

Appendix 1 Cancer differential methylated genes (cDMGs)

Appendix 1.1 – Differentially expressed genes for breast cancer.

Genes	Gene_Symbol	<i>pvalue_adjust</i>	log ₂ (Foldchange)
ADCY8 114	ADCY8	3.78E-15	-1.61024
ADCYAP1R1 117	ADCYAP1R1	1.37E-23	-1.55953
APOB 338	APOB	4.75E-26	-1.71651
APOBEC1 339	APOBEC1	2.65E-05	3.713445
BTNL2 56244	BTNL2	2.56E-07	-1.56044
C13orf36 400120	C13orf36	1.70E-23	-2.23728
C16orf11 146325	C16orf11	2.04E-05	2.043785
C17orf64 124773	C17orf64	6.40E-14	-1.51429
C1orf230 284485	C1orf230	2.41E-12	2.236132
C20orf85 128602	C20orf85	0.0051082	2.214147
C3orf50 93556	C3orf50	1.97E-18	-2.3019
C7orf16 10842	C7orf16	3.36E-14	-2.06496
C8orf22 492307	C8orf22	2.01E-08	-2.07933
CACNG5 27091	CACNG5	0.043692223	2.50431
CCL1 6346	CCL1	0.000421062	1.984998
CCL7 6354	CCL7	1.54E-08	1.895776
CDK5R2 8941	CDK5R2	2.44E-05	1.650237
CHRNA6 8973	CHRNA6	1.67E-26	2.720222
CLDN25 644672	CLDN25	2.65E-10	3.035763
CLDN6 9074	CLDN6	1.78E-07	1.51539
CMTM5 116173	CMTM5	1.44E-20	-1.5558
COL29A1 256076	COL29A1	1.09E-08	2.110849
CPA1 1357	CPA1	7.19E-30	-2.41234
CRHR2 1395	CRHR2	4.90E-18	-1.55116
CST5 1473	CST5	2.69E-10	2.698205
CYP1A2 1544	CYP1A2	3.85E-05	-1.91728
DCAF12L1 139170	DCAF12L1	2.99E-13	-1.59517
DLK1 8788	DLK1	5.26E-19	-1.64789
DNAJC5G 285126	DNAJC5G	5.24E-07	-1.81122
DPP6 1804	DPP6	2.34E-27	-1.70627
DUSP13 51207	DUSP13	2.44E-09	1.652558
EFNA2 1943	EFNA2	0.000220379	3.684249
F2 2147	F2	2.88E-07	2.671647
FCRL4 83417	FCRL4	1.36E-19	3.214507
FOXG1 2290	FOXG1	0.007468817	1.826042
FRMPD4 9758	FRMPD4	3.01E-18	-1.68825
GAB4 128954	GAB4	9.84E-06	-1.81983
GABRA4 2557	GABRA4	1.26E-16	-2.41073
GABRA5 2558	GABRA5	1.32E-06	2.531089
GABRQ 55879	GABRQ	0.007567309	2.031881
GNGT1 2792	GNGT1	0.00316872	2.568962
GPR123 84435	GPR123	5.14E-11	-1.79269

GRIN2B 2904	GRIN2B	1.57E-22	-1.96937
GRM4 2914	GRM4	1.77E-24	1.876292
HEPN1 641654	HEPN1	4.27E-27	-1.75457
HIST1H1A 3024	HIST1H1A	0.000727331	2.624084
HIST1H2BB 3018	HIST1H2BB	2.74E-05	2.380529
HIST1H4L 8368	HIST1H4L	0.027933988	2.907368
HMX2 3167	HMX2	2.62E-07	2.700817
HORMAD2 150280	HORMAD2	1.21E-06	-2.04188
HOXB13 10481	HOXB13	1.71E-07	2.242113
HOXC12 3228	HOXC12	0.003641728	2.000368
HPD 3242	HPD	7.11E-19	-1.73639
HPSE2 60495	HPSE2	2.18E-28	-1.79186
HPYR1 93668	HPYR1	0.000457173	1.603815
HS3ST4 9951	HS3ST4	4.44E-20	-1.62755
KCNA4 3739	KCNA4	4.69E-21	-2.57248
KCNH5 27133	KCNH5	1.49E-13	-2.25989
KCNJ16 3773	KCNJ16	1.82E-26	-1.5582
KRTAP3-1 83896	KRTAP3-1	0.006899931	1.689716
LHX1 3975	LHX1	0.022281858	2.046216
LHX2 9355	LHX2	1.07E-15	2.002553
LHX9 56956	LHX9	0.000734802	1.885352
LOC100132354 100132354	LOC100132354	2.09E-06	1.788207
LOC201651 201651	LOC201651	5.61E-23	-1.58675
LOC284661 284661	LOC284661	2.11E-09	-2.04155
LOC642597 642597	LOC642597	7.99E-15	-2.46411
LOC646627 646627	LOC646627	0.008593985	2.484756
LOC647309 647309	LOC647309	4.91E-21	-2.81833
LPA 4018	LPA	0.00117384	-1.53872
LRRC3B 116135	LRRC3B	1.34E-28	-1.98482
MAGEA1 4100	MAGEA1	0.000473114	2.537682
METTL11B 149281	METTL11B	4.08E-18	4.624172
MS4A15 219995	MS4A15	5.30E-17	2.488982
MYT1 4661	MYT1	3.94E-14	1.535842
NKX2-2 4821	NKX2-2	5.08E-05	2.172034
NKX2-3 159296	NKX2-3	0.030001463	1.926245
NPHS1 4868	NPHS1	4.81E-07	1.673317
NPY2R 4887	NPY2R	2.59E-22	-1.8574
OLFM3 118427	OLFM3	0.019714015	1.782271
OR10A3 26496	OR10A3	1.96E-17	-2.80199
OR5P3 120066	OR5P3	0.000102535	-1.61321
OTP 23440	OTP	5.73E-05	2.001677
PAX7 5081	PAX7	0.000759878	1.888118
PDX1 3651	PDX1	0.008052127	3.346008
PLAC1 10761	PLAC1	5.40E-23	2.290264
POU6F2 11281	POU6F2	7.43E-09	-1.6858
PROC 5624	PROC	4.76E-27	1.824074
PROKR1 10887	PROKR1	7.57E-18	-2.18765

PRRG3 79057	PRRG3	6.10E-25	-1.52988
RAX 30062	RAX	0.000460009	2.652757
RBM46 166863	RBM46	3.51E-15	-1.89749
RESP18 389075	RESP18	0.040093727	-3.60623
RP1-177G6.2 286411	RP1-177G6.2	4.35E-05	-1.72174
RXRG 6258	RXRG	3.55E-24	-1.55267
SBK2 646643	SBK2	2.74E-07	3.107397
SGCZ 137868	SGCZ	8.69E-14	-2.38789
SLC24A2 25769	SLC24A2	8.66E-24	3.347718
SLC32A1 140679	SLC32A1	0.007722758	1.951242
SLC6A19 340024	SLC6A19	0.02199667	2.878835
SLC6A2 6530	SLC6A2	5.22E-25	-1.69993
SLC7A14 57709	SLC7A14	3.20E-24	-2.01252
SP8 221833	SP8	0.045245577	3.60938
SPHKAP 80309	SPHKAP	4.68E-21	-1.77396
TBX20 57057	TBX20	0.0003396	1.646648
TCHHL1 126637	TCHHL1	0.004567018	3.071436
TEPP 374739	TEPP	2.18E-18	-1.73811
TERT 7015	TERT	1.86E-11	1.607042
TLX1 3195	TLX1	6.10E-07	2.091894
TLX1NB 100038246	TLX1NB	2.49E-11	5.246989
TLX3 30012	TLX3	0.007963623	3.431032
TMEM196 256130	TMEM196	1.25E-07	-1.67603
TRIM15 89870	TRIM15	0.000114659	2.11294
TRPM1 4308	TRPM1	3.02E-10	-1.71975
TUBA3C 7278	TUBA3C	7.96E-11	1.942983
WIT1 51352	WIT1	2.85E-13	2.262483
WT1 7490	WT1	9.08E-16	1.582593

Appendix 1.2 - Differentially expressed genes for colorectal cancer.

Genes	Gene_Symbol	<i>pvalue_adjust</i>	log₂(Foldchange)
ABCA12 26154	ABCA12	0.013616	1.643278
ADAMTS19 171019	ADAMTS19	1.07E-08	-1.95949
ADCYAP1R1 117	ADCYAP1R1	4.48E-08	-3.34101
ADRB3 155	ADRB3	2.61E-09	-2.21542
AGTR1 185	AGTR1	4.69E-09	-1.54082
AKR1CL1 340811	AKR1CL1	0.005314	3.188003
ALK 238	ALK	2.77E-09	-2.43529
ALOXE3 59344	ALOXE3	0.001239	1.74863
ANKS1B 56899	ANKS1B	1.75E-09	-1.83867
AQP5 362	AQP5	0.000457	1.74512
ARL5C 390790	ARL5C	0.0008	-2.13591
ASPG 374569	ASPG	2.22E-07	-1.61497

ASTN1 460	ASTN1	1.14E-09	-2.58936
ATCAY 85300	ATCAY	1.22E-09	-2.39966
ATP13A5 344905	ATP13A5	0.000901	-2.60535
B3GALT1 8708	B3GALT1	2.99E-09	-1.50474
BAI3 577	BAI3	1.14E-09	-2.47315
BEST4 266675	BEST4	1.14E-09	-1.6049
BEX1 55859	BEX1	1.14E-09	-1.96555
BMP3 651	BMP3	1.14E-09	-1.6132
BTNL2 56244	BTNL2	0.000558	-2.832
C13orf36 400120	C13orf36	2.58E-09	-2.93752
C13orf38 728591	C13orf38	4.07E-06	-2.29142
C1orf173 127254	C1orf173	1.01E-08	-2.31566
C2orf40 84417	C2orf40	1.14E-09	-2.11543
C3orf72 401089	C3orf72	0.020597	3.086948
C6orf155 79940	C6orf155	2.87E-08	-1.50182
C6orf186 728464	C6orf186	1.44E-09	-1.96862
C9orf4 23732	C9orf4	1.22E-09	-3.60405
C9orf79 286234	C9orf79	1.81E-07	-3.34591
CA10 56934	CA10	4.70E-09	-1.79014
CACNG5 27091	CACNG5	5.21E-05	-5.05246
CACNG7 59284	CACNG7	4.05E-08	-2.75103
CADM2 253559	CADM2	1.14E-09	-3.3193
CADM3 57863	CADM3	1.14E-09	-1.61265
CALCA 796	CALCA	0.004384	1.91079
CALY 50632	CALY	1.25E-09	-2.95297
CAMKV 79012	CAMKV	0.004281	1.71598
CD300LG 146894	CD300LG	2.63E-09	-2.38354
CDH19 28513	CDH19	1.32E-09	-2.34067
CDH22 64405	CDH22	1.39E-08	-2.01334
CHRM2 1129	CHRM2	6.61E-08	-2.14638
CHRNA4 1137	CHRNA4	0.000191	-2.11202
CHST4 10164	CHST4	0.000156	1.9032
CHST8 64377	CHST8	4.77E-08	-1.95481
CIDEA 1149	CIDEA	1.14E-09	-3.76947
CLVS2 134829	CLVS2	1.14E-09	-4.21696
CMA1 1215	CMA1	1.14E-09	-2.68978
CNGA3 1261	CNGA3	2.11E-09	-1.6484
CNKSR2 22866	CNKSR2	9.28E-08	-1.56006
CNTFR 1271	CNTFR	1.36E-09	-2.1899
CNTN1 1272	CNTN1	2.22E-09	-1.85442
CNTN2 6900	CNTN2	1.75E-09	-1.96438
CNTNAP4 85445	CNTNAP4	3.51E-06	-3.39316
COL11A1 1301	COL11A1	2.20E-09	1.922362
COL29A1 256076	COL29A1	1.96E-05	-1.67046
CPA4 51200	CPA4	2.52E-06	2.079227
CPEB1 64506	CPEB1	1.14E-09	-2.15608
CPNE4 131034	CPNE4	4.94E-07	-1.53664

CRABP1 1381	CRABP1	4.25E-08	-1.5335
CRHBP 1393	CRHBP	1.90E-09	-1.52474
CST2 1470	CST2	1.07E-06	2.945361
CTNNA3 29119	CTNNA3	2.88E-09	-2.51001
CTNND2 1501	CTNND2	1.20E-09	-2.07986
DACH2 117154	DACH2	2.13E-07	-1.87113
DBX2 440097	DBX2	0.00396	-2.28248
DCAF12L1 139170	DCAF12L1	3.13E-05	-3.09734
DIRC1 116093	DIRC1	0.000424	4.527528
DIRC3 729582	DIRC3	6.12E-09	-1.73738
DLGAP2 9228	DLGAP2	1.64E-07	-1.86221
DLX6AS 285987	DLX6AS	0.000702	2.998087
DMRTA1 63951	DMRTA1	1.90E-09	-1.96613
DMRTA2 63950	DMRTA2	0.037668	1.696718
DNER 92737	DNER	3.93E-09	-1.51251
DPP10 57628	DPP10	5.57E-07	-1.71415
DPP6 1804	DPP6	1.33E-09	-2.26809
DSCAML1 57453	DSCAML1	5.61E-09	-1.62207
DUSP5P 574029	DUSP5P	1.18E-06	2.775664
ELANE 1991	ELANE	1.14E-09	-3.16938
ELAVL3 1995	ELAVL3	1.28E-09	-3.02242
ELAVL4 1996	ELAVL4	2.95E-09	-1.77884
ELMOD1 55531	ELMOD1	5.28E-08	-1.63032
EN2 2020	EN2	0.009005	2.251067
ENPP6 133121	ENPP6	1.14E-09	-1.53338
EPHA5 2044	EPHA5	3.33E-08	-1.9479
EPHA6 285220	EPHA6	2.95E-09	-2.87096
FAM135B 51059	FAM135B	1.14E-09	-2.47674
FAM5C 339479	FAM5C	2.09E-09	-2.41515
FEZF1 389549	FEZF1	1.85E-07	6.619383
FFAR1 2864	FFAR1	0.011066	-2.12301
FGF10 2255	FGF10	8.91E-08	-1.62233
FGF19 9965	FGF19	3.40E-05	2.28103
FGF20 26281	FGF20	0.003818	3.476588
FGF3 2248	FGF3	0.028666	3.095722
FGF8 2253	FGF8	0.046061	1.546188
FMN2 56776	FMN2	2.63E-08	-1.81555
FRMPD4 9758	FRMPD4	4.18E-09	-2.75677
GABRG1 2565	GABRG1	2.66E-10	-4.67752
GAD1 2571	GAD1	4.84E-08	2.732974
GAL3ST3 89792	GAL3ST3	0.00093	-2.47597
GBX2 2637	GBX2	2.92E-07	6.099528
GFRA3 2676	GFRA3	1.14E-09	-1.52046
GP2 2813	GP2	2.27E-07	-1.51358
GPM6A 2823	GPM6A	2.37E-09	-2.04352
GPR123 84435	GPR123	3.05E-05	-2.6284
GPR26 2849	GPR26	1.94E-07	-2.75938

GRHL3 57822	GRHL3	1.14E-09	1.604944
GRIA2 2891	GRIA2	1.92E-06	-2.10416
GRIA3 2892	GRIA3	1.22E-09	-1.62288
GRIN2A 2903	GRIN2A	1.93E-09	-1.73703
GSDMC 56169	GSDMC	1.08E-07	1.746355
HABP2 3026	HABP2	6.70E-05	2.382557
HBM 3042	HBM	4.81E-05	-3.20551
HCN4 10021	HCN4	2.97E-08	-1.73116
HCRT 3060	HCRT	0.003187	3.027137
HEPHL1 341208	HEPHL1	0.000327	1.647128
HMGCLL1 54511	HMGCLL1	1.15E-09	-1.68061
HMHB1 57824	HMHB1	0.039525	2.882952
HMX3 340784	HMX3	9.01E-08	-1.76969
HPSE2 60495	HPSE2	1.15E-09	-1.68203
HRK 8739	HRK	4.33E-07	-2.48178
HTR3B 9177	HTR3B	8.47E-08	-4.59867
HTR5A 3361	HTR5A	0.003902	-3.12914
IBSP 3381	IBSP	1.40E-06	3.812795
IGSF11 152404	IGSF11	9.29E-09	-1.90159
IL1RAPL2 26280	IL1RAPL2	0.005407	-1.5902
IL5RA 3568	IL5RA	3.98E-08	-2.06399
INA 9118	INA	1.43E-09	-1.54728
INSL6 11172	INSL6	0.038884	-2.37035
IRX1 79192	IRX1	0.002287	-2.41235
IRX5 10265	IRX5	3.84E-07	2.321498
KCNA1 3736	KCNA1	7.32E-08	-2.38609
KCNC2 3747	KCNC2	0.000152	-1.74921
KCNIP1 30820	KCNIP1	2.28E-07	-1.73057
KCNK2 3776	KCNK2	3.61E-09	-1.72621
KCNQ2 3785	KCNQ2	2.80E-05	-1.60805
KCNS2 3788	KCNS2	1.93E-08	-1.97409
KIAA1751 85452	KIAA1751	0.000217	2.02497
KIAA2022 340533	KIAA2022	1.14E-09	-1.83415
KIF1A 547	KIF1A	1.64E-09	-1.67408
KIR3DX1 90011	KIR3DX1	0.0019	-2.42842
KRT23 25984	KRT23	1.47E-07	1.542102
KRTAP3-1 83896	KRTAP3-1	0.000702	4.473923
LECT1 11061	LECT1	2.78E-06	-2.29175
LHFPL1 340596	LHFPL1	3.04E-05	-1.59761
LHFPL4 375323	LHFPL4	1.14E-09	-2.45113
LMX1A 4009	LMX1A	1.73E-09	-2.37339
LOC284276 284276	LOC284276	1.20E-09	-1.91056
LOC286467 286467	LOC286467	4.85E-08	2.876746
LOC389493 389493	LOC389493	1.14E-09	-3.32993
LOC400804 400804	LOC400804	0.000307	-1.68847
LOC84931 84931	LOC84931	2.75E-07	6.280649
LONRF2 164832	LONRF2	6.96E-09	-1.66053

LPO 4025	LPO	1.62E-06	3.050536
LRAT 9227	LRAT	1.32E-09	-2.47165
LRRC3B 116135	LRRC3B	1.14E-09	-3.31577
LY6G6D 58530	LY6G6D	0.000179	1.563556
LY6G6E 79136	LY6G6E	1.88E-07	4.194419
MAFA 389692	MAFA	0.000131	-2.05788
MAPK4 5596	MAPK4	1.05E-08	-1.70122
MAS1L 116511	MAS1L	1.14E-09	-3.64593
MCHR2 84539	MCHR2	9.37E-09	-4.00502
MGAT4C 25834	MGAT4C	6.38E-10	-3.71051
MMD2 221938	MMD2	7.82E-06	-2.61275
MMP20 9313	MMP20	0.011334	1.692984
MOGAT1 116255	MOGAT1	0.048534	1.698052
MYOT 9499	MYOT	1.14E-09	-2.3728
MYT1L 23040	MYT1L	9.75E-09	-3.36372
NANOS3 342977	NANOS3	1.66E-06	1.583508
NCAN 1463	NCAN	4.25E-06	-1.56267
NEFL 4747	NEFL	1.24E-09	-1.86434
NEFM 4741	NEFM	4.83E-09	-1.7049
NEUROD1 4760	NEUROD1	1.70E-08	-2.20398
NLGN1 22871	NLGN1	1.15E-09	-2.32857
NOS1 4842	NOS1	8.36E-07	-2.13947
NPAS4 266743	NPAS4	8.61E-09	-2.0414
NPFFR1 64106	NPFFR1	5.12E-06	1.609569
NPY 4852	NPY	1.14E-09	-3.17006
NPY2R 4887	NPY2R	1.61E-09	-2.90015
NPY5R 4889	NPY5R	1.17E-06	-1.6218
NRG3 10718	NRG3	1.49E-07	-1.93805
NRSN1 140767	NRSN1	3.64E-09	-2.45501
NRXN1 9378	NRXN1	1.14E-09	-2.26376
NTNG1 22854	NTNG1	5.53E-08	-1.71922
NXPH1 30010	NXPH1	0.000243	4.362306
OBP2B 29989	OBP2B	0.015174	3.403071
ONECUT3 390874	ONECUT3	0.024112	4.610758
OPRM1 4988	OPRM1	1.79E-07	-3.36853
OR1J4 26219	OR1J4	0.015122	2.956574
OR2L13 284521	OR2L13	1.14E-09	-3.73722
OR2W3 343171	OR2W3	5.40E-07	-1.51032
OTX1 5013	OTX1	2.75E-09	3.224364
PAEP 5047	PAEP	2.89E-05	3.877506
PAK7 57144	PAK7	1.94E-07	-2.46078
PAX4 5078	PAX4	6.85E-06	-1.65956
PCDH10 57575	PCDH10	1.36E-09	-2.37003
PCDH8 5100	PCDH8	4.40E-06	-1.50707
PCDHB1 29930	PCDHB1	5.75E-06	-2.50127
PCP4L1 654790	PCP4L1	1.66E-07	-1.5996
PCSK2 5126	PCSK2	1.14E-09	-2.94975

PENK 5179	PENK	4.01E-06	-1.57132
PGC 5225	PGC	4.55E-05	2.155347
PGLYRP3 114771	PGLYRP3	0.005716	4.703651
PHOX2B 8929	PHOX2B	1.14E-09	-2.95125
PIK3C2G 5288	PIK3C2G	1.19E-09	-2.66036
PKD1L2 114780	PKD1L2	1.47E-08	-1.81538
PLCXD3 345557	PLCXD3	4.11E-09	-1.80997
PLD5 200150	PLD5	1.28E-09	-3.20306
PLP1 5354	PLP1	1.14E-09	-2.20288
PPP1R1A 5502	PPP1R1A	2.54E-08	-1.87396
PRB2 653247	PRB2	0.015638	3.967656
PRHOXNB 646625	PRHOXNB	9.57E-08	-2.19908
PRIMA1 145270	PRIMA1	1.14E-09	-1.59626
PRPH 5630	PRPH	1.14E-09	-1.74413
PRRG3 79057	PRRG3	7.14E-09	-2.11362
PRRT4 401399	PRRT4	1.61E-06	-1.50492
PRSS1 5644	PRSS1	0.005326	1.742451
PTF1A 256297	PTF1A	0.012762	4.264442
PTPRZ1 5803	PTPRZ1	1.22E-09	-1.98531
RALYL 138046	RALYL	1.14E-09	-3.46097
RASGEF1C 255426	RASGEF1C	1.14E-09	-2.65563
RGS22 26166	RGS22	4.83E-08	-1.87956
RIC3 79608	RIC3	3.93E-09	-1.64383
RIMS2 9699	RIMS2	9.69E-08	-2.17461
RIMS4 140730	RIMS4	1.83E-09	-2.09685
RIPPLY2 134701	RIPPLY2	4.67E-06	-2.58953
RORB 6096	RORB	9.80E-07	-1.55833
RSPO2 340419	RSPO2	1.14E-09	-1.7367
SAA4 6291	SAA4	7.10E-06	2.773909
SALL4 57167	SALL4	1.73E-09	1.809289
SCG3 29106	SCG3	1.66E-09	-1.90659
SCNN1G 6340	SCNN1G	1.50E-06	-1.66591
SEC14L4 284904	SEC14L4	0.046548	1.635986
SEMA3E 9723	SEMA3E	1.14E-09	-2.15524
SEMG2 6407	SEMG2	0.019094	4.615364
SERPINB7 8710	SERPINB7	0.000239	2.173943
SEZ6L 23544	SEZ6L	3.93E-09	-2.01058
SFTPD 6441	SFTPD	5.54E-07	-1.50068
SGCG 6445	SGCG	1.14E-09	-3.35487
SH3GL3 6457	SH3GL3	4.52E-07	-3.70202
SIX1 6495	SIX1	3.86E-09	1.664363
SLC16A12 387700	SLC16A12	1.14E-09	-1.65186
SLC26A9 115019	SLC26A9	3.94E-05	2.029847
SLC27A6 28965	SLC27A6	1.19E-09	-2.02651
SLC30A10 55532	SLC30A10	1.14E-09	-2.30897
SLC35F3 148641	SLC35F3	2.89E-08	-1.85905
SLC5A7 60482	SLC5A7	1.50E-09	-2.62046

SLC5A8 160728	SLC5A8	2.32E-06	-1.68871
SLC6A15 55117	SLC6A15	1.14E-09	-2.64991
SLC6A19 340024	SLC6A19	2.98E-09	-2.09315
SLC6A2 6530	SLC6A2	3.33E-07	-2.32101
SLC7A14 57709	SLC7A14	1.14E-09	-2.87898
SLCO1B1 10599	SLCO1B1	0.004894	3.553262
SLCO4C1 353189	SLCO4C1	1.83E-09	-1.63349
SLITRK2 84631	SLITRK2	2.03E-09	-2.11512
SLITRK4 139065	SLITRK4	4.11E-09	-1.60981
SNTG2 54221	SNTG2	1.91E-09	-2.49839
SNX32 254122	SNX32	2.13E-08	-1.86894
SOHLH2 54937	SOHLH2	1.10E-05	-2.18861
SORCS1 114815	SORCS1	1.14E-09	-1.60126
SORCS3 22986	SORCS3	2.22E-09	-2.70215
SOX14 8403	SOX14	1.61E-06	6.46383
SPAG17 200162	SPAG17	0.033827	1.775868
SPAG6 9576	SPAG6	1.03E-07	-2.33637
SPERT 220082	SPERT	3.30E-07	4.071516
SPOCK3 50859	SPOCK3	1.64E-09	-3.29832
SPRR1A 6698	SPRR1A	0.000198	6.209938
SPRR2E 6704	SPRR2E	0.02241	3.885866
SPRR3 6707	SPRR3	0.000869	4.481173
SST 6750	SST	1.14E-09	-2.59484
ST8SIA3 51046	ST8SIA3	1.14E-09	-3.19164
STAC2 342667	STAC2	1.10E-08	-1.76108
STON1-GTF2A1L 286749	STON1-GTF2A1L	0.026052	-1.62524
STRA6 64220	STRA6	1.14E-09	1.86406
STXBP5L 9515	STXBP5L	1.71E-07	-1.53369
SVOPL 136306	SVOPL	1.13E-07	-2.19792
SYT10 341359	SYT10	1.14E-09	-2.87238
SYT4 6860	SYT4	1.14E-09	-2.20864
SYT9 143425	SYT9	1.14E-09	-2.99579
TAS2R38 5726	TAS2R38	3.64E-06	1.59616
TAT 6898	TAT	2.39E-09	-2.11238
TBX20 57057	TBX20	0.045509	2.457511
TBX5 6910	TBX5	0.039525	3.95718
TCN1 6947	TCN1	1.15E-07	2.343515
TEX101 83639	TEX101	3.13E-05	-1.60717
TFAP2B 7021	TFAP2B	9.02E-06	-3.93169
TG 7038	TG	5.84E-08	1.512263
TMEFF2 23671	TMEFF2	9.04E-10	-3.81316
TNNI3 7137	TNNI3	1.41E-06	2.664956
TPH1 7166	TPH1	3.73E-09	-2.08508
TPH2 121278	TPH2	0.000499	-2.85495
TTY14 83869	TTY14	0.003057	-1.94302
ULBP1 80329	ULBP1	2.47E-18	1.602129
UNC5D 137970	UNC5D	4.25E-09	-1.82562

VSTM2A 222008	VSTM2A	1.14E-09	-2.66443
VWC2 375567	VWC2	5.53E-08	-1.68952
WDR17 116966	WDR17	1.12E-08	-1.61919
WNT2 7472	WNT2	1.14E-09	1.775872
WNT7B 7477	WNT7B	1.22E-09	3.208024
WT1 7490	WT1	0.000235	1.817844
XKR4 114786	XKR4	1.14E-09	-3.15196
ZIC1 7545	ZIC1	3.99E-07	-2.71644
ZIC5 85416	ZIC5	1.14E-06	5.908159
ZIM2 23619	ZIM2	0.004446	-3.2191
ZNF280A 129025	ZNF280A	5.51E-05	3.667233
ZNF492 57615	ZNF492	1.43E-07	-1.79187
ZNF727 442319	ZNF727	1.78E-07	-1.59758

Appendix 1.3 – Differentially expressed genes for head and neck cancer.

Gene	Gene_Symbol	<i>pvalue_adjust</i>	<i>log2(Foldchange)</i>
ABCC8 6833	ABCC8	0.002886	-1.64487
ACCSL 390110	ACCSL	0.017251	-4.46586
ADCY8 114	ADCY8	9.18E-05	-2.86397
ADH1B 125	ADH1B	5.22E-06	-1.50847
AGBL4 84871	AGBL4	0.018337	-1.73497
AMELY 266	AMELY	0.038467	-2.32214
BMP3 651	BMP3	1.58E-05	-1.61742
C10orf90 118611	C10orf90	0.00171	-1.58835
C10orf93 255352	C10orf93	4.01E-05	-1.6121
C13orf26 122046	C13orf26	0.008338	-2.99731
C13orf36 400120	C13orf36	0.002438	-2.09341
C1orf173 127254	C1orf173	0.000522	-2.26339
C20orf141 128653	C20orf141	0.000115	2.657089
C6 729	C6	1.49E-05	-2.09328
C6orf10 10665	C6orf10	0.00264	2.068684
C6orf118 168090	C6orf118	0.004799	-2.13908
CA10 56934	CA10	0.000632	-2.25276
CDH12 1010	CDH12	0.000369	-1.64874
CHRM1 1128	CHRM1	0.000905	-2.24306
CNGB3 54714	CNGB3	0.000668	2.298173
CPNE4 131034	CPNE4	5.10E-05	-1.67934
CSMD3 114788	CSMD3	0.003188	2.413996
CSN2 1447	CSN2	0.000194	-3.87293
CYP4Z2P 163720	CYP4Z2P	0.003838	-1.90255
DCT 1638	DCT	0.002998	-1.80696
DLK1 8788	DLK1	0.000335	-1.57795
DPCR1 135656	DPCR1	0.000339	-2.05493

DPP10 57628	DPP10	0.0014	-2.74493
DSCAM 1826	DSCAM	0.001057	1.571388
EPHA6 285220	EPHA6	7.38E-06	-2.0839
FAM150A 389658	FAM150A	0.007508	-2.46619
FAM183B 340286	FAM183B	0.021358	1.796244
FCN2 2220	FCN2	0.006029	-3.18351
FOXI2 399823	FOXI2	1.91E-06	-1.97321
GABRA4 2557	GABRA4	6.57E-05	-1.90401
GABRB1 2560	GABRB1	0.020173	-1.64627
GABRG3 2567	GABRG3	0.00443	-1.88479
GBX2 2637	GBX2	5.31E-05	2.674603
GPR144 347088	GPR144	6.71E-05	2.581066
GRIA2 2891	GRIA2	0.015897	-1.94552
GRIA4 2893	GRIA4	0.005161	-1.83473
GRID2 2895	GRID2	0.002296	-2.65634
GRIK3 2899	GRIK3	6.85E-05	-1.60634
GRM7 2917	GRM7	0.000258	-2.66205
HCN1 348980	HCN1	0.00108	-2.2022
HMGCLL1 54511	HMGCLL1	0.000239	-1.81048
HOTAIR 100124700	HOTAIR	3.95E-05	2.279598
HOXB9 3219	HOXB9	3.09E-05	2.930675
HOXC11 3227	HOXC11	2.20E-06	2.335814
HOXC9 3225	HOXC9	1.58E-05	1.58117
HOXD13 3239	HOXD13	0.000196	2.203406
IGF2BP1 10642	IGF2BP1	0.000103	1.823582
IL24 11009	IL24	1.35E-08	1.704819
KCNC2 3747	KCNC2	0.000417	-2.74948
KCTD8 386617	KCTD8	0.00634	-1.50451
KLHL33 123103	KLHL33	0.004562	-1.67289
LHFPL1 340596	LHFPL1	1.42E-05	-1.62188
LHX1 3975	LHX1	2.18E-06	3.780419
LHX5 64211	LHX5	0.000329	2.879919
LHX9 56956	LHX9	0.000562	2.293583
LMX1A 4009	LMX1A	0.000393	-1.60418
LRRC3B 116135	LRRC3B	0.008078	-1.68226
MDGA2 161357	MDGA2	0.033456	-2.17008
MGC16121 84848	MGC16121	1.09E-05	1.610461
NKAIN3 286183	NKAIN3	0.007682	-5.18984
NOL4 8715	NOL4	0.004081	-1.89419
NPFFR2 10886	NPFFR2	0.026659	-2.0073
NPY 4852	NPY	0.000429	-2.14458
NPY2R 4887	NPY2R	0.013979	-2.51525
NPY5R 4889	NPY5R	0.006179	-2.7512
NR1H4 9971	NR1H4	0.033858	-1.50582
NRG3 10718	NRG3	0.000392	-1.5569
PACRG 135138	PACRG	8.12E-06	-1.57245
PAQR9 344838	PAQR9	0.014584	-1.79885

PDX1 3651	PDX1	0.043464	2.362928
POU3F3 5455	POU3F3	0.015746	-1.98509
PRAMEF12 390999	PRAMEF12	0.037107	-4.87102
PROKR2 128674	PROKR2	0.041303	-3.99935
RBP4 5950	RBP4	4.27E-06	-1.61413
RGR 5995	RGR	0.001812	-1.53036
RGS7BP 401190	RGS7BP	0.000141	-1.59042
SHISA9 729993	SHISA9	5.43E-05	-1.65975
SLC5A7 60482	SLC5A7	0.002122	-2.12626
SLC5A8 160728	SLC5A8	2.35E-05	-3.04614
SLC7A14 57709	SLC7A14	0.000691	-2.31833
SLITRK3 22865	SLITRK3	0.007363	-1.54006
SOST 50964	SOST	0.000383	1.859097
SPATA4 132851	SPATA4	0.014287	-2.17129
SYNPR 132204	SYNPR	0.02667	-2.30348
TLX2 3196	TLX2	0.016368	2.312618
TRH 7200	TRH	0.004388	-1.83477
TRPM3 80036	TRPM3	0.000181	-1.67294
UGT3A1 133688	UGT3A1	0.000331	-3.33054
UNC13C 440279	UNC13C	1.36E-05	-2.09638
VAX1 11023	VAX1	0.001099	3.207563
WIF1 11197	WIF1	3.08E-06	-2.28337
WT1 7490	WT1	0.032992	1.952702
ZIC5 85416	ZIC5	2.27E-05	2.460854
ZNF536 9745	ZNF536	0.001242	-1.52373

Appendix 1.4 - Differentially expressed genes for kidney_R cancer.

Gene	Gene_Symbol	<i>pvalue_adjust</i>	log₂(Foldchange)
A2BP1 54715	A2BP1	7.29E-14	-3.00006
ABCA4 24	ABCA4	5.39E-13	-1.78378
ADH1C 126	ADH1C	5.21E-13	-1.97159
AKNAD1 254268	AKNAD1	2.08E-06	-1.59635
AKR1CL1 340811	AKR1CL1	0.000139	2.942924
ANKRD2 26287	ANKRD2	1.27E-12	-1.60536
AQP2 359	AQP2	3.73E-13	-2.52059
ATP10B 23120	ATP10B	3.39E-11	-1.79186
ATP4B 496	ATP4B	2.57E-12	-2.18389
B4GALNT2 124872	B4GALNT2	5.77E-13	-1.72343
BCAS1 8537	BCAS1	3.50E-11	-1.57479
BIRC7 79444	BIRC7	1.91E-11	2.807446
BMP7 655	BMP7	4.39E-12	-1.84876
BSND 7809	BSND	3.99E-14	-3.12991
BTBD16 118663	BTBD16	4.55E-10	1.764211

C10orf71 118461	C10orf71	1.27E-12	-2.41961
C10orf99 387695	C10orf99	5.10E-08	2.214637
C11orf16 56673	C11orf16	1.81E-12	-2.54477
C11orf86 254439	C11orf86	6.50E-05	1.613885
C13orf26 122046	C13orf26	0.00059	-1.64225
C14orf50 145376	C14orf50	3.33E-12	-1.51225
C15orf53 400359	C15orf53	0.000168	2.353073
C1orf127 148345	C1orf127	7.38E-21	1.865365
C20orf151 140893	C20orf151	2.43E-15	-3.28691
C4orf6 10141	C4orf6	6.01E-12	2.961184
C5orf38 153571	C5orf38	2.10E-12	-1.77362
C8orf22 492307	C8orf22	5.92E-05	2.862382
CA10 56934	CA10	4.78E-13	-2.64359
CA9 768	CA9	2.29E-12	2.453755
CALB1 793	CALB1	3.00E-09	-1.68986
CAPN8 388743	CAPN8	2.60E-12	-2.56639
CCDC33 80125	CCDC33	5.40E-10	-1.88397
CD5L 922	CD5L	1.10E-07	2.494575
CHRNA6 8973	CHRNA6	2.09E-08	1.935184
CKMT1A 548596	CKMT1A	1.49E-09	-1.50097
CLCN1 1180	CLCN1	9.72E-10	-1.898
CLCNKA 1187	CLCNKA	6.47E-13	-1.84429
CLDN16 10686	CLDN16	1.75E-12	-1.74872
CLDN19 149461	CLDN19	5.53E-13	-1.59617
CLDN8 9073	CLDN8	3.62E-13	-2.63904
CLNK 116449	CLNK	4.29E-12	-2.02244
CTNNA2 1496	CTNNA2	4.72E-10	-1.54554
DEFB132 400830	DEFB132	4.91E-23	-4.66636
DGCR10 26222	DGCR10	2.42E-12	2.499835
DLX2 1746	DLX2	7.76E-09	2.385863
DPP10 57628	DPP10	4.36E-13	-2.91233
DUSP5P 574029	DUSP5P	7.65E-11	1.524085
EHF 26298	EHF	6.85E-13	-1.65821
ELF5 2001	ELF5	3.27E-13	-2.99981
EMID2 136227	EMID2	1.28E-12	-2.16903
EPN3 55040	EPN3	8.05E-13	-2.08787
ESRP1 54845	ESRP1	4.58E-12	-1.58443
ESRRB 2103	ESRRB	5.53E-13	-1.93313
F2 2147	F2	4.12E-05	2.06842
FAM184B 27146	FAM184B	6.29E-13	-3.04751
FATE1 89885	FATE1	6.85E-13	2.286973
FBN3 84467	FBN3	9.42E-13	-2.55144
FGFBP1 9982	FGFBP1	3.39E-12	-2.34274
FLJ42875 440556	FLJ42875	8.53E-13	-1.9254
FOXI1 2299	FOXI1	4.54E-13	-2.68567
FXYD4 53828	FXYD4	9.47E-15	-3.32324
GABRA2 2555	GABRA2	2.57E-13	-2.74847

GAL3ST3 89792	GAL3ST3	1.28E-12	-1.87566
GGT6 124975	GGT6	5.77E-13	-1.62946
GPR110 266977	GPR110	6.24E-13	-1.90939
GRHL2 79977	GRHL2	1.45E-12	-2.13187
GRM1 2911	GRM1	1.30E-12	-1.58753
HAO1 54363	HAO1	0.046775	-2.00276
HEPACAM2 253012	HEPACAM2	6.29E-13	-2.75543
HES5 388585	HES5	1.28E-08	2.204206
IL20RA 53832	IL20RA	5.71E-10	-1.50066
IRX1 79192	IRX1	6.01E-13	-1.65083
KCNA1 3736	KCNA1	2.21E-11	-2.04334
KCNA4 3739	KCNA4	1.67E-10	-2.46399
KCNE1 3753	KCNE1	5.77E-13	-1.64421
KCNJ1 3758	KCNJ1	5.65E-13	-1.50951
KRT32 3882	KRT32	9.53E-05	2.245748
LGALS12 85329	LGALS12	1.17E-07	1.572626
LGR5 8549	LGR5	9.64E-10	-1.77355
LHX1 3975	LHX1	7.39E-12	-2.2122
LILRA4 23547	LILRA4	2.40E-10	1.943551
LINGO3 645191	LINGO3	2.97E-05	2.373166
LOC100128076 100128076	LOC100128076	0.00023	3.27088
LOC100131551 100131551	LOC100131551	1.04E-11	1.518689
LOC285796 285796	LOC285796	1.80E-08	-1.52571
LSAMP 4045	LSAMP	1.81E-12	-2.12273
LYPD6B 130576	LYPD6B	1.18E-12	-1.86292
MAP3K15 389840	MAP3K15	5.22E-12	-1.65106
MAPK4 5596	MAPK4	1.34E-11	-1.71881
MARCH10 162333	MARCH	1.58E-12	-2.11681
MS4A3 932	MS4A3	0.036712	1.922177
MYEOV 26579	MYEOV	9.93E-12	2.11428
MYO3B 140469	MYO3B	1.66E-12	-1.60236
NAT8L 339983	NAT8L	1.05E-12	-1.78015
NCRNA00160 54064	NCRNA00160	0.004085	3.997237
NDST3 9348	NDST3	1.00E-12	-1.7483
NEIL3 55247	NEIL3	1.34E-12	1.838402
NPY 4852	NPY	0.00072	-1.55299
NR0B2 8431	NR0B2	7.72E-13	-2.79584
OLFM3 118427	OLFM3	1.14E-14	-3.42948
OLFM4 10562	OLFM4	4.13E-11	-1.83136
OVCH2 341277	OVCH2	1.05E-14	-3.04449
OVOL2 58495	OVOL2	1.93E-12	-2.36427
PADI1 29943	PADI1	2.83E-09	1.670867
PHF21B 112885	PHF21B	4.87E-11	-1.84308
PLA2G4F 255189	PLA2G4F	6.29E-13	-2.48493
PPP1R1B 84152	PPP1R1B	5.41E-12	-2.04124
PRSS22 64063	PRSS22	1.36E-12	-2.53974
PVT1 5820	PVT1	5.44E-13	1.759878

RAB25 57111	RAB25	2.66E-12	-1.84067
RAB3B 5865	RAB3B	1.93E-10	-1.77842
RANBP3L 202151	RANBP3L	5.41E-13	-1.82702
REG1A 5967	REG1A	2.88E-07	1.558986
RNASE3 6037	RNASE3	4.35E-07	2.222466
ROS1 6098	ROS1	4.15E-15	-3.61662
RPSAP52 204010	RPSAP52	5.39E-11	-1.82175
RUFY4 285180	RUFY4	1.74E-09	1.832019
RXFP4 339403	RXFP4	4.56E-11	-2.11242
S100A5 6276	S100A5	1.06E-11	-1.93999
S100Z 170591	S100Z	1.45E-11	2.565697
SEMA3E 9723	SEMA3E	4.51E-09	-1.53545
SFTA1P 207107	SFTA1P	4.02E-12	3.437696
SIAH3 283514	SIAH3	7.09E-13	-2.6009
SLC17A2 10246	SLC17A2	9.27E-10	1.946801
SLC7A14 57709	SLC7A14	3.53E-11	-2.50686
SPERT 220082	SPERT	9.04E-11	-1.83446
ST8SIA2 8128	ST8SIA2	2.73E-09	-1.65818
SVOPL 136306	SVOPL	8.97E-12	-2.13159
TAGLN3 29114	TAGLN3	6.29E-13	-2.38993
TDGF3 6998	TDGF3	1.32E-12	-2.68638
TERT 7015	TERT	0.000159	4.429828
TFAP2B 7021	TFAP2B	4.53E-13	-2.42793
TFAP2C 7022	TFAP2C	4.05E-11	-1.63251
TGM7 116179	TGM7	3.64E-12	-2.36209
TH 7054	TH	8.53E-13	-2.66492
TMEM61 199964	TMEM61	2.60E-12	-1.91917
TMPRSS12 283471	TMPRSS12	4.58E-11	-2.59996
TMPRSS4 56649	TMPRSS4	2.60E-12	-1.76942
TNFAIP6 7130	TNFAIP6	5.35E-12	1.887395
TNFSF14 8740	TNFSF14	1.64E-11	2.169032
TNIP3 79931	TNIP3	1.12E-08	1.589871
TNNI2 7136	TNNI2	4.08E-11	1.798761
TP73 7161	TP73	2.32E-12	1.971944
TRPV6 55503	TRPV6	6.01E-13	-2.15477
UBASH3A 53347	UBASH3A	3.11E-11	1.517861
UMODL1 89766	UMODL1	5.57E-14	-3.15148
UNC13C 440279	UNC13C	5.23E-12	-1.82864
UNC5A 90249	UNC5A	1.15E-10	1.752731
UNC93A 54346	UNC93A	7.26E-09	-1.78974
VGLL1 51442	VGLL1	3.62E-15	-3.55021
VSIG1 340547	VSIG1	8.84E-12	1.62234
VWA3B 200403	VWA3B	2.56E-11	-2.25117
WFDC12 128488	WFDC12	1.05E-09	-1.95293
WNT7B 7477	WNT7B	6.15E-12	-1.8561
XKR4 114786	XKR4	1.41E-09	-1.56437
ZIC3 7547	ZIC3	9.23E-10	-1.92572

Appendix 1.5 – Differentially expressed genes for kidney_p cancer.

