5	2	489
MIR769	47.5	3	490
PELI1	47.5	2	491
R3HDM4	47.5	4	492

RNF157-AS1	47.5	6	493
SNORA74B	47.5	2	494
TMEM215	47.5	6	495
ABHD17A	47	5	496
CNBD2	47	4	497
GRIA4	47	3	498
MIR1237	47	7	499
MRGPRX3	47	4	500

**Supplementary Table S22. List of the top 500 5hmC-gaining promoters based on the highest fold change increase after induced overexpression of *TET1* .**

These promoters were characterized by endogenous 5hmC content above the threshold of 5 reads for positive 5hmC identification per 5hmC site and showed increased 5hmC read numbers after *TET1* overexpression. Read numbers above the threshold were accumulated per promoter region.

gene_symbol	RRHP_+Dox_reads	RRHP_-Dox_reads	RRHP_5hmC_sites	fold_change	rank
DEAF1	350.5	5.5	18	63.73	1
MIR3940	243.5	5	17	48.70	2
ARPC1B	206	5	11	41.20	3
PPDPF	262	6.5	12	40.31	4
FSTL3	201	5	15	40.20	5
MBP	195.5	5	9	39.10	6
MIR3649	440	12	17	36.67	7
GNG13	182	5	13	36.40	8
GAREML	175	5	10	35.00	9
EIF4E1B	187.5	5.5	8	34.09	10
S1PR3	164.5	5	10	32.90	11
FAIM2	178	5.5	7	32.36	12
ACY1	192	6	9	32.00	13
ATP12A	158	5	6	31.60	14
KIAA1875	170	5.5	11	30.91	15
GRID1	212.5	7	14	30.36	16
DMPK	150.5	5	9	30.10	17
EBF4	164.5	5.5	7	29.91	18
C2orf50	149	5	7	29.80	19
MIR589	148.5	5	10	29.70	20
MIR3187	160.5	5.5	13	29.18	21
NELFCD	201	7	8	28.71	22
CCNA1	197.5	7	8	28.21	23
HRH3	151.5	5.5	8	27.55	24
ZNF423	163.5	6	7	27.25	25
RPS13	176	6.5	11	27.08	26
BEGAIN	148.5	5.5	2	27.00	27
MIR4656	175.5	6.5	17	27.00	28
DDAH2	134	5	8	26.80	29
NKX2-1-AS1	147	5.5	12	26.73	30
NR5A1	146	5.5	11	26.55	31
KLF4	157.5	6	9	26.25	32
HRH2	129.5	5	5	25.90	33
RELN	168	6.5	9	25.85	34
CHTF18	279.5	11	16	25.41	35
MAPK8	215.5	8.5	5	25.35	36
ATP2B3	189.5	7.5	11	25.27	37
VWCE	164	6.5	9	25.23	38
CTRB2	136	5.5	10	24.73	39
WDR63	135.5	5.5	7	24.64	40
VPS37D	171	7	10	24.43	41
DHPS	122	5	9	24.40	42
NGF	170.5	7	8	24.36	43
RIMS4	170	7	3	24.29	44
CDSN	120	5	6	24.00	45
AMZ1	168	7	9	24.00	46
LCN6	119.5	5	8	23.90	47
PPP1R1B	177	7.5	11	23.60	48
HEMK1	116	5	9	23.20	49
TENM3	115	5	7	23.00	50

ZNF503-AS2	126.5	5.5	8	23.00	51
ICAM5	160.5	7	11	22.93	52
GRK1	146	6.5	10	22.46	53
C8orf31	112	5	6	22.40	54
SPPL2A	200	9	7	22.22	55
MC1R	120.5	5.5	8	21.91	56
WNT10B	109.5	5	4	21.90	57
ZNF276	141	6.5	9	21.69	58
MIR1226	291	13.5	14	21.56	59
PPP2R2C	128.5	6	8	21.42	60
JPH2	107	5	7	21.40	61
TBC1D1	107	5	7	21.40	62
MRPS31P5	106.5	5	9	21.30	63
C9orf141	212	10	14	21.20	64
MIR133A2	169.5	8	10	21.19	65
SULT1A3	169.5	8	5	21.19	66
MAP4K4	116	5.5	6	21.09	67
AMDHD2	104.5	5	6	20.90	68
MIR193A	104.5	5	9	20.90	69
MORN3	114.5	5.5	8	20.82	70
TCF24	124.5	6	7	20.75	71
SATB2	103.5	5	5	20.70	72
EXOC2	124	6	6	20.67	73
LINC00475	113	5.5	7	20.55	74
PLCXD1	122.5	6	6	20.42	75
ANKRD18DP	102	5	4	20.40	76
MEIS1-AS2	122	6	5	20.33	77
SHANK2	152	7.5	5	20.27	78
SEMA6C	141.5	7	3	20.21	79
PPP1R18	101	5	4	20.20	80
ZNF584	131	6.5	7	20.15	81
RNF144A	150.5	7.5	5	20.07	82
TPSP2	180.5	9	8	20.06	83
H6PD	230.5	11.5	8	20.04	84
C16orf72	110	5.5	8	20.00	85
POU4F3	130	6.5	9	20.00	86
NCS1	240	12	6	20.00	87
PTP4A2P1	159.5	8	6	19.94	88
ASCL2	99.5	5	8	19.90	89
MAMSTR	148	7.5	6	19.73	90
RN7SL830P	108.5	5.5	8	19.73	91
RNU6-510P	108.5	5.5	5	19.73	92
BCORL1	138	7	9	19.71	93
PNOC	98.5	5	5	19.70	94
AGAP1	157	8	7	19.63	95
PPAP2C	205.5	10.5	8	19.57	96
CPNE7	97.5	5	10	19.50	97
SIRT5	136.5	7	6	19.50	98
KCNC3	107	5.5	6	19.45	99
RAB20	136	7	4	19.43	100
SHARPIN	204	10.5	11	19.43	101
VPS9D1-AS1	349.5	18	17	19.42	102
AP2A2	97	5	8	19.40	103
CD79B	126	6.5	6	19.38	104
ZBED3	126	6.5	3	19.38	105
CACNA1C-AS1	96.5	5	7	19.30	106