Genes	Gene_Symbol	<i>pvalue_adjust</i>	log₂(Foldchange)
ABCA4 24	ABCA4	6.80E-13	-2.13271
ABCC13 150000	ABCC13	0.020261	-2.49726
ADH1C 126	ADH1C	2.55E-12	-2.12234
ALX4 60529	ALX4	4.99E-07	-2.34243
AMELY 266	AMELY	3.10E-14	-3.97677
APOH 350	APOH	3.53E-10	-1.60423
AQP2 359	AQP2	5.49E-13	-2.79863
AZU1 566	AZU1	0.005391	1.785546
BMP5 653	BMP5	7.72E-13	-2.98366
BSND 7809	BSND	2.70E-14	-3.89626
C10orf50 645528	C10orf50	5.05E-06	2.470227
C10orf99 387695	C10orf99	4.97E-05	1.624187
C16orf11 146325	C16orf11	2.08E-15	-4.00779
C1orf168 199920	C1orf168	6.30E-12	-1.63867
C1orf64 149563	C1orf64	5.76E-13	-2.63175
C20orf151 140893	C20orf151	1.24E-13	-2.89825
C21orf29 54084	C21orf29	1.06E-11	-2.49436
C4orf26 152816	C4orf26	2.52E-07	2.404864
C6orf223 221416	C6orf223	1.12E-11	-1.71534
CALML3 810	CALML3	1.34E-11	-2.25044
CAMK2A 815	CAMK2A	1.15E-12	-2.84986
CAMP 820	CAMP	0.001468	1.565385
CASQ2 845	CASQ2	6.74E-12	-1.52433
CDKN2BAS 100048912	CDKN2BAS	9.95E-07	2.056536
CGA 1081	CGA	3.62E-25	-5.49976
CHRM3 1131	CHRM3	3.44E-12	-1.80249
CLDN8 9073	CLDN8	1.14E-13	-3.09307
CLEC3A 10143	CLEC3A	2.70E-12	-2.79833
CPNE6 9362	CPNE6	6.13E-16	-4.83861
CSF3 1440	CSF3	3.39E-06	-1.74952
DCDC2B 149069	DCDC2B	0.002457	1.549908
DGKI 9162	DGKI	2.65E-12	-1.96038
DNAJC5B 85479	DNAJC5B	1.00E-09	2.478569
DOC2A 8448	DOC2A	3.34E-10	1.551318
DUSP5P 574029	DUSP5P	1.74E-07	2.869176
EBF2 64641	EBF2	1.05E-12	-2.48716
ELF5 2001	ELF5	1.66E-12	-2.32656
F11 2160	F11	9.04E-13	-2.15634
FAM3B 54097	FAM3B	1.10E-11	-1.68031
FBXO40 51725	FBXO40	2.00E-09	-1.86456
FLJ32063 150538	FLJ32063	8.51E-07	2.661072
FSTL4 23105	FSTL4	1.64E-11	-1.57905
FXVD3 5349	FXVD3	2.69E-11	-1.89871

FXYD4 53828	FXYD4	1.15E-15	-3.61816
G6PC 2538	G6PC	9.91E-12	-1.66451
GABRR1 2569	GABRR1	9.60E-13	-2.56177
GATA5 140628	GATA5	2.28E-12	-1.98267
GCKR 2646	GCKR	5.08E-06	1.684503
GRHL2 79977	GRHL2	8.06E-11	-1.9278
HCRTR1 3061	HCRTR1	1.63E-09	-1.97252
HRG 3273	HRG	2.18E-14	-3.36567
HRK 8739	HRK	7.50E-07	2.80136
HTR3D 200909	HTR3D	0.000159	2.075698
HTRA4 203100	HTRA4	1.81E-10	2.64938
IFITM5 387733	IFITM5	0.000395	2.996621
IGFN1 91156	IGFN1	0.001902	1.608448
KCNE1 3753	KCNE1	8.98E-13	-1.70394
KCNJ1 3758	KCNJ1	2.98E-12	-2.11013
LHX1 3975	LHX1	4.63E-12	-2.34795
LMX1B 4010	LMX1B	1.60E-11	-1.7164
LOC100132354 100132354	LOC100132354	4.33E-14	-2.8951
LOC153910 153910	LOC153910	1.56E-08	2.936622
LOC283404 283404	LOC283404	2.61E-05	2.101133
LOC348840 348840	LOC348840	0.017588	1.926476
MAT1A 4143	MAT1A	1.16E-09	-1.57392
MCCD1 401250	MCCD1	2.03E-12	-2.01998
MMP20 9313	MMP20	9.61E-18	-3.80124
MNX1 3110	MNX1	1.86E-11	2.576415
MUC12 10071	MUC12	5.31E-10	2.427232
MYOCD 93649	MYOCD	1.43E-11	-1.72902
NKAIN3 286183	NKAIN3	0.002897	2.814396
NR0B2 8431	NR0B2	6.65E-12	-2.83723
NXPH2 11249	NXPH2	4.74E-14	-3.83735
PEBP4 157310	PEBP4	1.08E-10	-1.65674
PI16 221476	PI16	1.48E-12	-2.2919
PKD2L1 9033	PKD2L1	2.45E-06	1.623181
PLA2G3 50487	PLA2G3	1.11E-20	-3.87671
PRDM16 63976	PRDM16	2.22E-12	-1.94056
PROZ 8858	PROZ	9.58E-12	-2.19413
PSORS1C1 170679	PSORS1C1	1.33E-11	1.602698
PXDNL 137902	PXDNL	6.20E-11	-2.10192
PYY 5697	PYY	8.85E-11	-2.0743
RASL11B 65997	RASL11B	5.82E-13	-1.73558
RGS17 26575	RGS17	2.83E-19	1.783547
RIMBP2 23504	RIMBP2	1.44E-11	-2.10395
RNASE11 122651	RNASE11	0.0044	3.620994
RPS4Y2 140032	RPS4Y2	0.02523	-1.6671
RXRG 6258	RXRG	6.35E-14	-2.88631
SCEL 8796	SCEL	2.00E-08	1.506034
SIAH3 283514	SIAH3	9.51E-13	-2.21119

SLC22A8 9376	SLC22A8	4.05E-12	-2.34603
SLC38A8 146167	SLC38A8	0.000743	-1.57166
SLC4A9 83697	SLC4A9	6.79E-13	-3.20459
SLC5A11 115584	SLC5A11	4.60E-10	-1.67103
SLC9A10 285335	SLC9A10	5.46E-08	1.564697
STRA6 64220	STRA6	9.58E-12	-1.71746
TBL1Y 90665	TBL1Y	7.04E-08	-3.13635
TFAP2A 7020	TFAP2A	5.14E-11	-1.68518
TMEM145 284339	TMEM145	1.11E-06	1.569604
TNNT2 7139	TNNT2	1.12E-12	-2.40465
TRPM8 79054	TRPM8	2.56E-08	1.547034
TTC36 143941	TTC36	6.38E-12	-1.75581
TTR 7276	TTR	2.84E-13	-2.78408
UCN 7349	UCN	1.60E-23	1.561109
WIT1 51352	WIT1	5.91E-14	-2.95247
WT1 7490	WT1	6.90E-13	-2.34682

Appendix 1.6 – Differentially expressed genes for liver cancer.

Gene	Gene_Symbol	<i>pvalue_adjust</i>	<i>log₂(Foldchange)</i>
ABCB5 340273	ABCB5	1.11E-05	2.693574
ACTL8 81569	ACTL8	0.002859	2.801745
AGBL4 84871	AGBL4	2.85E-13	-1.65964
ALPI 248	ALPI	0.004168	2.073559
AMPD1 270	AMPD1	3.38E-11	-1.87823
ANKFN1 162282	ANKFN1	0.003312	3.687692
ANKRD30B 374860	ANKRD30B	3.99E-07	-2.41302
ASCL4 121549	ASCL4	0.002523	2.051268
ATP13A4 84239	ATP13A4	7.51E-17	-1.89727
B3GALT1 8708	B3GALT1	0.015748	1.878531
B3GALT5 10317	B3GALT5	5.70E-17	-2.01561
B4GALNT2 124872	B4GALNT2	5.07E-05	4.544699
BEND4 389206	BEND4	1.91E-14	-1.5297
BFSP2 8419	BFSP2	1.54E-06	1.916622
BMP10 27302	BMP10	3.41E-23	-3.5797
BMP5 653	BMP5	5.09E-16	-1.58652
BMPER 168667	BMPER	7.13E-20	-1.70364
C10orf71 118461	C10orf71	4.62E-05	-2.46291
C13orf26 122046	C13orf26	1.69E-21	-3.15505
C14orf180 400258	C14orf180	3.68E-19	-2.20784
C1orf125 126859	C1orf125	9.69E-05	1.638369
C1orf158 93190	C1orf158	0.014681	3.593416
C1QL4 338761	C1QL4	4.13E-08	2.315656
C20orf186 149954	C20orf186	7.35E-05	2.357016

C21orf62 56245	C21orf62	8.22E-19	-2.40586
C3orf50 93556	C3orf50	0.00338	1.806825
C7orf71 285941	C7orf71	0.013417	2.699601
C9orf4 23732	C9orf4	0.002217	2.885118
C9orf50 375759	C9orf50	0.001854	1.932356
CACNA1B 774	CACNA1B	0.039799	1.689402
CACNA1E 777	CACNA1E	1.03E-06	2.05805
CACNA1S 779	CACNA1S	9.29E-07	3.287807
CALN1 83698	CALN1	4.39E-20	-2.78827
CALY 50632	CALY	7.53E-05	2.561458
CAMKV 79012	CAMKV	0.000512	3.28451
CAPN14 440854	CAPN14	1.06E-05	1.867604
CARD18 59082	CARD18	0.000158	5.320566
CBLN2 147381	CBLN2	2.85E-14	-2.11057
CCBE1 147372	CCBE1	1.06E-18	-1.65423
CCDC144NL 339184	CCDC144NL	0.036453	2.684699
CCL26 10344	CCL26	9.47E-06	1.859856
CD164L2 388611	CD164L2	0.036692	-2.01299
CDH10 1008	CDH10	0.015776	3.098723
CDH8 1006	CDH8	1.45E-07	3.236695
CDH9 1007	CDH9	0.002669	5.501311
CDKN2BAS 100048912	CDKN2BAS	6.01E-14	2.038602
CEACAM20 125931	CEACAM20	0.000132	2.203673
CFTR 1080	CFTR	4.46E-15	-1.51484
CHGA 1113	CHGA	3.15E-07	2.881104
CHRM2 1129	CHRM2	2.10E-21	-3.06539
CHST4 10164	CHST4	1.76E-17	-1.83084
CLDN10 9071	CLDN10	3.40E-14	-1.56563
CLDN8 9073	CLDN8	6.83E-11	-1.9519
CLEC1B 51266	CLEC1B	1.47E-22	-2.83105
CLEC2L 154790	CLEC2L	0.000236	2.703667
CLEC4C 170482	CLEC4C	0.00073	-1.57023
CLEC4G 339390	CLEC4G	7.13E-20	-1.93007
CLEC4GP1 440508	CLEC4GP1	1.35E-12	-1.61272
CLEC4M 10332	CLEC4M	3.98E-20	-2.65552
CNGB3 54714	CNGB3	0.022468	1.953493
CNTNAP4 85445	CNTNAP4	0.004353	2.550283
COL24A1 255631	COL24A1	1.00E-06	1.732005
COL25A1 84570	COL25A1	4.83E-17	-1.52345
COL2A1 1280	COL2A1	0.006039	2.343152
COL6A6 131873	COL6A6	2.37E-19	-2.12491
COL9A1 1297	COL9A1	5.73E-15	2.61688
COX7B2 170712	COX7B2	2.36E-08	5.53362
CPA5 93979	CPA5	0.004612	1.849403
CPA6 57094	CPA6	1.60E-07	3.253695
CPLX2 10814	CPLX2	2.03E-09	2.450564
CR1L 1379	CR1L	7.51E-13	-1.70974

CRABP1 1381	CRABP1	0.012635	3.637112
CSMD1 64478	CSMD1	7.20E-08	4.129565
CTAG2 30848	CTAG2	1.24E-05	5.999763
CTNNA2 1496	CTNNA2	0.00047	1.544477
CWH43 80157	CWH43	1.92E-12	-2.07786
CYP19A1 1588	CYP19A1	0.000103	1.971777
CYP2W1 54905	CYP2W1	1.68E-06	1.730328
DACH2 117154	DACH2	2.13E-05	4.466968
DCAF4L2 138009	DCAF4L2	1.93E-05	3.567871
DCC 1630	DCC	0.002002	3.007582
DDX53 168400	DDX53	3.48E-05	5.136106
DEFA4 1669	DEFA4	5.24E-07	-1.65716
DGCR10 26222	DGCR10	6.51E-06	1.689687
DGKI 9162	DGKI	6.71E-08	1.788137
DLGAP2 9228	DLGAP2	1.83E-14	-1.64176
DLX5 1749	DLX5	3.34E-07	2.658508
DMRTA2 63950	DMRTA2	0.017714	1.572118
DNER 92737	DNER	0.020209	1.832277
DPP10 57628	DPP10	3.58E-16	-1.7885
DPYSL5 56896	DPYSL5	0.009804	2.518112
DQX1 165545	DQX1	0.016542	1.899668
DRP2 1821	DRP2	1.14E-05	2.270084
DSCAM 1826	DSCAM	2.50E-15	-1.80949
DUSP13 51207	DUSP13	5.17E-06	3.037308
DUSP5P 574029	DUSP5P	8.69E-07	2.225602
ELAVL2 1993	ELAVL2	5.67E-06	1.645994
EPS8L3 79574	EPS8L3	2.09E-11	1.593494
ERBB4 2066	ERBB4	4.21E-12	-1.55339
ERC2 26059	ERC2	3.01E-05	1.899959
FAM150A 389658	FAM150A	6.92E-14	-1.91397
FAM55D 54827	FAM55D	0.001368	-1.94587
FAM5B 57795	FAM5B	4.31E-15	-1.53249
FAM5C 339479	FAM5C	1.93E-05	4.985141
FAM83B 222584	FAM83B	3.27E-15	-1.96453
FAM83E 54854	FAM83E	3.36E-11	-1.53699
FAM83F 113828	FAM83F	1.53E-16	-1.88485
FATE1 89885	FATE1	1.09E-14	2.789912
FCAR 2204	FCAR	1.22E-13	-1.77375
FCN2 2220	FCN2	7.07E-20	-1.68393
FGF23 8074	FGF23	7.34E-19	-3.26258
FIBCD1 84929	FIBCD1	6.59E-07	2.911841
FOXD3 27022	FOXD3	1.73E-10	-2.18199
FRMPD2 143162	FRMPD2	0.004086	2.85911
FSHR 2492	FSHR	0.011351	-1.93273
GABRA3 2556	GABRA3	0.006935	3.111851
GABRA4 2557	GABRA4	5.78E-06	-1.57153
GABRA5 2558	GABRA5	0.00045	-1.93667

GABRD 2563	GABRD	1.17E-19	1.69968
GABRQ 55879	GABRQ	0.001765	2.289971
GABRR3 200959	GABRR3	7.82E-05	4.20962
GAD1 2571	GAD1	5.88E-06	2.276903
GAGE12J 729396	GAGE12J	0.000973	5.437585
GAST 2520	GAST	0.007663	4.035414
GDF2 2658	GDF2	5.96E-21	-2.6844
GHRHR 2692	GHRHR	0.000178	1.545898
GJA10 84694	GJA10	7.90E-05	4.922305
GJD4 219770	GJD4	0.004531	2.375124
GLB1L3 112937	GLB1L3	0.042385	2.376496
GLP1R 2740	GLP1R	6.86E-05	3.918026
GLP2R 9340	GLP2R	9.66E-17	-2.25433
GPR123 84435	GPR123	1.08E-16	-2.07686
GPRIN2 9721	GPRIN2	1.14E-14	-1.57525
GRIN1 2902	GRIN1	0.0002	2.021177
GRM4 2914	GRM4	0.001212	2.264458
H1FNT 341567	H1FNT	0.003255	2.413877
HAVCR1 26762	HAVCR1	1.88E-05	2.101967
HBD 3045	HBD	4.63E-11	-1.58048
HCN1 348980	HCN1	5.82E-11	-1.65389
HHIP 64399	HHIP	1.10E-18	-1.77735
HIST3H2BB 128312	HIST3H2BB	0.035828	2.091973
HMGCLL1 54511	HMGCLL1	3.27E-18	-1.73828
HOXA10 3206	HOXA10	8.49E-10	1.805959
HOXA6 3203	HOXA6	0.000501	3.896998
HOXD1 3231	HOXD1	2.31E-13	2.902751
HOXD3 3232	HOXD3	5.08E-11	2.907601
HOXD4 3233	HOXD4	6.04E-13	3.518332
HRH3 11255	HRH3	5.74E-05	3.111425
HTR3B 9177	HTR3B	0.001778	4.526841
IGDCC3 9543	IGDCC3	1.27E-06	3.330282
IGF2BP1 10642	IGF2BP1	2.33E-10	2.380697
IGFL2 147920	IGFL2	0.000121	2.737806
IPLL1 3543	IPLL1	0.041858	2.475261
IL17F 112744	IL17F	0.038537	2.869305
IL20RA 53832	IL20RA	1.83E-13	-1.56424
ISL2 64843	ISL2	5.77E-07	1.921799
ISX 91464	ISX	3.08E-09	2.707558
ITLN1 55600	ITLN1	3.64E-18	-1.82196
KCNG3 170850	KCNG3	0.036804	2.181202
KCNH7 90134	KCNH7	2.71E-11	-1.53118
KCNJ16 3773	KCNJ16	2.32E-15	-1.73907
KCNJ9 3765	KCNJ9	0.004544	2.54984
KCNK16 83795	KCNK16	0.000225	-2.72875
KCNK9 51305	KCNK9	2.04E-07	3.188166
KCNU1 157855	KCNU1	0.000194	3.68174

KIRREL2 84063	KIRREL2	0.005088	1.698055
KLK10 5655	KLK10	1.46E-14	-1.90601
KLK11 11012	KLK11	1.41E-15	-2.10142
KLK2 3817	KLK2	0.000367	3.670904
KLK4 9622	KLK4	0.006032	3.146445
KRT12 3859	KRT12	0.000992	3.937192
KRT20 54474	KRT20	0.000117	2.512378
KRTAP1-1 81851	KRTAP1-1	4.46E-05	-1.71398
LCE1C 353133	LCE1C	0.033695	2.473747
LDLRAD1 388633	LDLRAD1	1.45E-07	2.075353
LILRA3 11026	LILRA3	4.26E-11	-1.52044
LINGO2 158038	LINGO2	0.001831	-1.63394
LOC100133469 100133469	LOC100133469	6.38E-06	4.046305
LOC146336 146336	LOC146336	0.011127	1.680729
LOC153910 153910	LOC153910	2.33E-05	4.02495
LOC221122 221122	LOC221122	3.59E-11	4.73118
LOC285629 285629	LOC285629	0.000212	2.015952
LOC731789 731789	LOC731789	0.006505	2.88493
LOC84740 84740	LOC84740	4.07E-07	1.642748
LOC84931 84931	LOC84931	0.002542	2.088734
LPAR4 2846	LPAR4	3.14E-05	2.060537
LRRC26 389816	LRRC26	0.001068	1.768477
MAFA 389692	MAFA	8.80E-07	5.234352
MAG 4099	MAG	8.36E-06	-1.66121
MAGEA1 4100	MAGEA1	5.34E-09	3.891075
MAGEA8 4107	MAGEA8	0.001951	2.840982
MAGEB1 4112	MAGEB1	0.003542	4.27048
MAGEB2 4113	MAGEB2	9.09E-05	5.03014
MAGEC1 9947	MAGEC1	0.00022	3.288054
MAGEC2 51438	MAGEC2	3.97E-06	3.363837
MARCH4 57574	MARCH4	1.07E-15	2.793764
MARCO 8685	MARCO	1.60E-19	-1.60468
MKRN3 7681	MKRN3	9.70E-08	1.954242
MNX1 3110	MNX1	0.038762	1.560084
MS4A3 932	MS4A3	1.27E-07	-2.18329
MYBPHL 343263	MYBPHL	2.25E-06	3.288193
MYCBPAP 84073	MYCBPAP	6.67E-06	1.698217
MYH1 4619	MYH1	0.004893	1.682967
MYH13 8735	MYH13	0.009785	1.694915
MYH8 4626	MYH8	0.016778	1.640807
MYO18B 84700	MYO18B	1.29E-07	2.766721
MYO3A 53904	MYO3A	8.11E-18	-2.15949
NAA11 84779	NAA11	0.001321	5.824472
NCRNA00164 554226	NCRNA00164	0.000662	2.328878
NDST3 9348	NDST3	9.00E-20	-2.41714
NEIL3 55247	NEIL3	8.23E-17	1.791409
NEUROD6 63974	NEUROD6	0.037475	-2.37582

NKX3-2 579	NKX3-2	7.48E-05	2.338728
NPHS1 4868	NPHS1	0.001098	2.50473
NR0B1 190	NR0B1	0.005054	2.967591
NRXN1 9378	NRXN1	1.86E-17	-2.52679
NUDT10 170685	NUDT10	4.94E-19	-1.95684
NXF5 55998	NXF5	0.00218	2.711814
ODAM 54959	ODAM	0.000597	3.555264
ODZ3 55714	ODZ3	2.84E-14	-1.55581
OPN1MW 2652	OPN1MW	0.033822	-3.48052
OR13A1 79290	OR13A1	0.001733	2.10553
OR1J2 26740	OR1J2	0.022184	1.967838
OR51E1 143503	OR51E1	9.21E-17	1.806105
OR51E2 81285	OR51E2	1.31E-09	2.479677
OR56A3 390083	OR56A3	0.01909	3.773502
OR5AK2 390181	OR5AK2	1.46E-05	-3.01892
OTP 23440	OTP	0.019687	3.008189
OTX1 5013	OTX1	2.62E-11	2.402099
PAEP 5047	PAEP	3.21E-05	3.953963
PAGE1 8712	PAGE1	0.025428	3.45289
PAGE2 203569	PAGE2	0.011348	2.892741
PAGE2B 389860	PAGE2B	0.006567	2.284953
PAGE4 9506	PAGE4	0.000248	2.476871
PAK7 57144	PAK7	3.49E-16	-2.16031
PANX3 116337	PANX3	0.0352	3.490524
PART1 25859	PART1	0.017012	2.717932
PCSK2 5126	PCSK2	3.89E-16	-2.60775
PDZRN4 29951	PDZRN4	6.04E-17	-1.51268
PGK2 5232	PGK2	0.007129	3.984729
PHACTR3 116154	PHACTR3	1.80E-18	-1.92257
PITX1 5307	PITX1	2.53E-08	2.053045
PLP1 5354	PLP1	5.83E-18	-2.46785
PMP2 5375	PMP2	2.58E-16	-2.50015
PNCK 139728	PNCK	0.000243	2.087395
POPDC3 64208	POPDC3	0.017888	2.260412
POU6F2 11281	POU6F2	1.31E-10	-1.84074
PPAPDC1A 196051	PPAPDC1A	8.72E-16	-1.53739
PRAMEF12 390999	PRAMEF12	0.038537	3.002893
PRDM7 11105	PRDM7	4.28E-09	2.712469
PRDM9 56979	PRDM9	1.95E-05	4.100761
PRIMA1 145270	PRIMA1	2.03E-15	-1.86272
PRND 23627	PRND	2.29E-09	1.754792
PROK2 60675	PROK2	1.76E-10	-1.8294
PRRG3 79057	PRRG3	7.21E-06	3.03025
PRSS22 64063	PRSS22	1.33E-12	-1.53806
PTF1A 256297	PTF1A	0.024465	4.06967
PVALB 5816	PVALB	1.65E-19	-2.4935
PXDNL 137902	PXDNL	2.26E-13	1.899448

PZP 5858	PZP	1.43E-16	-1.75138
RCVRN 5957	RCVRN	9.34E-11	-1.75648
RDH8 50700	RDH8	0.00139	4.132833
REG1A 5967	REG1A	1.90E-05	2.448916
REG1B 5968	REG1B	0.003953	5.720864
REG3A 5068	REG3A	8.34E-06	2.620626
RFPL4B 442247	RFPL4B	5.32E-05	3.760202
RGS9BP 388531	RGS9BP	5.31E-06	1.628225
RPS6KA6 27330	RPS6KA6	5.92E-16	-2.11187
RPSAP52 204010	RPSAP52	0.013681	2.932945
RTL1 388015	RTL1	0.028645	1.843416
S100A12 6283	S100A12	3.48E-15	-1.65392
SCGB1D2 10647	SCGB1D2	0.01993	2.566672
SEMA3E 9723	SEMA3E	6.06E-14	-1.61818
SH2D4B 387694	SH2D4B	1.59E-07	2.101736
SHISA6 388336	SHISA6	0.004429	2.598924
SIX1 6495	SIX1	1.04E-10	2.851637
SIX2 10736	SIX2	2.46E-12	2.913972
SLC17A8 246213	SLC17A8	6.12E-17	-1.86708
SLC22A6 9356	SLC22A6	0.004839	3.269318
SLC28A3 64078	SLC28A3	1.65E-14	-1.81046
SLC34A3 142680	SLC34A3	1.41E-08	2.453001
SLC38A8 146167	SLC38A8	0.020398	2.976233
SLC5A1 6523	SLC5A1	2.20E-16	-1.66493
SLC5A7 60482	SLC5A7	4.37E-11	-2.6608
SLC5A8 160728	SLC5A8	0.005076	-1.84381
SLC6A19 340024	SLC6A19	6.97E-16	-1.77954
SLC7A4 6545	SLC7A4	2.05E-14	-1.54494
SLCO1C1 53919	SLCO1C1	9.33E-15	4.410146
SLCO6A1 133482	SLCO6A1	0.001361	4.58661
SLITRK2 84631	SLITRK2	8.37E-16	-2.20251
SLITRK3 22865	SLITRK3	1.77E-12	-1.56547
SLITRK6 84189	SLITRK6	1.89E-18	-2.14824
SLN 6588	SLN	0.042308	2.151791
SMEK3P 139420	SMEK3P	4.60E-05	4.103666
SOX11 6664	SOX11	0.004213	1.68027
SP8 221833	SP8	0.000253	4.461869
SPHKAP 80309	SPHKAP	0.010207	-2.24705
SPINK5 11005	SPINK5	3.11E-09	1.575674
SPRED3 399473	SPRED3	0.004577	2.357108
SPRR2A 6700	SPRR2A	3.46E-05	-2.21233
SPSB4 92369	SPSB4	6.48E-18	-1.87143
SRRM4 84530	SRRM4	0.015007	2.291791
SSX1 6756	SSX1	6.06E-07	4.274758
SSX3 10214	SSX3	0.000985	4.171997
SSX6 280657	SSX6	0.003211	2.961522
ST8SIA6 338596	ST8SIA6	8.06E-14	-1.97547

STAB2 55576	STAB2	7.07E-20	-1.97129
STRA6 64220	STRA6	0.000136	1.56067
STRA8 346673	STRA8	0.00098	3.726976
STXBP5L 9515	STXBP5L	0.024482	1.869312
SYT9 143425	SYT9	9.57E-17	-1.86633
TAS2R10 50839	TAS2R10	0.001904	1.717579
TBX4 9496	TBX4	2.10E-08	3.482737
TERT 7015	TERT	5.37E-17	4.506918
TEX101 83639	TEX101	0.046888	3.498817
TEX15 56154	TEX15	2.25E-12	-1.53007
TFDP3 51270	TFDP3	0.002709	3.76104
TFF2 7032	TFF2	1.70E-08	-1.57766
TH 7054	TH	2.71E-16	-1.96129
THBS4 7060	THBS4	3.72E-17	1.883986
TIMD4 91937	TIMD4	5.88E-17	-1.53597
TINAG 27283	TINAG	0.00018	2.73125
TM4SF20 79853	TM4SF20	0.00027	2.067194
TMEM132C 92293	TMEM132C	1.20E-14	-2.07535
TMEM145 284339	TMEM145	2.42E-08	1.726228
TNR 7143	TNR	5.99E-11	-1.85863
TRIM71 131405	TRIM71	1.93E-06	3.796145
TRPM5 29850	TRPM5	0.000889	1.797009
TRPV6 55503	TRPV6	1.18E-15	-1.59852
TSPY2 64591	TSPY2	0.01498	4.761387
TUBA3C 7278	TUBA3C	0.001478	2.346728
UBL4B 164153	UBL4B	9.42E-05	3.606772
UPK1B 7348	UPK1B	2.99E-08	-1.68832
UPK3A 7380	UPK3A	0.000907	1.512701
VCX3A 51481	VCX3A	0.000193	1.942629
VGLL1 51442	VGLL1	5.81E-14	-2.05351
VSX2 338917	VSX2	0.002996	3.918116
VWDE 221806	VWDE	8.51E-08	-1.50517
WNT2 7472	WNT2	3.52E-14	-1.57379
WNT3A 89780	WNT3A	3.14E-09	4.13082
XAGE5 170627	XAGE5	0.003762	4.234275
XKR4 114786	XKR4	2.56E-05	-2.06739
ZIC2 7546	ZIC2	2.74E-15	2.657356
ZIC5 85416	ZIC5	2.04E-13	4.031575
ZNF280A 129025	ZNF280A	0.009732	3.342433
ZNF679 168417	ZNF679	0.040213	4.144802
ZNF695 57116	ZNF695	1.11E-05	2.028627
ZNF716 441234	ZNF716	0.000154	4.269507
ZNF735 730291	ZNF735	0.040213	3.774277

Appendix 1.7 – Differentially expressed genes for lung cancer.

Gene	Gene_Symbol	pvalue_adjust	log₂(Foldchange)
ADAMTS20 80070	ADAMTS20	0.0271	3.539885
ADCY8 114	ADCY8	1.13E-11	-2.72857
ADCYAP1R1 117	ADCYAP1R1	1.00E-08	-1.79741
AGBL1 123624	AGBL1	1.13E-11	-2.28412
ALX1 8092	ALX1	0.030313	2.123182
APOBEC1 339	APOBEC1	0.003795	3.514866
BARX1 56033	BARX1	2.19E-06	2.795123
BOLL 66037	BOLL	0.000887	4.332272
BPIL1 80341	BPIL1	0.00145	1.654253
BRDT 676	BRDT	0.000419	2.704529
C12orf42 374470	C12orf42	2.23E-06	1.850159
C13orf36 400120	C13orf36	1.13E-11	-2.08731
C14orf39 317761	C14orf39	0.000306	2.064444
C17orf102 400591	C17orf102	0.013819	1.961438
C1QL2 165257	C1QL2	6.18E-05	2.73964
C1QL4 338761	C1QL4	0.002547	2.242578
C7orf16 10842	C7orf16	4.93E-05	-1.58488
C7orf52 375607	C7orf52	0.000169	2.416721
CALN1 83698	CALN1	3.91E-06	-1.51972
CD300LG 146894	CD300LG	1.36E-11	-1.78277
CDX2 1045	CDX2	0.003308	2.151169
CHRM1 1128	CHRM1	3.08E-11	-1.83164
CHRM2 1129	CHRM2	1.13E-11	-2.68037
CHRNA4 1137	CHRNA4	3.89E-10	-1.89244
CNGA3 1261	CNGA3	1.64E-06	1.616767
CNTD2 79935	CNTD2	1.78E-09	1.590586
CNTNAP4 85445	CNTNAP4	0.000174	5.139916
COL9A1 1297	COL9A1	9.42E-05	1.691919
COX6B2 125965	COX6B2	4.44E-10	2.58956
CRABP1 1381	CRABP1	2.75E-06	2.511476
CRH 1392	CRH	2.27E-06	-1.95684
CXorf1 9142	CXorf1	8.43E-09	-2.83995
DCAF12L2 340578	DCAF12L2	0.00275	1.948389
DGKI 9162	DGKI	1.13E-07	1.676382
DGKK 139189	DGKK	2.14E-08	-2.0988
DLX1 1745	DLX1	0.000231	2.263473
DLX6AS 285987	DLX6AS	0.001513	2.319521
DMRT1 1761	DMRT1	0.000754	5.241954
DMRT3 58524	DMRT3	0.000278	1.688492
DMRTA2 63950	DMRTA2	5.67E-07	2.931745
DUSP9 1852	DUSP9	1.02E-07	2.171052
ECEL1 9427	ECEL1	1.73E-09	2.209588
EDN3 1908	EDN3	3.34E-09	-1.75491

EMX1 2016	EMX1	0.000435	2.394399
EN2 2020	EN2	0.000603	1.89676
FAM163A 148753	FAM163A	1.09E-07	1.688127
FAM83A 84985	FAM83A	1.32E-11	1.67778
FEZF1 389549	FEZF1	5.11E-08	2.869816
FGF10 2255	FGF10	1.13E-11	-2.53996
FLJ12825 440101	FLJ12825	9.67E-09	1.733627
FOXD3 27022	FOXD3	8.42E-06	3.259319
FOXE1 2304	FOXE1	6.35E-06	2.225499
FOXE3 2301	FOXE3	6.15E-05	2.777738
FOXI3 344167	FOXI3	1.77E-06	5.256634
FOXL2 668	FOXL2	0.024668	2.648408
FRMPD4 9758	FRMPD4	1.55E-06	-1.56228
FSD1 79187	FSD1	5.94E-08	1.782509
FUT9 10690	FUT9	2.18E-07	4.234433
GABRA1 2554	GABRA1	0.001202	-1.71841
GABRA3 2556	GABRA3	0.010714	2.731782
GABRA4 2557	GABRA4	2.47E-06	-1.8218
GAD1 2571	GAD1	1.24E-09	1.902985
GDNF 2668	GDNF	0.009387	1.908917
GLB1L3 112937	GLB1L3	2.18E-06	2.33793
GPR115 221393	GPR115	6.28E-08	1.777507
GPR50 9248	GPR50	0.009866	4.842363
GRHL3 57822	GRHL3	5.02E-19	1.868248
GRID2 2895	GRID2	6.27E-06	-1.83298
GSG1L 146395	GSG1L	2.49E-08	-1.85582
GUCA1A 2978	GUCA1A	1.38E-05	2.404105
HAVCR1 26762	HAVCR1	2.24E-06	3.103912
HBG1 3047	HBG1	1.00E-08	-2.18188
HBG2 3048	HBG2	3.91E-10	-2.41944
HBM 3042	HBM	6.97E-17	-4.20938
HIST1H2BI 8346	HIST1H2BI	0.005519	4.280954
HIST1H3B 8358	HIST1H3B	3.43E-05	3.597799
HIST1H4E 8367	HIST1H4E	0.000133	1.833036
HMX2 3167	HMX2	0.015843	4.427665
HOTAIR 100124700	HOTAIR	0.00013	5.34661
HOXA11 3207	HOXA11	0.002547	2.259536
HOXB13 10481	HOXB13	0.000249	3.461615
HOXB9 3219	HOXB9	1.34E-05	2.518882
HOXC10 3226	HOXC10	1.53E-05	3.069416
HOXC11 3227	HOXC11	4.06E-05	4.134999
HOXC13 3229	HOXC13	2.21E-06	4.523225
HOXD11 3237	HOXD11	0.002446	4.041436
HOXD13 3239	HOXD13	0.021643	3.695643
IGF2BP1 10642	IGF2BP1	0.003716	1.816812
IL1RAPL2 26280	IL1RAPL2	3.11E-07	4.950485
IL22RA2 116379	IL22RA2	6.08E-10	2.528675

KCNA4 3739	KCNA4	4.79E-10	-1.87804
KCNA7 3743	KCNA7	5.87E-05	3.05117
KCNK12 56660	KCNK12	4.04E-07	1.962147
KREMEN2 79412	KREMEN2	2.92E-10	1.630464
KRT16 3868	KRT16	7.52E-09	2.514821
LCE2A 353139	LCE2A	0.000403	-1.77562
LHX2 9355	LHX2	1.98E-08	3.204062
LPA 4018	LPA	4.44E-08	-1.97564
MAGEA2 4101	MAGEA2	0.015988	2.699501
MAST1 22983	MAST1	5.26E-17	1.526764
MMP13 4322	MMP13	2.16E-10	2.457104
MNX1 3110	MNX1	2.05E-09	1.896408
MYEOV 26579	MYEOV	1.38E-09	1.609031
NGB 58157	NGB	0.006976	4.136496
NKAIN3 286183	NKAIN3	0.037594	3.04807
NKX3-2 579	NKX3-2	1.17E-05	1.840563
NKX6-1 4825	NKX6-1	0.005067	1.743465
NOS1 4842	NOS1	1.60E-10	-1.62818
NPBWR1 2831	NPBWR1	0.018619	1.731379
NPY5R 4889	NPY5R	2.32E-09	-1.70868
NR2E1 7101	NR2E1	1.06E-06	4.473389
NXPH1 30010	NXPH1	4.45E-05	3.831347
ONECUT2 9480	ONECUT2	1.69E-08	1.707693
OPRD1 4985	OPRD1	0.036097	4.290871
OR10A3 26496	OR10A3	3.30E-11	-2.97825
OR2B11 127623	OR2B11	0.000591	-1.98395
OR2W3 343171	OR2W3	1.17E-11	-2.10916
OR5P2 120065	OR5P2	1.95E-05	-2.35885
OR5P3 120066	OR5P3	0.000188	-1.99059
OR6K3 391114	OR6K3	1.13E-11	-3.04394
OR6N1 128372	OR6N1	2.42E-07	-2.9872
OTX1 5013	OTX1	2.99E-11	1.518668
OTX2 5015	OTX2	0.039275	3.590097
OVCH1 341350	OVCH1	1.34E-10	-2.31209
OVCH2 341277	OVCH2	1.13E-11	-2.33882
OXT 5020	OXT	0.015681	1.669797
PAX7 5081	PAX7	0.000674	2.080132
PGLYRP1 8993	PGLYRP1	4.11E-08	-2.27638
PHOX2A 401	PHOX2A	0.049856	3.333794
PITX1 5307	PITX1	3.60E-09	1.588292
PITX2 5308	PITX2	9.83E-11	5.551558
PNPLA5 150379	PNPLA5	0.007428	4.380352
POU4F1 5457	POU4F1	9.34E-07	3.036814
PPAPDC1A 196051	PPAPDC1A	4.22E-07	1.578911
PRKCG 5582	PRKCG	0.000136	1.619785
PRSS1 5644	PRSS1	3.57E-05	2.570273
PTPRH 5794	PTPRH	2.21E-10	1.775741

RASGEF1C 255426	RASGEF1C	0.00638	1.966024
REG1A 5967	REG1A	0.049486	2.027669
S100A7 6278	S100A7	0.010802	2.784087
SALL1 6299	SALL1	0.000957	2.108
SALL3 27164	SALL3	0.009142	2.771208
SH3GL3 6457	SH3GL3	1.13E-11	-2.15467
SIM1 6492	SIM1	0.020334	3.221569
SIRPD 128646	SIRPD	1.75E-11	-1.65965
SLC24A2 25769	SLC24A2	1.69E-06	4.28345
SLC27A6 28965	SLC27A6	8.17E-10	-1.70682
SLC30A10 55532	SLC30A10	0.020706	3.258387
SLC4A1 6521	SLC4A1	2.65E-11	-2.12186
SNTG1 54212	SNTG1	0.04333	-1.81464
SOX11 6664	SOX11	8.79E-06	1.555766
SP8 221833	SP8	7.20E-06	5.357363
SPATA19 219938	SPATA19	0.022817	-2.23189
SPHKAP 80309	SPHKAP	2.66E-09	-2.08855
SPRED3 399473	SPRED3	2.80E-06	2.3759
SPRR3 6707	SPRR3	0.005747	2.107227
SRY 6736	SRY	1.78E-08	-3.09988
SSTR4 6754	SSTR4	2.20E-13	-3.47001
ST8SIA6 338596	ST8SIA6	1.31E-11	-1.54593
STXBP5L 9515	STXBP5L	0.016425	1.608383
SYNPR 132204	SYNPR	0.012252	3.825294
SYT14 255928	SYT14	0.000461	2.599139
T 6862	T	3.29E-05	3.800893
TAF7L 54457	TAF7L	6.33E-06	2.076022
TBR1 10716	TBR1	0.037679	2.471108
TCN1 6947	TCN1	2.27E-05	1.883455
TERT 7015	TERT	1.20E-10	3.937126
TFAP2D 83741	TFAP2D	5.27E-05	6.177428
TLX1 3195	TLX1	0.000634	5.093243
TLX2 3196	TLX2	0.003237	1.715179
TNR 7143	TNR	5.03E-09	-2.0795
TRIM15 89870	TRIM15	0.003221	2.41629
TRPM1 4308	TRPM1	2.30E-06	-2.00059
TRPM8 79054	TRPM8	2.71E-09	2.536257
UCP1 7350	UCP1	0.000345	-2.02828
VSX1 30813	VSX1	1.91E-05	2.482444
VWC2 375567	VWC2	8.75E-09	-1.55006
ZIC4 84107	ZIC4	0.022851	3.870973
ZIC5 85416	ZIC5	0.012128	2.742162
ZBP2 124626	ZBP2	0.008553	2.306343

Appendix 1.8 – Differentially expressed genes for thyroid cancer.

Genes	Gene_Symbol	pvalue_adjust	log₂(Foldchange)
AWAT2 158835	AWAT2	5.24E-17	3.513328
BANF2 140836	BANF2	1.27E-19	-1.9523
C1orf180 439927	C1orf180	0.017844	1.919349
C1orf187 374946	C1orf187	1.60E-19	2.095217
CSF2 1437	CSF2	3.73E-19	3.55922
ESPN 83715	ESPN	1.77E-17	2.03402
FAM178B 51252	FAM178B	4.78E-20	2.392688
FIBCD1 84929	FIBCD1	4.81E-20	2.465128
GPR115 221393	GPR115	1.03E-10	2.113207
HPSE2 60495	HPSE2	1.40E-12	1.998716
IL2 3558	IL2	2.89E-11	-1.63327
KCNA1 3736	KCNA1	2.64E-23	-2.09145
KRT15 3866	KRT15	1.14E-18	1.907809
KRT85 3891	KRT85	4.32E-20	-1.81645
LIPH 200879	LIPH	1.89E-21	1.71926
MS4A15 219995	MS4A15	2.85E-11	4.458327
MUC21 394263	MUC21	3.72E-17	2.25802
MYBPH 4608	MYBPH	1.52E-14	2.046142
NMU 10874	NMU	3.91E-15	1.960847
ODAM 54959	ODAM	1.75E-22	-1.79201
PLA2G2E 30814	PLA2G2E	7.36E-10	7.060823
RNASE11 122651	RNASE11	6.04E-10	3.444127
SLC39A12 221074	SLC39A12	1.06E-13	3.061849
SYT8 90019	SYT8	5.77E-12	2.411472
TMPRSS11F 389208	TMPRSS11F	6.24E-06	2.48124

Appendix 1.9 – Differentially methylated CpG probes for breast cancer.

cg	Gene_Symbol	pvalue_adjust	Δβ
cg00006081	HMX2	2.88E-22	0.217311
cg00017489	DPP6	4.50E-23	0.353689
cg00149708	SBK2	4.80E-23	-0.2716
cg00176740	POU6F2	3.58E-18	-0.24531
cg00423153	SPHKAP	2.01E-11	0.240361
cg00446413	DPP6	2.11E-21	0.263483
cg00574563	LHX1	3.70E-19	0.244973
cg00635343	LOC642597	6.03E-18	-0.2126
cg00791406	GRIN2B	2.38E-23	-0.28632
cg00794881	PAX7	1.42E-21	0.23202
cg00802855	GPR123	2.06E-22	-0.22087

cg00989961	DPP6	2.20E-14	-0.20006
cg01003961	SP8	7.27E-19	0.268741
cg01041256	GABRA5	5.40E-19	-0.27183
cg01141459	HORMAD2	2.20E-10	0.214643
cg01175020	TLX1	2.60E-09	0.200971
cg01181150	DPP6	7.82E-24	-0.31297
cg01454519	CST5	2.67E-18	-0.21741
cg01479664	TEPP	4.85E-14	-0.23518
cg01520122	CCL7	1.44E-26	-0.25717
cg01556466	ADCYAP1R1	1.39E-28	-0.34128
cg01582980	SP8	4.79E-19	0.274989
cg01595325	HS3ST4	1.23E-21	-0.22664
cg01612158	FCRL4	8.58E-14	-0.25672
cg01747222	CMTM5	5.89E-22	0.262727
cg01913196	DCAF12L1	9.69E-23	0.271608
cg01925883	TCHHL1	2.11E-21	-0.31708
cg02261899	DCAF12L1	2.30E-18	0.313966
cg02363969	SBK2	1.55E-23	-0.30432
cg02390209	HS3ST4	1.60E-17	0.216469
cg02506908	HPD	4.01E-19	0.212716
cg02608452	KCNA4	7.24E-17	-0.31576
cg02681442	FOXG1	1.03E-17	0.34579
cg02732252	CLDN6	2.37E-26	0.378928
cg02743222	TLX3	2.44E-17	0.285542
cg02748047	BTNL2	1.45E-18	-0.23027
cg02814558	PRRG3	8.14E-21	-0.26698
cg02831668	PLAC1	4.65E-26	-0.34876
cg02846790	ADCYAP1R1	4.18E-20	-0.2587
cg02866152	MYT1	3.09E-20	-0.26126
cg02874376	DLK1	1.39E-23	0.333263
cg02882755	GRM4	5.76E-22	-0.2411
cg02926033	DPP6	1.12E-26	-0.2439
cg02991338	FOXG1	6.98E-20	0.322729
cg03226000	SLC6A2	6.16E-15	0.203558
cg03269050	TLX1NB	2.85E-19	0.232677
cg03276000	DPP6	2.44E-27	-0.35181
cg03462380	GABRA5	6.21E-18	0.232487
cg03506489	KCNA4	1.20E-25	0.277003
cg03532926	DPP6	9.11E-26	0.425192
cg03543319	PROKR1	3.93E-19	-0.23093
cg03711485	NKX2-3	1.40E-11	0.235263
cg03861633	SLC7A14	1.91E-18	-0.21682
cg03884018	HS3ST4	1.79E-24	-0.31515
cg04024799	LOC646627	3.34E-21	-0.20871
cg04046669	HORMAD2	2.80E-15	0.243007
cg04063166	KCNA4	4.45E-26	-0.24445
cg04096767	WT1	1.88E-19	0.203215

cg04111071	TMEM196	1.51E-26	0.45135
cg04341210	C13orf36	1.37E-15	-0.22895
cg04365202	LHX9	4.27E-18	0.204417
cg04525757	FOXG1	7.95E-17	0.241414
cg04553632	GPR123	1.25E-21	-0.33442
cg04561937	GAB4	3.22E-20	-0.20994
cg04866380	C7orf16	1.08E-22	-0.27659
cg04868078	LHX9	5.54E-09	0.208958
cg04954680	LRRC3B	1.06E-18	0.248507
cg05031352	MAGEA1	1.32E-17	-0.20107
cg05052324	PAX7	5.04E-20	0.311653
cg05160181	C1orf230	1.77E-19	0.247513
cg05222924	WT1	9.35E-16	0.222393
cg05426601	CPA1	1.44E-27	0.200353
cg05686467	HEPN1	1.01E-17	-0.21891
cg05756220	KCNA4	3.00E-23	0.286885
cg05787556	TLX3	5.49E-26	0.250979
cg05816193	HIST1H1A	1.85E-16	0.225396
cg05872306	FOXG1	8.80E-18	0.275412
cg05916059	HS3ST4	1.36E-23	-0.3464
cg05937737	SLC7A14	2.26E-27	0.431771
cg05989672	DPP6	2.44E-27	-0.31727
cg06036912	CLDN6	8.42E-17	0.26802
cg06038358	PROC	1.37E-15	-0.24479
cg06051311	TRIM15	4.52E-12	-0.22302
cg06092815	SPHKAP	5.08E-22	0.259157
cg06100368	C1orf230	2.32E-16	0.256081
cg06111374	GRIN2B	5.26E-13	-0.21301
cg06226384	CACNG5	3.35E-23	-0.23156
cg06370771	PAX7	5.15E-15	0.254748
cg06383709	HS3ST4	4.14E-16	-0.26982
cg06389252	POU6F2	1.21E-14	-0.2251
cg06410537	TLX3	7.11E-17	0.244621
cg06434470	DPP6	1.50E-19	-0.24043
cg06464008	TLX1NB	2.60E-21	0.244582
cg06490225	LHX1	1.70E-18	0.237326
cg06495961	DPP6	1.03E-26	0.407061
cg06501084	KCNH5	1.48E-13	-0.2048
cg06834698	OR10A3	8.94E-22	-0.24351
cg06845853	WIT1	7.71E-22	0.288287
cg06896909	TMEM196	6.52E-27	0.308908
cg07010687	SLC6A19	2.97E-19	-0.23887
cg07042729	GABRA5	4.77E-22	-0.23812
cg07163547	RXRG	6.04E-24	0.301374
cg07177174	LPA	5.44E-13	-0.2348
cg07197831	DNAJC5G	1.16E-24	-0.24136
cg07336617	OTP	1.09E-20	0.220692

cg07467482	DPP6	2.68E-18	-0.27146
cg07489048	FOXG1	1.39E-23	0.353817
cg07504127	CLDN25	5.58E-17	-0.23736
cg07557260	ADCY8	5.85E-18	0.210131
cg07696099	HPYR1	6.26E-15	-0.24851
cg07717704	HPSE2	7.67E-18	-0.21534
cg07766263	SLC7A14	1.18E-25	0.303812
cg07784084	LRRC3B	3.93E-19	-0.23026
cg07816556	HIST1H1A	1.27E-17	0.261213
cg08100618	DCAF12L1	3.63E-20	0.236311
cg08120263	FOXG1	3.38E-18	0.312939
cg08126203	PAX7	2.03E-18	0.229288
cg08128826	LHX9	3.96E-11	0.240722
cg08133584	C16orf11	2.07E-21	0.257626
cg08350288	PAX7	2.19E-22	0.225918
cg08490115	KCNA4	1.59E-23	0.372676
cg08536961	COL29A1	3.51E-18	-0.25179
cg08575722	WT1	2.16E-19	0.222382
cg08594218	HOXB13	6.46E-17	0.295304
cg08610862	LHX9	8.55E-20	0.329328
cg08699646	TEPP	1.86E-13	0.234265
cg08741898	TLX1NB	7.22E-14	0.204216
cg08831002	SP8	2.13E-15	0.262689
cg08867825	OLFM3	1.32E-13	0.235582
cg08883223	LHX9	7.95E-17	0.293936
cg08910550	DPP6	2.32E-20	-0.27016
cg08934846	CLDN6	1.03E-15	0.253397
cg08959216	TBX20	3.16E-09	0.219609
cg09000583	HOXB13	1.14E-09	0.242593
cg09124223	DPP6	5.61E-21	0.255079
cg09134205	DPP6	2.43E-23	-0.32771
cg09171565	GABRA5	1.55E-23	-0.29129
cg09212014	DLK1	1.54E-19	-0.20318
cg09321400	SLC6A2	3.85E-24	0.329917
cg09349530	TBX20	2.16E-19	0.216153
cg09472467	GABRA5	1.56E-15	-0.21595
cg09505145	SPHKAP	6.59E-16	-0.22417
cg09543255	SLC7A14	3.94E-17	0.247975
cg09624858	TRIM15	7.85E-23	-0.22614
cg09975620	PDX1	9.69E-18	0.21172
cg10071275	MYT1	6.52E-22	-0.27193
cg10208367	C13orf36	2.63E-19	-0.22826
cg10244666	WT1	6.63E-26	0.411749
cg10300684	FOXG1	7.42E-20	0.298559
cg10315366	GPR123	2.73E-24	-0.25161
cg10316270	RBM46	5.42E-21	-0.21748
cg10322419	LOC284661	1.24E-26	-0.26566

cg10387551	KCNA4	1.15E-23	0.273192
cg10615414	SLC32A1	7.73E-20	0.252961
cg10828337	FOXG1	7.08E-22	0.244104
cg10860802	DPP6	1.87E-17	-0.32648
cg10912240	FOXG1	5.99E-17	0.20218
cg10959353	SPHKAP	1.37E-18	0.225499
cg10963664	DUSP13	2.56E-24	-0.21046
cg11044716	C13orf36	1.98E-11	-0.21564
cg11300568	DPP6	3.56E-22	-0.31834
cg11310812	KCNJ16	5.11E-23	-0.32224
cg11392848	C8orf22	1.31E-20	-0.29622
cg11473616	CYP1A2	7.23E-13	-0.22304
cg11624728	SLC7A14	9.51E-22	-0.23442
cg11625005	TERT	6.37E-26	0.263041
cg11690979	C1orf230	2.68E-20	0.26975
cg11709896	DUSP13	2.02E-14	-0.2088
cg11800608	C20orf85	7.25E-25	-0.27735
cg11969108	DPP6	1.07E-26	-0.33059
cg11975608	LPA	1.06E-24	-0.31688
cg12001304	SPHKAP	5.73E-19	0.307592
cg12002589	LHX2	3.73E-09	0.21143
cg12022102	COL29A1	3.12E-15	-0.20017
cg12105691	C3orf50	1.90E-17	-0.2731
cg12131208	C17orf64	1.93E-22	0.21354
cg12140543	ADCYAP1R1	7.17E-24	-0.21505
cg12279877	LHX1	6.06E-20	0.24248
cg12408601	HIST1H4L	3.86E-11	0.248725
cg12416080	LRRC3B	2.54E-17	-0.20185
cg12422154	TRIM15	1.66E-16	-0.26073
cg12444328	LHX9	2.36E-14	0.248276
cg12451099	SLC32A1	7.89E-26	0.275355
cg12747410	MS4A15	1.82E-12	-0.20135
cg12788108	C17orf64	6.24E-16	0.24413
cg12828073	MYT1	3.60E-24	-0.32461
cg13016237	DPP6	1.12E-26	-0.30252
cg13022402	APOB	9.50E-23	-0.22988
cg13146839	LOC647309	1.79E-12	0.214254
cg13161658	KCNA4	3.60E-25	0.267296
cg13207345	PAX7	1.23E-14	0.204872
cg13321077	RESP18	4.67E-24	0.313639
cg13380622	FCRL4	8.04E-19	-0.30218
cg13492692	LHX2	1.41E-24	0.263356
cg13540960	WT1	1.56E-15	0.223571
cg13606025	KCNJ16	7.10E-26	-0.31954
cg13641903	WT1	4.83E-34	0.229685
cg13661323	SLC24A2	3.72E-17	-0.20873
cg13671841	KCNA4	9.07E-24	-0.28561

cg13696490	LOC201651	1.77E-18	0.261073
cg13754259	NKX2-3	7.35E-14	0.201161
cg13932450	LOC100132354	2.20E-14	-0.21886
cg13989810	DPP6	4.47E-21	-0.22261
cg14093715	LHX2	1.43E-16	0.255906
cg14096229	BTNL2	2.73E-13	-0.22408
cg14270857	HPSE2	1.94E-21	0.209059
cg14393466	KCNA4	1.23E-12	-0.24843
cg14442421	SLC24A2	3.03E-19	0.240986
cg14523847	DPP6	2.02E-25	0.425429
cg14564076	DPP6	4.00E-25	0.342186
cg14652095	HIST1H1A	1.50E-19	0.26506
cg14674582	PLAC1	1.02E-20	-0.2433
cg14703002	HIST1H1A	1.19E-15	0.271672
cg14754787	LHX1	7.33E-24	0.386394
cg15044957	KCNA4	2.33E-23	0.37805
cg15082028	PAX7	7.98E-18	0.220452
cg15154229	CPA1	4.08E-25	0.227162
cg15228617	GABRQ	8.63E-15	-0.21148
cg15291243	LHX1	2.15E-16	0.229695
cg15310492	KCNA4	4.01E-24	0.329082
cg15549927	DPP6	2.30E-21	0.257499
cg15585183	BTNL2	2.17E-15	-0.22308
cg15590532	FRMPD4	3.49E-20	-0.23265
cg15604615	PRRG3	2.35E-17	-0.2083
cg15615022	TUBA3C	6.08E-18	-0.21269
cg15615793	CRHR2	1.25E-21	0.24681
cg15618646	DPP6	2.83E-22	-0.20825
cg15698171	MYT1	1.11E-20	-0.22639
cg15731296	PRRG3	1.73E-19	-0.25407
cg15741433	HIST1H1A	1.27E-16	0.307501
cg15770754	DPP6	6.47E-16	-0.23964
cg16038120	FOXG1	1.64E-18	0.355145
cg16092786	WT1	4.74E-20	0.24863
cg16226642	OR5P3	1.34E-18	-0.27491
cg16304215	OTP	2.07E-18	0.242497
cg16310003	HPD	8.79E-25	0.249793
cg16355550	HS3ST4	2.07E-10	-0.20435
cg16375358	CACNG5	1.83E-21	-0.23983
cg16448058	TLX1NB	8.95E-09	0.240326
cg16557178	HOXB13	4.68E-14	0.216126
cg16772207	MYT1	7.08E-22	-0.31268
cg16960593	LPA	6.48E-23	-0.25415
cg17006281	DPP6	6.04E-24	-0.27828
cg17028067	LPA	2.82E-23	-0.30128
cg17073891	PLAC1	5.97E-21	-0.27867
cg17085688	GNGT1	3.86E-20	0.208609

cg17157462	C13orf36	1.70E-18	-0.24369
cg17187764	APOBEC1	1.55E-23	-0.26959
cg17189167	LPA	8.52E-24	-0.31713
cg17446896	HIST1H4L	6.30E-11	0.237386
cg17498296	HMX2	7.24E-18	0.232727
cg17525102	FOXG1	6.85E-12	0.200912
cg17535691	TLX1NB	4.23E-11	0.218329
cg17651821	HIST1H4L	1.29E-07	0.225868
cg17714025	KCNA4	3.35E-23	0.278277
cg17985646	TBX20	1.88E-13	0.324919
cg18011916	TBX20	7.57E-20	0.330781
cg18064631	PDX1	5.29E-14	0.217776
cg18142856	OR10A3	1.40E-16	-0.23334
cg18147278	SPHKAP	7.52E-17	-0.21525
cg18249173	TBX20	2.03E-19	0.296113
cg18252309	DPP6	1.81E-22	0.262315
cg18268488	FCRL4	3.60E-15	-0.21445
cg18336674	TLX3	3.51E-18	0.219787
cg18404374	LRRC3B	2.57E-20	0.252593
cg18421840	ADCYAP1R1	3.03E-26	-0.25337
cg18432768	KCNJ16	1.68E-24	-0.28166
cg18940047	DPP6	3.53E-24	0.298347
cg19057986	HOXB13	7.78E-12	0.214345
cg19161124	DPP6	6.23E-25	0.316649
cg19451845	CDK5R2	7.89E-08	0.220436
cg19714132	FOXG1	5.44E-13	0.214552
cg19803052	TMEM196	2.65E-23	0.284387
cg19909787	HMX2	2.51E-15	0.232427
cg20044918	GPR123	1.75E-21	-0.27517
cg20119106	DPP6	6.39E-22	0.235597
cg20542822	COL29A1	1.37E-17	-0.23028
cg20556988	CCL1	4.62E-18	-0.20059
cg20663376	TRPM1	2.54E-17	0.355033
cg20742415	METTL11B	8.78E-15	-0.26241
cg20743365	LHX9	1.00E-11	0.23218
cg20745419	C1orf230	2.27E-20	-0.2736
cg20950167	LHX1	1.88E-19	0.280725
cg21154627	SLC7A14	1.84E-23	0.269769
cg21367256	MYT1	3.64E-27	-0.37686
cg21512644	NPY2R	2.92E-11	0.206449
cg21865150	HOXB13	3.79E-09	0.255413
cg21871080	KCNJ16	1.96E-23	-0.28168
cg21884231	SLC7A14	9.64E-24	0.416066
cg21977377	NKX2-2	6.62E-14	0.26497
cg22190437	SPHKAP	2.29E-22	0.242735
cg22304522	ADCY8	1.72E-16	-0.27412
cg22400015	RESP18	2.73E-28	0.3384

cg22460204	POU6F2	2.70E-16	-0.20647
cg22474464	NKX2-2	5.51E-19	0.312377
cg22495124	CACNG5	1.11E-20	-0.2106
cg22620221	DPP6	6.49E-25	0.355105
cg22639011	KCNA4	1.26E-19	0.237038
cg22679813	DPP6	1.20E-17	-0.30458
cg22685409	KCNA4	2.79E-24	0.275778
cg22686881	TLX3	1.04E-15	0.209444
cg22697187	RP1-177G6.2	4.43E-19	-0.21883
cg22785561	GABRA4	1.36E-13	-0.20075
cg22790257	C1orf230	3.61E-12	0.243649
cg22856114	PROC	2.71E-22	-0.25589
cg22886575	HMX2	3.19E-18	0.206313
cg23019936	GRIN2B	2.07E-19	-0.30541
cg23154497	GPR123	1.85E-20	-0.22185
cg23214840	APOB	2.73E-20	-0.26126
cg23216015	C7orf16	1.99E-18	-0.27302
cg23230830	LOC646627	8.70E-24	-0.36858
cg23235241	HS3ST4	8.35E-19	0.222798
cg23348723	C7orf16	3.01E-22	-0.3243
cg23658462	EFNA2	3.86E-21	-0.27061
cg23829024	HIST1H1A	5.73E-18	0.232563
cg23846114	PRRG3	8.30E-21	-0.22584
cg23856293	MYT1	8.57E-26	-0.2909
cg23915487	GABRA5	7.24E-22	-0.22656
cg23934819	HEPN1	5.25E-20	-0.25964
cg23950788	C7orf16	1.36E-23	-0.36804
cg24011260	DPP6	3.48E-19	0.212004
cg24073950	DPP6	4.60E-23	-0.25937
cg24158160	C1orf230	1.17E-15	-0.26147
cg24311564	DPP6	1.75E-21	-0.34545
cg24315710	COL29A1	1.69E-23	-0.30949
cg24384519	ADCYAP1R1	9.58E-25	-0.34252
cg24393673	OLFM3	4.82E-12	0.208923
cg24394172	GABRA4	5.25E-29	0.350336
cg24592546	TRIM15	9.71E-20	-0.27114
cg24627900	HPYR1	1.01E-14	-0.21284
cg24833464	KRTAP3-1	3.04E-24	-0.2836
cg24881205	SP8	5.06E-15	0.340682
cg24881420	TLX3	2.97E-20	0.232216
cg24913868	NKX2-3	8.29E-14	0.218983
cg24977541	SLC7A14	2.03E-24	-0.25072
cg25072962	MS4A15	5.85E-21	-0.31558
cg25078444	FOXG1	3.19E-16	0.357475
cg25094569	WT1	4.68E-14	0.213982
cg25195987	ADCYAP1R1	1.79E-28	-0.33816
cg25247290	WIT1	4.60E-23	0.373753

cg25391023	BTNL2	5.00E-23	-0.29888
cg25503804	F2	3.09E-19	-0.28344
cg25537669	NPHS1	4.79E-27	0.270635
cg25609301	KCNH5	1.72E-18	-0.20787
cg25720804	TLX3	1.48E-20	0.348534
cg25942450	TLX3	2.57E-20	0.315302
cg25951981	GABRA4	2.13E-27	0.312739
cg25996557	FRMPD4	3.63E-20	-0.22315
cg26288719	FRMPD4	4.10E-20	-0.2835
cg26299169	PDX1	4.65E-25	0.408825
cg26332560	ADCY8	2.43E-19	0.222687
cg26351479	DCAF12L1	2.03E-16	0.23523
cg26517171	TLX3	6.27E-22	0.23683
cg26517714	TLX3	1.85E-20	0.290133
cg26673012	TBX20	5.01E-13	0.24088
cg26725397	HS3ST4	1.12E-18	-0.23118
cg26738880	DPP6	8.18E-27	-0.34922
cg26844246	TLX3	2.34E-22	0.355421
cg26925231	SGCZ	4.77E-24	0.273407
cg26931862	HOXC12	1.45E-21	0.302579
cg26985798	MS4A15	1.23E-25	-0.31732
cg27006650	FOXC1	3.55E-19	0.234076
cg27032232	DPP6	1.52E-25	0.428927
cg27051318	CHRNA6	3.17E-24	-0.29958
cg27189087	RAX	4.71E-18	0.259986
cg27189967	GABRQ	1.80E-17	-0.27439
cg27319123	KCNA4	9.66E-20	0.302651
cg27635394	HIST1H2BB	1.38E-09	0.200542

Appendix 1.10 – Differentially methylated CpG probes for colorectal cancer.

cg	Gene_Symbol	<i>pvalue_adjust</i>	$\Delta\beta$
cg00017489	DPP6	1.05E-08	0.35885
cg00076307	SLC27A6	2.48E-13	0.215759
cg00086346	ATCAY	1.36E-07	-0.24588
cg00089091	DPP10	2.38E-08	0.4642
cg00126498	ULBP1	2.41E-06	0.309974
cg00132141	CTNNA3	1.05E-08	-0.33879
cg00163702	PKD1L2	3.15E-06	-0.25838
cg00169792	SALL4	7.51E-08	0.250162
cg00187686	TCN1	2.50E-07	-0.37527
cg00212521	FMN2	1.05E-08	-0.36225
cg00270497	RIPPLY2	1.64E-06	0.364439

cg00287312	PCDH8	4.24E-08	0.471878
cg00310968	SPAG17	0.022429054	0.207121
cg00317577	CPEB1	8.83E-08	-0.224
cg00321288	MGAT4C	1.32E-08	-0.21718
cg00332249	CALCA	1.06E-06	0.218734
cg00445405	OTX1	7.20E-07	0.291477
cg00452252	SCNN1G	4.89E-07	-0.31545
cg00463631	GRIA2	4.11E-06	0.25183
cg00463767	OTX1	1.83E-06	0.237975
cg00484940	DACH2	0.000435123	0.243309
cg00493429	NLGN1	9.84E-08	-0.38482
cg00518386	GRIN2A	2.52E-14	0.320323
cg00575005	RIPPLY2	1.64E-06	0.334614
cg00596508	CNTN1	9.01E-09	0.398179
cg00618450	SEZ6L	1.91E-08	0.391342
cg00662647	SLC35F3	2.50E-07	0.539367
cg00708598	LECT1	2.85E-08	0.287494
cg00735885	LHFPL1	1.44E-07	-0.33435
cg00772922	RIPPLY2	2.64E-07	0.313425
cg00774005	DLX6AS	0.001437306	0.271912
cg00824018	INA	4.36E-10	0.232268
cg00840403	CHST4	5.36E-06	-0.28881
cg00887153	CHST4	0.000149275	-0.30876
cg00945234	DMRTA2	1.19E-08	0.345601
cg00945238	PCDH10	1.27E-08	0.304703
cg00949386	WNT7B	1.86E-05	-0.25184
cg00954382	NPY2R	2.41E-06	0.291948
cg00993140	DACH2	0.002117369	0.283609
cg00995065	SLCO1B1	2.50E-07	-0.36679
cg00997798	FMN2	2.28E-08	-0.30632
cg01002253	NPY5R	5.28E-05	0.272204
cg01003803	FGF20	0.004751379	0.22849
cg01003815	INSL6	2.12E-07	-0.23862
cg01050885	NPY	4.66E-11	0.211066
cg01068102	SNX32	5.77E-07	0.240987
cg01089249	GAD1	2.83E-06	0.22499
cg01089319	GAD1	3.12E-07	0.245158
cg01098237	SNX32	8.04E-07	0.266156
cg01162507	GP2	5.07E-06	-0.27092
cg01176516	ZNF727	2.45E-07	0.203009
cg01189783	MCHR2	5.12E-17	0.27254
cg01201932	CMA1	7.91E-08	-0.35601
cg01245880	SEC14L4	8.53E-05	-0.27669
cg01249544	CTNNA3	4.46E-08	-0.26638
cg01382137	PCDH8	1.83E-06	0.296232
cg01403246	MAFA	0.000256929	0.204612
cg01485075	ZNF492	1.80E-07	0.385785

cg01535698	FMN2	0.001814952	0.247385
cg01558909	HBM	1.01E-05	0.311391
cg01560464	SLITRK4	1.83E-08	0.274994
cg01566592	RIMS2	1.36E-07	0.618219
cg01584389	BTNL2	1.69E-11	-0.27204
cg01614101	HTR3B	9.07E-06	-0.29605
cg01618102	BAI3	9.01E-09	-0.49695
cg01645753	CPEB1	4.24E-08	0.467714
cg01664666	PLD5	1.27E-08	0.429706
cg01718116	DPP10	2.64E-07	0.466754
cg01718602	DACH2	0.000473844	0.263453
cg01743841	CHRNA4	2.38E-08	0.405167
cg01748263	ATP13A5	1.13E-08	-0.49144
cg01759597	DLX6AS	9.01E-09	0.41706
cg01763051	ULBP1	1.33E-18	0.323526
cg01776825	CPEB1	2.83E-06	-0.31316
cg01789478	NEUROD1	0.001746886	0.217022
cg01803258	CADM3	1.13E-08	-0.38453
cg01808545	TMEFF2	1.09E-07	0.482308
cg01815529	PCSK2	1.36E-07	0.396218
cg01821113	DIRC3	2.79E-05	-0.22409
cg01901262	IRX5	1.48E-08	0.584442
cg01933308	NXPH1	5.02E-11	0.26133
cg01965173	RIPPLY2	0.00015622	0.302947
cg02076785	CNGA3	8.93E-12	0.291241
cg02079122	FMN2	1.99E-08	-0.29952
cg02117416	SLC26A9	1.52E-05	-0.20317
cg02152120	SPAG17	0.001617341	0.22117
cg02179341	MYT1L	0.000205203	-0.21616
cg02208270	SPERT	1.09E-07	-0.26883
cg02228160	HMHB1	1.91E-13	-0.20208
cg02288301	TMEFF2	3.69E-07	0.426114
cg02288341	GFRA3	0.000416946	0.2547
cg02352295	SLITRK2	2.05E-06	-0.37908
cg02361557	NTNG1	3.50E-06	0.374925
cg02362508	NRSN1	1.70E-07	-0.42416
cg02392179	SORCS3	5.77E-07	0.302925
cg02397205	NOS1	6.78E-08	-0.32404
cg02492791	SLC6A15	1.32E-08	0.353334
cg02530022	DLX6AS	1.48E-08	0.337001
cg02561482	TFAP2B	8.31E-11	0.214597
cg02562431	PCDH10	9.01E-09	0.499121
cg02574509	FMN2	0.025199093	0.246413
cg02600430	ZIC5	2.05E-06	0.212294
cg02606423	OTX1	1.37E-08	0.226266
cg02645340	PRHOXNB	0.000256929	0.243503
cg02671603	KIAA2022	1.13E-08	-0.37534

cg02695780	FGF20	0.001381647	0.273125
cg02723395	GAD1	9.59E-13	0.218515
cg02739437	SPOCK3	1.61E-07	-0.28411
cg02748047	BTNL2	4.79E-05	-0.23554
cg02814558	PRRG3	6.97E-06	-0.36378
cg02836529	NEUROD1	0.022429054	0.203755
cg02853387	DSCAML1	1.83E-08	-0.30312
cg02893231	FAM5C	8.16E-06	0.239154
cg02958527	LOC389493	6.82E-07	0.226569
cg02990291	DLX6AS	2.68E-06	0.3568
cg03020208	AQP5	4.81E-06	0.245084
cg03023935	NPFRR1	3.61E-08	-0.22829
cg03064067	SLC6A15	9.01E-09	0.51125
cg03073000	LOC286467	0.000187521	-0.22843
cg03098937	CAMKV	0.013803689	0.231399
cg03121419	DCAF12L1	3.13E-08	-0.41572
cg03169018	NEFM	1.11E-08	0.262051
cg03170056	TMEFF2	1.70E-07	0.329938
cg03187135	OPRM1	3.64E-08	-0.28171
cg03226737	SYT9	4.06E-07	0.506109
cg03230154	ZNF492	5.46E-07	0.329953
cg03244189	TTY14	0.014243978	0.207946
cg03264414	PAEP	1.13E-12	-0.20749
cg03299042	OTX1	9.51E-09	0.231285
cg03315215	PCDH8	4.03E-08	0.363718
cg03342543	KIF1A	4.62E-07	-0.22845
cg03350814	RIMS2	1.22E-07	0.278023
cg03386971	WNT7B	3.08E-05	-0.25409
cg03406106	PKD1L2	1.91E-08	-0.33852
cg03428399	LMX1A	0.000435123	-0.21371
cg03483150	PENK	1.74E-10	0.239696
cg03512250	DIRC3	4.24E-08	-0.4206
cg03513163	PCDHB1	1.36E-07	0.274299
cg03520282	FGF20	0.000234924	-0.20021
cg03520644	COL11A1	3.94E-05	0.246274
cg03532926	DPP6	1.54E-08	0.271566
cg03537215	CNTN2	9.32E-08	-0.27315
cg03542197	SEMA3E	5.81E-08	-0.42109
cg03567151	TEX101	1.05E-08	-0.314
cg03609960	ANKS1B	1.13E-08	0.387767
cg03655683	OTX1	4.13E-07	0.400884
cg03739409	TPH2	2.85E-08	-0.23647
cg03748376	OR2L13	1.29E-06	0.212515
cg03752965	UNC5D	0.00015622	-0.21325
cg03753331	DPP10	1.04E-07	0.509922
cg03802424	DACH2	0.00075342	0.278048
cg03903246	FMN2	7.04E-05	0.233682

cg03926852	LY6G6E	1.60E-05	-0.23927
cg03928812	TCN1	1.16E-07	-0.37014
cg03932978	HMGCLL1	3.83E-07	-0.24956
cg03950120	KIAA1751	0.000585897	-0.24726
cg03989480	DMRTA2	0.00061108	0.27568
cg03991152	PGC	3.12E-07	-0.24955
cg03991534	DIRC3	5.82E-05	-0.22501
cg04035209	PCDH10	2.85E-08	0.432661
cg04046889	XKR4	2.40E-05	-0.34075
cg04048634	GABRG1	0.00015622	0.217165
cg04075191	DPP10	7.91E-08	0.444902
cg04088697	DLX6AS	4.01E-14	0.270486
cg04108939	BEST4	0.003438959	0.203694
cg04130427	RORB	6.08E-16	0.225875
cg04135498	STXBP5L	0.001885305	0.21791
cg04184836	CPEB1	6.78E-08	0.535363
cg04240493	AGTR1	1.18E-06	0.210027
cg04276301	OTX1	4.24E-08	0.268549
cg04306063	CRHBP	9.01E-09	0.258118
cg04341210	C13orf36	6.62E-06	-0.26915
cg04372933	ZNF727	1.54E-08	-0.39188
cg04450501	SLC6A2	2.80E-07	-0.30992
cg04505023	SPRR1A	1.99E-08	-0.29445
cg04530015	ABCA12	1.99E-08	-0.29802
cg04612444	PENK	3.94E-12	0.267862
cg04617755	DPP10	2.72E-08	0.391162
cg04621020	SLCO4C1	5.54E-05	0.355501
cg04633600	SLCO4C1	6.10E-05	0.244565
cg04645545	FGF8	2.40E-05	0.278594
cg04649215	KCNQ2	9.28E-08	-0.201
cg04654530	OTX1	2.99E-08	0.378405
cg04670666	HMX3	3.91E-07	0.290271
cg04678336	SGCG	5.23E-08	-0.25889
cg04774103	DNER	1.37E-08	-0.38033
cg04779631	SH3GL3	1.09E-07	0.472492
cg04797846	BTNL2	1.03E-08	-0.31871
cg04807594	AGTR1	1.25E-06	0.407425
cg04829946	PTF1A	1.08E-08	0.306493
cg04842426	CHRM2	1.58E-10	0.221235
cg04878685	PIK3C2G	2.72E-08	-0.3519
cg04886703	BEST4	5.03E-05	0.203131
cg04902286	C13orf38	5.50E-08	0.385081
cg04931216	DMRTA2	0.001227183	0.229841
cg04945331	SOX14	0.000179187	0.370152
cg04956382	MYOT	1.05E-08	-0.33823
cg04961466	NPY5R	1.69E-05	0.248875
cg05005358	SLC6A19	2.37E-07	-0.20116

cg05051043	SLC35F3	1.19E-08	0.463156
cg05099508	SPAG6	7.51E-08	0.443744
cg05135828	SLITRK4	1.13E-08	0.556762
cg05158615	NPY	9.01E-09	0.300096
cg05188948	HEPHL1	5.07E-06	-0.23667
cg05211662	ADAMTS19	7.35E-06	0.259176
cg05223210	DSCAML1	2.48E-08	-0.25552
cg05241461	ZNF492	2.96E-07	0.380561
cg05316065	GSDMC	2.50E-07	-0.20438
cg05373457	KCNS2	1.12E-16	0.221319
cg05401965	PCDH10	1.23E-08	0.348064
cg05414135	XKR4	5.36E-06	-0.26347
cg05437823	TFAP2B	2.48E-08	0.280624
cg05502445	DIRC3	3.90E-06	-0.34677
cg05503824	ATP13A5	7.20E-07	-0.30022
cg05511530	MGAT4C	5.81E-08	-0.32108
cg05535113	CHST4	2.28E-05	-0.34949
cg05658491	FMN2	3.32E-06	0.306583
cg05710753	AGTR1	2.06E-05	0.280719
cg05718036	BMP3	4.81E-06	0.257509
cg05758094	SNX32	9.84E-08	0.401152
cg05802545	NTNG1	8.83E-08	-0.32521
cg05927742	C13orf38	2.28E-08	0.464354
cg05989672	DPP6	2.17E-05	-0.24569
cg06008912	TMEFF2	1.13E-08	0.479794
cg06010032	FAM135B	1.77E-12	0.20892
cg06060135	IRX1	2.99E-08	0.33239
cg06066137	PENK	1.94E-15	0.214938
cg06114087	PCDH8	1.13E-08	0.305109
cg06128028	TBX20	4.11E-06	0.226994
cg06203976	CADM3	1.16E-07	-0.34011
cg06244906	ZIM2	2.99E-08	-0.28533
cg06299307	GRIN2A	2.16E-06	0.501973
cg06376426	GRHL3	1.83E-06	-0.25767
cg06378617	KRT23	1.74E-06	-0.23998
cg06385227	EN2	0.001494474	0.331209
cg06400704	FMN2	3.57E-05	0.36312
cg06437052	SLC26A9	1.27E-08	-0.31295
cg06460717	PCDH8	3.46E-08	0.395366
cg06480736	SLCO4C1	0.000335147	0.360015
cg06484432	ADAMTS19	2.01E-07	-0.363
cg06495961	DPP6	1.68E-08	0.286741
cg06504205	DIRC3	2.41E-06	-0.29577
cg06511917	PTF1A	3.03E-13	0.20004
cg06523618	DIRC3	1.04E-07	-0.27506
cg06598197	CA10	0.000293528	-0.26413
cg06610484	MCHR2	1.28E-09	0.237966