RN7SL838P	193	10	13	19.30	107
SLC6A4	154	8	11	19.25	108
SLC38A1	173	9	5	19.22	109
ZNF598	105.5	5.5	8	19.18	110
ACKR6	95.5	5	5	19.10	111
ANTXR1	95.5	5	4	19.10	112
C11orf91	95.5	5	4	19.10	113
C9orf117	105	5.5	4	19.09	114
TNS3	219.5	11.5	8	19.09	115
CYP2D7P1	124	6.5	6	19.08	116
KCNJ11	104.5	5.5	4	19.00	117
CCNF	123.5	6.5	6	19.00	118
CBX8	142	7.5	6	18.93	119
RPS10	94.5	5	7	18.90	120
C11orf35	113	6	6	18.83	121
SCT	113	6	6	18.83	122
RHOB	319.5	17	10	18.79	123
LOXL3	131.5	7	9	18.79	124
PPP1R16A	225	12	8	18.75	125
FAAH	130.5	7	4	18.64	126
KCNT1	130.5	7	4	18.64	127
LCN10	177	9.5	8	18.63	128
FAM53A	130	7	5	18.57	129
ABHD11	139	7.5	5	18.53	130
ACTG1	147.5	8	9	18.44	131
MIR671	92	5	7	18.40	132
GRPEL1	137.5	7.5	5	18.33	133
DLL1	174	9.5	6	18.32	134
FTSJ3	164.5	9	7	18.28	135
ANKRD20A8P	100.5	5.5	8	18.27	136
HR	209.5	11.5	13	18.22	137
ANKDD1B	91	5	6	18.20	138
QRFP	136.5	7.5	10	18.20	139
CDKN2D	109	6	5	18.17	140
FGFR3	218	12	5	18.17	141
TWIST2	181	10	11	18.10	142
KDELR3	117.5	6.5	5	18.08	143
SIRPA	144.5	8	7	18.06	144
PNPLA6	90	5	4	18.00	145
MYEOV2	108	6	4	18.00	146
MATK	314.5	17.5	9	17.97	147
TNNT3	107.5	6	10	17.92	148
JDP2	98.5	5.5	5	17.91	149
CABP4	89.5	5	7	17.90	150
ZBTB3	89.5	5	5	17.90	151
OPTN	98	5.5	7	17.82	152
MYL3	89	5	6	17.80	153
PLIN5	89	5	5	17.80	154
HPN	204.5	11.5	8	17.78	155
ANKRD63	115.5	6.5	4	17.77	156
MIR4800	150.5	8.5	10	17.71	157
ARC	88.5	5	3	17.70	158
MYADM	132.5	7.5	5	17.67	159
INSRR	185.5	10.5	7	17.67	160
HTT	97	5.5	5	17.64	161
SOX13	158.5	9	8	17.61	162