cg06613095	SOX14	0.022429054	0.267759
cg06668555	FAM135B	9.01E-09	0.36794
cg06678084	SNX32	1.74E-08	0.232436
cg06695115	SEMG2	1.00E-06	-0.32824
cg06700606	RASGEF1C	1.06E-06	-0.20462
cg06710785	NRG3	7.51E-08	-0.29906
cg06735285	DSCAML1	5.16E-07	-0.28865
cg06812991	NPY2R	3.13E-08	0.361965
cg06838365	LHFPL4	6.78E-08	0.301959
cg06856528	TMEFF2	3.46E-08	0.35635
cg06872257	FGF20	0.000722601	0.208466
cg06908778	SPAG6	5.07E-16	0.277297
cg06912272	ELAVL3	0.010026407	-0.20041
cg06912936	KCNIP1	8.38E-08	-0.27478
cg07005523	NTNG1	2.28E-08	0.415362
cg07010687	SLC6A19	2.12E-07	-0.27357
cg07015195	RSPO2	2.01E-07	0.289519
cg07020596	CTNNA3	1.48E-08	-0.25084
cg07103129	TFAP2B	1.05E-08	0.268984
cg07121547	NPY2R	7.51E-08	0.387874
cg07150062	ASPG	0.000268614	0.287027
cg07204280	CIDEA	1.04E-07	0.406904
cg07283833	RIPPLY2	8.16E-06	0.28525
cg07349217	TG	4.89E-07	-0.25046
cg07362328	DMRTA2	3.64E-08	0.319514
cg07369190	PCP4L1	9.55E-06	0.330863
cg07412254	LOC84931	1.44E-05	-0.23356
cg07418387	FMN2	9.01E-09	-0.50086
cg07452217	IRX5	1.03E-08	0.424909
cg07502050	DIRC3	1.13E-08	-0.39965
cg07525003	C13orf38	1.19E-08	0.460735
cg07561162	GRIN2A	1.37E-08	-0.22656
cg07609206	SNTG2	2.96E-07	-0.27938
cg07642043	GRIN2A	1.13E-08	0.411114
cg07652786	KIF1A	1.36E-07	-0.234
cg07664198	CHRM2	3.76E-13	0.235409
cg07665387	PCDH10	1.55E-17	0.263366
cg07697895	WNT2	9.01E-09	0.532721
cg07707546	NPY2R	6.62E-06	0.250479
cg07769790	CPEB1	9.57E-17	0.212391
cg07781364	NRXN1	0.000129944	-0.20157
cg07824824	CIDEA	1.09E-07	0.245008
cg07847863	PCDH8	9.84E-08	0.343354
cg07877559	CTNND2	2.09E-13	0.241881
cg07881405	IRX1	8.83E-08	0.318422
cg07895504	CDH22	6.10E-07	-0.26417
cg07907386	PHOX2B	4.46E-10	0.2423

cg07911080	PRHOXNB	0.000515855	0.23013
cg07934818	DIRC3	1.08E-09	-0.22956
cg07938743	OTX1	1.90E-07	0.467526
cg07945335	CD300LG	9.80E-09	-0.20339
cg07974511	OTX1	1.48E-08	0.643914
cg08000644	DIRC1	8.16E-06	-0.21068
cg08050235	INA	6.10E-07	0.382081
cg08073312	SOX14	0.024481734	0.210655
cg08088989	ZNF280A	8.04E-07	-0.27125
cg08095852	WDR17	3.30E-07	0.470783
cg08104310	ASTN1	9.01E-09	-0.31812
cg08154348	RIPPLY2	8.04E-07	0.406667
cg08181476	NCAN	3.40E-05	0.317337
cg08211895	STON1-GTF2A1L	2.85E-08	-0.20268
cg08260406	OR2L13	1.17E-08	0.21831
cg08266366	AQP5	1.25E-06	0.394803
cg08271804	ZNF492	2.38E-08	0.414408
cg08323651	CHRM2	3.10E-11	0.236636
cg08351163	DBX2	6.97E-06	-0.29855
cg08383315	RIC3	1.23E-08	0.247672
cg08393317	CACNG7	1.22E-07	0.237767
cg08404354	HABP2	4.24E-08	-0.22659
cg08422599	KCNIP1	9.01E-09	0.302129
cg08473330	OTX1	1.54E-08	0.384303
cg08567279	LECT1	9.01E-09	0.473031
cg08609270	SLITRK2	2.28E-08	0.428205
cg08637905	DACH2	7.75E-05	0.309608
cg08659667	PLD5	2.28E-06	0.323361
cg08684639	WDR17	2.12E-07	0.474132
cg08688548	CPEB1	2.59E-08	0.298169
cg08701543	KCNIP1	2.37E-07	-0.24562
cg08707110	SNX32	1.83E-06	0.231159
cg08827110	CAMKV	2.80E-07	-0.22068
cg08832227	KCNA1	3.74E-12	0.241527
cg08863440	GAD1	5.46E-07	0.295195
cg08876441	FAM5C	1.15E-05	0.38939
cg08900101	TBX5	0.01612645	0.218064
cg08959216	TBX20	2.65E-05	0.267065
cg09044294	NRXN1	9.01E-09	-0.43629
cg09053366	LPO	0.013382202	0.203185
cg09070142	PTPRZ1	1.89E-06	-0.32203
cg09184853	HRK	8.53E-05	0.376788
cg09186006	SLC16A12	3.30E-07	0.465471
cg09201151	SH3GL3	2.28E-08	0.525888
cg09221867	PCDH10	1.37E-08	0.319111
cg09226786	DLX6AS	1.12E-09	0.226081
cg09233651	TBX5	5.84E-09	0.235548

cg09239744	GRIN2A	2.37E-07	0.45363
cg09247060	TFAP2B	9.80E-09	0.212124
cg09252204	CNKSR2	1.99E-08	0.432621
cg09271709	NRXN1	1.36E-07	-0.23642
cg09317884	LMX1A	7.04E-05	0.220032
cg09350274	GFRA3	0.010026407	0.27337
cg09376854	FGF8	0.000179187	0.325842
cg09388140	DLX6AS	3.49E-07	0.330593
cg09388605	XKR4	0.001227183	0.23648
cg09400152	CPEB1	9.51E-07	-0.32778
cg09409956	LY6G6D	2.48E-08	-0.37135
cg09424759	SLC35F3	1.19E-08	0.418972
cg09442828	ADRB3	3.46E-08	0.24909
cg09492451	IRX5	1.27E-08	0.553068
cg09557313	LECT1	1.08E-08	0.311474
cg09574088	FGF19	0.015639509	0.209618
cg09610569	SLITRK2	2.01E-07	0.326941
cg09781827	PRHOXNB	0.000214615	0.273722
cg09792881	DMRTA2	6.62E-06	0.382507
cg09795588	PTF1A	2.08E-08	0.355865
cg09805172	SOHLH2	3.46E-08	-0.38864
cg09811123	SLC35F3	1.12E-06	0.28743
cg09813525	PCDH8	2.72E-08	0.533185
cg09942248	NEUROD1	0.007435923	0.224992
cg10034890	DNER	7.74E-06	0.472234
cg10068034	C6orf186	1.05E-08	0.413032
cg10078687	KIAA2022	2.01E-07	0.388529
cg10092516	FMN2	6.45E-07	-0.22601
cg10122865	OTX1	2.28E-06	0.522128
cg10192893	PHOX2B	2.32E-09	0.245967
cg10196720	PCDH10	9.01E-09	0.420561
cg10206931	SCNN1G	2.99E-08	-0.38917
cg10251217	TAT	1.83E-06	-0.23892
cg10259748	C6orf186	4.97E-08	0.530069
cg10288278	SLITRK4	9.01E-09	0.344386
cg10315366	GPR123	1.76E-14	-0.21831
cg10316490	FAM5C	2.59E-08	0.437623
cg10325600	SLC30A10	0.042619988	0.229705
cg10359143	EPHA6	3.32E-06	-0.24958
cg10397440	PENK	3.04E-10	0.236935
cg10397765	SIX1	1.70E-07	0.301835
cg10402103	PRHOXNB	1.22E-07	-0.31047
cg10474871	IL1RAPL2	3.32E-06	-0.30585
cg10484958	PCDH8	9.51E-07	0.255014
cg10491556	HMX3	5.46E-07	0.407476
cg10512745	DMRTA2	5.77E-07	0.544335
cg10524033	PCDH10	1.54E-08	0.3889

cg10592710	COL29A1	4.62E-07	-0.32179
cg10623221	NLGN1	1.27E-08	-0.34667
cg10648197	SPAG6	2.48E-08	0.360695
cg10658542	SYT10	1.55E-06	0.477743
cg10721855	PRRG3	8.90E-09	-0.33095
cg10735632	C2orf40	1.78E-18	0.284777
cg10761315	ASPG	0.000350176	0.214689
cg10764388	AKR1CL1	4.13E-07	-0.21623
cg10775792	PCP4L1	9.55E-06	0.262198
cg10778441	TBX20	1.30E-05	0.220783
cg10778841	SORCS3	1.68E-08	0.253349
cg10784511	AGTR1	0.000293528	-0.22896
cg10859133	OTX1	2.98E-06	0.25783
cg10862354	SORCS3	8.38E-08	-0.29578
cg10917619	NRXN1	4.89E-07	-0.28966
cg10951619	FAM5C	2.41E-06	0.302913
cg11044716	C13orf36	2.50E-07	-0.33689
cg11070059	DLX6AS	6.45E-07	0.317316
cg11074968	CPEB1	1.83E-08	-0.26215
cg11113469	DLX6AS	3.91E-07	0.412265
cg11154829	SYT10	1.32E-06	0.245031
cg11165765	LY6G6D	5.81E-08	-0.30494
cg11192975	FGF20	0.000888726	0.255664
cg11198128	SNX32	2.65E-05	0.4344
cg11200929	CRABP1	0.027461399	0.217235
cg11267955	SLCO4C1	0.000149275	0.385957
cg11281641	GAD1	1.47E-06	0.493434
cg11322877	LOC286467	0.000435123	-0.25094
cg11333886	DSCAML1	1.37E-05	0.221849
cg11346522	KCNK2	5.50E-08	-0.27328
cg11374596	ALK	4.37E-07	-0.2775
cg11438428	PTF1A	2.17E-05	0.292511
cg11630154	SOX14	0.025944394	0.200137
cg11660826	ULBP1	1.68E-08	0.467602
cg11697588	CALCA	1.44E-05	0.302475
cg11816202	TTY14	7.78E-06	0.475134
cg11843728	ALOXE3	8.53E-05	-0.2144
cg11912330	PCP4L1	0.000335147	0.399629
cg11970703	ABCA12	0.000179187	-0.21047
cg12020179	MMP20	1.83E-06	-0.26066
cg12034383	EN2	0.023095442	0.281406
cg12124386	FAM5C	1.74E-06	0.422819
cg12128340	LMX1A	3.64E-08	-0.27717
cg12154976	RASGEF1C	1.15E-08	-0.32502
cg12232463	LONRF2	1.32E-08	-0.39412
cg12243453	HTR3B	7.61E-07	-0.25596
cg12395205	CIDEA	1.37E-08	0.316934

cg12428378	PGLYRP3	1.29E-07	-0.30481
cg12435551	SPAG17	3.13E-08	-0.34889
cg12545687	PCDH8	1.06E-05	0.257843
cg12568898	PCDH8	7.51E-08	0.276367
cg12664940	PCDHB1	1.32E-06	0.301606
cg12666279	DPP10	7.91E-08	0.511138
cg12737536	AKR1CL1	8.38E-08	-0.23006
cg12738913	SNTG2	1.32E-08	-0.30227
cg12746059	PCDH10	2.72E-08	0.379356
cg12756396	DMRTA2	9.01E-09	0.349997
cg12855851	PGC	1.80E-07	-0.2017
cg12878228	PRSS1	1.74E-08	-0.32764
cg12884814	NRXN1	1.99E-08	-0.20926
cg12907379	ZIC5	3.15E-06	0.343202
cg12936335	ULBP1	3.36E-18	0.285392
cg12944573	OPRM1	2.12E-07	-0.24043
cg12951348	LY6G6D	7.13E-08	-0.32361
cg12965599	ZIC1	7.61E-07	0.218387
cg12974660	HRK	7.13E-08	-0.35219
cg12982322	WT1	1.23E-08	0.211485
cg13096208	ST8SIA3	2.18E-08	0.347076
cg13128117	PPP1R1A	9.55E-06	-0.20419
cg13156931	PRHOXNB	0.002037716	0.212297
cg13177758	CRABP1	0.001746886	0.249243
cg13206017	SST	1.16E-07	0.330157
cg13209441	DLX6AS	1.13E-08	0.306751
cg13226172	CNTFR	0.000399014	0.294803
cg13258563	C13orf38	3.46E-08	0.428661
cg13387869	NEFM	1.06E-05	-0.23975
cg13388277	ZNF727	2.80E-07	-0.23219
cg13455704	C13orf38	1.99E-08	0.570966
cg13467162	SNX32	1.74E-08	0.307751
cg13492364	FMN2	0.001227183	0.209093
cg13502823	DIRC3	1.94E-06	-0.33885
cg13518298	CNTFR	0.023095442	0.225058
cg13557752	GPR26	2.24E-07	-0.28373
cg13578447	CNTFR	0.001276581	0.245452
cg13660086	MYOT	1.08E-08	-0.38647
cg13663706	SLITRK2	2.08E-08	0.321057
cg13708218	SNX32	8.60E-06	0.237001
cg13713537	NOS1	3.12E-07	-0.29658
cg13777681	DPP10	1.74E-08	0.459016
cg13857519	TPH1	1.32E-06	-0.23139
cg13909533	ELAVL4	5.50E-08	-0.42201
cg13996593	DNER	3.13E-08	-0.36988
cg14009098	SLC35F3	1.09E-11	0.219523
cg14056110	CA10	3.46E-08	0.345464

cg14070647	RSPO2	1.08E-08	0.379856
cg14075424	NANOS3	7.75E-05	-0.20987
cg14146100	PCDH10	3.93E-15	0.28024
cg14170313	RORB	1.04E-07	0.520252
cg14171414	PCDH8	3.05E-14	0.2084
cg14243778	CNTN1	9.01E-09	0.292662
cg14262937	OPRM1	1.19E-15	0.237403
cg14289228	LOC389493	2.68E-06	0.285338
cg14304469	VSTM2A	1.60E-08	0.344882
cg14316898	NCAN	2.79E-05	0.26858
cg14326225	NPAS4	7.51E-08	-0.21884
cg14326644	ALK	1.54E-08	-0.35834
cg14328457	STAC2	1.42E-08	0.326366
cg14331104	C9orf79	2.08E-08	-0.29464
cg14338345	DMRTA1	5.23E-08	0.466897
cg14372265	OBP2B	1.74E-08	-0.22969
cg14386728	FEZF1	0.000585897	0.287152
cg14403327	HCN4	4.03E-08	-0.25567
cg14449051	SLC6A15	1.13E-08	0.501423
cg14462017	SYT4	2.48E-08	-0.37401
cg14510812	SLC6A15	9.01E-09	0.508789
cg14523847	DPP6	1.48E-08	0.346515
cg14532484	PAEP	3.91E-12	-0.21147
cg14538944	DIRC3	2.45E-14	-0.23887
cg14542334	KCNIP1	5.23E-08	-0.30682
cg14604681	OTX1	1.37E-08	0.256221
cg14625113	CNTN1	1.01E-08	0.444591
cg14635303	SNTG2	1.39E-06	-0.26195
cg14725537	PLP1	1.96E-05	-0.23466
cg14730445	SLC5A8	1.37E-05	0.219772
cg14743710	CDH22	2.01E-07	-0.24308
cg14752426	SLITRK4	1.60E-08	0.389803
cg14811608	NPY2R	3.90E-06	0.295396
cg14841350	IGSF11	3.64E-08	-0.33132
cg14924469	LOC286467	2.41E-06	-0.27451
cg14950829	PCDH8	2.59E-08	0.291833
cg14972889	DCAF12L1	3.91E-07	-0.33204
cg14975160	C13orf36	6.10E-07	-0.31608
cg15026634	OTX1	9.11E-09	0.258471
cg15031661	FMN2	1.69E-05	0.437377
cg15167956	C13orf38	1.60E-08	0.50738
cg15199678	DLX6AS	8.25E-17	0.26644
cg15225844	MYT1L	1.37E-08	-0.32046
cg15281774	HCN4	0.000585897	0.244029
cg15336765	AQP5	3.91E-07	0.475874
cg15373633	DACH2	0.001045039	0.303067
cg15392618	FMN2	6.45E-08	-0.24587

cg15475851	INA	1.42E-08	0.214708
cg15542741	SLC6A15	9.01E-09	0.467114
cg15604615	PRRG3	0.00015622	-0.26312
cg15682575	IBSP	1.44E-07	-0.21169
cg15748490	FMN2	4.79E-05	0.213354
cg15753746	GAD1	1.30E-05	0.286748
cg15765724	GBX2	0.008228907	0.207913
cg15819918	HRK	1.32E-06	-0.32981
cg15821496	DLGAP2	1.13E-08	-0.3404
cg15890274	SNX32	7.74E-06	0.321066
cg15951557	GFRA3	0.000818753	0.248241
cg15957341	SYT9	7.20E-07	-0.25176
cg16003790	SLC26A9	2.08E-08	-0.32123
cg16027761	PCDH8	3.69E-07	0.40223
cg16043144	CPEB1	1.52E-07	0.264748
cg16045677	BTNL2	1.70E-07	-0.31259
cg16080876	NEFL	1.55E-17	0.30605
cg16105906	ZIC5	2.38E-08	0.241162
cg16111924	SVOPL	0.005096674	0.207718
cg16136098	NTNG1	4.89E-07	0.366426
cg16144072	DACH2	0.002285276	0.243799
cg16158843	LHFPL4	0.000179187	0.220321
cg16162122	KCNQ2	9.01E-09	-0.31848
cg16204420	FGF10	4.89E-07	-0.24273
cg16232126	SLC5A7	1.20E-14	0.277017
cg16245265	CALCA	3.40E-05	0.293774
cg16248277	FGF8	0.000107794	0.330009
cg16270399	LOC284276	8.04E-07	-0.25521
cg16368442	GRIN2A	1.23E-08	0.492121
cg16374999	PRPH	0.010360562	0.268661
cg16375358	CACNG5	1.19E-08	-0.24625
cg16415058	SORCS1	9.51E-09	0.278692
cg16489926	CDH19	3.90E-06	-0.2678
cg16495212	CPEB1	5.50E-08	0.270518
cg16528511	RIPPLY2	2.54E-06	0.431371
cg16546432	SLC35F3	5.16E-07	0.275712
cg16562730	CHST4	0.000163579	-0.27565
cg16584573	FGF8	7.04E-05	0.350134
cg16624692	SNX32	8.60E-06	0.330761
cg16699354	ALK	3.12E-07	-0.21136
cg16717122	SCG3	9.32E-08	0.219142
cg16727201	CIDEA	9.32E-08	0.458
cg16732787	DUSP5P	1.08E-08	0.20289
cg16809460	DMRTA2	0.000179187	0.340455
cg16822191	KCNQ2	1.09E-07	-0.21233
cg16863522	DPP10	1.13E-08	-0.51633
cg16896847	MAFA	6.97E-06	0.345564

cg16902385	ST8SIA3	8.99E-07	0.271902
cg16909685	IBSP	6.97E-06	-0.27275
cg16964348	NPY	9.01E-09	0.54977
cg16974909	WDR17	5.36E-06	0.259801
cg17012160	FMN2	4.56E-05	0.277305
cg17053060	HEPHL1	5.64E-06	-0.20521
cg17076890	PTF1A	5.96E-06	0.254862
cg17133183	CRABP1	0.001680839	0.213739
cg17170839	GPM6A	8.38E-08	-0.37792
cg17173451	SVOPL	7.61E-07	-0.24085
cg17215863	RALYL	9.01E-09	0.388297
cg17222500	SLC6A15	3.46E-08	0.43573
cg17243896	WDR17	3.75E-05	0.251235
cg17318632	SNX32	2.64E-07	0.266974
cg17330459	DACH2	0.000256929	0.237857
cg17503085	KCNQ2	6.45E-08	-0.33381
cg17519477	NRG3	1.36E-07	-0.28313
cg17526573	NRXN1	1.13E-08	0.305864
cg17535595	PCDH8	4.89E-07	0.496383
cg17567560	INA	2.64E-07	0.44139
cg17571554	DACH2	0.001746886	0.287381
cg17603132	RIC3	8.93E-12	0.237163
cg17606558	MAS1L	0.010698423	-0.2059
cg17623116	LRRC3B	5.54E-05	-0.25408
cg17632299	LECT1	3.13E-08	0.380867
cg17641904	C9orf4	1.04E-07	0.533269
cg17647537	HTR3B	1.52E-05	-0.33401
cg17711717	CNTFR	0.014697243	0.205497
cg17721710	SLC30A10	0.003566659	0.367681
cg17739202	LMX1A	1.52E-05	-0.21013
cg17782848	KCNIP1	1.04E-07	-0.34911
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cg17803868	EN2	0.012563113	0.252947
cg17814335	KIAA2022	1.99E-08	0.325028
cg17853635	C6orf155	1.86E-05	-0.21226
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cg17985972	PLCXD3	1.52E-07	-0.25898
cg18002116	PCDH8	2.28E-08	0.359141
cg18023283	SLC6A15	1.13E-08	0.618712
cg18106668	NPY	4.78E-14	0.260234
cg18109485	HEPHL1	2.72E-08	-0.24504
cg18158990	SYT10	7.61E-07	0.2762
cg18221862	TMEFF2	3.69E-07	0.40192
cg18232816	SYT10	1.04E-07	0.237159
cg18365865	ZNF492	2.96E-07	0.313496
cg18388084	KIF1A	1.13E-08	-0.28018

cg18404308	CNGA3	3.64E-08	0.430758
cg18420965	EPHA5	9.94E-19	0.33562
cg18421840	ADCYAP1R1	9.76E-16	-0.20045
cg18423935	STXBPSL	0.021173766	0.251735
cg18442524	GFRA3	0.007694981	0.263078
cg18443378	WDR17	2.99E-08	0.484375
cg18458597	CADM2	8.53E-05	-0.24468
cg18499443	HPSE2	4.70E-08	0.287424
cg18548950	HCN4	5.07E-06	-0.23506
cg18560328	SYT9	3.12E-07	0.609696
cg18568634	DLX6AS	2.61E-09	0.21568
cg18580232	DPP10	6.78E-08	-0.37246
cg18599790	ZNF492	1.29E-06	0.230668
cg18673954	INA	7.51E-08	0.399054
cg18720642	DACH2	0.000335147	0.247521
cg18725544	PRRT4	1.32E-06	-0.25974
cg18759960	PTF1A	1.60E-05	0.377036
cg18807003	MYT1L	1.51E-10	-0.24933
cg18833140	HABP2	1.06E-06	-0.27946
cg18838701	TNNI3	6.26E-09	0.203961
cg18898125	NEFM	1.30E-11	0.268519
cg18920423	PTF1A	1.55E-06	0.408167
cg18930994	NPY2R	1.61E-07	0.456681
cg18932798	INA	1.27E-08	0.394751
cg18959161	B3GALT1	1.61E-07	-0.30087
cg19018097	SNX32	4.57E-06	0.390377
cg19030579	DMRTA2	0.001087855	0.224977
cg19057309	HCRT	5.35E-12	-0.20754
cg19094243	TMEFF2	2.06E-05	0.242573
cg19129369	LRAT	0.000664727	0.344156
cg19179801	STAC2	5.86E-18	0.278878
cg19255241	OR2W3	1.90E-05	-0.21648
cg19370054	CNGA3	1.42E-08	0.343876
cg19376823	IL5RA	0.001227183	-0.22169
cg19428722	HPSE2	0.000187521	0.240191
cg19437258	C13orf38	1.83E-08	0.498145
cg19530293	TPH2	8.83E-08	-0.2848
cg19591056	FMN2	0.000888726	0.258268
cg19630629	CHRM2	9.01E-09	0.367782
cg19633231	CALY	0.009391291	0.308518
cg19670286	GFRA3	0.001494474	0.228951
cg19671120	CNGA3	8.16E-15	0.210523
cg19690404	CPA4	1.16E-07	-0.33507
cg19712603	PCDH8	1.04E-07	0.378988
cg19719547	PLD5	2.16E-06	0.333408
cg19722748	DLX6AS	2.83E-06	0.292544
cg19736503	RIPPLY2	1.74E-06	0.357247

cg19752855	LOC389493	2.80E-07	0.27292
cg19761848	GBX2	0.012963973	0.250198
cg19788741	SLCO4C1	0.000179187	0.39112
cg19801062	C13orf38	1.13E-08	0.410571
cg19835595	SYT4	9.84E-08	-0.36757
cg19846314	GAD1	3.91E-07	0.275827
cg19865770	LOC400804	1.15E-08	-0.26765
cg19917714	CNTN2	8.99E-07	-0.33848
cg19952303	SLC6A15	1.13E-08	0.417478
cg20014049	PTF1A	9.07E-06	0.440116
cg20044918	GPR123	6.45E-07	-0.25496
cg20103758	SLC27A6	1.60E-05	0.246811
cg20129213	RIMS2	8.83E-08	0.511472
cg20133890	LY6G6E	6.71E-05	-0.23577
cg20134215	MCHR2	2.77E-15	0.223225
cg20189913	DLX6AS	1.18E-05	0.228027
cg20219381	RGS22	4.36E-10	0.329469
cg20270231	DIRC3	6.97E-06	-0.26981
cg20271517	NPY2R	3.64E-08	0.443873
cg20403031	ZNF280A	0.000123996	-0.27605
cg20417527	SLC27A6	1.52E-07	0.321638
cg20432960	TFAP2B	4.11E-06	0.280035
cg20438306	PHOX2B	2.76E-08	0.210438
cg20472643	SYT10	1.47E-06	0.288387
cg20475114	SLC6A19	2.41E-06	-0.21009
cg20481032	PRIMA1	9.01E-09	-0.38908
cg20482223	SVOPL	2.38E-08	-0.26811
cg20507276	OR2L13	8.92E-07	0.200199
cg20555674	ARL5C	8.04E-07	0.223254
cg20581321	CNGA3	1.54E-08	0.349371
cg20587945	SEMA3E	1.27E-08	-0.3938
cg20631104	BMP3	2.98E-06	0.295925
cg20672477	PAX4	3.64E-08	-0.21642
cg20709008	NEUROD1	0.027461399	0.263791
cg20737185	C6orf186	6.45E-07	0.523087
cg20739526	DPP6	0.002117369	0.275745
cg20752831	RIMS4	2.72E-08	-0.20803
cg20890989	MOGAT1	9.62E-09	-0.37602
cg20944283	CADM3	9.01E-09	-0.32134
cg20947377	PTPRZ1	1.06E-05	0.305831
cg20950932	GRIA3	1.03E-08	0.315462
cg20965743	ASPG	1.01E-05	0.215696
cg20976526	RGS22	2.42E-08	0.211924
cg21051580	MMD2	9.51E-09	0.25312
cg21060736	HCN4	6.78E-08	-0.30285
cg21114773	CIDEA	1.27E-08	0.304351
cg21120436	NLGN1	1.52E-11	0.226892

cg21145136	SH3GL3	2.38E-08	0.505877
cg21154627	SLC7A14	6.97E-16	0.317404
cg21174746	CTNND2	1.25E-10	0.259014
cg21225170	GFRA3	0.018213583	0.248116
cg21283867	FGF3	6.40E-05	0.213247
cg21320123	DPP6	1.19E-08	-0.39288
cg21336116	KRT23	5.81E-07	-0.27862
cg21354912	SERPINB7	3.50E-06	-0.29488
cg21384402	INA	4.97E-08	0.407025
cg21426003	GBX2	0.012563113	0.302544
cg21457909	AGTR1	1.09E-07	0.33669
cg21472506	OTX1	1.12E-06	0.504317
cg21497990	EN2	4.03E-08	0.42238
cg21501724	PAK7	3.75E-14	0.24226
cg21535772	GAD1	3.58E-13	0.218833
cg21543102	SPRR3	1.06E-05	-0.24329
cg21545390	DLX6AS	9.62E-09	0.31276
cg21550785	ALK	9.08E-12	-0.20776
cg21581821	FAM5C	7.35E-06	0.214478
cg21589375	MYOT	3.13E-08	-0.35068
cg21678377	DPP10	1.16E-07	0.519443
cg21748223	NPY5R	9.37E-05	0.264739
cg21769093	VWC2	1.13E-08	-0.56328
cg21773142	VSTM2A	6.80E-12	0.211599
cg21884231	SLC7A14	2.38E-08	0.265802
cg21945930	DLX6AS	4.94E-13	0.252845
cg21971621	SNX32	1.68E-08	0.279039
cg22082709	AGTR1	4.37E-07	0.383301
cg22090773	NCAN	7.75E-05	0.220396
cg22149516	SLCO4C1	7.04E-05	0.356063
cg22226821	FMN2	1.60E-08	-0.37733
cg22245446	DIRC3	4.03E-08	-0.25672
cg22248052	TFAP2B	9.32E-10	0.28594
cg22255773	DPP6	1.23E-08	-0.3553
cg22288982	SAA4	1.12E-05	-0.22805
cg22322158	MMP20	2.50E-07	-0.32004
cg22359606	NEUROD1	0.001680839	0.236486
cg22368204	KCNQ2	2.28E-08	-0.27562
cg22410478	C6orf186	4.03E-08	0.441981
cg22471517	CHRM2	4.32E-15	0.239193
cg22490907	TBX20	0.001437306	0.200861
cg22498996	AGTR1	1.47E-06	0.318046
cg22506490	ASTN1	8.60E-06	-0.28166
cg22509138	CDH22	0.000196162	-0.28953
cg22586405	CDH22	5.77E-07	-0.25535
cg22616881	DLX6AS	0.002285276	0.215989
cg22669120	KCNA1	1.61E-07	-0.25858

cg22685369	SLC35F3	1.16E-07	0.351788
cg22723056	SYT9	2.59E-08	0.455976
cg22731763	SLC26A9	2.24E-07	-0.28595
cg22732253	OTX1	9.11E-09	0.23752
cg22733133	EN2	0.001555215	0.246552
cg22746058	PTF1A	1.94E-06	0.331074
cg22763718	PCDH8	4.89E-07	0.432125
cg22827685	NOS1	6.28E-06	-0.22137
cg22855255	CA10	3.64E-08	0.262089
cg22863880	SLC26A9	5.81E-08	-0.2829
cg22885558	SOX14	0.000925409	0.275674
cg22888418	LRAT	5.50E-08	0.382577
cg23003534	INA	2.01E-07	0.411056
cg23003720	C13orf38	1.42E-08	0.371951
cg23010538	FAM5C	1.80E-07	0.570365
cg23093692	SLC35F3	1.84E-08	-0.22611
cg23208513	RGS22	1.99E-08	0.312655
cg23215729	RIPPLY2	6.45E-07	0.349688
cg23217946	ZNF492	9.37E-05	0.219876
cg23229261	OTX1	6.10E-07	0.41273
cg23235384	MYOT	5.50E-08	-0.24452
cg23260456	DPP10	7.61E-07	-0.31945
cg23290556	SFTPD	2.34E-14	-0.23208
cg23294090	FAM135B	1.05E-08	0.354586
cg23297872	SLITRK4	9.01E-09	0.355889
cg23337754	CRABP1	0.012685795	0.207984
cg23426473	EN2	4.70E-08	0.284945
cg23450509	CPNE4	1.83E-06	-0.23707
cg23511432	GFRA3	1.86E-05	0.243928
cg23545828	GPR26	0.000399014	-0.20387
cg23558002	PRHOXNB	0.001276581	0.252903
cg23642747	INA	3.64E-08	0.234506
cg23685102	BEX1	1.55E-06	0.221235
cg23690264	SLITRK4	1.19E-08	0.472269
cg23709290	CNKS2	2.18E-08	0.405776
cg23710498	C13orf38	1.91E-08	0.380549
cg23719157	STRA6	1.94E-06	-0.21204
cg23757489	HTR5A	1.74E-06	0.210579
cg23851685	HTR3B	7.51E-08	-0.4069
cg23886662	CHRM2	2.28E-08	-0.3019
cg23917513	LMX1A	3.15E-06	-0.3532
cg24031355	SPAG6	4.46E-08	0.443469
cg24061141	TBX20	2.54E-06	0.305571
cg24114651	SLC6A19	6.82E-07	-0.24402
cg24130287	HCN4	1.60E-08	-0.23563
cg24137660	OR1J4	3.46E-08	-0.33448
cg24141863	WDR17	1.36E-07	0.382039

cg24145235	ELMOD1	4.33E-06	-0.22948
cg24221853	CHST8	1.15E-08	-0.33361
cg24228819	CHRM2	9.01E-09	0.362968
cg24242823	NPY	9.01E-09	0.481176
cg24312105	SLC35F3	2.99E-08	-0.48075
cg24315710	COL29A1	2.38E-08	-0.28996
cg24319381	CPEB1	1.13E-08	0.448685
cg24365464	FAM5C	5.82E-05	0.287033
cg24366557	TFAP2B	1.05E-08	0.268613
cg24384519	ADCYAP1R1	3.13E-08	-0.3323
cg24396691	SLC30A10	0.006276881	0.203567
cg24433477	CADM2	0.000136091	-0.20343
cg24442913	CALCA	5.50E-08	0.235483
cg24489015	LPO	2.28E-08	-0.35553
cg24529280	NXPH1	4.33E-06	0.249248
cg24560494	PCDH8	1.90E-07	0.256689
cg24641186	TFAP2B	3.49E-07	0.292519
cg24643282	FMN2	8.99E-07	0.324027
cg24680586	INA	7.61E-07	0.396194
cg24728018	CLVS2	2.93E-05	0.276773
cg24764979	GRIN2A	1.29E-07	0.330809
cg24767148	PTF1A	4.57E-06	0.366899
cg24778248	CNGA3	4.46E-08	0.399157
cg24833464	KRTAP3-1	6.45E-07	-0.28293
cg24846807	C1orf173	1.42E-08	-0.37662
cg24885417	NPY	9.01E-09	0.383074
cg24889512	ZNF492	1.70E-07	0.364654
cg24891312	PRB2	6.78E-08	-0.34657
cg24926711	HPSE2	1.74E-08	0.319462
cg24933645	SLC30A10	0.022429054	0.292885
cg24960947	GAL3ST3	4.24E-08	0.219339
cg25033144	KIR3DX1	2.79E-05	-0.26229
cg25045746	CNGA3	3.30E-08	0.378197
cg25098208	RIC3	1.29E-14	0.211799
cg25103492	FGF10	5.92E-11	0.235632
cg25115993	ULBP1	1.11E-08	0.268335
cg25128583	CST2	5.43E-16	-0.22805
cg25188238	XKR4	2.18E-08	-0.32981
cg25191628	DMRTA2	1.54E-08	0.418813
cg25208017	FMN2	0.000268614	0.352777
cg25217100	C13orf36	1.44E-05	0.282125
cg25226247	TFAP2B	6.10E-07	0.256984
cg25234732	LOC389493	5.46E-07	0.25879
cg25237542	SLITRK4	3.83E-08	0.413855
cg25399352	TBX5	0.001132278	0.207924
cg25415246	ONECUT3	1.61E-07	0.241211
cg25437385	SLC35F3	1.29E-07	0.4081

cg25481253	TAS2R38	4.46E-08	-0.35126
cg25523580	MMD2	2.37E-08	-0.24757
cg25530944	LOC286467	0.000196162	-0.23444
cg25538883	MAPK4	2.37E-07	-0.25044
cg25565504	NRXN1	1.52E-07	-0.36584
cg25600049	PCDH8	6.45E-08	0.416675
cg25616216	SNX32	1.25E-06	0.335732
cg25622366	OTX1	1.18E-06	0.452896
cg25684999	PTF1A	1.13E-08	0.316257
cg25691526	LOC286467	6.10E-05	-0.27191
cg25778535	RIC3	9.51E-09	0.295325
cg25782229	WT1	7.20E-07	0.271286
cg25797887	DLX6AS	6.10E-07	0.309735
cg25798600	MAS1L	1.80E-07	-0.31404
cg25819602	DLX6AS	1.90E-07	0.292483
cg25825506	DLX6AS	2.37E-07	0.286899
cg25912428	GPR26	1.36E-07	-0.30808
cg25930591	DLX6AS	1.16E-07	0.231074
cg25971548	FFAR1	7.61E-07	-0.22301
cg25996557	FRMPD4	0.002863241	-0.22559
cg26001902	SLC5A7	2.12E-07	0.3763
cg26015971	LY6G6D	2.59E-08	-0.36272
cg26070020	LMX1A	6.10E-05	-0.20703
cg26075150	DLX6AS	1.64E-06	0.277866
cg26165108	ENPP6	5.23E-08	-0.36758
cg26170604	NXPH1	1.08E-08	0.385299
cg26215967	SH3GL3	1.04E-07	0.450263
cg26251506	DLX6AS	0.00015622	0.219642
cg26295681	FMN2	3.30E-07	-0.20676
cg26297493	CTNNA3	5.03E-05	-0.24059
cg26300652	SYT10	6.10E-07	0.342702
cg26328335	AQP5	3.12E-07	0.507775
cg26499822	CNKSR2	2.37E-07	-0.40666
cg26501046	DIRC3	1.32E-08	-0.32325
cg26513304	KCNIP1	9.11E-09	-0.25354
cg26556895	CRABP1	0.000538416	0.201613
cg26565719	CPEB1	3.40E-05	-0.24652
cg26647242	ALK	2.93E-05	-0.22159
cg26673012	TBX20	4.57E-06	0.27677
cg26676559	CALCA	2.05E-06	0.338955
cg26679047	UNC5D	2.48E-08	-0.28853
cg26699569	BMP3	1.77E-05	0.247144
cg26717554	ELANE	0.000585897	0.246742
cg26880055	RIPPLY2	5.77E-07	0.37263
cg26913669	COL11A1	1.60E-08	-0.32529
cg26946769	MAPK4	1.83E-06	-0.2958
cg26980244	NEFM	5.42E-13	0.207856

cg27032232	DPP6	1.68E-08	0.288263
cg27154343	KCNC2	3.91E-07	0.318058
cg27195326	CNTN1	1.13E-08	0.255336
cg27209571	DNER	1.19E-08	-0.35899
cg27223727	PCP4L1	9.55E-06	0.323545
cg27248571	LY6G6D	9.84E-08	-0.25572
cg27260772	TFAP2B	6.78E-08	0.281837
cg27315191	SYT10	5.77E-07	0.253755
cg27326452	C3orf72	1.77E-05	0.257097
cg27331524	WNT2	9.01E-09	0.416142
cg27360326	PCDH8	2.72E-08	0.361269
cg27364741	OTX1	2.85E-08	0.490354
cg27420415	CNTNAP4	9.01E-09	-0.42899
cg27475652	NEFM	2.03E-17	-0.31631
cg27486637	WDR17	8.99E-07	0.496745
cg27505273	SOX14	0.035301858	0.220898
cg27578811	CPEB1	1.42E-08	0.273125
cg27600205	PCDH10	1.23E-08	0.42517
cg27603283	MMD2	9.01E-09	0.349222
cg27631593	SPRR2E	3.32E-06	-0.2483

Appendix 1.11 – Differentially methylated CpG probes for head and neck cancer.