RN7SL391P	88	5	5	17.60	163
RPL7P4	96.5	5.5	6	17.55	164
FAM181A-AS1	96	5.5	9	17.45	165
SLC43A2	174.5	10	10	17.45	166
NOP14-AS1	122	7	4	17.43	167
ACSL1	104.5	6	5	17.42	168
DGKI	104.5	6	5	17.42	169
OVOL1	104.5	6	8	17.42	170
FLVCR2	87	5	4	17.40	171
IFITM5	130.5	7.5	4	17.40	172
TBC1D29	86.5	5	4	17.30	173
ZHX1	86.5	5	5	17.30	174
SNORD88B	103.5	6	6	17.25	175
SCARF2	422.5	24.5	13	17.24	176
WDR38	318	18.5	12	17.19	177
RIPK1	94.5	5.5	9	17.18	178
MIR4749	120	7	8	17.14	179
NOTUM	180	10.5	9	17.14	180
SLC22A18AS	248.5	14.5	14	17.14	181
TNFRSF10D	111	6.5	6	17.08	182
IFITM2	85	5	6	17.00	183
CHST2	93.5	5.5	6	17.00	184
C1orf216	118.5	7	6	16.93	185
CDH1	118.5	7	2	16.93	186
SMPX	93	5.5	4	16.91	187
IPO4	84.5	5	4	16.90	188
MCM2	84.5	5	5	16.90	189
MYOZ1	84.5	5	4	16.90	190
BRD1	202.5	12	5	16.88	191
ADAM11	84	5	3	16.80	192
MIR661	210	12.5	12	16.80	193
MIR4525	100.5	6	5	16.75	194
PIEZO2	83.5	5	7	16.70	195
SLC13A5	100	6	10	16.67	196
MIR196A1	191.5	11.5	10	16.65	197
IFITM10	116.5	7	8	16.64	198
UCN	191	11.5	12	16.61	199
MIR152	274	16.5	12	16.61	200
PRSS8	83	5	5	16.60	201
ALOX5	116	7	5	16.57	202
UBP1	124	7.5	7	16.53	203
MIR1234	148	9	6	16.44	204
ATHL1	197	12	7	16.42	205
IGFL1P2	82	5	6	16.40	206
RAMP2-AS1	106.5	6.5	6	16.38	207
SULT1A4	163.5	10	5	16.35	208
RIIAD1	106	6.5	7	16.31	209
PLXND1	114	7	5	16.29	210
BZRAP1-AS1	89.5	5.5	7	16.27	211
CHRD	146	9	4	16.22	212
FNDC1	186.5	11.5	13	16.22	213
CSRP2BP	81	5	5	16.20	214
STAG3	81	5	3	16.20	215
ZNF774	234.5	14.5	7	16.17	216
NTF6B	105	6.5	5	16.15	217
CLDN5	80.5	5	5	16.10	218

P2RY2	201	12.5	6	16.08	219
TMEM120A	112.5	7	3	16.07	220
CDIPT	144.5	9	5	16.06	221
TNFRSF13C	184.5	11.5	13	16.04	222
SUV420H1	80	5	7	16.00	223
FIZ1	128	8	9	16.00	224
ACOT7	207.5	13	4	15.96	225
VIPR2	103.5	6.5	1	15.92	226
CDH15	207	13	7	15.92	227
ANKRD9	95.5	6	6	15.92	228
ATP2A1	87.5	5.5	6	15.91	229
UBXN10	79.5	5	6	15.90	230
MIR5088	87	5.5	10	15.82	231
AK5	79	5	7	15.80	232
MGLL	79	5	2	15.80	233
ZAR1	79	5	7	15.80	234
ETHE1	94.5	6	7	15.75	235
PNMA6A	94.5	6	7	15.75	236
GDF7	283	18	14	15.72	237
ARHGAP23	212	13.5	9	15.70	238
SLC7A4	78.5	5	7	15.70	239
ZNF600	94	6	6	15.67	240
RNF223	227	14.5	13	15.66	241
FAM132A	296.5	19	15	15.61	242
HAND2	78	5	7	15.60	243
KLHL30	78	5	6	15.60	244
ZNF502	78	5	6	15.60	245
SNX3	93.5	6	4	15.58	246
HS3ST6	202.5	13	14	15.58	247
SCUBE3	124.5	8	9	15.56	248
OSCAR	85.5	5.5	7	15.55	249
SOX8	225	14.5	10	15.52	250
CD164L2	108.5	7	7	15.50	251
MGRN1	186	12	8	15.50	252
GCM2	108	7	7	15.43	253
UQCC	131	8.5	7	15.41	254
MRPS31	77	5	6	15.40	255
TMCO4	77	5	5	15.40	256
MYD88	161.5	10.5	3	15.38	257
MPPED1	84.5	5.5	4	15.36	258
SLC1A1	84.5	5.5	3	15.36	259
ANKRD53	92	6	9	15.33	260
CNTFR	705	46	25	15.33	261
DKC1	99.5	6.5	6	15.31	262
ZNF57	76.5	5	4	15.30	263
GPR17	84	5.5	7	15.27	264
ST6GALNAC6	84	5.5	7	15.27	265
CIRBP-AS1	152.5	10	5	15.25	266
PTGES	183	12	9	15.25	267
HOXD12	182.5	12	12	15.21	268
RSPO3	76	5	6	15.20	269
TMEM235	76	5	4	15.20	270
FRMD3	91	6	5	15.17	271
IGHG1	189.5	12.5	12	15.16	272
HOXD13	212	14	6	15.14	273
MIR4689	121	8	7	15.13	274



C2orf27B	83	5.5	4	15.09	275
TRABD2A	173.5	11.5	7	15.09	276
RNU1-28P	188.5	12.5	6	15.08	277
FAM105B	105.5	7	4	15.07	278
CCP110	218.5	14.5	3	15.07	279
SLC22A11	113	7.5	9	15.07	280
LINC00574	128	8.5	5	15.06	281
MIR23A	150.5	10	9	15.05	282
EPHA1-AS1	75	5	5	15.00	283
PSMD4	82.5	5.5	8	15.00	284
CYP24A1	127.5	8.5	5	15.00	285
KANK3	187.5	12.5	13	15.00	286
ENDOV	322.5	21.5	9	15.00	287
EXOC7	239.5	16	11	14.97	288
TPSAB1	127	8.5	6	14.94	289
MRPL34	112	7.5	9	14.93	290
EMC7	104.5	7	4	14.93	291
ERVFRD-1	97	6.5	3	14.92	292
RPL29	97	6.5	2	14.92	293
RFPL2	89.5	6	4	14.92	294
PPP4R2	82	5.5	4	14.91	295
PDIA2	297.5	20	12	14.88	296
ATP6AP1	104	7	7	14.86	297
CMKLR1	89	6	5	14.83	298
MAFB	89	6	4	14.83	299
MIR574	81.5	5.5	7	14.82	300
PDZD4	370	25	7	14.80	301
U2AF2	191.5	13	13	14.73	302
SLC26A1	272.5	18.5	13	14.73	303
LINC00028	81	5.5	10	14.73	304
PRTN3	81	5.5	7	14.73	305
CCDC79	132.5	9	6	14.72	306
ZBTB46	250	17	13	14.71	307
TMED11P	73.5	5	5	14.70	308
ZNF287	88	6	5	14.67	309
LRFN4	80.5	5.5	4	14.64	310
MIR1180	80.5	5.5	6	14.64	311
CCDC88B	73	5	6	14.60	312
CA15P2	109.5	7.5	2	14.60	313
ERGIC3	146	10	1	14.60	314
YDJC	87.5	6	5	14.58	315
PAX2	138.5	9.5	6	14.58	316
FICD	102	7	3	14.57	317
POLR1C	102	7	8	14.57	318
SEPN1	80	5.5	3	14.55	319
ZNF726	80	5.5	6	14.55	320
FEZ1	94.5	6.5	4	14.54	321
RNU6-1175P	109	7.5	6	14.53	322
IGFALS	72.5	5	6	14.50	323
FAM120B	87	6	6	14.50	324
CCDC134	275	19	8	14.47	325
TPRG1L	94	6.5	3	14.46	326
SLC1A2	79.5	5.5	5	14.45	327
SLC37A2	79.5	5.5	7	14.45	328
TNFSF12-TNFSF13	115.5	8	7	14.44	329
PARD6A	231	16	7	14.44	330

ACER1	86.5	6	9	14.42	331
BACE1	72	5	3	14.40	332
DYSF	72	5	6	14.40	333
MYL5	72	5	6	14.40	334
KCNA7	266	18.5	14	14.38	335
PAX6	316	22	15	14.36	336
MIR4321	437.5	30.5	14	14.34	337
PPM1N	107.5	7.5	7	14.33	338
BIN1	272	19	9	14.32	339
RHCG	93	6.5	6	14.31	340
RNF24	121.5	8.5	5	14.29	341
MICA	100	7	3	14.29	342
HPCA	85.5	6	7	14.25	343
PRSS12	171	12	5	14.25	344
STAC2	256.5	18	10	14.25	345
HLA-K	71	5	5	14.20	346
MRGPRG	106.5	7.5	5	14.20	347
RGL2	106.5	7.5	5	14.20	348
AGBL5-AS1	85	6	5	14.17	349
MIR145	85	6	4	14.17	350
MIR645	85	6	4	14.17	351
MMP25	99	7	8	14.14	352
RAD9A	148.5	10.5	9	14.14	353
IGFBP4	247.5	17.5	8	14.14	354
PRELID1P3	134	9.5	5	14.11	355
HSPB8	70.5	5	4	14.10	356
NME2	70.5	5	6	14.10	357
MIR602	141	10	7	14.10	358
MIOS	77.5	5.5	6	14.09	359
ODF2	84.5	6	6	14.08	360
PTPRN2	169	12	9	14.08	361
OTUD1	183	13	9	14.08	362
FGFRL1	112.5	8	8	14.06	363
SMYD5	161.5	11.5	7	14.04	364
ABCG8	70	5	3	14.00	365
ALDH1L2	70	5	7	14.00	366
IGHV3-71	77	5.5	2	14.00	367
UBE2J1	77	5.5	3	14.00	368
AXIN1	84	6	5	14.00	369
AKAP12	98	7	6	14.00	370
GLI2	105	7.5	9	14.00	371
AHCY	140	10	6	14.00	372
DCAF4	175	12.5	7	14.00	373
CYB561	433.5	31	17	13.98	374
RPL22	230	16.5	11	13.94	375
KIAA1257	104.5	7.5	5	13.93	376
PDLIM7	90.5	6.5	4	13.92	377
PGM5-AS1	83.5	6	7	13.92	378
C1orf65	76.5	5.5	8	13.91	379
GDPGP1	69.5	5	5	13.90	380
DUSP9	125	9	8	13.89	381
SLC51A	111	8	5	13.88	382
TRAPPC12	97	7	3	13.86	383
PPP1R3G	173	12.5	17	13.84	384
HN1L	83	6	4	13.83	385
MOB3A	83	6	4	13.83	386