cg	Gene_Symbol	<i>pvalue_adjust</i>	$\Delta\beta$
cg00003298	LHX5	8.10E-08	0.390795
cg00079219	HOTAIR	5.23E-08	0.251048
cg00089091	DPP10	1.08E-07	0.326925
cg00263760	VAX1	0.003674	0.201489
cg00458965	LHX1	1.94E-06	0.235684
cg00466268	SLITRK3	2.90E-06	0.251655
cg00586732	GRM7	1.08E-07	-0.23536
cg00665492	SLITRK3	1.68E-05	0.292011
cg00721315	LHX5	1.68E-05	0.294948
cg00735885	LHFPL1	1.94E-06	-0.32645
cg00745725	GABRG3	2.54E-06	0.289222
cg00778995	POU3F3	1.45E-07	0.302429
cg00796424	HOXC11	8.91E-06	0.213343
cg01002253	NPY5R	9.21E-06	0.225085
cg01022087	FAM183B	6.98E-08	-0.21768
cg01151966	NRG3	1.45E-07	0.266376
cg01245966	ADCY8	4.74E-07	0.298243
cg01622385	DPP10	4.56E-08	0.212701
cg01718116	DPP10	1.26E-07	0.374994

cg01878345	POU3F3	2.22E-06	0.367817
cg01882260	SLITRK3	1.67E-08	-0.30408
cg01898698	POU3F3	3.05E-07	0.220291
cg01942962	GRIA2	1.33E-05	0.265309
cg02069715	GABRG3	9.70E-07	0.27179
cg02071162	NKAIN3	1.69E-06	0.290609
cg02100674	NRG3	7.99E-05	0.204171
cg02227188	HOXC9	3.05E-07	0.366655
cg02281208	GABRG3	2.27E-07	0.346432
cg02583418	POU3F3	4.08E-07	0.257364
cg02595832	FOXI2	2.27E-07	0.356574
cg02598319	C6	1.95E-07	-0.274
cg02621694	BMP3	0.000263	0.215539
cg02700891	TRH	2.91E-09	0.386426
cg02842496	ADCY8	9.70E-07	0.302946
cg03024760	GABRG3	1.95E-07	0.389815
cg03120091	ADCY8	6.98E-08	0.292
cg03222834	SHISA9	7.60E-08	-0.22171
cg03465157	FAM183B	1.26E-07	-0.20506
cg03509412	WIF1	1.33E-05	0.289403
cg03701341	NKAIN3	2.27E-07	-0.26159
cg03753331	DPP10	4.53E-08	0.440867
cg03804213	C13orf36	3.05E-07	0.299275
cg03827337	RGS7BP	2.22E-06	0.258977
cg03860037	PDX1	9.21E-06	0.211744
cg04008252	NPFFR2	3.39E-09	0.360818
cg04023483	GRM7	1.33E-05	0.237053
cg04075191	DPP10	6.04E-08	0.35201
cg04077800	NPY2R	2.44E-08	-0.20836
cg04139895	GABRG3	1.28E-06	-0.21739
cg04259977	HCN1	6.32E-07	0.343965
cg04315554	DPP10	3.71E-08	-0.26005
cg04354077	PROKR2	6.98E-08	-0.26617
cg04386206	SLC7A14	3.32E-06	0.223627
cg04481181	SLITRK3	1.68E-05	0.255998
cg04510788	GRIK3	7.30E-07	0.271851
cg04529370	NRG3	2.64E-07	0.279222
cg04617755	DPP10	1.26E-07	0.300815
cg05229355	ADCY8	8.42E-07	0.223197
cg05311412	SLC5A7	1.95E-07	0.249587
cg05316043	NRG3	1.94E-06	0.221515
cg05387519	AGBL4	9.21E-06	0.243595
cg05506365	POU3F3	9.70E-07	0.289558
cg05516489	HOTAIR	1.67E-08	0.300673
cg05539745	HCN1	3.54E-07	0.298298
cg05663573	SLC7A14	1.95E-07	0.414458
cg05667379	DPP10	6.04E-08	0.280171

cg05678749	GABRG3	9.70E-07	0.276776
cg05759718	AGBL4	4.19E-05	0.32353
cg05937737	SLC7A14	6.70E-08	0.283649
cg05954446	AMELY	0.009441	-0.24843
cg06106653	NRG3	6.98E-08	-0.33247
cg06162589	SLC5A8	1.26E-07	-0.26548
cg06418867	C10orf90	1.94E-06	-0.2098
cg06498267	HCN1	2.20E-08	0.244926
cg06530558	UNC13C	5.00E-07	-0.2465
cg06563089	KCNC2	3.60E-09	0.240924
cg06579154	C10orf93	3.91E-08	-0.2867
cg06611922	VAX1	2.22E-06	0.237156
cg06639332	C13orf36	1.94E-06	0.247245
cg06661450	LHX9	4.19E-05	0.260313
cg06757810	CNGB3	3.68E-07	-0.25503
cg06796611	IL24	9.70E-07	-0.21866
cg06834689	PACRG	5.23E-08	-0.28275
cg07075026	IGF2BP1	0.000593	0.224846
cg07076175	FAM150A	6.32E-07	0.360978
cg07103093	LHX1	2.88E-08	0.221133
cg07203423	TLX2	5.23E-08	0.319532
cg07312654	ADCY8	1.26E-07	0.226487
cg07369569	HMGCLL1	1.08E-07	-0.31759
cg07421032	C10orf93	1.94E-06	0.294002
cg07524679	TLX2	5.47E-07	0.21859
cg07557260	ADCY8	4.08E-07	0.327903
cg07766263	SLC7A14	1.76E-07	0.225213
cg07784084	LRRC3B	1.95E-07	-0.24797
cg07802350	HOXD13	7.30E-07	0.364341
cg07913294	AGBL4	0.001074	0.21743
cg07918545	FOXI2	2.27E-07	0.382426
cg07990546	TLX2	1.47E-06	0.330233
cg08182446	GABRG3	3.54E-07	0.367312
cg08217024	MDGA2	1.94E-06	0.391621
cg08274073	NKAIN3	4.08E-07	-0.23659
cg08325191	C10orf93	8.10E-08	0.382031
cg08333835	CSMD3	0.000134	-0.22153
cg08379987	C13orf26	0.002027	0.210953
cg08445263	GABRG3	4.08E-07	0.338668
cg08482501	PROKR2	6.98E-08	-0.30927
cg08536228	SYNPR	9.34E-08	0.30234
cg08857479	HOXC11	1.47E-06	0.22763
cg09102610	GRID2	3.38E-08	-0.25857
cg09205438	GABRG3	1.26E-07	-0.27465
cg09297288	GBX2	4.74E-07	0.332087
cg09442654	FAM150A	3.78E-06	0.353529
cg09543255	SLC7A14	1.47E-06	0.247483

cg09681167	GBX2	6.98E-08	0.305673
cg09907509	C13orf36	1.69E-06	0.23775
cg09935282	VAX1	0.000289	0.230168
cg09975620	PDX1	3.35E-08	0.29526
cg10010103	DPP10	9.55E-08	-0.25271
cg10094616	FAM150A	1.33E-05	0.274966
cg10141715	SLC5A8	5.22E-07	0.224274
cg10143067	VAX1	1.28E-06	0.231327
cg10223575	LHX5	7.33E-08	0.206891
cg10401879	NRG3	6.04E-08	0.295352
cg10418524	HOXD13	2.44E-08	0.321568
cg10641615	HOTAIR	4.85E-09	0.401653
cg10679688	ZIC5	3.41E-06	0.234219
cg10782668	PDX1	9.21E-06	0.23234
cg10819004	NKAIN3	2.03E-08	-0.37636
cg10982443	KLHL33	2.22E-06	0.323695
cg11009001	C6orf118	5.23E-08	-0.28734
cg11027140	GPR144	4.08E-07	0.229374
cg11213520	LHX5	2.88E-08	0.354345
cg11328436	HOTAIR	4.32E-08	0.210835
cg11355135	SLC5A7	1.04E-05	0.239767
cg11360416	C10orf93	1.17E-08	-0.3082
cg11398452	VAX1	0.001483	0.213138
cg11410023	EPHA6	2.38E-05	0.215365
cg11545923	GABRG3	1.19E-06	-0.25595
cg11586330	LHX5	5.57E-06	0.237564
cg11591636	ZIC5	0.000163	0.228832
cg11624728	SLC7A14	1.13E-07	-0.22371
cg11651237	GABRG3	3.32E-06	0.313756
cg11701372	DSCAM	3.05E-07	-0.20354
cg11940285	TRH	2.89E-09	0.377064
cg12057127	HOXB9	3.11E-09	0.303007
cg12238015	PDX1	6.32E-07	0.244875
cg12294121	GABRB1	7.99E-05	0.202282
cg12416080	LRRC3B	9.34E-08	-0.2666
cg12431689	GABRG3	1.12E-06	-0.21883
cg12573849	POU3F3	3.05E-07	0.253777
cg12614105	NPY	1.03E-07	0.210305
cg12666279	DPP10	4.08E-07	0.335303
cg12815918	PDX1	1.67E-08	0.233287
cg12907379	ZIC5	8.13E-06	0.30102
cg13272644	GRIK3	8.13E-06	0.202582
cg13279700	C6orf10	9.21E-06	-0.2486
cg13394110	PRAMEF12	8.42E-07	-0.26019
cg13540960	WT1	3.05E-07	0.212019
cg13619915	SLITRK3	7.99E-05	0.215073
cg13672800	C20orf141	1.94E-06	-0.25299

cg13929328	FOXI2	1.28E-06	0.259518
cg14033273	FCN2	2.42E-07	-0.20111
cg14215586	HOXC9	0.003946	0.238369
cg14240300	HOXB9	3.32E-06	0.227844
cg14612870	C6orf118	6.98E-08	-0.24223
cg14615336	AGBL4	0.000218	0.21155
cg14691529	HOTAIR	2.03E-08	0.293898
cg14730445	SLC5A8	6.04E-08	0.378025
cg14856914	RGR	2.57E-07	-0.21888
cg15056773	SYNPR	4.08E-07	0.24307
cg15175266	CDH12	1.08E-07	-0.29889
cg15593298	PAQR9	4.30E-06	0.293346
cg15594205	POU3F3	2.64E-07	0.368213
cg15603568	GRIA4	3.54E-07	0.354656
cg15731655	HOTAIR	8.10E-08	0.288891
cg15990724	NR1H4	2.64E-07	-0.23855
cg16001323	ADH1B	1.47E-06	-0.22058
cg16006349	HOTAIR	4.85E-09	0.325165
cg16043651	ZNF536	0.000129	0.228219
cg16149574	CYP4Z2P	5.23E-08	-0.25752
cg16232126	SLC5A7	8.13E-06	0.279942
cg16260421	AGBL4	1.45E-07	0.261958
cg16415870	GRM7	2.54E-06	0.24063
cg16417028	IL24	2.90E-06	-0.22647
cg16515477	AGBL4	1.67E-08	-0.31884
cg16638385	SOST	2.91E-09	0.364031
cg16696270	ADCY8	8.10E-08	0.224984
cg16767916	POU3F3	1.45E-07	0.246931
cg17078686	POU3F3	8.13E-06	0.292815
cg17210837	UGT3A1	2.09E-07	-0.27258
cg17381377	ABCC8	9.34E-08	0.253279
cg17495130	HOXD13	5.23E-08	0.371897
cg17505819	RGS7BP	1.16E-07	-0.27302
cg17519477	NRG3	4.92E-05	-0.22366
cg17573720	HOTAIR	2.03E-08	0.306705
cg17689601	NRG3	4.53E-08	-0.30926
cg17769229	NRG3	1.95E-07	-0.22226
cg17892178	GRM7	1.69E-06	0.250059
cg18040901	HOTAIR	2.89E-09	0.405495
cg18097532	ABCC8	1.12E-06	0.232944
cg18273840	HCN1	9.34E-08	0.403926
cg18771173	SLC5A7	1.45E-07	0.293655
cg18774195	SLC7A14	2.38E-05	0.224597
cg18824990	HOTAIR	1.12E-06	0.21169
cg18856581	MDGA2	7.30E-07	0.366489
cg18863595	GRM7	1.47E-06	0.34824
cg18950108	DPCR1	7.30E-07	-0.24163

cg19112977	MGC16121	2.67E-05	0.317332
cg19139832	CPNE4	1.26E-07	-0.26177
cg19385628	GRM7	5.47E-07	0.234465
cg19427610	WIF1	0.000121	0.238651
cg19513834	POU3F3	4.53E-08	0.387807
cg19635505	KLHL33	1.69E-07	0.315927
cg19656282	TLX2	6.98E-08	0.337705
cg19672997	MDGA2	1.26E-07	0.296094
cg19714279	GBX2	2.64E-07	0.282316
cg19760241	LHX1	1.69E-07	0.348717
cg19876672	VAX1	6.47E-05	0.2019
cg19884262	FOXI2	9.70E-07	0.310674
cg19897071	UGT3A1	1.45E-07	0.299695
cg19969606	LHX5	1.95E-07	0.22205
cg20073686	GRIA4	5.22E-05	0.208609
cg20291049	POU3F3	3.32E-06	0.244778
cg20535254	C6orf118	5.23E-08	-0.20166
cg20631104	BMP3	1.45E-07	0.225323
cg20646280	KCTD8	1.69E-06	0.2793
cg20936920	GRM7	3.05E-07	-0.22635
cg21048930	GBX2	4.08E-07	0.210854
cg21154627	SLC7A14	8.10E-08	0.289789
cg21171320	TRPM3	3.35E-08	-0.32901
cg21185289	TLX2	3.78E-06	0.33473
cg21217024	GRIA4	8.86E-05	0.222134
cg21242918	VAX1	0.008305	0.215414
cg21383810	WIF1	6.47E-05	0.2924
cg21575295	DLK1	5.23E-08	0.240763
cg21678377	DPP10	4.53E-08	0.417047
cg21711132	GABRG3	1.69E-07	0.286888
cg21834207	AGBL4	7.99E-05	0.244264
cg21884231	SLC7A14	6.04E-08	0.408364
cg21945989	CSN2	1.26E-07	-0.25968
cg22031964	CHRM1	0.000769	0.270278
cg22060073	ADCY8	2.64E-07	0.261941
cg22095604	NOL4	5.47E-07	0.271078
cg22126211	SLITRK3	4.30E-06	0.356933
cg22512438	TRH	1.95E-07	0.33394
cg22520372	NPY5R	3.35E-08	-0.23104
cg22670147	DPP10	4.08E-07	0.327133
cg22679316	HOXC9	2.88E-08	0.296237
cg22762091	ADCY8	1.47E-06	0.279359
cg22785561	GABRA4	2.72E-07	-0.24582
cg23245942	HOXB9	6.28E-09	0.267353
cg23291301	POU3F3	4.30E-06	0.268951
cg23317501	UGT3A1	1.69E-07	0.278464
cg23430388	SYNPR	5.39E-06	-0.20481

cg23559689	GRIA4	1.08E-07	0.344326
cg23951190	CPNE4	4.30E-06	-0.2261
cg23962250	C10orf93	1.49E-05	0.295124
cg23980760	ACCSL	4.74E-07	-0.22252
cg24025893	C10orf93	1.12E-06	0.249463
cg24157814	DCT	3.48E-08	-0.20058
cg24166864	WIF1	7.19E-05	0.286816
cg24394172	GABRA4	1.95E-07	0.270162
cg24472231	POU3F3	1.94E-06	0.335235
cg24500832	HOXC9	2.67E-05	0.212745
cg24566400	RBP4	4.68E-05	0.223605
cg24846807	C1orf173	1.04E-05	-0.21485
cg24977541	SLC7A14	4.53E-08	-0.28556
cg25039722	CA10	3.05E-07	0.343257
cg25063515	CA10	1.67E-08	-0.28985
cg25147632	NRG3	1.28E-06	-0.23978
cg25209672	SPATA4	1.47E-06	-0.23667
cg25456468	HOXC9	0.000769	0.203529
cg25578773	C13orf36	4.94E-09	-0.2461
cg25724842	PACRG	8.42E-07	-0.34207
cg25745697	C10orf93	9.70E-07	0.228388
cg26001902	SLC5A7	9.21E-06	0.376319
cg26035689	NKAIN3	1.08E-07	-0.28635
cg26070020	LMX1A	3.35E-08	-0.24051
cg26115633	FOXI2	7.30E-07	0.437315
cg26164184	FCN2	3.05E-07	-0.2435
cg26299169	PDX1	1.67E-08	0.393575
cg26332560	ADCY8	9.34E-08	0.31348
cg26351229	ADCY8	1.08E-07	0.216549
cg26397188	WIF1	5.22E-05	0.262252
cg26522340	NPY5R	2.27E-07	-0.24464
cg26733786	WIF1	0.000289	0.212836
cg26783057	VAX1	3.32E-06	0.303544
cg26896918	C10orf93	1.11E-07	-0.23151
cg26978976	NKAIN3	4.42E-05	-0.21948
cg27114120	PROKR2	2.64E-07	0.261981
cg27533288	VAX1	0.001483	0.218614
cg27553667	GABRG3	3.54E-07	0.325602

Appendix 1.12 – Differentially methylated CpG probes for kidney_R cancer.

cg	Gene_Symbol	pvalue_adjust	$\Delta\beta$
cg00093087	AQP2	9.60E-12	0.30764
cg00155310	TFAP2B	2.63E-09	-0.3563

cg00355281	NPY	2.46E-09	0.314359
cg00373436	TAGLN3	9.80E-12	-0.3479
cg00458681	DGCR10	1.20E-11	-0.4216
cg00525383	ZIC3	7.40E-08	0.230715
cg00689360	ADH1C	2.04E-10	0.34772
cg00780520	PVT1	9.60E-12	-0.361
cg00812246	BSND	5.85E-10	0.21985
cg00865429	CLNK	3.64E-10	-0.20951
cg01020079	TMPRSS12	5.59E-10	0.226681
cg01020475	ATP4B	9.83E-11	0.427896
cg01050885	NPY	1.79E-10	0.245798
cg01173650	RUFY4	1.74E-11	-0.23073
cg01189638	TNFAIP6	3.93E-08	-0.2489
cg01380946	EMID2	8.03E-09	-0.20771
cg01394349	CAPN8	3.54E-09	0.326783
cg01514538	FLJ42875	4.65E-10	0.269681
cg01519063	GRHL2	5.83E-08	0.257485
cg01525538	DUSP5P	4.40E-11	0.268016
cg01708344	Mar-10	1.16E-07	0.215769
cg01917716	MS4A3	1.87E-11	-0.26534
cg01922613	ABCA4	6.94E-08	0.271502
cg01942558	TNFAIP6	9.60E-12	-0.43779
cg01942646	NR0B2	7.68E-09	0.200391
cg01952226	GRHL2	1.15E-08	0.307766
cg02079584	CCDC33	2.36E-08	0.213365
cg02100150	PVT1	3.84E-11	-0.32264
cg02483661	HES5	1.07E-10	-0.30749
cg02537838	C20orf151	4.57E-11	0.436739
cg02544502	HEPACAM2	2.62E-11	-0.32859
cg02570298	OLFM4	1.58E-11	-0.25537
cg02786912	CLDN16	4.07E-10	0.319435
cg02839195	GAL3ST3	6.86E-10	0.221127
cg02924487	TP73	9.60E-12	0.321774
cg02950892	ANKRD2	5.70E-11	0.359331
cg03095982	FAM184B	8.49E-11	-0.20633
cg03211864	BTBD16	1.09E-11	-0.23755
cg03256938	FLJ42875	4.26E-10	0.227346
cg03267220	FAM184B	2.50E-10	-0.25721
cg03359095	C20orf151	1.03E-09	0.313696
cg03415545	ADH1C	4.65E-10	0.359114
cg03441713	UMODL1	9.80E-12	-0.20895
cg03478199	GRM1	5.09E-10	0.241575
cg03481855	PVT1	2.73E-10	-0.24677
cg03761113	CD5L	2.03E-11	-0.26385
cg03762549	TMEM61	7.81E-11	0.239261
cg04052038	CLDN8	1.61E-10	0.442259
cg04063166	KCNA4	1.91E-11	-0.33328

cg04204669	TH	9.60E-12	-0.35122
cg04233230	RXFP4	3.19E-10	0.285991
cg04350627	SEMA3E	1.84E-11	-0.20406
cg04367216	KCNJ1	6.18E-07	0.221925
cg04484550	FLJ42875	8.86E-11	0.29827
cg04511534	GGT6	1.61E-11	0.39297
cg04538585	LGR5	6.70E-09	0.24834
cg04556646	PHF21B	1.13E-11	-0.3101
cg04592706	ABCA4	1.41E-10	0.27471
cg04670857	CTNNA2	1.99E-11	0.223017
cg04697148	NPY	5.22E-10	0.232389
cg05014103	SPERT	1.08E-11	-0.2134
cg05067125	S100Z	5.59E-11	-0.24538
cg05158615	NPY	1.40E-11	0.312357
cg05280762	VSIG1	5.70E-11	0.398306
cg05295584	AKNAD1	4.15E-11	-0.25672
cg05375002	TDGF3	5.10E-08	-0.2136
cg05437823	TFAP2B	8.32E-11	-0.30772
cg05503887	EHF	1.02E-07	0.207232
cg05897163	PPP1R1B	2.39E-06	-0.20711
cg05937737	SLC7A14	1.14E-10	0.267835
cg06154311	C20orf151	1.59E-09	0.348245
cg06162324	FXYP4	3.91E-11	0.240782
cg06178310	CLDN16	2.52E-09	0.274527
cg06186790	PRSS22	1.49E-09	-0.25101
cg06427867	CLDN8	1.68E-10	0.423258
cg06429466	TRPV6	2.73E-10	0.27884
cg06530558	UNC13C	3.98E-11	-0.32431
cg06621027	CTNNA2	1.84E-11	-0.45474
cg06650260	NR0B2	4.23E-11	0.375017
cg06653004	TFAP2B	4.77E-09	-0.31615
cg06680065	LGR5	5.09E-10	0.242565
cg06689180	KCNE1	1.67E-09	0.358085
cg06915321	ZIC3	1.52E-06	0.217526
cg06950942	CLDN19	1.05E-11	0.245966
cg06986734	PVT1	2.24E-11	-0.20118
cg07045089	TP73	7.24E-08	0.225949
cg07141504	LOC100131551	1.01E-11	-0.2394
cg07167594	DGCR10	1.97E-11	-0.3635
cg07269374	RPSAP52	1.48E-11	-0.23575
cg07638689	FBN3	3.99E-10	0.24174
cg07696006	CCDC33	1.21E-08	0.201942
cg07795964	NAT8L	8.67E-11	0.253435
cg07798731	C10orf99	7.68E-09	-0.27297
cg07899060	EMID2	1.02E-10	0.402379
cg07906724	CHRNA6	2.45E-10	-0.26338
cg08119452	OLFM4	2.99E-11	-0.3625

cg08390979	A2BP1	1.21E-10	-0.2104
cg08403419	RXFP4	6.12E-09	0.267864
cg08525145	RXFP4	9.39E-08	0.229066
cg08560074	FOXI1	2.06E-08	0.296703
cg08568550	C11orf16	1.01E-09	0.23572
cg08642731	C10orf71	6.21E-11	0.367299
cg08759026	MYEOV	1.47E-11	-0.2721
cg08823182	S100A5	2.00E-10	0.252978
cg08842032	EPN3	6.75E-11	0.355429
cg08867825	OLFM3	5.59E-10	0.23107
cg08927738	BCAS1	5.92E-08	0.306059
cg09060908	CAPN8	1.67E-09	0.32927
cg09074856	FLJ42875	3.73E-10	0.20814
cg09232937	IRX1	2.29E-10	0.218748
cg09243900	RAB25	1.02E-10	0.370882
cg09370594	LINGO3	9.23E-11	0.244324
cg09443388	XKR4	9.60E-12	-0.25584
cg09486642	TRPV6	7.51E-09	0.252923
cg09662034	TFAP2C	1.91E-09	-0.26582
cg09682183	UNC93A	2.39E-10	-0.29231
cg09727050	TNFAIP6	8.86E-11	-0.42671
cg09842118	RNASE3	4.35E-10	-0.21244
cg10055471	NR0B2	2.57E-11	0.273137
cg10332649	LYPD6B	2.35E-09	0.221171
cg10343327	ANKRD2	1.61E-10	0.268571
cg10362335	TNFSF14	2.82E-09	-0.20133
cg10530883	IRX1	4.10E-08	0.237681
cg10683527	NEIL3	2.88E-08	-0.29283
cg10690747	UBASH3A	7.52E-10	-0.22331
cg10775039	C10orf71	1.01E-08	0.228659
cg10821830	CTNNA2	2.53E-11	-0.2342
cg10864979	PVT1	6.69E-41	-0.25332
cg10888337	WNT7B	1.48E-11	-0.38585
cg10896586	GPR110	1.53E-07	0.263813
cg10899768	GRHL2	8.61E-10	0.27875
cg10917153	PLA2G4F	3.05E-10	0.246621
cg10958362	C5orf38	1.41E-10	-0.21964
cg11172423	CLDN19	2.46E-09	0.221445
cg11183156	LGALS12	9.64E-12	-0.45994
cg11475550	NPY	5.71E-10	0.368446
cg11552829	FOXI1	1.15E-08	0.358785
cg11625005	TERT	1.41E-08	0.21344
cg11945297	GRHL2	2.69E-09	0.271584
cg11984608	CLDN16	3.99E-10	0.326412
cg12221689	VWA3B	1.20E-11	-0.37091
cg12311175	NDST3	9.64E-12	-0.21281
cg12614105	NPY	3.41E-10	0.267109

cg12691739	CA10	9.60E-12	-0.21356
cg12737536	AKR1CL1	3.11E-11	-0.30145
cg12792363	LGALS12	2.83E-11	-0.20539
cg12924654	SVOPL	1.09E-10	0.267505
cg12982543	CLDN16	2.19E-10	0.325976
cg13065504	PLA2G4F	1.19E-10	0.263739
cg13267718	KCNJ1	3.12E-10	0.302599
cg13271963	ANKRD2	3.56E-11	0.20662
cg13290149	C20orf151	4.40E-11	0.324074
cg13439241	LGALS12	1.08E-11	-0.52059
cg13540480	C14orf50	5.22E-10	0.283084
cg13563074	OVCH2	4.57E-11	-0.38249
cg13578652	UBASH3A	7.02E-10	-0.22944
cg13614409	C13orf26	7.34E-09	0.349506
cg13629358	ATP10B	5.22E-09	0.22133
cg13675753	KCNJ1	9.87E-10	0.272455
cg13929970	FGFBP1	9.87E-10	0.236362
cg14021961	CLCNKA	1.18E-09	0.223245
cg14022090	EHF	3.38E-09	0.329061
cg14269301	MAP3K15	3.84E-08	0.30558
cg14470998	TFAP2B	9.43E-10	-0.34309
cg14481339	KCNJ1	4.17E-10	0.324448
cg14524955	PADI1	2.67E-11	-0.21341
cg14591667	B4GALNT2	5.14E-07	0.242962
cg14605590	LOC100128076	1.03E-11	-0.21616
cg14622443	Mar-10	2.04E-10	0.308393
cg14666108	TP73	1.95E-10	0.252378
cg14845020	BMP7	1.71E-11	-0.34947
cg14895298	BIRC7	4.88E-09	-0.24693
cg15066337	CLDN16	2.19E-09	0.243532
cg15119640	CAPN8	1.11E-09	0.261612
cg15154339	ATP4B	1.27E-10	0.262828
cg15169829	TMPRSS12	8.80E-08	0.249332
cg15429888	C11orf86	2.69E-09	-0.21223
cg15567182	VGLL1	2.40E-09	0.246782
cg15638705	TFAP2B	1.29E-07	-0.20759
cg15679829	GRHL2	2.85E-10	0.213422
cg15819225	TP73	7.49E-11	-0.35089
cg15896939	RAB25	2.99E-10	0.331342
cg15929698	NPY	9.23E-11	0.316684
cg15994604	EHF	2.20E-11	-0.25675
cg16010178	EPN3	1.78E-07	0.200288
cg16231917	PVT1	2.57E-09	-0.28179
cg16268165	UNC5A	6.22E-06	0.212296
cg16454426	C8orf22	3.38E-09	-0.25268
cg16661744	Mar-10	5.46E-08	-0.24277
cg16732787	DUSP5P	5.71E-10	0.217404

cg16752583	TRPV6	1.15E-08	0.242528
cg16762386	NR0B2	2.52E-09	0.233763
cg16791528	REG1A	5.82E-11	-0.26597
cg16804165	CKMT1A	3.84E-11	-0.26004
cg16863522	DPP10	2.50E-10	-0.28253
cg16963138	Mar-10	3.44E-08	0.258852
cg16964348	NPY	1.07E-10	0.44677
cg17140222	RAB3B	1.12E-11	-0.21127
cg17153727	TFAP2B	6.70E-10	-0.29366
cg17163168	TP73	9.84E-09	0.229516
cg17471939	TP73	2.24E-11	0.368873
cg17565967	C20orf151	3.91E-11	0.31543
cg17616677	SEMA3E	2.52E-09	-0.24998
cg17684207	LOC285796	1.85E-08	0.329539
cg17804348	TP73	1.76E-11	0.292417
cg17976205	C20orf151	6.62E-11	0.4354
cg18106668	NPY	4.15E-11	0.301249
cg18185648	ABCA4	2.52E-09	0.314817
cg18258482	ROS1	4.16E-09	-0.23605
cg18285377	C1orf127	6.75E-11	-0.20345
cg18335796	CALB1	1.35E-11	0.283003
cg18390495	DEFB132	1.14E-11	-0.26447
cg18414381	EHF	1.73E-08	0.274421
cg18507053	PHF21B	1.76E-11	-0.22094
cg18560551	EHF	4.35E-09	0.318715
cg18565355	ESRP1	6.70E-10	0.280886
cg18677603	LOC100131551	9.60E-12	-0.30297
cg19026320	CLDN8	2.36E-08	0.313342
cg19303187	DLX2	7.85E-09	-0.26641
cg19406511	RAB25	1.12E-11	-0.206
cg19432362	SIAH3	7.68E-09	0.213771
cg19580810	RAB25	1.61E-11	0.409496
cg19760241	LHX1	5.22E-09	0.205363
cg19802477	LILRA4	2.09E-11	-0.20866
cg19808620	S100A5	1.44E-08	0.283631
cg19862235	HAO1	2.36E-11	-0.30264
cg20054157	SFTA1P	8.15E-11	-0.28866
cg20363347	MYEOV	2.28E-11	-0.28254
cg20371378	TNNI2	2.13E-11	-0.29088
cg20485165	WFDC12	1.06E-09	-0.21268
cg20610181	CA9	1.03E-11	-0.3922
cg20678353	C15orf53	9.60E-12	-0.259
cg20765441	SLC17A2	3.76E-11	-0.33797
cg20928429	CLDN16	1.14E-10	0.345998
cg20955836	BMP7	1.29E-08	-0.27323
cg20971488	DUSP5P	2.06E-11	0.244865
cg21097881	NPY	5.98E-10	0.29218

cg21126506	ESRRB	7.34E-11	-0.20881
cg21217846	S100A5	1.91E-10	0.270004
cg21229979	LOC285796	2.11E-08	0.245009
cg21284779	RXFP4	6.26E-10	0.292792
cg21422742	OVOL2	9.21E-09	-0.24418
cg21504505	C4orf6	1.51E-08	-0.24695
cg21766898	TFAP2B	1.08E-09	-0.38383
cg21869609	LINGO3	4.07E-11	0.230171
cg21870145	RANBP3L	6.48E-11	0.327157
cg21962316	TGM7	5.48E-11	-0.20414
cg22162435	BSND	7.87E-10	0.208374
cg22235258	EHF	1.11E-06	0.234999
cg22383924	TP73	2.16E-11	-0.26221
cg22669120	KCNA1	1.16E-10	-0.31457
cg22863889	RXFP4	2.79E-10	0.248832
cg22889914	ANKRD2	5.26E-11	0.388279
cg22923895	EMID2	2.13E-11	-0.29747
cg22934939	ZIC3	8.21E-07	0.217943
cg22957898	TMPRSS4	2.30E-09	0.263802
cg23075139	LSAMP	2.73E-10	-0.22247
cg23111544	REG1A	1.97E-11	-0.31025
cg23160016	GABRA2	3.63E-11	0.258062
cg23657388	EMID2	2.99E-10	0.254474
cg23682609	BCAS1	1.61E-10	0.304932
cg24161652	TFAP2B	5.84E-09	-0.23292
cg24163360	SLC17A2	8.71E-11	-0.26409
cg24215459	TNIP3	3.71E-11	-0.22785
cg24242823	NPY	8.32E-11	0.348076
cg24245418	NPY	4.07E-10	0.392476
cg24318032	KRT32	1.38E-07	-0.22914
cg24393673	OLFM3	5.85E-10	0.242051
cg24570211	CTNNA2	2.00E-10	-0.2666
cg24580782	NR0B2	1.42E-11	0.307992
cg24822127	FATE1	1.38E-08	-0.25722
cg24885417	NPY	9.44E-10	0.295382
cg24935217	ELF5	9.03E-11	0.285318
cg25063515	CA10	1.03E-08	-0.28366
cg25116503	TMPRSS4	2.40E-09	0.230454
cg25214914	RXFP4	4.65E-10	0.287804
cg25226247	TFAP2B	1.00E-06	-0.23891
cg25503804	F2	1.30E-10	-0.40148
cg25538883	MAPK4	9.60E-12	-0.20533
cg25649889	MYO3B	1.29E-08	0.31116
cg25884711	NPY	1.35E-10	0.414358
cg26055950	TP73	5.70E-11	0.243941
cg26350373	PLA2G4F	4.88E-09	0.200525
cg26405835	NCRNA00160	1.10E-11	-0.26164

cg26511075	RANBP3L	5.95E-11	0.470495
cg26582789	MAP3K15	3.87E-06	0.246333
cg26629942	CA10	2.30E-09	-0.27246
cg26864905	IL20RA	1.49E-06	0.203687
cg26946769	MAPK4	1.75E-09	-0.27315
cg27051318	CHRNA6	7.02E-10	-0.26161
cg27056194	KCNJ1	4.99E-09	0.276493
cg27080171	GABRA2	2.94E-11	-0.25709
cg27109461	EMID2	9.43E-11	0.278972
cg27129048	ST8SIA2	1.77E-08	-0.2016
cg27261219	TMPRSS12	3.23E-09	0.226225
cg27300950	TMPRSS4	5.46E-10	0.317887
cg27376024	LGALS12	1.08E-11	-0.44409
cg27497928	CLCN1	1.24E-10	-0.2072
cg27655935	ESRP1	1.41E-07	0.208992

Appendix 1.13 – Differentially methylated CpG probes for kidney_p cancer.

cg	Gene_Symbol	<i>pvalue_adjust</i>	$\Delta\beta$
cg00061039	F11	1.74E-09	0.253093
cg00061629	ALX4	4.66E-07	-0.20932
cg00093087	AQP2	1.76E-11	0.21377
cg00144673	MCCD1	1.46E-10	0.303626
cg00254258	PRDM16	1.58E-05	0.201916
cg00293644	DCDC2B	9.74E-11	-0.23244
cg00333528	GABRR1	1.21E-09	0.233095
cg00339695	SLC5A11	1.06E-07	-0.22677
cg00498289	GCKR	6.44E-10	-0.28471
cg00574563	LHX1	1.07E-08	0.242967
cg00583535	IGFN1	1.97E-08	0.271854
cg00689360	ADH1C	2.39E-09	0.223834
cg00768993	FLJ32063	2.16E-06	0.227748
cg00831237	AQP2	3.46E-10	0.217947
cg00965643	DCDC2B	1.17E-10	-0.27917
cg01062116	PRDM16	3.69E-08	-0.20233
cg01519063	GRHL2	8.57E-07	0.21103
cg01525538	DUSP5P	5.23E-07	0.280645
cg01804664	CAMK2A	0.00015	0.23703
cg01847344	C21orf29	5.51E-10	-0.21495
cg01853665	RNASE11	5.66E-05	-0.25498
cg02017534	SIAH3	1.06E-07	0.244367
cg02053920	PSORS1C1	3.14E-09	-0.25992
cg02067098	PRDM16	4.73E-07	-0.24374
cg02090805	PXDNL	2.02E-10	0.220335

cg02097420	HRG	1.22E-10	0.291434
cg02147126	AZU1	5.99E-11	-0.24936
cg02159996	GABRR1	8.05E-10	0.213591
cg02241986	CALML3	1.14E-10	0.275732
cg02511456	MNX1	2.04E-09	0.251072
cg02537838	C20orf151	3.14E-09	0.295934
cg02633371	LHX1	3.75E-09	0.218444
cg02674384	SIAH3	4.10E-06	0.237093
cg02704949	FXYD3	4.31E-10	0.28631
cg02845063	FBXO40	1.02E-05	0.235388
cg02952295	TRPM8	4.81E-11	-0.55223
cg03180302	TTR	7.53E-10	0.260254
cg03316570	LOC100132354	9.57E-09	0.218717
cg03359095	C20orf151	1.79E-06	0.21452
cg03388266	TRPM8	9.27E-07	-0.31563
cg03415545	ADH1C	5.39E-10	0.243665
cg03449456	PRDM16	2.90E-10	0.201445
cg03583016	FLJ32063	1.78E-09	0.307018
cg03873049	CAMK2A	8.81E-10	0.21479
cg03890691	DOC2A	4.55E-07	0.369226
cg04006839	APOH	0.000145	-0.22151
cg04052038	CLDN8	8.08E-07	0.223129
cg04134748	PRDM16	4.37E-08	-0.27284
cg04365980	CLEC3A	3.36E-09	-0.25237
cg04389897	TFAP2A	1.66E-09	-0.23457
cg04527918	UCN	2.87E-06	0.207197
cg04562611	C16orf11	1.10E-09	0.208194
cg04592706	ABCA4	2.15E-11	0.221629
cg04872399	TNNT2	1.86E-09	0.270913
cg04985582	ABCC13	8.65E-06	-0.21228
cg05113927	UCN	4.19E-08	0.333825
cg05231308	UCN	4.50E-06	0.222163
cg05328761	C4orf26	4.49E-09	-0.40872
cg05374238	C1orf168	2.74E-07	0.236969
cg05530472	AMELY	1.92E-08	-0.20429
cg05656251	PRDM16	1.36E-09	0.210526
cg05954446	AMELY	3.66E-07	-0.25189
cg06060874	PRDM16	2.56E-06	0.226667
cg06136702	PSORS1C1	4.81E-11	-0.21502
cg06154311	C20orf151	6.69E-08	0.294055
cg06162324	FXYD4	5.04E-10	0.20494
cg06166785	G6PC	5.36E-09	0.224174
cg06451843	FLJ32063	1.21E-09	0.288362
cg06490225	LHX1	2.39E-09	0.213123
cg06536868	UCN	4.96E-05	0.296496
cg06627354	TRPM8	0.00049	-0.2286
cg06650260	NR0B2	6.23E-11	0.351022

cg06689180	KCNE1	6.28E-08	0.203351
cg07163547	RXRG	2.20E-06	0.201783
cg07168810	KCNJ1	1.18E-09	0.245269
cg07211140	WT1	0.002292	0.202402
cg07444473	FLJ32063	1.59E-09	0.346913
cg07472953	CSF3	2.04E-09	0.234004
cg07493760	SLC4A9	3.54E-10	0.249099
cg07537370	UCN	5.48E-05	0.21513
cg07706776	CALML3	1.31E-07	-0.21794
cg07749074	HRG	8.24E-10	0.251299
cg07798731	C10orf99	9.80E-05	-0.21554
cg07913197	FLJ32063	4.72E-10	0.354109
cg08018585	SIAH3	2.56E-06	0.35167
cg08207466	TMEM145	2.92E-08	0.202389
cg08351100	FLJ32063	8.42E-10	0.235457
cg08382534	SLC38A8	3.35E-11	-0.52225
cg08457421	PLA2G3	3.61E-10	0.249509
cg08553601	RASL11B	5.03E-07	0.203569
cg08622198	CHRM3	7.26E-11	-0.39448
cg08622757	MNX1	5.30E-06	0.203016
cg08787968	WT1	1.15E-07	0.236457
cg09065714	UCN	9.36E-09	0.342635
cg09075137	SCEL	4.13E-10	0.289281
cg09080173	PEBP4	2.42E-06	0.212642
cg09179211	FAM3B	0.000351	0.209706
cg09605636	FLJ32063	1.63E-09	0.278986
cg09728865	TBL1Y	1.56E-11	0.234524
cg09729274	GRHL2	3.10E-07	-0.28302
cg09802818	LOC283404	4.57E-11	-0.44054
cg09990962	PRDM16	3.46E-10	-0.2047
cg10126372	PXDNL	3.77E-11	0.204387
cg10168149	FLJ32063	2.09E-09	0.442603
cg10230442	HRG	1.05E-08	0.272204
cg10244666	WT1	0.001814	0.209766
cg10273615	DGKI	8.24E-10	0.269343
cg10442735	PRDM16	2.24E-07	-0.20906
cg10483275	CAMK2A	1.66E-09	0.248202
cg10752406	AZU1	2.90E-10	-0.30576
cg10816760	LOC153910	4.69E-09	0.260005
cg10938046	C6orf223	9.01E-10	0.328454
cg10974219	MYOCD	2.77E-11	-0.34818
cg11157172	PRDM16	0.002845	-0.22438
cg11573219	HCRTR1	2.98E-08	0.212518
cg11736657	CALML3	2.93E-11	0.241841
cg11769400	PEBP4	1.66E-08	-0.30956
cg11945297	GRHL2	3.46E-08	0.235315
cg12078738	CGA	1.22E-05	0.200464

cg12204555	KCNJ1	5.02E-09	0.207794
cg12456825	FBXO40	1.11E-05	0.242692
cg12462883	SLC9A10	7.12E-08	-0.27992
cg12650635	AQP2	7.20E-10	0.201518
cg12651286	MMP20	9.45E-07	-0.28425
cg12728032	ELF5	3.83E-11	0.263581
cg12974660	HRK	4.20E-05	0.230073
cg12979844	SIAH3	2.50E-08	0.20163
cg13178597	RGS17	1.04E-07	0.222713
cg13290149	C20orf151	9.16E-09	0.219481
cg13492337	PXDNL	5.00E-11	0.287554
cg13808979	PSORS1C1	4.43E-11	-0.25869
cg13833437	UCN	1.00E-06	0.236909
cg13998850	CPNE6	2.83E-10	0.258587
cg14069088	CDKN2BAS	8.74E-07	0.248501
cg14097304	MNX1	5.87E-09	0.32557
cg14269973	SIAH3	3.65E-07	0.24497
cg14483391	HTR3D	1.86E-10	-0.21293
cg14620839	IFITM5	2.31E-05	-0.21458
cg14635269	LMX1B	2.44E-09	-0.26171
cg14663914	AZU1	1.98E-10	-0.29103
cg14928319	DNAJC5B	1.40E-10	0.260008
cg14985891	CASQ2	2.24E-07	-0.34242
cg15001406	RIMBP2	1.50E-05	-0.22385
cg15046062	HTRA4	8.24E-10	0.20208
cg15357022	PRDM16	2.19E-10	0.277789
cg15619820	PRDM16	3.72E-07	0.268563
cg15981734	FLJ32063	1.10E-09	0.349392
cg16019436	PROZ	9.13E-06	0.231664
cg16146033	SLC22A8	1.58E-11	-0.23207
cg16348158	PRDM16	8.81E-10	-0.20311
cg16510654	C1orf64	8.50E-11	0.219073
cg16694785	PRDM16	4.33E-06	-0.25951
cg16697620	HCRTR1	2.90E-10	0.20663
cg16732787	DUSP5P	1.24E-06	0.236338
cg16762386	NR0B2	5.51E-10	0.2462
cg16789230	LOC348840	2.44E-10	-0.36166
cg16798252	FLJ32063	7.70E-10	0.251494
cg16806210	TTC36	4.36E-11	0.232749
cg17486860	WT1	0.005182	0.206853
cg17543539	GATA5	7.84E-05	-0.20773
cg17565967	C20orf151	5.49E-09	0.25554
cg17598552	PSORS1C1	6.73E-10	-0.3157
cg17741448	RPS4Y2	9.54E-07	-0.2624
cg17972491	AMELY	2.96E-08	-0.35291
cg17976205	C20orf151	3.25E-08	0.263036
cg18120259	LOC100132354	3.77E-10	-0.21165

cg18240463	PRDM16	9.01E-10	-0.20432
cg19026320	CLDN8	2.58E-07	0.22555
cg19233001	TNNT2	8.42E-10	0.209889
cg19440734	CAMP	4.80E-05	-0.20911
cg19706803	PRDM16	9.55E-11	0.227348
cg19760241	LHX1	4.72E-10	0.202255
cg19765377	MAT1A	0.00026	0.205119
cg20076468	PROZ	2.57E-05	0.234101
cg20442078	UCN	1.28E-05	0.242037
cg20480642	PXDNL	9.17E-11	0.360596
cg20600729	AQP2	1.21E-09	0.223546
cg20688289	MUC12	2.49E-10	0.292753
cg20723436	NXPH2	3.28E-09	0.283813
cg20962532	KCNJ1	4.47E-08	0.20909
cg20971488	DUSP5P	2.56E-08	0.230312
cg21304163	FXD3	7.68E-09	0.235625
cg21348173	PYY	7.71E-11	-0.33277
cg21609526	PRDM16	8.05E-06	0.245435
cg21752601	UCN	1.02E-08	0.286084
cg22023826	BMP5	8.76E-09	0.210947
cg22129545	UCN	1.99E-09	0.344304
cg22162435	BSND	4.36E-11	0.253544
cg22264616	WT1	1.94E-07	0.24832
cg22324567	EBF2	7.37E-10	-0.20462
cg22619549	PKD2L1	2.47E-06	0.252189
cg22653915	PXDNL	1.78E-10	0.259703
cg22720392	PRDM16	1.55E-07	0.300107
cg22731981	ELF5	1.68E-11	0.231629
cg22822446	C10orf50	2.06E-10	0.30051
cg23050300	PRDM16	3.22E-06	-0.22662
cg23246703	FLJ32063	7.70E-10	0.350534
cg23311800	ELF5	7.71E-11	0.207134
cg23318538	C10orf50	1.39E-08	0.254843
cg23688111	TRPM8	2.98E-08	0.293804
cg24222546	STRA6	9.16E-09	0.210861
cg24286165	WIT1	0.030414	0.227745
cg24345062	FLJ32063	1.03E-09	0.479076
cg24688655	FLJ32063	8.05E-10	0.292748
cg24690588	C1orf168	1.61E-07	0.207696
cg24817216	NKAIN3	3.77E-08	0.229748
cg24831879	CALML3	2.98E-11	0.260944
cg24873695	PRDM16	1.01E-10	0.323537
cg24946253	PXDNL	7.56E-11	0.268048
cg25052456	FLJ32063	9.17E-09	0.318291
cg25322094	FSTL4	1.32E-10	-0.33492
cg25658983	SIAH3	4.39E-09	0.226206
cg25740565	FLJ32063	1.10E-09	0.42541

cg25883348	TRPM8	5.18E-11	-0.33002
cg25937577	PLA2G3	4.46E-07	0.246242
cg26123256	UCN	5.04E-05	0.214983
cg26129339	ELF5	5.00E-11	0.245916
cg26433444	PI16	5.56E-11	0.202948
cg26491818	RIMBP2	0.000529	-0.22346
cg26667946	SIAH3	0.000264	0.220835
cg26717066	FSTL4	2.35E-08	-0.29273
cg26848718	WT1	0.000214	0.232882
cg27109600	FLJ32063	6.89E-10	0.343698
cg27651243	MNX1	3.95E-06	0.207551

Appendix 1.14 – Differentially methylated CpG probes for liver cancer.

cg	Gene_Symbol	<i>pvalue_adjust</i>	$\Delta\beta$
cg00009553	CDH8	1.94E-10	-0.21519
cg00012148	TINAG	1.47E-13	-0.26392
cg00013196	DCAF4L2	1.76E-11	-0.40678
cg00018696	CSMD1	7.23E-16	-0.29482
cg00028598	GABRA5	9.34E-11	-0.44178
cg00059161	SLITRK3	3.38E-10	-0.25068
cg00096922	DLX5	2.77E-07	0.225849
cg00111503	KCNK9	9.14E-13	-0.39482
cg00126657	SSX6	3.71E-14	-0.28552
cg00134787	MYH1	5.06E-06	-0.2243
cg00142239	DLGAP2	6.45E-11	-0.24793
cg00145969	FAM5C	1.45E-06	-0.31662
cg00147248	CHRM2	6.64E-15	-0.34483
cg00158789	TBX4	9.06E-09	0.208633
cg00168942	GJD4	9.30E-07	-0.23283
cg00170438	HRH3	2.10E-15	-0.20494
cg00176740	POU6F2	5.08E-14	-0.3653
cg00199047	DLGAP2	4.72E-07	-0.22031
cg00201819	GPR123	2.88E-13	-0.26254
cg00207855	NCRNA00164	5.90E-09	-0.25694
cg00215587	MKRN3	1.44E-08	-0.30784
cg00235336	BEND4	2.08E-10	-0.23367
cg00246768	CSMD1	9.20E-10	-0.2809
cg00277753	GPR123	1.37E-11	-0.38668
cg00290340	IGDCC3	5.98E-08	-0.21185
cg00290944	PAGE2B	1.08E-05	-0.2035
cg00295573	MAGEA8	2.99E-12	-0.3268
cg00330059	ODZ3	2.40E-07	-0.25898
cg00344380	BEND4	1.17E-10	-0.28708

cg00355325	TFF2	2.13E-09	-0.295
cg00366850	SIX2	1.00E-09	0.32237
cg00369202	GRM4	1.95E-12	-0.20169
cg00400832	DLX5	1.13E-07	0.217788
cg00418735	HRH3	1.85E-12	-0.20764
cg00440217	COL9A1	6.24E-10	-0.20796
cg00443797	PPAPDC1A	3.28E-13	-0.25026
cg00445405	OTX1	2.86E-11	0.232609
cg00447018	LOC100133469	0.003798	-0.22466
cg00472281	SLC6A19	3.54E-09	-0.20969
cg00497078	C14orf180	6.78E-14	-0.32935
cg00502885	SLC6A19	6.40E-15	-0.30451
cg00510502	DLGAP2	3.50E-08	-0.2838
cg00515905	EPS8L3	1.84E-13	-0.21325
cg00517849	ODZ3	1.39E-17	-0.37315
cg00543869	SLC7A4	1.13E-13	-0.34151
cg00552087	CSMD1	4.98E-12	-0.38669
cg00563495	STRA6	1.36E-09	-0.20511
cg00576650	DSCAM	1.15E-10	-0.26992
cg00579393	REG1B	1.23E-12	-0.29105
cg00589161	PHACTR3	8.87E-17	-0.35984
cg00601486	HIFNT	5.41E-11	-0.29429
cg00611227	DPP10	9.75E-17	-0.47684
cg00617568	B4GALNT2	9.05E-07	-0.23004
cg00623161	DLGAP2	1.42E-10	-0.28202
cg00625743	TFDP3	5.15E-09	-0.21241
cg00629116	PRND	1.23E-10	-0.23764
cg00665114	TNR	1.73E-11	-0.3028
cg00672445	DLGAP2	2.81E-07	-0.2304
cg00702593	DSCAM	1.45E-09	-0.27041
cg00735923	CFTR	3.66E-09	0.345714
cg00775863	CTNNA2	1.10E-05	-0.2162
cg00802855	GPR123	8.51E-14	-0.25647
cg00805441	IGLL1	8.31E-14	-0.28374
cg00840403	CHST4	1.18E-06	0.203448
cg00844246	GPR123	1.88E-10	-0.34467
cg00887153	CHST4	5.32E-09	0.250237
cg00898486	GRM4	2.16E-10	-0.24688
cg00913945	MAGEA8	5.71E-11	-0.2203
cg00929798	CALY	6.29E-05	0.205983
cg00933692	MYH1	8.86E-11	-0.24311
cg00944166	SLCO6A1	4.58E-05	-0.28948
cg00968538	TERT	1.10E-12	-0.21082
cg00968561	FAM83F	5.27E-10	-0.21109
cg00974523	PRDM7	2.15E-16	-0.26688
cg00996764	KLK2	1.06E-08	-0.22391
cg01003961	SP8	1.40E-11	0.261625

cg01026898	LOC221122	1.83E-11	-0.21797
cg01037726	PNCK	2.65E-07	-0.24593
cg01041256	GABRA5	4.89E-14	-0.32989
cg01055386	TMEM132C	1.21E-11	-0.3973
cg01070560	CSMD1	4.66E-10	-0.3391
cg01078582	DSCAM	2.66E-11	-0.24446
cg01081636	GRM4	3.94E-10	-0.23519
cg01108921	DSCAM	3.61E-08	-0.3239
cg01120434	GPR123	9.90E-14	-0.21571
cg01138921	SPSB4	2.04E-11	-0.23136
cg01151029	CNTNAP4	2.76E-11	-0.29501
cg01154272	DLGAP2	4.45E-09	-0.22881
cg01156373	ERBB4	2.57E-16	-0.33551
cg01167924	OR13A1	9.18E-07	-0.30097
cg01182076	ODZ3	4.93E-17	-0.32318
cg01215762	HOXA10	7.51E-08	0.240716
cg01242196	GRM4	5.85E-07	-0.20245
cg01268381	DSCAM	2.98E-07	-0.26079
cg01275685	BMPER	8.03E-14	-0.32796
cg01282269	DSCAM	4.54E-13	-0.24983
cg01289352	POU6F2	8.48E-13	-0.33165
cg01289782	ODZ3	4.30E-12	-0.37348
cg01409460	BMPER	1.07E-06	-0.22245
cg01414185	HOXD4	0.015075	0.206035
cg01428589	RGS9BP	2.06E-08	0.274504
cg01434302	CSMD1	1.34E-12	-0.25524
cg01448276	DLX5	3.29E-08	0.252444
cg01481609	GPR123	1.60E-12	-0.37252
cg01487494	KCNJ16	7.19E-13	-0.34332
cg01516033	ISX	4.85E-13	-0.26784
cg01527581	DLGAP2	5.09E-10	-0.2124
cg01545419	MAGEB1	7.77E-10	-0.2235
cg01545952	ZNF716	2.61E-10	-0.20545
cg01587454	DCAF4L2	1.17E-09	-0.34166
cg01620077	PGK2	7.74E-13	-0.26031
cg01637537	FAM83F	8.27E-12	-0.2194
cg01648659	DNER	2.24E-06	-0.25347
cg01669948	KCNK16	6.12E-11	-0.27329
cg01689354	SPSB4	7.47E-09	-0.20688
cg01750724	DLGAP2	4.62E-11	-0.21931
cg01777672	PDZRN4	1.41E-16	-0.29186
cg01829407	NAA11	2.08E-10	-0.28966
cg01882260	SLITRK3	1.07E-13	-0.23015
cg01898337	TMEM132C	4.54E-11	-0.24868
cg01901466	CHGA	6.46E-10	-0.21203
cg01916429	CYP19A1	5.09E-10	-0.25397
cg01932197	SEMA3E	4.42E-05	-0.2195

cg01950474	ODZ3	5.31E-11	-0.30732
cg01952537	C14orf180	2.39E-10	-0.22275
cg02023367	GPR123	3.59E-12	-0.24745
cg02026371	NUDT10	5.26E-12	-0.34337
cg02037307	PITX1	5.82E-14	0.285338
cg02049829	UBL4B	1.11E-08	-0.23705
cg02054457	TNR	3.66E-09	-0.2601
cg02057755	AGBL4	1.41E-14	-0.33155
cg02113214	DGKI	1.09E-13	-0.29282
cg02134660	FAM83B	5.60E-14	-0.33823
cg02153334	TERT	1.98E-15	-0.21628
cg02192678	DLGAP2	4.23E-12	-0.32962
cg02215603	HHIP	1.63E-14	-0.32207
cg02255090	DLGAP2	3.49E-07	-0.23836
cg02310286	DCAF4L2	5.83E-15	-0.46196
cg02327812	SLC6A19	5.37E-08	-0.25663
cg02413326	B3GALT5	7.40E-08	-0.24327
cg02431964	MARCO	1.32E-11	-0.31334
cg02447488	CD164L2	6.90E-14	-0.22689
cg02466815	HOXD1	4.44E-10	0.295721
cg02470904	ABCB5	5.37E-07	-0.24868
cg02475236	DSCAM	2.07E-06	-0.25334
cg02478708	FCAR	4.62E-14	-0.28884
cg02483554	GJD4	4.91E-09	-0.25742
cg02485729	TMEM132C	1.36E-14	-0.30858
cg02501166	TMEM132C	1.11E-10	-0.26474
cg02502025	BEND4	7.77E-10	-0.25247
cg02504617	MAGEC1	1.46E-14	-0.3229
cg02515739	SPSB4	1.52E-12	-0.27393
cg02528400	CSMD1	1.77E-09	-0.23046
cg02530222	FIBCD1	4.72E-12	-0.22791
cg02558162	CRABP1	4.22E-10	-0.20312
cg02580900	SLC6A19	5.71E-11	-0.27404
cg02582587	POU6F2	4.90E-12	-0.36961
cg02593218	KLK10	1.63E-10	-0.29798
cg02641770	DLGAP2	2.65E-10	-0.29337
cg02643451	DLGAP2	3.15E-09	-0.26241
cg02644195	OR1J2	3.54E-13	-0.2318
cg02657833	MYO3A	1.29E-15	-0.28305
cg02756698	KRT12	1.08E-05	-0.24742
cg02757516	GPR123	4.62E-14	-0.31772
cg02772379	ACTL8	2.69E-08	-0.26548
cg02781618	BEND4	6.53E-15	0.271022
cg02786019	TRPV6	9.07E-06	-0.23901
cg02788401	MYCBPAP	0.022017	0.207969
cg02830744	SMEK3P	2.55E-09	-0.33441
cg02837027	DCC	2.77E-09	-0.28259

cg02858066	GPR123	1.37E-11	-0.28388
cg02868468	C14orf180	1.44E-14	-0.27834
cg02882755	GRM4	1.54E-12	-0.30414
cg02901136	S100A12	8.18E-13	-0.37312
cg02903104	DLGAP2	3.72E-12	-0.25018
cg02903436	PGK2	6.13E-10	-0.26945
cg02909890	POPDC3	9.38E-12	-0.30118
cg02911432	TMEM132C	1.32E-11	-0.21974
cg02912913	GABRA5	2.55E-09	-0.31564
cg02978737	PVALB	1.50E-07	-0.20299
cg02981003	GPR123	2.91E-11	-0.27635
cg02987368	DLGAP2	9.32E-13	-0.24343
cg03003467	LOC100133469	1.22E-05	-0.2802
cg03006172	DLGAP2	6.27E-14	-0.27052
cg03047616	DNER	8.09E-07	-0.25451
cg03059575	ABCB5	1.71E-12	-0.22461
cg03104467	CACNA1E	1.01E-11	-0.32932
cg03134083	TNR	7.55E-12	-0.27096
cg03170472	CWH43	2.10E-12	-0.26744
cg03192044	FIBCD1	1.76E-08	-0.21738
cg03194442	GPR123	3.26E-10	-0.27521
cg03242448	ODZ3	2.43E-14	-0.32511
cg03249561	FCAR	1.88E-08	-0.25541
cg03308704	DLGAP2	1.22E-13	-0.34375
cg03320607	LILRA3	6.18E-15	-0.34821
cg03369828	PAGE1	5.95E-15	-0.36906
cg03439587	CALN1	1.59E-15	-0.22624
cg03445896	LPAR4	2.91E-12	-0.29007
cg03471122	GABRA5	3.90E-09	-0.27711
cg03495768	ZIC2	1.15E-08	0.250555
cg03513858	FAM83B	9.40E-17	-0.42051
cg03518799	DLGAP2	5.54E-08	-0.27195
cg03519441	DSCAM	2.21E-16	-0.34645
cg03520471	GABRR3	3.06E-09	-0.21881
cg03521982	CBLN2	8.04E-15	-0.25514
cg03537537	DCAF4L2	9.18E-14	-0.37708
cg03567151	TEX101	2.09E-16	-0.32211
cg03595083	CSMD1	1.07E-15	-0.21712
cg03613433	DLGAP2	2.27E-10	-0.21907
cg03655683	OTX1	4.43E-13	0.31287
cg03693842	GABRA3	6.96E-08	-0.26078
cg03700143	GABRD	2.15E-06	-0.21459
cg03723211	DLGAP2	2.75E-10	-0.36081
cg03729889	MYO18B	5.33E-13	-0.21847
cg03733219	SPRED3	7.42E-12	0.221856
cg03734323	GDF2	9.70E-07	-0.23573
cg03755794	TIMD4	1.26E-06	-0.26315

cg03757053	MAGEB1	0.000191	-0.23841
cg03774724	CTNNA2	8.32E-05	-0.20726
cg03774868	DPP10	1.11E-10	-0.36121
cg03793368	MAGEC2	7.17E-15	-0.25599
cg03794862	WNT2	3.43E-10	-0.28572
cg03807914	SLC6A19	2.99E-10	-0.29626
cg03815683	CDH8	4.45E-14	-0.33649
cg03852041	GPR123	3.72E-09	-0.28481
cg03901910	DLGAP2	7.39E-06	-0.24553
cg03912954	CACNA1B	7.95E-11	0.202187
cg03928924	GAGE12J	1.12E-11	-0.24856
cg03931619	MAGEC1	3.65E-12	-0.29664
cg03932978	HMGCLL1	1.32E-10	-0.20753
cg03935379	TERT	1.80E-11	-0.20065
cg03954858	FAM83F	5.08E-12	-0.23509
cg04019076	TERT	1.29E-07	-0.22456
cg04021502	TERT	6.58E-06	-0.21329
cg04033390	TMEM132C	2.36E-14	-0.29382
cg04046889	XKR4	1.90E-16	-0.38281
cg04048705	CTNNA2	2.13E-11	-0.22224
cg04050941	DLGAP2	8.90E-12	-0.23533
cg04063348	IL17F	1.75E-10	-0.29051
cg04066400	KCNK9	9.90E-14	-0.27333
cg04102854	CPA5	4.21E-14	-0.34484
cg04112471	SPSB4	7.30E-11	-0.30856
cg04121368	PPAPDC1A	2.71E-15	-0.33273
cg04132353	CAPN14	4.62E-06	-0.23303
cg04135385	SLC6A19	9.67E-13	-0.33662
cg04205664	CLEC2L	1.02E-16	-0.37459
cg04223420	PITX1	1.26E-16	0.421804
cg04227026	FATE1	3.78E-09	-0.2306
cg04276301	OTX1	9.67E-11	0.272002
cg04279920	MAGEA8	1.47E-13	-0.31758
cg04291946	HRH3	7.88E-15	-0.23207
cg04315554	DPP10	1.99E-12	-0.23863
cg04316624	HOXD3	4.67E-10	0.234454
cg04350627	SEMA3E	5.09E-17	-0.27828
cg04425614	C14orf180	5.22E-11	-0.24469
cg04458776	SLC22A6	3.55E-08	-0.24508
cg04461895	DLGAP2	1.50E-16	-0.29299
cg04481779	IL20RA	2.26E-08	0.208649
cg04487479	COL9A1	3.46E-12	-0.27807
cg04501624	DLGAP2	1.05E-09	-0.3288
cg04553632	GPR123	1.28E-14	-0.45384
cg04570669	ODAM	1.45E-17	-0.20311
cg04577591	RPSAP52	1.45E-16	-0.38663
cg04620298	CPLX2	3.53E-15	-0.25816

cg04636876	PRND	3.84E-09	-0.21359
cg04637490	XAGE5	1.29E-08	-0.23249
cg04647241	KRT12	3.33E-12	-0.23256
cg04651193	NUDT10	2.09E-09	-0.32925
cg04654530	OTX1	5.87E-12	0.249971
cg04685060	MAGEB1	3.92E-05	-0.27923
cg04685163	DLGAP2	1.62E-05	-0.2217
cg04711063	BMPER	0.001021	-0.23106
cg04752263	HRH3	4.01E-11	-0.26204
cg04774103	DNER	1.62E-15	-0.28972
cg04781796	GABRD	7.23E-09	-0.3618
cg04843046	C9orf4	2.16E-09	-0.2106
cg04857792	UPK1B	3.08E-11	-0.2105
cg04876028	GPR123	6.34E-10	-0.20051
cg04923875	TNR	5.13E-11	-0.33111
cg04926384	BMP5	1.25E-07	-0.25725
cg04961448	CACNA1B	4.29E-10	-0.31559
cg04963177	PDZRN4	7.46E-13	-0.29059
cg04973839	ODZ3	2.23E-09	-0.27281
cg04976799	GPR123	4.27E-06	-0.21112
cg05005358	SLC6A19	1.52E-13	-0.34116
cg05006718	TUBA3C	4.75E-09	-0.28784
cg05031352	MAGEA1	1.01E-16	-0.4199
cg05033341	FAM83F	2.68E-09	-0.22994
cg05047411	MAGEA8	2.89E-07	-0.2236
cg05058973	GHRHR	4.30E-09	-0.21494
cg05099596	SLC5A7	3.13E-11	-0.2249
cg05118455	CACNA1E	2.35E-10	-0.29682
cg05137662	OPN1MW	8.89E-10	-0.2931
cg05141787	TH	3.96E-08	-0.24554
cg05171952	PITX1	1.27E-12	0.275465
cg05201970	HCN1	1.65E-08	0.215879
cg05221720	COL9A1	0.000499	-0.21469
cg05252264	FCAR	1.39E-13	-0.34794
cg05257372	MAGEC2	2.88E-13	-0.43979
cg05260949	CTAG2	5.91E-11	-0.34666
cg05293820	STXBPL	9.49E-10	0.246472
cg05329976	PHACTR3	3.08E-11	-0.30781
cg05338527	PDZRN4	2.11E-17	-0.29469
cg05340803	DSCAM	6.64E-15	-0.39706
cg05342469	ODZ3	7.60E-15	-0.33526
cg05422096	ANKFN1	2.17E-14	-0.20822
cg05436231	CD164L2	1.25E-07	0.249075
cg05450193	ERC2	8.31E-10	-0.32311
cg05455971	DLGAP2	1.17E-09	-0.2041
cg05458609	FAM83F	1.52E-13	-0.22894
cg05475938	DLGAP2	4.26E-05	-0.23592

cg05490659	HOXA10	1.08E-07	0.212224
cg05499890	AMPD1	1.67E-11	-0.23204
cg05522559	PAGE2	9.16E-05	-0.2054
cg05534676	NEUROD6	2.98E-17	-0.36813
cg05535113	CHST4	1.12E-06	0.208026
cg05553756	DDX53	3.15E-05	-0.21791
cg05557780	PDZRN4	2.57E-11	-0.25296
cg05576619	ST8SIA6	5.36E-10	-0.2252
cg05577437	DLGAP2	8.89E-10	-0.28164
cg05578840	OTP	2.01E-05	0.214723
cg05616355	PANX3	2.71E-11	-0.25806
cg05617002	DPP10	1.28E-12	-0.22842
cg05626117	CLEC4G	1.17E-09	-0.27335
cg05630943	CNTNAP4	1.97E-17	-0.34586
cg05632088	ZNF735	2.21E-12	-0.40618
cg05663558	MAG	3.59E-15	-0.21742
cg05669641	DPP10	8.80E-13	-0.34507
cg05688136	SPHKAP	2.72E-09	-0.42231
cg05690069	ODZ3	3.49E-14	-0.29782
cg05694450	DLGAP2	2.30E-13	-0.31313
cg05708385	CLDN10	4.16E-05	-0.21056
cg05730676	TMEM132C	1.66E-09	-0.30785
cg05780864	KCNK9	8.92E-09	-0.3102
cg05805326	DLGAP2	1.06E-10	-0.32986
cg05809437	DLGAP2	4.10E-09	-0.27352
cg05829782	VSX2	1.26E-05	0.214799
cg05837890	PRND	1.66E-06	-0.2975
cg05844832	ERBB4	1.73E-17	-0.36822
cg05854698	GPR123	1.80E-16	-0.33987
cg05897803	KCNK16	7.55E-12	-0.30122
cg05912481	BMPER	1.79E-05	-0.26596
cg05921170	S100A12	1.21E-10	-0.32621
cg05929864	SLN	2.97E-14	-0.31951
cg05952543	MKRN3	1.94E-14	-0.2811
cg05964600	HCN1	4.22E-10	-0.367
cg05992726	PDZRN4	2.13E-14	-0.31736
cg05994690	SPSB4	2.99E-12	-0.25777
cg05999364	CSMD1	5.96E-15	-0.25296
cg06010711	CTNNA2	1.99E-09	-0.3157
cg06040034	DLGAP2	1.67E-13	-0.42702
cg06048662	SLC6A19	7.14E-10	-0.24049
cg06061238	GPR123	1.63E-12	-0.22187
cg06065695	CTNNA2	4.10E-09	-0.30106
cg06070132	DLGAP2	2.00E-11	-0.27036
cg06074801	DSCAM	1.98E-13	-0.34659
cg06112871	POU6F2	1.21E-10	-0.25173
cg06121507	S100A12	2.53E-11	-0.42154

cg06135282	SLITRK6	1.83E-14	-0.37
cg06153883	CHRM2	2.38E-14	-0.36794
cg06162589	SLC5A8	2.62E-15	-0.20088
cg06172732	GAST	1.79E-08	-0.2035
cg06322518	C10orf71	6.13E-10	-0.21323
cg06324957	BMPER	2.24E-06	-0.32356
cg06365535	TBX4	1.09E-09	0.315977
cg06389252	POU6F2	1.25E-12	-0.32548
cg06392126	SPHKAP	4.38E-11	-0.42568
cg06527919	CACNA1E	2.48E-10	-0.24467
cg06556827	SLC6A19	5.53E-13	-0.26476
cg06563300	SLC17A8	3.24E-08	0.209888
cg06580725	ZIC2	1.16E-05	0.20562
cg06589421	ODZ3	7.89E-14	-0.20765
cg06593603	SLC6A19	2.23E-08	-0.2552
cg06609843	C3orf50	1.89E-11	-0.222
cg06656105	TRPV6	7.70E-11	-0.31258
cg06690689	CNGB3	4.68E-08	-0.20875
cg06707406	NRXN1	2.82E-16	-0.36871
cg06735218	OR51E1	8.18E-15	-0.38683
cg06830064	SOX11	1.87E-13	-0.32645
cg06873461	DPP10	1.16E-15	-0.35101
cg06942978	TERT	8.18E-13	-0.28543
cg06968859	CTNNA2	2.04E-11	-0.26781
cg06972578	CACNA1B	4.69E-05	-0.20672
cg06999127	RTL1	0.000116	-0.20946
cg07010687	SLC6A19	5.51E-15	-0.30702
cg07011961	PRDM9	9.55E-12	-0.32676
cg07032446	CSMD1	2.68E-16	-0.27297
cg07041214	OR56A3	8.00E-17	-0.36219
cg07047280	DSCAM	2.69E-07	-0.29161
cg07053177	TMEM132C	5.56E-16	-0.38712
cg07086592	DCAF4L2	1.01E-14	-0.29946
cg07100700	GRM4	2.26E-13	-0.21452
cg07119871	PRIMA1	1.89E-08	-0.276
cg07130714	C3orf50	1.78E-12	-0.25962
cg07155495	CSMD1	1.17E-16	-0.33674
cg07164606	MARCO	3.52E-16	-0.31465
cg07176410	CPA6	1.25E-12	-0.24571
cg07176609	TNR	8.60E-08	-0.28094
cg07177437	ITLN1	3.86E-07	-0.26306
cg07204739	WNT3A	1.70E-11	-0.38154
cg07205753	DLGAP2	1.50E-11	-0.29326
cg07241908	XKR4	8.74E-17	-0.32961
cg07247409	COL24A1	9.51E-10	-0.23619
cg07269374	RPSAP52	6.03E-10	-0.27586
cg07274716	PITX1	1.98E-17	0.42856

cg07274922	PAGE2B	1.61E-10	-0.21766
cg07277190	H1FNT	1.31E-09	-0.22252
cg07337456	DLGAP2	1.21E-10	-0.27337
cg07338584	KCNU1	3.29E-08	-0.22967
cg07346177	DLGAP2	9.18E-11	-0.29093
cg07369569	HMGCLL1	3.69E-14	-0.26227
cg07416590	FAM5B	4.46E-11	-0.39843
cg07449753	SEMA3E	3.05E-10	-0.26616
cg07456815	XKR4	4.09E-15	-0.25472
cg07471018	COX7B2	5.28E-14	-0.43197
cg07505629	GPR123	3.55E-08	-0.21187
cg07561017	COL2A1	6.01E-07	0.254515
cg07584894	CLEC4M	4.59E-10	-0.30817
cg07704990	SLCO6A1	4.74E-05	-0.2286
cg07725033	LOC285629	1.84E-10	-0.32226
cg07769622	SMEK3P	3.60E-09	-0.26062
cg07816271	DGCR10	8.35E-08	-0.26819
cg07836152	CR1L	2.69E-08	-0.20341
cg07841014	REG1B	2.00E-11	-0.32985
cg07851521	TSPY2	1.17E-06	-0.27597
cg07852840	SPSB4	1.21E-12	-0.3487
cg07856521	CALN1	3.02E-17	-0.2867
cg07856761	PVALB	1.21E-12	-0.2076
cg07862930	KCNJ16	9.50E-15	-0.34259
cg07878085	RCVRN	2.19E-10	-0.26176
cg07882687	PAGE1	3.22E-13	-0.32344
cg07909692	PDZRN4	2.63E-17	-0.3649
cg07938743	OTX1	5.51E-15	0.23703
cg07974511	OTX1	3.28E-13	0.33727
cg07982825	CACNA1B	2.62E-15	-0.27578
cg07992659	BMPER	1.94E-14	-0.31877
cg08023692	TFDP3	6.57E-11	-0.25075
cg08035351	CPA5	2.00E-11	-0.21095
cg08038402	DLGAP2	2.02E-09	-0.25478
cg08056755	LOC146336	7.73E-17	-0.34822
cg08099701	GABRA5	2.30E-15	-0.32144
cg08104999	UPK1B	7.39E-10	-0.23379
cg08124867	NAA11	2.73E-08	-0.20705
cg08125539	IGF2BP1	1.74E-14	-0.26652
cg08158518	SPSB4	2.99E-10	-0.30941
cg08182463	ODZ3	7.50E-17	-0.36138
cg08206318	PITX1	1.90E-14	0.263504
cg08236285	CSMD1	3.60E-09	-0.20943
cg08264725	DDX53	3.11E-07	-0.24758
cg08277486	CCDC144NL	6.19E-17	-0.20972
cg08317412	PANX3	1.99E-12	-0.22685
cg08331840	KCNU1	1.67E-11	-0.24787

cg08351598	SMEK3P	3.88E-13	-0.36633
cg08382534	SLC38A8	6.24E-10	-0.24248
cg08387538	DLGAP2	4.49E-16	-0.49775
cg08389130	TEX101	4.36E-10	-0.23352
cg08418978	CLDN10	6.41E-06	-0.22296
cg08442037	DSCAM	3.37E-13	-0.29356
cg08502239	RCVRN	9.05E-12	-0.42377
cg08573687	TH	6.33E-06	-0.21256
cg08575860	DLGAP2	2.77E-08	-0.20717
cg08584868	FAM150A	5.60E-07	-0.32095
cg08585489	MAG	9.18E-14	-0.24127
cg08586692	NAA11	2.05E-14	-0.25603
cg08599475	IL20RA	5.15E-14	-0.25887
cg08625617	CSMD1	6.49E-06	-0.29242
cg08651730	ACTL8	6.67E-10	-0.24646
cg08652808	NAA11	2.05E-13	-0.20007
cg08706312	MAGEB1	1.45E-10	-0.21165
cg08721320	GPR123	6.69E-11	-0.20973
cg08741952	ISX	1.46E-08	-0.23243
cg08760493	COL25A1	7.23E-07	-0.20764
cg08795360	B3GALT5	5.98E-08	-0.29593
cg08802511	ODZ3	2.87E-15	-0.38394
cg08810664	ODZ3	1.01E-16	-0.37483
cg08832906	CLEC2L	1.40E-11	0.31451
cg08835464	TRPV6	9.72E-14	-0.31831
cg08889347	ATP13A4	8.64E-13	-0.3249
cg08895932	LCE1C	1.15E-13	-0.35868
cg08934976	TERT	9.35E-10	-0.20167
cg08962392	C7orf71	9.87E-15	-0.21114
cg08969344	GRM4	5.97E-12	-0.2672
cg09044294	NRXN1	1.45E-17	-0.33444
cg09046427	TMEM132C	6.41E-12	-0.30567
cg09054951	ODZ3	2.88E-12	-0.32749
cg09055992	DLGAP2	1.70E-13	-0.35313
cg09063835	PHACTR3	5.53E-13	-0.22657
cg09079168	ZNF679	4.31E-11	-0.26624
cg09106984	GRM4	5.61E-11	-0.27903
cg09166973	PRDM9	2.18E-12	-0.32856
cg09171565	GABRA5	1.50E-10	-0.2364
cg09232269	CR1L	2.53E-13	-0.29996
cg09256281	CTNNA2	3.50E-16	-0.3072
cg09286599	CLEC4GP1	2.67E-12	-0.26887
cg09299053	ZNF716	1.11E-10	-0.32673
cg09299388	PGK2	1.16E-11	-0.31835
cg09327378	SLC5A1	1.66E-07	-0.20261
cg09354518	CDH8	9.05E-12	-0.29493
cg09359114	DLX5	8.50E-09	0.305677

cg09361748	CALN1	1.03E-17	-0.3403
cg09362722	CHRM2	5.64E-13	-0.34381
cg09417683	MYO3A	1.84E-15	-0.2471
cg09418861	DLGAP2	6.23E-11	-0.26712
cg09437135	MKRN3	6.70E-17	-0.37051
cg09468285	CR1L	1.45E-16	-0.32988
cg09472467	GABRA5	9.32E-13	-0.23941
cg09486642	TRPV6	4.83E-08	-0.24933
cg09557387	CR1L	2.52E-05	0.278863
cg09577907	CYP19A1	8.03E-13	-0.34229
cg09585906	CHRM2	8.23E-08	-0.28632
cg09586034	TNR	4.30E-12	-0.33713
cg09597390	SYT9	7.81E-16	-0.36197
cg09599529	CAPN14	2.16E-07	-0.31647
cg09626894	CFTR	1.83E-11	0.403203
cg09636715	HOXA10	7.17E-15	0.3527
cg09648809	SLC6A19	8.41E-11	-0.24108
cg09657185	GRM4	1.92E-12	-0.2677
cg09679746	CDH8	3.69E-14	-0.27825
cg09702698	RCVRN	5.52E-07	-0.25917
cg09758842	NCRNA00164	4.78E-11	-0.21822
cg09771429	LDLRAD1	2.53E-16	-0.26845
cg09795588	PTF1A	3.27E-05	0.241519
cg09816349	TRPV6	4.66E-16	-0.22322
cg09822482	C1orf125	0.000889	-0.22667
cg09826973	UBL4B	1.41E-08	-0.2334
cg09906458	PRND	1.13E-05	-0.21501
cg09923953	KLK11	8.48E-15	-0.28145
cg09929941	MAGEC2	1.19E-12	-0.24044
cg09938674	DLGAP2	4.76E-08	-0.237
cg09961397	COL9A1	9.21E-12	-0.28092
cg09966303	CNTNAP4	3.43E-14	-0.26491
cg09982918	MYO18B	7.33E-07	-0.21796
cg10010103	DPP10	3.32E-09	-0.25629
cg10066681	MAGEA1	8.92E-16	-0.42532
cg10083824	GRM4	4.03E-09	-0.25236
cg10094691	DSCAM	2.83E-12	-0.29637
cg10116904	FAM5C	1.76E-11	-0.32929
cg10122865	OTX1	4.98E-14	0.386097
cg10154597	GPR123	2.33E-16	-0.25212
cg10158850	TERT	1.50E-10	-0.23002
cg10159630	HOXD3	0.000295	0.20537
cg10172210	MAGEB2	2.64E-09	-0.29473
cg10191891	C7orf71	1.95E-12	-0.33326
cg10216717	TMEM132C	2.43E-17	-0.32321
cg10222925	DCAF4L2	3.82E-17	-0.47406
cg10226257	ODZ3	6.77E-17	-0.37137

cg10243939	DLX5	5.13E-08	0.223419
cg10271192	OTX1	7.83E-12	0.262865
cg10272176	PRSS22	6.08E-06	-0.20733
cg10276834	CHRM2	2.12E-16	-0.37079
cg10295807	RPSAP52	2.52E-14	-0.35613
cg10315366	GPR123	1.84E-15	-0.25223
cg10318148	CYP2W1	3.05E-13	-0.20313
cg10324703	POU6F2	6.04E-14	-0.26498
cg10376517	ACTL8	2.16E-07	-0.28547
cg10397765	SIX1	1.55E-13	0.406764
cg10479063	PZP	8.65E-15	0.217808
cg10489318	DLGAP2	1.76E-08	-0.30869
cg10522115	DUSP13	4.61E-08	-0.20182
cg10552189	NCRNA00164	3.30E-11	-0.22633
cg10557827	DLGAP2	4.15E-12	-0.29122
cg10598030	CCL26	2.44E-12	-0.24019
cg10598596	KLK10	1.19E-16	-0.28528
cg10632342	TEX101	1.63E-12	-0.28216
cg10640333	OTX1	1.64E-14	0.257976
cg10683527	NEIL3	2.57E-11	-0.27237
cg10702238	DLGAP2	3.04E-08	-0.21198
cg10721855	PRRG3	2.07E-14	-0.34235
cg10733677	CTAG2	1.08E-07	-0.21483
cg10739728	MAGEC2	4.98E-14	-0.35316
cg10776919	DMRTA2	5.07E-09	0.24568
cg10796634	PAGE1	7.67E-16	-0.47368
cg10816760	LOC153910	1.61E-07	-0.22026
cg10821830	CTNNA2	3.73E-05	-0.2014
cg10827485	GPR123	2.67E-12	-0.23652
cg10828127	DSCAM	1.74E-15	-0.42175
cg10831196	DLGAP2	6.55E-13	-0.30912
cg10858415	KCNJ16	6.07E-08	-0.28464
cg10859133	OTX1	1.53E-15	0.25363
cg10878976	TERT	4.80E-14	-0.25758
cg10881615	BMP10	6.55E-07	-0.22296
cg10910685	COX7B2	1.17E-10	-0.28957
cg10941721	MAGEB1	2.30E-13	-0.37405
cg10961604	CD164L2	4.08E-08	0.299269
cg10979994	SLC6A19	1.40E-09	-0.23755
cg10986125	ERBB4	1.51E-12	-0.32108
cg10992201	ODZ3	1.95E-07	-0.26177
cg11010909	STAB2	4.33E-07	-0.2884
cg11040394	GLP1R	1.38E-12	-0.2474
cg11074070	CTNNA2	1.41E-06	-0.21318
cg11100640	MKRN3	0.000209	-0.24191
cg11109621	CDH9	7.12E-17	-0.30444
cg11110686	MAGEC1	6.24E-10	-0.29448