GCGR	166	12	11	13.83	387
HOXD4	117.5	8.5	4	13.82	388
TNFRSF13B	76	5.5	7	13.82	389
DSG2	103.5	7.5	5	13.80	390
COL6A2	172.5	12.5	9	13.80	391
CCDC136	379.5	27.5	11	13.80	392
SDF4	96.5	7	8	13.79	393
LCK	82.5	6	3	13.75	394
RHOF	82.5	6	4	13.75	395
KBTBD12	75.5	5.5	6	13.73	396
KRI1	75.5	5.5	3	13.73	397
RN7SL835P	75.5	5.5	3	13.73	398
DPP7	96	7	6	13.71	399
DNMT3L	185	13.5	8	13.70	400
B4GALNT2	68.5	5	8	13.70	401
NANOS1	150.5	11	6	13.68	402
CACNB3	82	6	5	13.67	403
C9orf89	75	5.5	5	13.64	404
PCOLCE-AS1	75	5.5	5	13.64	405
GIGYF2	88.5	6.5	5	13.62	406
PPP1R3E	88.5	6.5	4	13.62	407
PTPN7	177	13	10	13.62	408
ZNF133	68	5	4	13.60	409
CRAMP1L	183.5	13.5	8	13.59	410
SLC9A3R2	203.5	15	11	13.57	411
C3AR1	74.5	5.5	2	13.55	412
PRUNE2	74.5	5.5	3	13.55	413
SLC22A20	74.5	5.5	5	13.55	414
BHLHE23	311.5	23	12	13.54	415
EPHA8	237	17.5	4	13.54	416
KCNB1	88	6.5	5	13.54	417
ALG1	115	8.5	6	13.53	418
TRIP13	250	18.5	6	13.51	419
EVPL	67.5	5	6	13.50	420
HDAC10	303	22.5	10	13.47	421
MARS	87.5	6.5	5	13.46	422
GRIN2C	175	13	11	13.46	423
KLRG2	74	5.5	5	13.45	424
ABCB6	195	14.5	10	13.45	425
ATP8B1	94	7	5	13.43	426
MAPK15	127.5	9.5	7	13.42	427
ZNHIT2	288.5	21.5	6	13.42	428
PSMB4	80.5	6	5	13.42	429
CCNI2	67	5	7	13.40	430
SCRT2	67	5	2	13.40	431
SPSB3	67	5	8	13.40	432
RPH3AL	140.5	10.5	5	13.38	433
SLC39A4	267.5	20	16	13.38	434
CABP2	180.5	13.5	13	13.37	435
ITGB5	73.5	5.5	6	13.36	436
WNT6	73.5	5.5	6	13.36	437
NBR2	120	9	5	13.33	438
ATP6VOCP3	106.5	8	6	13.31	439
ACSL6	66.5	5	3	13.30	440
CCDC130	66.5	5	6	13.30	441
MRPS34	66.5	5	3	13.30	442

PRAP1	66.5	5	2	13.30	443
LRRFIP1	166	12.5	6	13.28	444
ADCY9	73	5.5	5	13.27	445
KAT5	146	11	4	13.27	446
CDC42	99.5	7.5	8	13.27	447
FAM64A	112.5	8.5	3	13.24	448
MYO7B	112.5	8.5	9	13.24	449
CLASRP	198.5	15	8	13.23	450
EXOSC10	119	9	5	13.22	451
CTDSPL2	92.5	7	4	13.21	452
NANOS2	66	5	5	13.20	453
PABPN1L	66	5	5	13.20	454
GNA15	178	13.5	11	13.19	455
GOLT1A	72.5	5.5	5	13.18	456
TFAP2C	112	8.5	8	13.18	457
OPN1MW	79	6	8	13.17	458
JAK3	118.5	9	7	13.17	459
GPR35	85.5	6.5	6	13.15	460
LHB	177.5	13.5	5	13.15	461
BSND	144.5	11	4	13.14	462
UNC93B1	144.5	11	3	13.14	463
C8orf56	98.5	7.5	3	13.13	464
MIR593	65.5	5	4	13.10	465
PAPOLA	65.5	5	3	13.10	466
APCDD1L-AS1	131	10	9	13.10	467
RNU1-108P	78.5	6	5	13.08	468
PHRF1	170	13	5	13.08	469
PAX7	98	7.5	8	13.07	470
TPSG1	222	17	12	13.06	471
LY6E	137	10.5	8	13.05	472
ACAP1	65	5	4	13.00	473
DOK6	65	5	3	13.00	474
CPZ	71.5	5.5	6	13.00	475
MTMR9LP	71.5	5.5	6	13.00	476
WHSC1L1	71.5	5.5	5	13.00	477
ANKRD36BP2	84.5	6.5	4	13.00	478
LRRC38	84.5	6.5	7	13.00	479
WNT2	91	7	8	13.00	480
MDK	97.5	7.5	7	13.00	481
ZC3HAV1	117	9	6	13.00	482
C1orf54	175.5	13.5	2	13.00	483
TPBGL	201.5	15.5	5	13.00	484
SSTR5-AS1	325	25	17	13.00	485
OBSL1	188	14.5	5	12.97	486
SOHLH1	103.5	8	7	12.94	487
ATP6V1G1P3	97	7.5	8	12.93	488
ATP5I	194	15	4	12.93	489
FOXRED2	194	15	4	12.93	490
LINC00051	194	15	12	12.93	491
SLC7A9	90.5	7	5	12.93	492
GPR25	84	6.5	4	12.92	493
FBLN1	329.5	25.5	12	12.92	494
CACNG7	77.5	6	6	12.92	495
HTR2C	71	5.5	8	12.91	496
ATP13A2	64.5	5	3	12.90	497
DDX55	64.5	5	4	12.90	498

RNA5SP393	64.5	5	5	12.90	499
MRPS24	116	9	3	12.89	500

**Supplementary Table S23. Statistical overrepresentation test of the top 500 *de novo* and fold change 5hmC-gaining promoters after *TET1* overexpression.**  
 The top 5hmC-gaining promoters after induced overexpression of *TET1* were analyzed using the PANTHER Overrepresentation Test with default settings.