cg11176493	WNT3A	4.10E-09	0.277228
cg11188031	HAVCR1	7.74E-13	-0.20513
cg11217367	DLGAP2	1.38E-12	-0.30847
cg11222933	SPHKAP	4.21E-06	-0.29673
cg11247304	KLK10	1.95E-07	-0.39497
cg11254573	DLGAP2	2.89E-10	-0.28203
cg11291200	MAGEB2	2.75E-06	-0.20437
cg11310812	KCNJ16	5.64E-13	-0.38589
cg11312462	MYH13	1.63E-08	-0.30192
cg11346333	PRAMEF12	4.65E-07	-0.27055
cg11348701	GAD1	1.54E-05	-0.21417
cg11357940	ZNF716	6.04E-14	-0.34037
cg11388802	CACNA1E	4.03E-09	-0.26694
cg11430766	NRXN1	1.63E-12	-0.22293
cg11498870	DCAF4L2	4.74E-16	-0.49023
cg11511819	TUBA3C	2.53E-13	-0.36964
cg11518826	DNER	1.01E-11	-0.30076
cg11532179	CSMD1	0.000436	-0.26052
cg11543937	SPINK5	5.71E-11	-0.22492
cg11547474	GPR123	1.09E-09	-0.24218
cg11554507	NEUROD6	1.19E-15	-0.40843
cg11574620	NAA11	5.73E-15	-0.22927
cg11587635	MAG	2.49E-12	-0.35353
cg11592640	CRABP1	9.18E-11	-0.25901
cg11615959	CLEC4M	1.20E-13	-0.39626
cg11646259	BMPER	2.01E-15	-0.28713
cg11666857	SLC6A19	4.75E-10	-0.2407
cg11691504	DLGAP2	4.38E-11	-0.27685
cg11701372	DSCAM	3.82E-14	-0.38651
cg11721803	COL2A1	1.39E-08	0.227883
cg11726229	GABRR3	5.15E-16	-0.23937
cg11734845	DLGAP2	3.79E-12	-0.40221
cg11736942	C14orf180	5.18E-10	-0.216
cg11755803	TMEM132C	5.51E-11	-0.352
cg11760342	ODZ3	8.92E-07	-0.28881
cg11761200	REG1A	2.27E-12	-0.30972
cg11775579	NRXN1	3.80E-15	-0.36927
cg11778362	ODZ3	2.27E-12	-0.40353
cg11782250	CSMD1	3.32E-09	-0.23864
cg11796258	TNR	3.13E-11	-0.30985
cg11832804	TERT	5.22E-11	-0.21749
cg11842953	SLC6A19	2.45E-08	-0.38603
cg11878419	DLGAP2	5.71E-11	-0.27782
cg11884243	FCN2	7.61E-13	-0.22599
cg11891395	DLX5	1.40E-05	0.240786
cg11955474	CD164L2	6.19E-07	0.287212
cg11957331	TMEM145	3.18E-11	0.291852

cg11969493	PHACTR3	8.48E-13	-0.21725
cg11997899	DLX5	2.61E-07	0.252422
cg12013817	GRM4	2.23E-10	-0.22364
cg12020778	DLGAP2	4.98E-09	-0.234
cg12028740	CSMD1	3.53E-15	-0.32603
cg12032246	PAGE4	2.45E-08	-0.22544
cg12033248	KCNU1	3.21E-10	-0.27025
cg12037162	GPRIN2	2.99E-13	-0.23595
cg12042060	CSMD1	1.53E-06	-0.20322
cg12053971	GPR123	1.64E-11	-0.28806
cg12056501	TRPV6	8.27E-12	-0.31965
cg12100026	OR13A1	7.55E-12	-0.28194
cg12229387	GAST	1.17E-15	-0.28588
cg12234272	TFF2	1.80E-13	-0.3087
cg12244288	BMPER	2.19E-11	-0.27499
cg12269374	CSMD1	7.70E-11	-0.31372
cg12298598	DSCAM	1.59E-15	-0.22078
cg12311175	NDST3	2.71E-15	-0.35716
cg12314713	IGF2BP1	0.004806	0.20491
cg12315735	PANX3	3.44E-08	-0.2068
cg12338417	TRIM71	0.007208	0.211324
cg12340219	GPR123	4.40E-15	-0.23134
cg12354382	BFSP2	3.46E-12	-0.24307
cg12365177	WNT2	4.85E-13	-0.33118
cg12374506	C1QL4	1.78E-12	0.215273
cg12384303	VGLL1	5.18E-13	-0.25248
cg12389490	KCNJ16	8.92E-07	-0.30658
cg12393275	REG1B	4.95E-11	-0.36042
cg12437115	KRT12	4.24E-05	-0.20281
cg12471044	LOC731789	3.55E-11	-0.20293
cg12517410	DPP10	4.58E-16	-0.3611
cg12535476	BMP5	1.71E-09	-0.29364
cg12553321	PGK2	7.77E-10	-0.27838
cg12559474	CDH10	7.64E-10	-0.30635
cg12618806	DLGAP2	2.18E-12	-0.2918
cg12629875	ZNF695	1.66E-07	0.291714
cg12667021	DLGAP2	1.30E-11	-0.21513
cg12673103	PITX1	2.13E-09	0.205853
cg12678695	CALN1	1.04E-12	-0.34569
cg12690148	FOXD3	1.74E-09	0.300373
cg12693875	BEND4	5.20E-06	-0.24809
cg12707907	SLITRK6	2.33E-15	-0.31323
cg12760869	C1QL4	1.15E-10	0.241933
cg12781086	BMPER	4.05E-06	-0.20689
cg12904924	GABRA5	1.13E-10	-0.31529
cg12907876	KCNJ9	1.73E-17	-0.24699
cg12913512	CDH10	2.83E-12	-0.25648

cg12934371	DLGAP2	3.17E-14	-0.39588
cg12973941	NKX3-2	8.90E-12	0.306404
cg13003527	DPP10	1.54E-12	-0.3437
cg13026994	DPP10	1.08E-05	-0.26548
cg13067649	COL6A6	3.46E-16	-0.27796
cg13131878	ODZ3	3.91E-14	-0.39943
cg13275724	LOC100133469	2.05E-10	-0.20226
cg13276428	C14orf180	3.74E-13	-0.28505
cg13322601	ODZ3	9.56E-16	-0.24422
cg13344206	GRM4	2.83E-12	-0.20909
cg13391675	CTNNA2	1.51E-05	-0.24134
cg13394110	PRAMEF12	4.38E-06	-0.2559
cg13405678	CACNA1B	1.64E-11	-0.22821
cg13406243	CACNA1B	1.06E-11	-0.26339
cg13408752	DLGAP2	5.96E-13	-0.25739
cg13436417	PPAPDC1A	3.87E-15	-0.325
cg13441066	PAK7	4.95E-13	-0.34994
cg13444005	TNR	2.72E-09	-0.30719
cg13447566	FIBCD1	2.37E-08	-0.31365
cg13450437	FIBCD1	7.23E-09	-0.35444
cg13462129	DLX5	5.93E-07	0.216539
cg13468002	CAMKV	3.62E-10	0.223839
cg13505608	SLC34A3	3.15E-12	-0.2291
cg13510648	VCX3A	1.03E-17	-0.42249
cg13547474	NAA11	1.02E-14	-0.43466
cg13550802	GPR123	5.36E-12	-0.2295
cg13552831	TRPM5	1.41E-13	-0.24178
cg13558105	C10orf71	3.72E-09	-0.22656
cg13566596	CEACAM20	1.99E-12	-0.21825
cg13570487	TRPV6	9.86E-13	-0.26021
cg13585985	RFPL4B	4.60E-09	-0.21962
cg13596787	C9orf50	8.17E-10	-0.2195
cg13606025	KCNJ16	4.02E-08	-0.31587
cg13609861	FIBCD1	6.89E-09	-0.24006
cg13610307	CACNA1B	2.07E-07	0.259545
cg13649332	DLGAP2	1.98E-05	-0.21133
cg13659051	LRRC26	6.89E-07	-0.30483
cg13678205	CACNA1B	9.49E-13	-0.23232
cg13680200	TNR	5.31E-11	-0.3115
cg13687795	REG1B	1.39E-13	-0.34324
cg13696545	ERC2	1.16E-07	-0.26772
cg13715631	PITX1	1.47E-05	0.22195
cg13718100	FIBCD1	7.47E-09	-0.25416
cg13725636	DLGAP2	2.40E-07	-0.23028
cg13744508	FIBCD1	4.38E-12	-0.24726
cg13750264	GPR123	1.89E-11	-0.49453
cg13781096	SSX3	2.71E-11	-0.24197

cg13782905	CACNA1B	2.94E-13	-0.42449
cg13801201	FIBCD1	1.15E-09	-0.29061
cg13811936	CACNA1B	1.58E-11	-0.22181
cg13851375	GPR123	2.43E-15	-0.20274
cg13924604	TERT	9.84E-10	-0.21395
cg13935480	WNT3A	1.21E-09	-0.33928
cg13939166	CACNA1B	3.15E-12	-0.2649
cg13939549	DACH2	5.50E-10	-0.25079
cg13949259	LOC285629	7.61E-13	-0.25861
cg13985252	TEX101	3.67E-11	-0.22532
cg13996593	DNER	1.04E-12	-0.33359
cg14009729	GRIN1	4.59E-07	-0.27361
cg14020146	DDX53	4.46E-12	-0.44469
cg14033273	FCN2	1.83E-09	-0.20827
cg14040034	CACNA1B	5.86E-09	-0.37141
cg14044640	HOXA6	0.000145	0.238375
cg14069088	CDKN2BAS	0.000648	-0.2513
cg14095733	SMEK3P	6.90E-10	-0.26589
cg14138275	DDX53	2.20E-09	-0.32088
cg14181409	RCVRN	8.77E-09	-0.26146
cg14188840	HOXA10	6.77E-17	0.322129
cg14231974	ODZ3	1.91E-10	-0.30937
cg14241045	CACNA1B	6.40E-15	-0.22249
cg14247459	TMEM132C	1.30E-11	-0.26473
cg14267645	STRA8	2.35E-10	-0.20354
cg14319135	ZNF735	9.86E-13	-0.3037
cg14321066	C3orf50	5.91E-14	-0.24549
cg14321918	C3orf50	5.76E-12	-0.28942
cg14349144	LOC84740	2.39E-11	-0.27203
cg14366110	FIBCD1	1.26E-06	-0.22152
cg14381673	SLITRK2	7.70E-11	-0.27401
cg14404807	LOC100133469	1.91E-06	-0.28619
cg14441891	SLC28A3	2.99E-12	-0.21764
cg14452299	CACNA1B	7.29E-08	-0.24499
cg14479463	ELAVL2	1.35E-08	-0.24205
cg14479837	TMEM132C	2.41E-08	-0.25966
cg14484274	IGF2BP1	1.76E-14	-0.24822
cg14502431	CACNA1B	3.10E-10	-0.23366
cg14511652	FIBCD1	6.49E-06	-0.24204
cg14515517	MYO3A	3.72E-16	-0.40163
cg14517119	HCN1	2.49E-17	-0.38447
cg14519356	SEMA3E	1.17E-09	-0.21786
cg14522944	GABRD	2.02E-09	-0.24687
cg14525610	SLCO1C1	1.13E-16	-0.30816
cg14528916	CACNA1E	6.51E-10	-0.32707
cg14532484	PAEP	1.93E-16	-0.28564
cg14535518	MAG	1.80E-16	-0.20043

cg14560435	LINGO2	5.74E-13	-0.25095
cg14578087	FIBCD1	1.45E-05	-0.30871
cg14591419	TEX101	1.78E-10	-0.29591
cg14592807	SMEK3P	1.86E-05	-0.21896
cg14603539	DSCAM	5.00E-10	-0.29062
cg14614314	CALY	0.000131	0.251503
cg14620593	MYH8	9.55E-16	-0.29435
cg14622659	BMP5	5.78E-16	-0.3718
cg14714364	TH	2.67E-12	-0.33365
cg14718379	CALN1	2.15E-16	-0.38543
cg14719865	SLCO6A1	1.79E-08	-0.24882
cg14720996	COL6A6	6.00E-16	-0.36856
cg14721139	TFF2	7.31E-14	-0.33507
cg14751679	CSMD1	2.06E-16	-0.31672
cg14772660	SLC5A7	1.50E-15	-0.35016
cg14781189	KCNH7	1.05E-07	0.245492
cg14782206	CPA6	2.07E-06	-0.30141
cg14783904	GLP2R	6.55E-08	-0.20351
cg14803762	TH	4.30E-12	-0.21164
cg14814331	DRP2	9.19E-06	-0.20501
cg14833286	MYH1	1.02E-10	-0.32207
cg14837896	THBS4	6.18E-13	-0.21635
cg14903245	DSCAM	3.22E-13	-0.31705
cg14914442	SH2D4B	3.06E-06	-0.21245
cg14931118	ERBB4	5.28E-16	-0.28909
cg14940233	CSMD1	7.63E-08	-0.2039
cg14944166	CHRM2	6.30E-13	-0.32586
cg14958080	TERT	4.08E-11	-0.21226
cg14958947	TERT	6.67E-13	-0.22248
cg14966325	SPRR2A	4.72E-17	-0.46896
cg14974223	GABRD	4.52E-09	-0.26268
cg14979674	HCN1	5.11E-16	-0.37496
cg14981034	ODZ3	3.55E-17	-0.34033
cg15002721	FGF23	4.38E-12	-0.35487
cg15020132	BMPER	2.25E-14	-0.33727
cg15046388	MYH8	8.84E-11	-0.24721
cg15167807	MAGEB2	2.30E-08	-0.27011
cg15181905	WNT2	5.14E-07	-0.20855
cg15186616	DLGAP2	7.67E-16	-0.22667
cg15190834	BMPER	3.13E-11	-0.3489
cg15195541	CSMD1	1.80E-11	-0.23786
cg15217784	FAM83B	6.41E-12	-0.33002
cg15231809	ANKRD30B	8.76E-16	-0.29606
cg15233428	NAA11	2.57E-11	-0.3485
cg15235614	PDZRN4	1.70E-13	-0.39465
cg15244965	CSMD1	1.99E-12	-0.36283
cg15309004	GLP1R	1.06E-12	-0.21812

cg15328241	CTNNA2	1.11E-07	-0.24912
cg15331578	BMPER	3.72E-12	-0.27241
cg15339960	HCN1	5.81E-17	-0.36271
cg15376397	GPR123	8.74E-12	-0.34747
cg15417244	PDZRN4	2.62E-11	-0.2617
cg15452017	COX7B2	0.000728	-0.2069
cg15456555	H1FNT	4.15E-12	-0.29855
cg15496307	GPR123	1.26E-13	-0.25999
cg15547734	HCN1	6.16E-14	-0.30265
cg15572496	TH	8.26E-11	-0.26673
cg15595525	GPR123	2.99E-13	-0.37594
cg15602735	MAGEC2	3.43E-14	-0.30593
cg15603812	DNER	2.38E-14	-0.38084
cg15615022	TUBA3C	4.61E-08	-0.24783
cg15635483	ERBB4	5.83E-10	-0.27606
cg15707869	DCAF4L2	3.10E-16	-0.31637
cg15726040	DPP10	1.28E-11	-0.28755
cg15730879	FAM5C	1.51E-05	-0.28432
cg15731296	PRRG3	1.47E-10	-0.22887
cg15732768	DLX5	2.35E-10	0.218193
cg15741855	CAPN14	2.95E-08	-0.29046
cg15821496	DLGAP2	5.71E-11	-0.28361
cg15835058	GLP1R	2.29E-14	-0.25843
cg15837235	PRIMA1	1.84E-10	-0.24565
cg15841063	FOXD3	2.67E-12	0.316962
cg15884992	GRM4	2.56E-10	-0.24226
cg15896446	PPAPDC1A	2.82E-14	-0.34287
cg15922045	COL6A6	9.31E-15	-0.33585
cg15922705	COL9A1	5.27E-10	-0.2848
cg15927295	TERT	3.54E-06	-0.20336
cg15938529	DLGAP2	4.65E-15	-0.37729
cg15955772	CPA6	2.43E-09	-0.29353
cg15957341	SYT9	1.76E-11	-0.29383
cg15963070	CTNNA2	2.00E-08	-0.31264
cg16011217	LCE1C	4.33E-14	-0.37859
cg16023283	LOC100133469	6.57E-09	-0.36061
cg16033633	ZIC5	3.21E-09	0.226915
cg16071125	DPP10	2.72E-12	-0.35866
cg16101601	Mar-04	1.23E-08	-0.20701
cg16103732	SLITRK6	6.87E-17	-0.3399
cg16105591	CPLX2	2.47E-14	-0.25109
cg16113021	BMPER	3.94E-15	-0.31332
cg16131766	MKRN3	3.67E-11	-0.32633
cg16144476	NXF5	3.90E-09	-0.26482
cg16169129	SLCO1C1	3.28E-13	-0.2763
cg16202017	NUDT10	1.27E-11	-0.31601
cg16244889	PRIMA1	3.10E-10	-0.2248

cg16287284	SLC5A8	2.16E-09	-0.24335
cg16292773	RPSAP52	8.23E-08	-0.33514
cg16293983	PVALB	8.77E-09	-0.21968
cg16311072	NXF5	4.50E-16	-0.27714
cg16332700	GPR123	5.76E-07	-0.21654
cg16367697	SLC6A19	9.84E-10	-0.24006
cg16424196	FAM150A	7.05E-11	-0.30781
cg16455444	KCNK9	1.91E-10	-0.30964
cg16476427	SLN	3.16E-13	-0.23801
cg16480969	GRM4	6.34E-11	-0.24695
cg16483466	C20orf186	4.01E-11	-0.26595
cg16491185	LOC100133469	1.38E-05	-0.23116
cg16508529	ODZ3	2.88E-16	-0.32428
cg16516973	DPP10	1.12E-12	-0.3422
cg16517367	KCNJ16	9.41E-13	-0.29598
cg16520712	DLGAP2	9.85E-08	-0.27951
cg16525987	C13orf26	1.21E-10	-0.26527
cg16548818	ODZ3	8.21E-16	-0.34428
cg16562730	CHST4	1.47E-07	0.211135
cg16574643	TERT	1.51E-12	-0.22858
cg16576213	CTNNA2	2.90E-08	-0.26923
cg16577789	PRIMA1	7.83E-12	-0.28431
cg16595607	OTX1	6.16E-14	0.259413
cg16604126	OR51E1	2.71E-15	-0.44296
cg16615040	DSCAM	4.56E-06	-0.20486
cg16625916	CTNNA2	4.87E-11	-0.32135
cg16750953	TERT	4.32E-15	-0.24646
cg16793274	ODZ3	2.67E-12	-0.35596
cg16812660	GPRIN2	2.61E-10	-0.31672
cg16857858	HOXA10	2.60E-05	0.238407
cg16863522	DPP10	1.60E-14	-0.34649
cg16896847	MAFA	6.79E-10	0.312735
cg16916688	GRM4	8.35E-14	-0.23488
cg16967830	GABRA5	1.84E-10	-0.36426
cg16980530	BMP10	4.90E-08	-0.26747
cg17001717	CSMD1	4.91E-09	-0.22385
cg17059136	OR13A1	1.52E-09	-0.33316
cg17079431	CPA6	0.001011	-0.21384
cg17112707	CCBE1	5.64E-10	-0.23922
cg17124844	DLGAP2	2.56E-08	-0.25114
cg17142039	ACTL8	7.02E-10	-0.26627
cg17158811	SSX1	2.34E-14	-0.32438
cg17179557	GPR123	5.28E-14	-0.32429
cg17242608	ZIC2	2.26E-08	0.276831
cg17249224	TERT	6.19E-12	-0.20183
cg17277820	TMEM132C	2.41E-16	-0.36081
cg17299712	MAGEB2	2.05E-10	-0.2512

cg17327492	FSHR	5.07E-09	-0.26395
cg17346345	CTNNA2	2.12E-10	-0.22567
cg17376631	CPA5	4.16E-11	-0.28314
cg17450585	GRM4	5.04E-11	-0.22007
cg17493839	KCNK9	1.85E-12	-0.33184
cg17545399	FRMPD2	3.30E-14	-0.21852
cg17562528	DSCAM	0.00016	-0.27205
cg17593414	TFDP3	3.43E-09	-0.21573
cg17594004	ODZ3	1.06E-06	-0.2347
cg17616453	C21orf62	2.18E-12	-0.2414
cg17618474	MAGEB2	1.07E-09	-0.24597
cg17637877	HTR3B	2.09E-13	-0.20544
cg17638856	DLGAP2	6.83E-05	-0.23162
cg17641904	C9orf4	1.27E-11	0.482146
cg17664099	DLGAP2	1.63E-09	-0.2882
cg17697873	DLGAP2	3.43E-09	-0.21101
cg17703554	DCAF4L2	6.30E-13	-0.40264
cg17725129	FGF23	9.70E-16	-0.34351
cg17726720	DLGAP2	6.27E-14	-0.22027
cg17733836	CTNNA2	2.23E-11	-0.24086
cg17734698	TMEM132C	7.70E-11	-0.26444
cg17752799	CHRM2	1.03E-17	-0.41392
cg17765437	TERT	5.00E-07	-0.20864
cg17777531	DCAF4L2	9.31E-15	-0.49965
cg17797848	MYBPHL	1.01E-13	-0.26604
cg17848615	CYP19A1	3.32E-10	-0.22448
cg17861618	GPR123	9.31E-15	-0.26002
cg17875028	ALPI	1.52E-10	-0.20899
cg17882660	ZIC2	4.45E-09	0.250633
cg17936359	C3orf50	5.59E-09	-0.206
cg17937340	COL6A6	2.98E-17	-0.35493
cg17962547	GPR123	3.30E-14	-0.34995
cg17975443	TBX4	2.43E-07	0.248588
cg18034742	TMEM132C	1.23E-09	-0.2908
cg18059464	GPR123	1.47E-11	-0.20565
cg18104149	ERC2	5.83E-15	-0.37857
cg18105709	C10orf71	9.71E-08	-0.25856
cg18110578	C10orf71	1.26E-10	-0.30773
cg18154270	GHRHR	4.92E-05	-0.20909
cg18159289	SPSB4	1.55E-13	-0.23794
cg18161025	FAM5B	1.49E-17	-0.41467
cg18201871	SRRM4	1.22E-13	-0.29701
cg18222913	TMEM132C	1.33E-14	-0.20341
cg18226539	TH	9.51E-09	-0.20392
cg18249634	TRIM71	0.000223	0.268795
cg18279094	FOXD3	1.81E-15	0.412887
cg18403569	GRM4	6.41E-12	-0.2328

cg18427696	DLGAP2	6.57E-11	-0.27989
cg18432768	KCNJ16	9.86E-13	-0.37018
cg18434354	LOC84931	2.76E-11	-0.23215
cg18438823	OR51E1	1.99E-16	-0.36745
cg18444868	MAGEB1	2.86E-09	-0.20364
cg18484736	C14orf180	4.82E-09	-0.27189
cg18496841	DLGAP2	1.01E-15	-0.42842
cg18496858	WNT2	3.28E-15	-0.28279
cg18504196	C3orf50	1.93E-06	-0.2341
cg18520517	ZNF280A	4.98E-08	-0.22166
cg18529840	RCVRN	1.23E-12	-0.28233
cg18536148	TBX4	5.41E-11	0.230731
cg18540249	DLGAP2	5.61E-11	-0.27302
cg18543993	DCAF4L2	1.33E-14	-0.30945
cg18562121	DPYSL5	6.43E-13	-0.32138
cg18580232	DPP10	6.47E-16	-0.42309
cg18606375	PITX1	1.15E-15	0.29353
cg18627442	TMEM132C	5.51E-15	-0.4227
cg18629407	DLGAP2	1.21E-09	-0.34723
cg18643199	SH2D4B	1.23E-07	-0.32293
cg18682226	CALN1	9.14E-15	-0.2454
cg18690705	CTNNA2	9.21E-12	-0.27636
cg18718692	BFSP2	1.13E-13	-0.21719
cg18724037	GABRA5	2.93E-16	-0.22591
cg18736711	DLGAP2	7.29E-08	-0.23213
cg18766795	FAM5B	3.78E-16	-0.35737
cg18803856	DLGAP2	9.98E-07	-0.23971
cg18859248	HRH3	3.49E-14	-0.28604
cg18885992	FAM83E	3.81E-10	-0.2866
cg18918116	SYT9	4.46E-17	-0.45758
cg18959161	B3GALT1	4.08E-10	-0.22096
cg19005236	DLGAP2	4.98E-13	-0.27063
cg19015654	SCGB1D2	2.81E-11	-0.25858
cg19080100	TRPV6	4.43E-13	-0.30244
cg19091116	GABRD	6.45E-08	-0.23853
cg19111338	ODZ3	7.52E-16	-0.30719
cg19114576	KRT20	5.32E-09	-0.28382
cg19120125	TAS2R10	2.67E-15	-0.23159
cg19136704	PVALB	6.07E-13	-0.26379
cg19161000	FAM5B	2.75E-10	-0.25671
cg19177332	LPAR4	2.98E-06	-0.20926
cg19181692	CBLN2	4.01E-15	-0.35623
cg19251291	ODZ3	1.56E-16	-0.26964
cg19273074	PDZRN4	3.84E-14	-0.35107
cg19358195	RPS6KA6	1.75E-10	0.299307
cg19404723	DLGAP2	1.66E-10	-0.31464
cg19411919	SSX6	3.28E-12	-0.29757

cg19449377	KRT20	0.001205	-0.22868
cg19469449	DSCAM	1.28E-15	-0.30993
cg19477942	DSCAM	1.04E-10	-0.26427
cg19508823	DPP10	3.16E-15	-0.36455
cg19519626	NPHS1	7.31E-14	-0.3004
cg19521511	ZNF716	1.50E-16	-0.2637
cg19582822	KLK2	1.05E-15	-0.26289
cg19619756	SLC6A19	7.33E-13	-0.2667
cg19667211	ODZ3	5.28E-05	-0.20759
cg19679544	GABRA5	4.67E-10	-0.24378
cg19694850	MAG	7.98E-12	-0.20417
cg19708432	DNER	2.07E-07	-0.25916
cg19731276	OR13A1	7.98E-07	-0.23843
cg19762533	POU6F2	6.28E-14	-0.36931
cg19765450	CACNA1S	3.21E-09	-0.20065
cg19791043	LOC146336	9.36E-14	-0.31082
cg19795338	ATP13A4	1.05E-08	-0.22792
cg19816811	HOXA6	4.15E-10	0.222609
cg19837938	PRDM9	6.22E-21	-0.208
cg19868751	GABRD	2.58E-07	-0.27037
cg19886365	XKR4	1.32E-16	-0.37113
cg19903927	MKRN3	5.74E-13	-0.24967
cg19907520	SEMA3E	2.15E-16	-0.32725
cg19911850	WNT3A	3.23E-06	-0.20143
cg19923622	CSMD1	1.93E-08	-0.23152
cg19927457	FSHR	1.36E-09	-0.2134
cg19929006	VWDE	5.70E-16	-0.35729
cg19958021	SOX11	1.35E-10	-0.25179
cg19993573	DLGAP2	3.66E-08	-0.35547
cg19999705	GRM4	2.35E-13	-0.25639
cg20009866	DLGAP2	5.18E-10	-0.22179
cg20011604	TUBA3C	1.13E-08	-0.20851
cg20012537	GPR123	6.23E-16	-0.21206
cg20038038	LILRA3	3.78E-17	-0.25194
cg20044918	GPR123	9.38E-12	-0.35873
cg20057676	ZIC2	0.000318	0.229357
cg20073553	NKX3-2	3.26E-10	0.246293
cg20076070	DLGAP2	2.45E-17	-0.25666
cg20100668	DCAF4L2	1.06E-11	-0.43723
cg20129035	GPR123	3.47E-15	-0.42645
cg20164479	MYH8	9.30E-07	-0.25377
cg20173428	ASCL4	1.84E-07	-0.22507
cg20207911	RCVRN	9.90E-12	-0.21766
cg20210051	PDZRN4	4.95E-13	-0.21345
cg20223950	GPR123	3.28E-12	-0.26959
cg20248549	CEACAM20	6.92E-13	-0.2451
cg20261915	GLP2R	3.60E-09	-0.20569

cg20318358	ASCL4	9.85E-08	-0.2513
cg20318845	SIX2	9.36E-09	0.210379
cg20333412	MAGEC2	8.33E-13	-0.30347
cg20374317	TMEM132C	3.24E-08	-0.2665
cg20377305	DLX5	4.21E-07	0.22477
cg20383064	BFSP2	7.98E-08	-0.21432
cg20475114	SLC6A19	4.11E-13	-0.27403
cg20481032	PRIMA1	3.48E-09	-0.25106
cg20495476	SLC5A1	5.00E-10	-0.24795
cg20546259	FSHR	1.98E-15	-0.41159
cg20587945	SEMA3E	6.23E-11	-0.23242
cg20640749	GLP1R	1.19E-12	-0.27676
cg20660385	KLK11	5.96E-13	-0.26447
cg20660556	RCVRN	4.80E-06	-0.24108
cg20682236	SLITRK6	2.01E-16	-0.28474
cg20682720	COL9A1	5.51E-15	-0.36061
cg20683151	TM4SF20	2.64E-09	-0.2109
cg20685897	CR1L	1.73E-11	0.223318
cg20692597	SPSB4	8.90E-12	-0.26361
cg20698037	CACNA1B	3.54E-13	-0.29479
cg20699305	ACTL8	1.20E-07	-0.26557
cg20705812	DLGAP2	2.27E-09	-0.23681
cg20706711	SLC6A19	1.43E-09	-0.2386
cg20739205	TMEM132C	6.23E-16	-0.24519
cg20769842	MKRN3	3.94E-15	-0.33883
cg20772037	GRM4	1.06E-10	-0.24897
cg20792895	MKRN3	7.73E-17	-0.34056
cg20812772	DLGAP2	5.43E-13	-0.20587
cg20911707	CSMD1	3.22E-15	-0.26015
cg20927661	SOX11	0.00041	0.250322
cg20934731	CSMD1	9.47E-14	-0.2677
cg20939319	TEX15	9.74E-15	-0.2625
cg20966504	ABCB5	5.00E-06	-0.25786
cg20984053	MNX1	0.004257	0.227813
cg21006539	DEFA4	3.89E-06	-0.24309
cg21040814	DSCAM	3.30E-14	-0.24911
cg21064449	PAK7	3.24E-11	-0.3273
cg21080533	PGK2	1.95E-12	-0.36252
cg21084674	IGFL2	4.90E-12	-0.3139
cg21104351	GLB1L3	1.35E-10	-0.23439
cg21146374	TMEM132C	1.05E-08	-0.32645
cg21146652	DGKI	2.34E-14	-0.30071
cg21150053	CDH9	8.94E-16	-0.31622
cg21162304	NAA11	1.41E-14	-0.30221
cg21181391	DCAF4L2	4.46E-11	-0.42158
cg21181547	CACNA1B	8.12E-12	-0.25926
cg21192979	SLC7A4	3.18E-11	-0.31366

cg21202529	ABCB5	0.000321	-0.21695
cg21208734	ODZ3	6.59E-16	-0.43719
cg21216258	CACNA1B	6.19E-12	-0.36324
cg21248989	CACNA1B	1.58E-11	-0.24804
cg21295811	RFPL4B	3.38E-10	-0.30838
cg21298444	CBLN2	1.45E-16	-0.31054
cg21305926	MAG	2.59E-09	-0.21042
cg21385983	PVALB	4.80E-14	-0.2284
cg21397287	DLGAP2	2.31E-11	-0.20356
cg21406402	LOC84931	2.95E-08	-0.2017
cg21422740	GABRD	1.11E-08	-0.2534
cg21434949	TMEM132C	5.65E-12	-0.30559
cg21461649	CFTR	4.15E-10	0.307418
cg21462299	VGLL1	7.30E-14	-0.33299
cg21472506	OTX1	3.66E-15	0.488449
cg21515023	TERT	3.30E-11	-0.2571
cg21534317	DPP10	1.75E-10	-0.31006
cg21591278	DLGAP2	5.71E-11	-0.2976
cg21612170	TERT	2.39E-09	-0.27436
cg21620107	DLGAP2	6.12E-11	-0.32258
cg21643191	ABCB5	1.66E-10	-0.23485
cg21644468	TH	1.19E-08	-0.23043
cg21672572	SYT9	5.54E-08	-0.259
cg21690167	KCNJ16	1.05E-15	-0.37481
cg21746339	ODZ3	1.96E-16	-0.38284
cg21755806	DLGAP2	6.61E-16	-0.31129
cg21774064	DLGAP2	4.90E-08	-0.28683
cg21780600	BMPER	1.97E-14	-0.32948
cg21787176	SLITRK3	7.47E-09	-0.25238
cg21795074	TMEM132C	6.07E-08	-0.27697
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cg21811549	ZNF735	1.26E-15	-0.30976
cg21819129	DLGAP2	5.24E-09	-0.31381
cg21836358	FOXD3	1.82E-08	0.222772
cg21844331	NUDT10	5.69E-10	-0.27061
cg21851391	DLGAP2	3.11E-13	-0.31976
cg21860285	CPA6	2.27E-06	-0.2323
cg21871080	KCNJ16	9.55E-12	-0.3594
cg21884372	TRPV6	1.70E-13	-0.26819
cg21907107	OTP	1.50E-09	0.259787
cg21919492	TRPV6	1.98E-15	-0.31827
cg21924070	SPSB4	8.44E-07	-0.24896
cg21930938	DLGAP2	1.49E-13	-0.21194
cg21934230	WNT3A	9.92E-06	-0.21479
cg21935402	HCN1	1.45E-10	-0.25466
cg21960184	HTR3B	5.81E-11	-0.21808
cg21974580	FAM83B	2.15E-11	-0.24783

cg22008772	CTNNA2	0.002583	-0.20709
cg22011809	POPDC3	1.60E-08	-0.23062
cg22016513	CSMD1	1.24E-17	-0.24965
cg22023826	BMP5	2.63E-13	-0.34217
cg22027151	PDZRN4	1.16E-12	-0.26529
cg22035738	SLC7A4	1.80E-14	-0.26132
cg22052586	DDX53	2.40E-06	-0.21311
cg22054885	PRDM9	1.88E-12	-0.22899
cg22066521	ABCB5	7.19E-13	-0.25452
cg22079902	PRDM9	6.26E-08	-0.23086
cg22081933	GABRA5	4.11E-13	-0.3227
cg22097249	BEND4	1.64E-07	-0.24054
cg22102082	DLGAP2	4.31E-11	-0.23062
cg22143285	KCNJ16	4.22E-10	-0.2534
cg22165105	TINAG	1.74E-09	-0.25925
cg22223402	FAM55D	1.16E-11	-0.2683
cg22236143	TNR	7.30E-11	-0.22948
cg22238777	STAB2	7.35E-09	-0.2553
cg22249386	MYH13	3.24E-08	-0.23981
cg22274414	TUBA3C	3.66E-08	-0.22367
cg22359828	CACNA1E	1.01E-15	-0.26613
cg22374268	CARD18	1.09E-07	-0.24039
cg22385595	DLGAP2	4.78E-11	-0.36758
cg22424020	KCNK9	1.67E-11	-0.29393
cg22426329	ABCB5	2.81E-07	-0.25627
cg22433447	POU6F2	8.27E-12	-0.36623
cg22460204	POU6F2	7.29E-12	-0.2836
cg22465341	BFSP2	1.88E-12	-0.22323
cg22467052	CFTR	1.73E-11	-0.2979
cg22489491	PDZRN4	6.69E-17	-0.35836
cg22502715	ZNF695	9.00E-08	0.301162
cg22512292	PART1	2.86E-09	-0.27961
cg22519189	WNT3A	2.43E-07	-0.25815
cg22540233	CLDN8	3.70E-17	-0.29204
cg22603628	DLGAP2	3.22E-15	-0.24104
cg22605924	C3orf50	1.13E-12	-0.22079
cg22654504	ODZ3	1.22E-13	-0.35649
cg22657351	MARCO	3.34E-13	-0.3099
cg22663467	CSMD1	2.86E-05	-0.21118
cg22678436	TMEM132C	1.88E-10	-0.35469
cg22726414	CSMD1	1.01E-11	-0.29839
cg22732253	OTX1	3.66E-15	0.226057
cg22778014	COL25A1	3.21E-10	-0.20297
cg22785561	GABRA4	2.39E-12	-0.22837
cg22790870	TMEM132C	6.07E-15	-0.38979
cg22799510	PROK2	7.53E-13	-0.25783
cg22815110	FOXD3	2.27E-12	0.234795

cg22820233	FCAR	1.75E-12	-0.36959
cg22827250	PITX1	4.57E-15	0.249173
cg22827707	GRM4	2.83E-12	-0.27172
cg22851781	FIBCD1	3.54E-09	-0.23614
cg22863118	CHRM2	5.26E-12	-0.33015
cg22878084	ODZ3	1.44E-17	-0.33566
cg22882543	ZNF280A	3.14E-08	-0.30697
cg22911315	CSMD1	6.40E-15	-0.33495
cg22950153	IGDCC3	1.76E-11	-0.25506
cg22969014	PDZRN4	1.35E-11	-0.29618
cg22980483	CTNNA2	1.75E-10	-0.22386
cg22993667	GPR123	3.17E-14	-0.34802
cg23006065	SYT9	4.51E-10	-0.2484
cg23010538	FAM5C	1.65E-14	0.232991
cg23027521	ZNF695	1.15E-08	0.234501
cg23042540	DLGAP2	7.17E-11	-0.2357
cg23054394	SPSB4	1.91E-06	-0.27798
cg23097402	DMRTA2	1.60E-05	0.220611
cg23109018	GJA10	4.44E-06	-0.24496
cg23119827	SLC6A19	5.73E-10	-0.21555
cg23148546	XKR4	3.11E-13	-0.24106
cg23151413	REG1A	3.40E-12	-0.33396
cg23154497	GPR123	1.01E-13	-0.299
cg23176577	NCRNA00164	3.02E-11	-0.23502
cg23218431	PHACTR3	4.75E-09	-0.30701
cg23229261	OTX1	9.75E-16	0.429415
cg23234999	MKRN3	1.76E-06	-0.28052
cg23238719	VWDE	2.06E-17	-0.32187
cg23240355	MYH13	3.24E-08	-0.31747
cg23260105	SLC6A19	4.81E-12	-0.22836
cg23260456	DPP10	9.24E-12	-0.35094
cg23293230	GPR123	9.35E-10	-0.3315
cg23296572	TRPV6	1.03E-08	-0.2008
cg23300485	LPAR4	6.41E-15	-0.2712
cg23325997	CLEC1B	2.81E-15	-0.29891
cg23339720	SPSB4	5.04E-11	-0.32329
cg23344136	ODZ3	5.04E-13	-0.30367
cg23345631	CSMD1	1.74E-15	-0.31107
cg23392097	OR51E2	2.93E-16	-0.35508
cg23529231	IGDCC3	5.13E-06	-0.21322
cg23546506	DLGAP2	1.44E-08	-0.29537
cg23576999	TUBA3C	1.56E-11	-0.32102
cg23592016	TNR	3.38E-10	-0.29264
cg23600944	PHACTR3	6.52E-14	-0.2755
cg23601521	NRXN1	1.31E-15	-0.36004
cg23605722	ABCB5	4.72E-12	-0.22264
cg23625823	ODZ3	4.87E-11	-0.2806

cg23626475	ABCB5	7.29E-12	-0.32134
cg23631932	PXDNL	1.63E-12	-0.24656
cg23632744	OR51E1	9.67E-11	-0.3147
cg23649631	GPR123	9.00E-08	-0.23143
cg23655160	GPR123	4.17E-15	-0.381
cg23663533	KCNJ16	5.45E-12	-0.38452
cg23682822	GLB1L3	1.41E-14	-0.26481
cg23689428	LOC84931	0.00041	-0.23723
cg23701865	DCAF4L2	3.05E-13	-0.25423
cg23702644	CSMD1	3.38E-10	-0.20949
cg23713090	COL9A1	2.38E-14	-0.3619
cg23748514	PPAPDC1A	1.03E-15	-0.29989
cg23757622	MYH8	7.80E-14	-0.27755
cg23793961	CLEC4C	2.88E-14	-0.33809
cg23813564	MAGEC2	1.41E-14	-0.28057
cg23851685	HTR3B	7.59E-14	-0.29215
cg23875663	PCSK2	2.89E-13	-0.20947
cg23877661	GABRQ	8.13E-06	-0.20997
cg23892439	POU6F2	2.04E-06	-0.29469
cg23900225	GJD4	6.75E-08	-0.21333
cg23901700	KRT20	0.000369	-0.22204
cg23984446	OR5AK2	9.31E-15	-0.32551
cg24035595	DLGAP2	3.31E-06	-0.21616
cg24041338	TNR	6.69E-11	-0.20698
cg24102702	C14orf180	1.84E-10	-0.25564
cg24114651	SLC6A19	6.64E-14	-0.32358
cg24131141	TERT	7.16E-12	-0.29005
cg24150262	DLGAP2	6.74E-07	-0.21169
cg24158936	FAM5B	1.19E-12	-0.28989
cg24188870	DLGAP2	2.31E-11	-0.23748
cg24240626	REG3A	6.34E-10	-0.20887
cg24257495	DLGAP2	1.66E-09	-0.308
cg24265719	DLGAP2	4.08E-12	-0.29958
cg24274579	TBX4	5.21E-08	0.295117
cg24318763	CLEC2L	1.28E-10	0.223
cg24327361	CSMD1	1.60E-16	-0.30699
cg24333420	GPR123	9.51E-11	-0.23892
cg24338843	C1orf158	3.92E-05	-0.2226
cg24346637	UBL4B	6.43E-13	-0.22477
cg24356530	DLGAP2	2.09E-09	-0.25245
cg24364910	GABRD	9.92E-06	-0.20526
cg24387129	OR13A1	1.89E-11	-0.27272
cg24414383	KRTAP1-1	6.46E-10	-0.23382
cg24427947	PRND	6.46E-07	-0.28371
cg24436022	UPK3A	1.06E-06	-0.20023
cg24493115	UBL4B	1.53E-05	-0.25525
cg24544431	TNR	6.43E-13	-0.32432