Analysis Type: PANTHER Overrepresentation Test (release 20150430)  
 Annotation Version and Release Date: PANTHER version 10.0 Released 2015-05-15  
 Bonferroni correction for multiple testing  
 Annotation Data Set: PANTHER GO-Slim Biological Process

Reference List:  
 Homo sapiens (all genes in database)

Reference list  
 20814  
 0

Mapped IDs:  
 Unmapped IDs:

Displaying only results with P<0.05

		<i>TET1</i> overexpression									
Homo sapiens (REF)		Top 500 <i>de novo</i> 5hmC-gaining promoters (406 mapped IDs)					Top 500 fold change 5hmC-gaining promoters (424 mapped IDs)				
#		#	expected	Fold Enrichment	+/-	P value	#	expected	Fold Enrichment	+/-	P value
PANTHER GO-Slim Biological Process biological regulation		3918	110	76.42	1.44	+ 6.51E-03					



**Supplementary Table S24. List of 18 promoters characterized by differential methylation according to BeadChip analyses and by *de novo* or fold change 5hmC increase after induced overexpression of *TET1*.**

From the 500 top-ranked, mostly hypomethylated promoters identified after *TET1* overexpression, 18 promoters were among the top 500 *de novo* or fold change 5hmC-gaining promoters.

	gene_symbol	450K_beta.TET1+Dox	450K_beta.TET1-Dox	450K_beta_difference	450K_num.sites	RRHP_de_novo_reads	RRHP_+Dox_reads	RRHP_-Dox_reads	RRHP_fold_change	RRHP_5hmC_sites
<i>de novo</i> 5hmC increase	SHISA5	0.734637015	0.649913597	0.084723418	3	98.5	-	-	-	5
	FAM27E2	0.586671306	0.47688265	0.109788656	1	92.5	-	-	-	6
	METTL21A	0.416876715	0.363769164	0.053107551	5	90	-	-	-	7
	RDH8	0.576190123	0.649119278	-0.072929155	4	80	-	-	-	4
	BBS10	0.241064635	0.131405949	0.109658686	13	64.5	-	-	-	4
	PSMD2	0.078716033	0.130606806	-0.051890773	5	62	-	-	-	3
	SYT3	0.464084667	0.52910856	-0.065023893	6	49.5	-	-	-	4
	PTP4A2P1	0.084815991	0.132685376	-0.047869385	2	-	159.5	8	19.94	6
	MYADM	0.542498667	0.59733302	-0.054834354	11	-	132.5	7.5	17.67	5
	SCARF2	0.273210582	0.357018311	-0.083807729	10	-	422.5	24.5	17.24	13
fold change 5hmC increase	MYD88	0.367254643	0.453860153	-0.086605511	14	-	161.5	10.5	15.38	3
	RFPL2	0.5474095	0.614791422	-0.067381922	5	-	89.5	6	14.92	4
	ZNF726	0.141953305	0.327020175	-0.18506687	1	-	80	5.5	14.55	6
	STAC2	0.372307758	0.439943887	-0.06763613	10	-	256.5	18	14.25	10
	ALDH1L2	0.64340531	0.728004041	-0.084598731	11	-	70	5	14.00	7
	BHLHE23	0.561227896	0.63558759	-0.074359695	9	-	311.5	23	13.54	12
	MAPK15	0.522963163	0.600589664	-0.077626502	14	-	127.5	9.5	13.42	7
	CPZ	0.530963413	0.57741693	-0.046453517	10	-	71.5	5.5	13.00	6

**Table S25.** Results of the HOMER *de novo* motif discovery.














**Enriched motifs near the top 5,000 hypomethylated CpG sites after *TET1* overexpression**




Rank	Motif	P-value	log P-value	% of Targets	% of Background	Best Match/Details
1		1e-32	-7.508e+01	8.90%	4.83%	Fra1(bZIP)/BT549-Fra1-ChIP-Seq(GSE46166)/Homer(0.981)
2		1e-12	-2.800e+01	2.08%	0.94%	byn/dmmpmm(SeSiMCMC)/fly(0.726)

**Enriched motifs near the top 5,000 hypermethylated CpG sites after *TET* triple knockdown**








Rank	Motif	P-value	log P-value	% of Targets	% of Background	Best Match/Details
1		1e-20	-4.832e+01	12.12%	8.17%	Ets1-distal(ETS)/CD4+-PolIII-ChIP-Seq(Barski et al.)/Homer(0.932)
2		1e-19	-4.417e+01	46.22%	39.86%	MA0598.1_EHF/Jaspar(0.688)
3		1e-18	-4.270e+01	0.46%	0.03%	ROX1/Literature(Harbison)/Yeast(0.704)
4		1e-17	-4.045e+01	0.70%	0.10%	MA0592.1_ESRRA/Jaspar(0.679)
5		1e-16	-3.704e+01	0.26%	0.01%	MA0035.3_Gata1/Jaspar(0.649)
6		1e-15	-3.580e+01	6.00%	3.64%	HLHm5/dmmpmm(Pollard)/fly(0.669)
7		1e-15	-3.573e+01	1.02%	0.25%	Oct2(POU,Homeobox)/Bcell-Oct2-ChIP-Seq(GSE21512)/Homer(0.638)
8		1e-14	-3.450e+01	0.64%	0.10%	Unknown3/Arabidopsis-Promoters/Homer(0.616)
9		1e-14	-3.441e+01	2.20%	0.92%	MA0329.1_MBP1/Jaspar(0.675)



10		1e-14	-3.429e+01	0.98%	0.24%	PB0047.1_Myf6_1/Jaspar(0.683)
11		1e-14	-3.416e+01	0.46%	0.04%	Reverb(NR),DR2/RAW-Reverba. biotin-ChIP-Seq (GSE45914)/Homer(0.648)
12		1e-14	-3.405e+01	0.64%	0.10%	MA0362.1_RDS2/Jaspar(0.796)
13		1e-14	-3.363e+01	19.52%	15.36%	hkb/dmmpmm(Papatsenko)/ fly(0.844)
14		1e-14	-3.361e+01	4.62%	2.64%	GAMYB(MYB)/Hordeum vulgare/AthaMap(0.590)
15		1e-14	-3.319e+01	0.24%	0.01%	MA0427.1_YJL103C/Jaspar(0.643)
16		1e-14	-3.316e+01	0.40%	0.03%	MET31(Maclsaac)/Yeast(0.654)
17		1e-14	-3.262e+01	47.88%	42.43%	MA0056.1_MZF1_1-4/Jaspar(0.818)
18		1e-13	-3.204e+01	21.16%	16.96%	PB0100.1_Zfp740_1/Jaspar(0.718)
19		1e-13	-3.156e+01	0.62%	0.10%	PB0155.1_Osr2_2/Jaspar(0.669)
20		1e-13	-3.152e+01	0.38%	0.03%	MA0123.1_abi4/Jaspar(0.689)
21		1e-13	-3.060e+01	0.24%	0.01%	Smad4(MAD)/ESC-SMAD4-ChIP- Seq(GSE29422)/Homer(0.684)
22		1e-13	-3.039e+01	3.80%	2.11%	byn/dmmpmm(Pollard)/fly(0.675)
23		1e-12	-2.946e+01	18.60%	14.79%	PB0199.1_Zfp161_2/Jaspar(0.870)
24		1e-12	-2.914e+01	1.04%	0.31%	UME1/UME1_YPD/[(Harbison)/ Yeast(0.683)





25		1e-12	-2.825e+01	8.38%	5.85%	SeqBias: CA-repeat(0.858)
26		1e-12	-2.818e+01	7.60%	5.20%	ara/dmmpmm(Pollard)/fly(0.789)
27		1e-12	-2.766e+01	0.22%	0.01%	SKN7/SKN7_H2O2Lo/[] (Harbison)/Yeast(0.604)

### Enriched motifs near the top 5,000 *de novo* 5hmC-gaining CpG sites after *TET1* overexpression

Rank	Motif	P-value	log P-value	% of Targets	% of Background	Best Match/Details
1		1e-164	-3.781e+02	55.84%	36.70%	MA0280.1_CAT8/Jaspar(0.841)
2		1e-16	-3.736e+01	0.36%	0.02%	Dr/dmmpmm(Noyes_hd)/fly(0.651)
3		1e-14	-3.334e+01	46.14%	40.67%	ttk/dmmpmm(Bigfoot)/fly(0.766)
4		1e-14	-3.238e+01	13.64%	10.19%	MA0485.1_Hoxc9/Jaspar(0.763)
5		1e-14	-3.235e+01	5.62%	3.45%	MA0280.1_CAT8/Jaspar(0.635)
6		1e-13	-3.049e+01	24.84%	20.48%	PB0143.1_Klf7_2/Jaspar(0.742)
7		1e-12	-2.785e+01	25.96%	21.73%	SWI4(MacIsaac)/Yeast(0.818)

Enriched motifs near the top 5,000 fold change 5hmC-gaining CpG sites after *TET1* overexpression

Rank	Motif	P-value	log P-value	% of Targets	% of Background	Best Match/Details
1		1e-312	-7.185e+02	56.18%	30.26%	MA0280.1_CAT8/Jaspar(0.829)
2		1e-22	-5.167e+01	4.50%	2.17%	MA0473.1_ELF1/Jaspar(0.722)
3		1e-20	-4.630e+01	10.68%	7.06%	PHD1/PHD1_BUT90/8-SUT1(Harbison)/Yeast(0.685)
4		1e-17	-3.999e+01	38.44%	32.64%	POL010.1_DCE_S_III/Jaspar(0.667)
5		1e-17	-3.991e+01	3.76%	1.88%	MA0280.1_CAT8/Jaspar(0.665)
6		1e-16	-3.810e+01	19.14%	14.76%	PL0017.1_hlh-2::hlh-10/Jaspar(0.726)
7		1e-15	-3.554e+01	52.70%	46.97%	MA0403.1_TBF1/Jaspar(0.736)
8		1e-15	-3.477e+01	38.06%	32.68%	MA0067.1_Pax2/Jaspar(0.726)
9		1e-14	-3.406e+01	39.98%	34.59%	Initiator/Drosophila-Promoters/Homer(0.791)
10		1e-14	-3.345e+01	15.46%	11.74%	Trl/dmmpmm(Pollard)/fly(0.641)
11		1e-14	-3.333e+01	35.36%	30.20%	MA0294.1_EDS1/Jaspar(0.815)
12		1e-13	-3.190e+01	0.28%	0.01%	PB0174.1_Sox30_2/Jaspar(0.700)
13		1e-13	-3.170e+01	15.22%	11.62%	MA0391.1_STB4/Jaspar(0.728)

14		1e-13	-3.106e+01	0.24%	0.01%	MA0256.1_zen/Jaspar(0.758)
15		1e-13	-3.034e+01	0.24%	0.01%	PH0062.1_Hoxb7/Jaspar(0.692)
16		1e-12	-2.913e+01	22.80%	18.68%	ETS1(ETS)/Jurkat-ETS1-ChIP-Seq(GSE17954)/Homer(0.699)
17		1e-12	-2.826e+01	41.94%	37.01%	MA0282.1_CEP3/Jaspar(0.725)

**Supplementary Table S26. Primers and UPL probes used for qRT-PCR.**

The ProbeFinder Software is available at the Assay Design Center (<http://lifescience.roche.com/webapp/wcs/stores/servlet/CategoryDisplay?catalogId=10001&tab=&identifier=Universal+Probe+Library&langId=-1#tab-3>).

<b>Gene symbol</b>	<b>Primer name</b>	<b>Sequence (5' to 3')</b>	<b>UPL probe</b>
<i>TET1</i>	Taq_TET1_for	tctgttgttgctcctgga	#57
	Taq_TET1_rev	gcctttaaactttgggcttc	
<i>GAPDH</i>	Taq_GAPDH_for	agccacatcgctcagacac	#60
	Taq_GAPDH_rev	gccaatacgaccaaattcc	
<i>TET2</i>	Taq_TET2_B_for	aaacttactcggagcttaccg	#73
	Taq_TET2_B_rev	tgacaggcgcaagttctct	
<i>TET3</i>	Taq_TET3_for	ccattgcaaagtgggtga	#25
	Taq_TET3_rev	cgcaccaggcagagtagc	
<i>ASMTL</i>	Taq_ASMTL_for	gagaagccggtggacaag	#89
	Taq_ASMTL_rev	tgtgttctctcccactcaacc	
<i>TRAPPC6A</i>	Taq_TRAPPC6A_for	gttcagaagcagatggacag	#52
	Taq_TRAPPC6A_rev	ccagatactgcaggccaga	
<i>WIPI1</i>	Taq_WIPI1_for	gaccgtagccagaccaagtg	#41
	Taq_WIPI1_rev	cgccgtcctcagaataacc	
<i>ACPL2</i>	Taq_ACPL2_for	aataatgctttccgcaacc	#30
	Taq_ACPL2_rev	accgggatcaggtggaag	
<i>ARRDC4</i>	Taq2_ARRDC4_f	cactgaccctgccagagc	#6
	Taq2_ARRDC4_r	tgagggtaaggaggaatgtgtc	
<i>ERBB3</i>	Taq2_ERBB3_f	ccgagatgctgagatagtgtt	#29
	Taq2_ERBB3_r	cttgcaaacctcatgacagg	
<i>VTA1</i>	Taq_VTA1_for	catcaggcaactatactggaataca	#78
	Taq_VTA1_rev	ggttgatagtattacttgctacacct	
<i>ZNF678</i>	Taq2_ZNF678_f	ttgaactcctccctcaagtg	#29
	Taq2_ZNF678_r	ctgaatgccagtagtccctgt	

**Supplementary Table S27. RnBeads settings used for Infinium HumanMethylation450 BeadChip analyses.**

## **Preprocessing**

<b>Option</b>	<b>Value</b>
filtering.whitelist	
filtering.blacklist	
filtering.snp	3
filtering.missing.value.quantile	1
filtering.greedy	yes
filtering.greedy.pvalue.threshold	0.05
filtering.greedy.rc.ties	row
distribution.subsample	1000000
normalization.method	swan
normalization.background.method	methyumi.noob
normalization.plot.shifts	yes
filtering.context.removal	CC, CAG, CAH, CTG, CTH, Other
filtering.missing.value.quantile	1
filtering.sex.chromosomes.removal	no
filtering.deviation.threshold	0
distribution.subsample	1000000

## **Exploratory Analysis**

<b>Option</b>	<b>Value</b>
replicate.id.column	default
distribution.subsample	1000000

## **Differential Methylation**

<b>Option</b>	<b>Value</b>
analyze.sites	yes
region.types	default
differential.permutations	0
differential.comparison.columns	default
differential.comparison.columns.all.pairwise	default
columns.pairing	default
differential.site.test.method	limma
covariate.adjustment.columns	default
differential.adjustment.sva	yes
differential.adjustment.celltype	yes