cg24545961	CLDN10	1.33E-05	0.272072
cg24547253	GABRD	1.95E-07	-0.28917
cg24575705	PPAPDC1A	2.94E-13	-0.36448
cg24613097	TMEM132C	1.35E-08	-0.276
cg24622439	ERBB4	9.87E-15	-0.26955
cg24629438	TRIM71	8.10E-09	-0.20379
cg24637061	SPSB4	1.31E-09	-0.21807
cg24657817	BEND4	2.72E-14	0.373303
cg24714905	ZIC2	4.60E-09	0.273576
cg24721899	NKX3-2	9.05E-10	0.356855
cg24730564	LOC100133469	0.000765	-0.21557
cg24742746	ZIC2	2.19E-11	0.29414
cg24803030	SCGB1D2	1.25E-06	-0.28224
cg24819266	GJD4	1.86E-09	-0.26945
cg24822127	FATE1	1.85E-08	-0.21538
cg24887265	SIX2	0.000305	0.273054
cg24890716	DLGAP2	1.63E-09	-0.2096
cg24898738	GPR123	4.47E-06	-0.20491
cg24931138	TERT	5.45E-12	-0.27181
cg24932457	TNR	1.06E-10	0.330005
cg24956253	CBLN2	3.90E-09	-0.23155
cg25020591	RTL1	5.41E-11	-0.32638
cg25032595	CLDN10	2.35E-15	0.478394
cg25086767	DLGAP2	2.10E-07	-0.25341
cg25124433	KRT20	9.70E-07	-0.23786
cg25137110	POU6F2	3.46E-12	-0.31734
cg25142479	COL9A1	4.40E-07	-0.20779
cg25154424	GABRD	7.55E-12	-0.28714
cg25164237	KCNK9	4.92E-10	-0.23779
cg25175508	PAK7	8.18E-13	-0.36838
cg25182501	DQX1	1.69E-10	-0.26395
cg25188238	XKR4	1.41E-16	-0.41109
cg25272655	HIST3H2BB	2.03E-05	0.228417
cg25300234	ERBB4	1.39E-17	-0.38653
cg25310241	DSCAM	1.32E-06	-0.31113
cg25311162	ODZ3	5.38E-14	-0.29025
cg25329377	CSMD1	9.59E-16	-0.23137
cg25335544	CAMKV	4.26E-05	0.205911
cg25338036	CSMD1	1.01E-13	-0.41504
cg25344064	COL9A1	2.63E-13	-0.36359
cg25364381	TMEM132C	9.02E-11	-0.25312
cg25367334	GPR123	1.94E-13	-0.28964
cg25368212	SSX1	9.85E-08	-0.20673
cg25398924	DLGAP2	1.69E-06	-0.29185
cg25447299	NR0B1	8.75E-10	-0.2251
cg25449412	DLGAP2	1.27E-09	-0.2611
cg25451456	OR56A3	3.63E-14	-0.28525

cg25455659	KCNG3	1.40E-09	-0.2851
cg25472530	PRDM9	3.26E-09	-0.20394
cg25518571	TERT	7.43E-11	-0.22969
cg25582398	SLC6A19	3.38E-10	-0.31848
cg25597535	NEUROD6	7.01E-17	-0.41642
cg25622366	OTX1	4.93E-15	0.492135
cg25633955	DLGAP2	5.60E-07	-0.22555
cg25651984	MAGEC1	7.46E-13	-0.32482
cg25661884	RDH8	1.88E-10	-0.21667
cg25702335	CLDN10	4.41E-08	0.245049
cg25734539	B3GALT5	1.93E-09	-0.28941
cg25794766	ZNF695	5.13E-08	0.222835
cg25831075	SLITRK3	1.21E-06	0.255608
cg25831281	XAGE5	8.83E-15	-0.38581
cg25900280	TBX4	1.43E-05	0.225607
cg25910622	PAGE2	3.24E-08	-0.21548
cg25950377	SMEK3P	4.98E-09	-0.36626
cg25955692	DLGAP2	6.41E-12	-0.26335
cg25960785	FAM83E	1.57E-12	-0.27096
cg25979373	ODZ3	3.92E-07	-0.30717
cg25988118	GRM4	2.72E-09	-0.22171
cg25993152	XAGE5	2.23E-08	-0.34181
cg26009591	DDX53	6.36E-09	-0.40161
cg26012050	PCSK2	7.74E-15	-0.37629
cg26060665	FRMPD2	3.24E-08	-0.2501
cg26068292	CCBE1	8.04E-15	-0.30954
cg26086902	MYH13	4.30E-09	-0.2751
cg26101428	SLCO6A1	1.58E-14	-0.21031
cg26117778	LOC100133469	6.37E-07	-0.29027
cg26126295	NDST3	2.00E-08	-0.21906
cg26128378	DLGAP2	1.46E-08	-0.23772
cg26164184	FCN2	6.67E-13	-0.29557
cg26197836	PLP1	5.95E-15	-0.37188
cg26200826	HTR3B	4.13E-14	-0.24408
cg26244661	PVALB	2.52E-08	-0.24451
cg26247186	TMEM132C	5.26E-12	-0.34153
cg26253500	CHRM2	2.44E-12	-0.28655
cg26270695	CRABP1	2.89E-10	-0.21891
cg26299044	KRT12	9.38E-09	-0.28172
cg26320946	GABRA5	1.92E-12	-0.33798
cg26321366	DLGAP2	2.03E-08	-0.32882
cg26362078	CDH9	8.78E-16	-0.33473
cg26369315	GPR123	3.84E-14	-0.33217
cg26373716	FAM150A	1.49E-05	-0.22124
cg26391832	SIX2	4.10E-06	0.215004
cg26423283	DEFA4	1.01E-11	-0.26004
cg26424956	GRM4	2.07E-11	-0.20375

cg26426186	KCNK9	5.85E-13	-0.33888
cg26452811	IGDCC3	3.42E-11	-0.27361
cg26463699	DLGAP2	3.69E-14	-0.29976
cg26465331	MYH13	1.33E-06	-0.29953
cg26465522	MAGEC2	3.49E-14	-0.41361
cg26500539	MAGEA8	3.73E-11	-0.31356
cg26509691	PITX1	9.59E-16	0.300439
cg26538093	PDZRN4	1.76E-11	-0.3551
cg26544752	CDH10	3.70E-17	-0.3123
cg26555966	IGDCC3	2.18E-06	-0.21233
cg26556078	CACNA1B	4.29E-14	-0.24236
cg26563200	TEX101	4.46E-12	-0.36421
cg26609236	GABRD	1.71E-06	-0.21578
cg26635219	CFTR	1.28E-12	0.389197
cg26674943	ISL2	2.13E-13	0.333889
cg26709720	B3GALT5	1.45E-07	-0.23536
cg26722684	OR13A1	1.80E-09	-0.32965
cg26827876	KLK4	6.08E-12	-0.2293
cg26841013	WNT3A	1.28E-10	0.400676
cg26842423	DPP10	7.05E-11	-0.20324
cg26850677	ODZ3	1.53E-16	-0.37856
cg26859841	DUSP5P	0.003764	0.287242
cg26874534	TMEM132C	2.38E-14	-0.39143
cg26881899	NRXN1	4.10E-16	-0.31889
cg26905768	BMPER	1.21E-09	-0.25984
cg26940328	SHISA6	3.40E-16	-0.20625
cg26942892	DLGAP2	3.11E-13	-0.26991
cg26955491	CLEC1B	2.17E-14	-0.3453
cg26966083	TH	3.84E-14	-0.24593
cg26981076	MS4A3	4.23E-11	-0.22908
cg27016494	DLX5	3.01E-09	0.201527
cg27035708	KIRREL2	2.00E-11	-0.23403
cg27040976	TUBA3C	1.91E-06	-0.22425
cg27043838	DLGAP2	3.60E-05	-0.20667
cg27056972	SSX3	1.47E-10	-0.27648
cg27105634	HBD	2.97E-17	-0.32261
cg27124742	DDX53	1.03E-05	-0.22561
cg27137084	TMEM132C	1.07E-13	-0.23777
cg27157482	HOXA10	1.45E-10	0.209548
cg27183113	OR51E1	6.07E-13	-0.28837
cg27209571	DNER	5.57E-13	-0.22787
cg27237541	MYO3A	3.52E-16	-0.387
cg27281765	PMP2	1.74E-16	-0.32071
cg27281882	PAK7	2.48E-13	-0.354
cg27297441	GPR123	1.38E-10	-0.3606
cg27315635	KCNJ9	1.06E-14	-0.28995
cg27364741	OTX1	8.11E-16	0.440534

cg27371466	GRM4	6.53E-12	-0.28423
cg27373591	CBLN2	8.33E-13	-0.23982
cg27412284	DLGAP2	1.02E-09	-0.2679
cg27418687	POPDC3	1.68E-15	-0.29375
cg27420415	CNTNAP4	1.41E-08	-0.23711
cg27456111	NRXN1	3.59E-15	-0.31846
cg27469019	DLGAP2	1.47E-07	-0.32135
cg27532754	GPR123	3.74E-10	-0.26799
cg27549878	SPRED3	7.46E-13	0.219004
cg27573344	RCVRN	4.15E-10	-0.23503
cg27600813	RCVRN	9.36E-09	-0.2945
cg27611699	ATP13A4	2.13E-14	-0.37362
cg27619840	HCN1	2.16E-09	-0.21763
cg27661315	BEND4	2.43E-07	-0.22509

Appendix 1.15 – Differentially methylated CpG probes for lung cancer.

cg	Gene_Symbol	<i>pvalue_adjust</i>	$\Delta\beta$
cg00028935	ZIC4	1.05E-10	0.271121
cg00079219	HOTAIR	1.61E-09	0.208768
cg00087368	SIM1	7.73E-11	0.277021
cg00143249	MNX1	1.60E-08	0.227149
cg00147248	CHRM2	8.70E-10	-0.22384
cg00154357	ZIC4	9.36E-10	0.238852
cg00158333	IGF2BP1	8.70E-10	0.269265
cg00310215	SALL1	4.65E-08	0.21243
cg00325910	S100A7	2.00E-10	-0.20683
cg00333226	VWC2	1.01E-08	0.208922
cg00396667	PITX1	7.73E-11	0.413683
cg00423153	SPHKAP	2.22E-09	0.311028
cg00445405	OTX1	1.02E-10	0.236903
cg00463767	OTX1	1.78E-28	0.241279
cg00582524	SALL1	5.70E-10	0.368978
cg00601648	ADCY8	1.21E-08	-0.24846
cg00633740	EDN3	6.36E-09	-0.20982
cg00692611	PITX2	8.37E-09	0.224096
cg00765312	ALX1	0.000136	0.200218
cg00806704	CDX2	8.80E-11	0.332505
cg00853940	TRPM8	1.54E-10	0.246451
cg00945234	DMRTA2	3.52E-10	0.228146
cg01002253	NPY5R	1.43E-09	0.212977
cg01003961	SP8	1.52E-07	0.231992
cg01089249	GAD1	8.19E-10	0.218572

cg01089319	GAD1	1.01E-09	0.234958
cg01146232	SALL1	8.09E-07	0.208186
cg01175020	TLX1	2.67E-09	0.211048
cg01247127	SIRPD	4.78E-09	-0.22489
cg01281911	FOXE3	5.57E-08	0.212332
cg01392518	T	2.15E-10	0.218394
cg01499197	CDX2	2.11E-10	0.240791
cg01538344	TAF7L	3.37E-07	0.262711
cg01556466	ADCYAP1R1	1.03E-09	-0.23765
cg01670677	PHOX2A	6.75E-10	0.21151
cg01695225	EMX1	3.62E-09	0.266278
cg01708273	HOXD11	7.73E-11	0.363357
cg01715455	VSX1	1.53E-10	0.260991
cg01743841	CHRNA4	4.11E-10	0.313281
cg01758512	FUT9	5.33E-10	0.247891
cg01759597	DLX6AS	5.38E-09	0.204177
cg01847754	CXorf1	9.36E-10	-0.27574
cg01893212	VWC2	1.62E-08	0.342303
cg01933308	NXPH1	5.83E-08	0.221756
cg01951086	PITX2	4.99E-09	0.24002
cg01965874	PAX7	1.63E-06	0.258048
cg01978237	SIM1	7.73E-11	0.284723
cg02037307	PITX1	7.73E-11	0.414001
cg02054457	TNR	3.23E-10	-0.26593
cg02076785	CNGA3	2.96E-09	0.217817
cg02081277	EDN3	1.15E-10	0.22364
cg02113214	DGKI	8.27E-08	-0.20259
cg02213684	PITX1	2.95E-08	0.21848
cg02341759	AGBL1	7.18E-09	-0.21782
cg02387803	ZIC4	1.01E-09	0.27597
cg02455094	ONECUT2	1.29E-10	0.208487
cg02467990	VWC2	1.86E-08	0.333991
cg02498177	SALL1	1.05E-08	-0.22155
cg02530022	DLX6AS	4.89E-10	0.262821
cg02608452	KCNA4	1.26E-06	-0.2014
cg02631468	VSX1	2.58E-10	0.267385
cg02650767	OR2B11	7.73E-11	-0.26845
cg02653559	ZIC4	3.35E-09	0.26553
cg02715629	FAM83A	1.88E-10	-0.28587
cg02725370	PITX2	7.73E-11	0.319304
cg02772121	TRIM15	7.73E-11	-0.43332
cg02842496	ADCY8	3.72E-10	0.206386
cg02849693	PRKCG	2.38E-08	0.236843
cg02881570	NGB	1.07E-09	0.272388
cg02898293	VSX1	4.82E-10	0.215725
cg02920600	DGKI	1.70E-08	-0.21461
cg02943604	PPAPDC1A	4.34E-10	0.216615

cg03111498	VSX1	9.11E-11	0.274966
cg03144922	PITX2	9.50E-11	0.362578
cg03184290	PITX2	7.73E-11	0.407257
cg03199745	FLJ12825	7.73E-11	0.21096
cg03239552	HOXC13	2.63E-10	0.310629
cg03340466	FAM163A	4.45E-10	0.258753
cg03536474	HOXC11	2.75E-09	0.26592
cg03631131	ZIC4	1.26E-10	0.200009
cg03655683	OTX1	2.40E-10	0.29697
cg03726785	SIRPD	1.55E-07	-0.20712
cg03733219	SPRED3	1.04E-09	0.281675
cg03752741	SH3GL3	2.99E-10	-0.26051
cg03767515	HOXA11	1.90E-07	0.208373
cg03771840	TRIM15	1.89E-08	0.285406
cg03806192	DGKK	1.17E-06	0.261995
cg03830329	SIM1	1.20E-25	0.206289
cg03881775	ZIC4	3.62E-10	0.249829
cg03900143	ZIC4	1.15E-10	0.393241
cg03943773	PITX2	1.19E-08	0.205869
cg03950614	NR2E1	3.57E-10	0.218587
cg03972665	PITX2	3.16E-09	0.205564
cg03981954	FEZF1	1.64E-09	0.275533
cg04008601	C12orf42	7.73E-11	0.327919
cg04048259	EDN3	1.05E-10	0.333009
cg04063166	KCNA4	2.79E-09	-0.20301
cg04079301	ZIC4	1.10E-10	0.225579
cg04088697	DLX6AS	7.84E-33	0.250096
cg04138756	SPRR3	3.10E-10	-0.24697
cg04223420	PITX1	7.73E-11	0.403565
cg04337653	SIM1	3.28E-10	0.247671
cg04415176	HOXD13	7.82E-10	0.35053
cg04431946	KCNK12	3.08E-08	0.23442
cg04454951	VWC2	5.66E-08	0.202099
cg04455430	DMRTA2	9.38E-11	0.233142
cg04543008	PHOX2A	1.20E-10	0.319567
cg04550052	SALL1	3.14E-10	0.269302
cg04590119	CHRM2	2.15E-10	-0.26689
cg04654530	OTX1	7.73E-11	0.319212
cg04698114	SALL1	7.93E-10	0.309777
cg04765207	MAGEA2	6.66E-10	-0.20275
cg04819096	HOXC13	7.18E-09	0.202392
cg04832767	DLX6AS	2.87E-10	0.21433
cg04842426	CHRM2	1.10E-10	0.255276
cg04846243	IGF2BP1	8.99E-06	0.227992
cg04883903	NOS1	4.99E-09	0.221814
cg04899175	NOS1	1.62E-10	0.26712
cg04904331	VWC2	3.93E-08	0.271596

cg04917446	HOXB9	4.84E-16	0.248185
cg04923875	TNR	8.96E-10	-0.23719
cg04961466	NPY5R	1.78E-10	0.211383
cg04972930	OR6N1	8.40E-08	-0.20472
cg05030680	PITX2	2.50E-10	0.295382
cg05052324	PAX7	1.75E-08	0.231704
cg05080154	SALL3	4.11E-10	0.322181
cg05093169	PHOX2A	8.96E-10	0.230676
cg05139788	TFAP2D	7.73E-11	0.334821
cg05151154	SALL1	3.32E-08	0.203155
cg05259868	GPR50	4.84E-09	0.237483
cg05349062	TLX2	5.42E-07	0.25652
cg05380821	NR2E1	3.33E-10	0.226872
cg05462543	EN2	2.16E-09	0.230583
cg05581451	PITX2	1.01E-10	0.240139
cg05756220	KCNA4	5.47E-10	0.204408
cg05771518	HOXC13	9.01E-11	0.225963
cg05855917	ZIC4	4.89E-10	0.239464
cg05922253	DGKK	6.54E-07	0.290896
cg05922610	NR2E1	7.73E-11	0.277505
cg05938001	DLX1	7.37E-10	0.221821
cg05962092	KCNA7	2.19E-09	0.285506
cg06051311	TRIM15	2.72E-10	-0.34505
cg06092815	SPHKAP	7.82E-10	0.226941
cg06151165	VSX1	3.04E-08	0.210833
cg06319822	HBM	2.87E-07	0.207654
cg06376426	GRHL3	5.47E-10	-0.23226
cg06382344	TBR1	1.32E-09	0.309549
cg06382559	TLX1	8.80E-11	0.253564
cg06404175	OXT	2.72E-05	0.251856
cg06463958	T	4.78E-09	0.288948
cg06488443	TBR1	1.23E-09	0.207484
cg06581175	DLX6AS	2.06E-10	0.290208
cg06724588	SALL1	9.18E-09	0.21785
cg06834698	OR10A3	1.37E-09	-0.22165
cg06842954	PITX2	8.44E-10	0.307759
cg06850283	FGF10	1.71E-09	0.247024
cg06942701	TBR1	7.58E-10	0.214071
cg07010617	PRSS1	1.10E-08	-0.21136
cg07090701	C1QL2	1.29E-10	0.252728
cg07135614	FOXL2	3.99E-10	0.316977
cg07203423	TLX2	1.01E-09	0.288513
cg07235577	SNTG1	2.27E-07	-0.23336
cg07279070	EMX1	1.62E-10	0.256857
cg07362328	DMRTA2	2.29E-09	0.202552
cg07382554	SALL3	2.96E-09	0.22082
cg07442479	GDNF	3.92E-09	0.226128

cg07462540	NXPH1	2.77E-06	0.215132
cg07495363	BOLL	1.68E-06	0.200581
cg07536847	PAX7	2.68E-10	0.30387
cg07557260	ADCY8	3.47E-10	0.256706
cg07625194	TFAP2D	8.96E-10	0.224148
cg07664198	CHRM2	1.71E-09	0.2218
cg07676859	SSTR4	1.95E-10	0.411947
cg07758529	IL1RAPL2	6.59E-08	0.29403
cg07780095	ALX1	9.07E-07	0.273035
cg07788369	DLX6AS	8.74E-11	0.352949
cg07802350	HOXD13	1.39E-09	0.258125
cg07850418	ZIC4	4.50E-09	0.216398
cg07851738	ADCY8	1.53E-10	-0.27953
cg07854132	OVCH1	1.62E-10	-0.29594
cg07936950	DLX1	1.35E-08	0.337795
cg07937271	NKX3-2	4.74E-34	0.210378
cg07938743	OTX1	2.43E-10	0.224176
cg07973435	SIM1	7.73E-11	0.381413
cg07974511	OTX1	7.87E-11	0.431911
cg07984133	CDX2	7.73E-11	0.330075
cg07990546	TLX2	4.91E-09	0.28494
cg08013557	ZIC4	8.37E-11	0.26227
cg08074534	SIM1	2.40E-09	0.240954
cg08074851	KCNK12	4.29E-10	0.257381
cg08091192	ZIC4	1.20E-10	0.260695
cg08166767	LCE2A	6.75E-09	-0.21636
cg08307469	GDNF	8.24E-09	0.276419
cg08318212	EDN3	1.73E-10	0.257417
cg08393041	ZIC4	1.80E-10	0.281581
cg08473330	OTX1	1.04E-15	0.203061
cg08490115	KCNA4	7.27E-10	0.259821
cg08526074	SALL1	1.04E-09	0.205965
cg08526991	SOX11	5.90E-09	0.249784
cg08536228	SYNPR	8.11E-11	0.205327
cg08550101	SP8	1.74E-09	0.208169
cg08594218	HOXB13	1.51E-10	0.320351
cg08640634	NR2E1	1.01E-10	0.365941
cg08812189	ZIC4	2.67E-09	0.27509
cg08858649	TRIM15	2.31E-08	0.291679
cg08871608	CNTD2	1.88E-06	0.21766
cg08876932	PHOX2A	2.40E-10	0.245398
cg08878368	SALL1	1.21E-09	0.268068
cg08889797	ZIC4	4.58E-08	0.201718
cg08911275	HOXD13	1.78E-06	0.301271
cg08918845	BPIL1	2.58E-10	-0.23482
cg08979319	SIM1	7.73E-11	0.289018
cg09000583	HOXB13	2.79E-07	0.229307

cg09005679	EDN3	2.34E-10	0.223084
cg09016242	SALL1	3.64E-08	0.288738
cg09094037	CNTNAP4	2.99E-10	-0.2702
cg09140665	OR10A3	3.99E-10	-0.20999
cg09250199	BRDT	1.05E-07	-0.22019
cg09388140	DLX6AS	3.81E-07	0.201403
cg09462808	SYNPR	2.91E-10	0.227447
cg09528825	GSG1L	1.17E-06	0.210694
cg09586034	TNR	2.26E-10	-0.25296
cg09595415	SRY	1.85E-05	0.219331
cg09647108	CD300LG	2.87E-10	-0.21715
cg09781994	PITX2	9.06E-08	0.248626
cg09791440	PAX7	7.56E-08	0.213671
cg09792881	DMRTA2	1.19E-09	0.309879
cg09796544	DUSP9	2.24E-07	0.261671
cg09803262	DLX6AS	8.41E-11	0.347011
cg09812070	GABRA4	1.32E-10	0.236324
cg09907509	C13orf36	2.57E-08	0.24086
cg10055501	PITX2	7.73E-11	0.365558
cg10085326	MMP13	7.58E-10	-0.22302
cg10122477	GLB1L3	6.08E-09	0.241989
cg10122865	OTX1	7.73E-11	0.420382
cg10136354	EMX1	3.23E-08	0.223335
cg10297473	SALL1	1.41E-10	0.246685
cg10387551	KCNA4	6.48E-10	0.211281
cg10417567	NKX6-1	8.87E-11	0.232055
cg10418524	HOXD13	1.50E-10	0.222452
cg10512745	DMRTA2	1.64E-10	0.427145
cg10641615	HOTAIR	8.09E-07	0.212111
cg10659805	DLX6AS	7.73E-11	0.404435
cg10679688	ZIC5	4.23E-09	0.212066
cg10682299	PITX2	3.25E-09	0.277572
cg10709593	DLX1	7.93E-10	0.255849
cg10717463	SALL3	9.63E-10	0.247714
cg10745499	SIM1	5.87E-30	0.218651
cg10821610	PAX7	6.36E-07	0.250518
cg10835584	ONECUT2	1.62E-08	0.222317
cg10959353	SPHKAP	3.67E-10	0.258441
cg10968815	BPIL1	1.33E-08	-0.20751
cg10979216	SNTG1	5.19E-07	-0.21399
cg11038322	TFAP2D	2.11E-10	0.265262
cg11188031	HAVCR1	2.06E-10	-0.26093
cg11250773	PNPLA5	7.41E-09	0.21229
cg11295724	SIRPD	1.61E-09	-0.22667
cg11328436	HOTAIR	1.36E-10	0.26617
cg11334771	PHOX2A	9.38E-11	0.28848
cg11428724	PAX7	2.08E-07	0.204663

cg11538641	SIM1	6.09E-07	0.21506
cg11546137	HOXD11	2.43E-10	0.331514
cg11591636	ZIC5	1.55E-08	0.205915
cg11625005	TERT	2.76E-10	0.25993
cg11761200	REG1A	1.02E-09	-0.25815
cg11781718	HIST1H4E	1.46E-07	0.237443
cg11795276	FLJ12825	1.19E-09	0.209561
cg11796258	TNR	3.05E-09	-0.2394
cg11854928	NOS1	1.10E-09	-0.28481
cg11975608	LPA	2.17E-08	-0.21677
cg12001304	SPHKAP	1.26E-09	0.285264
cg12018098	SPRED3	3.87E-08	0.234481
cg12118269	TLX1	1.34E-09	0.250877
cg12164612	KCNA4	3.35E-09	0.202613
cg12189551	C14orf39	3.62E-09	0.248143
cg12265623	NXPH1	7.73E-11	0.258346
cg12308746	DLX1	6.29E-10	0.263884
cg12314713	IGF2BP1	2.55E-07	0.265175
cg12374506	C1QL4	7.73E-11	0.262543
cg12422154	TRIM15	5.06E-09	-0.27896
cg12477716	IGF2BP1	8.57E-10	0.313868
cg12520549	TBR1	2.83E-09	0.21149
cg12559170	HBG2	5.25E-10	-0.23612
cg12597389	NXPH1	7.73E-11	0.346776
cg12673103	PITX1	9.16E-30	0.216302
cg12720637	GABRA3	1.28E-09	0.265106
cg12756396	DMRTA2	7.73E-11	0.351489
cg12868052	AGBL1	3.46E-09	-0.22231
cg12892506	ZIC4	7.73E-11	0.387155
cg12907379	ZIC5	2.54E-10	0.242624
cg12973941	NKX3-2	2.23E-10	0.277784
cg13019143	DLX6AS	9.60E-11	0.23821
cg13209441	DLX6AS	3.30E-09	0.220687
cg13355047	FSD1	2.84E-06	0.219383
cg13356896	BOLL	8.09E-07	0.245085
cg13409645	COX6B2	2.38E-08	0.233939
cg13413955	DMRT1	7.73E-11	0.321193
cg13449778	FAM163A	2.75E-09	0.21789
cg13491584	FOXI3	0.000119	0.202833
cg13492692	LHX2	2.18E-10	0.225963
cg13549845	GRID2	1.95E-08	0.213326
cg13563074	OVCH2	1.23E-10	-0.20996
cg13611822	NXPH1	1.86E-08	0.208863
cg13656408	EMX1	5.33E-15	-0.20097
cg13663644	DMRT3	4.79E-08	-0.23584
cg13736376	PITX2	8.44E-10	0.223563
cg13755795	SALL1	7.27E-10	0.230731

cg13784235	NR2E1	8.76E-11	0.309159
cg13791254	FOXE1	7.65E-07	0.297016
cg13794993	SALL3	5.47E-10	0.209157
cg13891220	PITX2	1.78E-28	0.210145
cg13969001	PAX7	1.82E-07	0.200094
cg14001023	PGLYRP1	7.73E-11	0.374005
cg14005211	GAD1	1.49E-09	0.25111
cg14007067	SALL3	1.51E-10	0.274268
cg14045872	VWC2	4.71E-09	0.27178
cg14093715	LHX2	4.23E-10	0.246499
cg14094983	NXPH1	7.73E-11	0.292173
cg14116122	ALX1	4.51E-08	0.202412
cg14123923	POU4F1	1.14E-08	0.249706
cg14127859	BARX1	7.74E-09	0.220151
cg14239515	SPRED3	2.92E-07	0.231995
cg14314744	SIM1	7.73E-11	0.331692
cg14425564	LHX2	1.83E-10	0.354244
cg14441976	SLC27A6	3.88E-10	0.260025
cg14442421	SLC24A2	3.28E-10	0.234003
cg14461582	TLX1	1.04E-09	0.227615
cg14544666	RASGEF1C	2.31E-08	0.252027
cg14562712	C7orf52	2.51E-09	0.253908
cg14631053	SSTR4	5.55E-10	0.218299
cg14691529	HOTAIR	2.54E-10	0.283312
cg14717557	SIM1	9.17E-11	0.284226
cg14763548	VSX1	3.33E-10	0.27603
cg14822490	HMX2	8.63E-11	0.302236
cg14861089	TLX1	1.88E-10	0.3717
cg14995062	MMP13	9.87E-11	-0.22361
cg14996220	ALX1	8.76E-11	0.266064
cg15044957	KCNA4	1.61E-09	0.262357
cg15067015	TNR	1.42E-10	-0.26665
cg15082028	PAX7	9.18E-09	0.20933
cg15105326	ZIC4	7.73E-11	0.289581
cg15126544	GAD1	7.22E-08	0.278739
cg15149095	SYT14	3.62E-09	0.213801
cg15199678	DLX6AS	4.34E-10	0.206585
cg15272362	VSX1	2.99E-10	0.258068
cg15285250	NXPH1	8.37E-11	0.305325
cg15310492	KCNA4	6.96E-10	0.238778
cg15416877	NR2E1	1.30E-22	0.222276
cg15435730	TFAP2D	2.92E-09	0.202739
cg15443952	C7orf52	1.60E-08	0.212418
cg15731655	HOTAIR	6.39E-10	0.270855
cg15772216	SYNPR	7.82E-10	0.210842
cg15786205	NR2E1	4.61E-24	0.210493
cg15841063	FOXD3	1.86E-05	0.232274

cg16006349	HOTAIR	9.01E-11	0.312248
cg16033633	ZIC5	1.71E-09	0.23131
cg16100530	SH3GL3	1.57E-08	-0.20846
cg16108684	DCAF12L2	5.12E-05	0.215002
cg16201038	CDX2	2.13E-10	0.242668
cg16205854	EDN3	1.11E-10	0.200909
cg16226642	OR5P3	3.46E-09	-0.21435
cg16226785	AGBL1	2.28E-08	-0.20612
cg16240162	ZIC4	1.40E-09	0.264837
cg16327839	SPATA19	3.72E-10	-0.24895
cg16355785	GABRA1	2.04E-08	0.215107
cg16413687	ALX1	1.91E-06	0.208811
cg16464328	SLC4A1	7.08E-09	-0.20833
cg16557178	HOXB13	5.38E-09	0.201394
cg16565394	SIM1	1.22E-20	0.22442
cg16723800	TAF7L	1.44E-08	0.295454
cg16732616	DMRTA2	7.73E-11	0.460028
cg16758800	DLX6AS	1.70E-27	0.220855
cg16768018	ZIC4	7.73E-11	0.445006
cg16781647	EMX1	1.24E-05	0.20309
cg16856286	HOXC13	9.95E-10	0.270299
cg16922279	PHOX2A	5.47E-10	0.224813
cg16928066	EMX1	2.57E-08	0.229958
cg16935980	EN2	4.96E-10	0.277082
cg16961816	DLX6AS	9.50E-11	0.278369
cg17028067	LPA	8.79E-08	-0.20947
cg17093995	VWC2	8.45E-09	0.271667
cg17146570	EDN3	1.68E-10	0.249709
cg17187764	APOBEC1	2.26E-10	-0.25191
cg17191462	TFAP2D	3.62E-10	0.30023
cg17199800	DLX6AS	3.67E-10	0.235695
cg17305181	CRH	4.17E-09	0.233445
cg17386213	NR2E1	1.56E-10	0.33759
cg17391928	SLC27A6	1.03E-09	0.218074
cg17444738	NKX6-1	9.34E-11	0.215573
cg17489695	TFAP2D	1.71E-07	0.213651
cg17495130	HOXD13	2.95E-08	0.212589
cg17498296	HMX2	1.29E-07	0.244359
cg17507671	PITX2	1.76E-10	0.227896
cg17586860	SSTR4	4.10E-09	0.21748
cg17602500	IL1RAPL2	1.28E-06	0.218993
cg17707140	PITX2	4.17E-09	0.201812
cg17714025	KCNA4	2.88E-09	0.211585
cg17721710	SLC30A10	6.21E-06	0.317029
cg17787134	IGF2BP1	9.77E-09	0.308723
cg17800654	DMRTA2	9.49E-10	0.330495
cg17840707	AGBL1	1.35E-08	-0.22282

cg18040901	HOTAIR	1.43E-09	0.228085
cg18082337	ZIC4	9.01E-11	0.314554
cg18142856	OR10A3	4.34E-10	-0.2254
cg18197392	SSTR4	2.80E-10	0.32858
cg18206027	VWC2	5.70E-10	0.285703
cg18219713	SNTG1	4.31E-08	-0.21696
cg18421840	ADCYAP1R1	1.78E-10	-0.21058
cg18423935	STXBP5L	3.69E-07	0.204558
cg18438777	NPY5R	1.18E-07	0.206329
cg18449120	SOX11	2.59E-07	0.204829
cg18451814	OTX2	1.73E-10	0.327475
cg18502142	DLX6AS	7.73E-11	0.471093
cg18543971	AGBL1	2.88E-09	-0.21182
cg18682226	CALN1	4.34E-10	-0.23492
cg18722841	PHOX2A	7.73E-11	0.289786
cg18731327	ZIC4	1.80E-10	0.207086
cg18768582	HBG1	1.81E-10	-0.22737
cg18782604	SIM1	7.18E-09	0.345215
cg18824990	HOTAIR	6.08E-09	0.205182
cg19047707	ECEL1	5.95E-10	0.246696
cg19134945	PITX2	7.67E-08	0.236844
cg19162841	DGKK	3.05E-05	0.224223
cg19194373	EDN3	7.73E-11	0.33532
cg19255241	OR2W3	9.33E-09	-0.20461
cg19370054	CNGA3	1.44E-10	0.298566
cg19370653	PITX2	8.66E-11	0.265156
cg19605788	CNTD2	1.57E-06	0.222292
cg19619405	ADAMTS20	9.25E-11	0.435569
cg19620758	MMP13	4.30E-26	-0.25208
cg19630629	CHRM2	1.43E-08	0.202387
cg19651694	PHOX2A	1.62E-10	0.265121
cg19653212	GUCA1A	3.99E-10	0.320087
cg19715410	OPRD1	4.91E-09	0.251303
cg19846314	GAD1	6.78E-05	0.213232
cg19909787	HMX2	1.45E-09	0.240593
cg19922137	SYT14	7.47E-10	0.314369
cg19924352	FAM83A	7.73E-11	-0.28377
cg20011402	ST8SIA6	2.65E-06	0.203348
cg20073553	NKX3-2	1.53E-10	0.254521
cg20104341	HOXC13	7.17E-10	0.234633
cg20106459	COX6B2	7.74E-09	0.295827
cg20114732	T	7.73E-11	0.394228
cg20180370	TFAP2D	2.11E-10	0.281158
cg20234976	SIM1	7.84E-11	0.216284
cg20268857	OR6K3	2.75E-07	-0.24073
cg20291436	PITX2	9.95E-10	0.213139
cg20400904	TCN1	2.88E-09	-0.20425

cg20402783	HOXC10	2.43E-09	0.316244
cg20403938	HOXC10	1.85E-07	0.215051
cg20431250	NR2E1	7.73E-11	0.29987
cg20457051	GPR115	4.40E-10	-0.24065
cg20547407	EN2	8.44E-10	0.226684
cg20597842	APOBEC1	2.34E-10	-0.23077
cg20663376	TRPM1	2.24E-07	0.232702
cg20705938	PITX2	7.33E-08	0.238967
cg20731469	NR2E1	2.82E-27	0.238789
cg20910807	EDN3	1.59E-10	0.232227
cg20927661	SOX11	3.68E-07	0.237863
cg20939084	ZIC4	1.76E-09	0.209451
cg20939662	LHX2	6.36E-09	0.205788
cg21127068	ZIC4	2.62E-09	0.243021
cg21146652	DGKI	2.65E-08	-0.21229
cg21174841	FOXE1	2.38E-08	0.2127
cg21185289	TLX2	8.89E-09	0.303029
cg21239311	NR2E1	6.29E-10	0.232878
cg21299542	PITX2	9.07E-29	0.244776
cg21472506	OTX1	7.73E-11	0.450754
cg21488538	CNGA3	1.03E-10	0.368031
cg21497990	EN2	1.32E-10	0.344101
cg21545390	DLX6AS	2.51E-09	0.233829
cg21610164	HIST1H2BI	1.09E-30	0.220598
cg21619594	ADCYAP1R1	5.78E-10	-0.20605
cg21726372	PITX2	2.87E-10	0.314573
cg21732056	OR5P2	2.47E-09	-0.22115
cg21760402	TFAP2D	2.09E-10	0.24181
cg21769093	VWC2	6.79E-08	-0.25451
cg21774338	DMRTA2	9.95E-10	0.287176
cg21836358	FOXD3	5.63E-10	0.274731
cg21865150	HOXB13	6.03E-10	0.318673
cg21945930	DLX6AS	3.38E-43	0.226955
cg22031964	CHRM1	1.29E-10	0.263214
cg22190437	SPHKAP	2.83E-10	0.25144
cg22212237	C1QL4	6.15E-42	0.215691
cg22274539	C12orf42	7.73E-11	0.40905
cg22286936	TFAP2D	1.06E-09	0.262886
cg22304522	ADCY8	2.38E-10	-0.2994
cg22476027	NR2E1	1.39E-10	0.296723
cg22496102	CRABP1	1.27E-07	0.218307
cg22534145	SSTR4	2.68E-10	0.315611
cg22603247	HMX2	7.33E-08	0.241277
cg22614239	ZIC4	5.14E-09	0.216001
cg22616881	DLX6AS	6.39E-10	0.261396
cg22639011	KCNA4	1.04E-27	0.216358
cg22658979	MMP13	1.13E-10	-0.21081

cg22711111	TRIM15	3.53E-08	0.24649
cg22717014	PITX2	7.92E-11	0.341429
cg22762091	ADCY8	1.53E-10	0.243315
cg22779330	MYEOV	7.84E-11	-0.24029
cg22827685	NOS1	1.35E-08	-0.20265
cg22829917	HOTAIR	3.67E-10	0.234388
cg22914729	PITX2	7.74E-09	0.214311
cg22941315	TNR	2.21E-08	-0.25645
cg23032674	COL9A1	5.38E-09	0.202977
cg23097402	DMRTA2	1.20E-10	0.360434
cg23115387	FOXE3	2.31E-10	0.200691
cg23229261	OTX1	7.73E-11	0.346538
cg23251359	DGKK	0.000551	0.212643
cg23340017	TLX1	1.95E-25	0.226635
cg23348723	C7orf16	8.65E-08	-0.22559
cg23426473	EN2	8.83E-10	0.208856
cg23467079	FAM83A	7.73E-11	0.257223
cg23489434	FLJ12825	7.98E-11	0.280165
cg23507945	IL22RA2	5.72E-09	-0.27795
cg23668184	SOX11	1.39E-07	0.227931
cg23676151	NR2E1	9.38E-11	0.292151
cg23677657	DLX6AS	9.72E-11	0.22585
cg23720064	SIM1	1.05E-10	0.227901
cg23757446	ONECUT2	3.72E-10	0.252069
cg23767994	DLX6AS	7.73E-11	0.304831
cg23874437	SPRED3	2.87E-10	0.262886
cg23922739	HOXC13	1.19E-09	0.220556
cg24005685	PITX2	7.76E-11	0.294823
cg24116870	ADAMTS20	2.91E-10	0.233149
cg24154839	GABRA4	7.73E-11	0.32869
cg24211504	SIM1	9.19E-08	0.251376
cg24275315	NKX6-1	1.00E-30	0.226986
cg24340081	NKAIN3	1.61E-09	0.264243
cg24381587	OR6N1	1.41E-10	-0.31144
cg24384519	ADCYAP1R1	4.05E-08	-0.21833
cg24394172	GABRA4	1.37E-10	0.230536
cg24399122	COL9A1	6.03E-10	0.26853
cg24530250	PHOX2A	3.46E-09	0.263532
cg24561661	HOXD11	7.37E-10	0.255286
cg24575234	CHRM2	1.04E-07	0.205155
cg24595606	NR2E1	9.60E-11	0.367262
cg24633978	HOXD11	2.03E-10	0.266216
cg24721899	NKX3-2	1.10E-08	0.267165
cg24748769	OTX2	3.14E-10	0.280923
cg24812837	TLX1	4.96E-10	0.259832
cg24837370	SOX11	4.44E-09	0.277348
cg24875808	AGBL1	2.17E-08	-0.20538

cg24925400	PITX2	1.15E-09	0.236823
cg24933645	SLC30A10	3.58E-05	0.283556
cg25114913	FUT9	2.43E-10	0.23824
cg25191628	DMRTA2	7.73E-11	0.369844
cg25195987	ADCYAP1R1	3.05E-09	-0.22938
cg25266629	TLX1	2.83E-09	0.246914
cg25287257	MNX1	1.86E-06	0.246504
cg25555059	SLC27A6	1.49E-16	0.21701
cg25622366	OTX1	9.25E-11	0.430901
cg25678815	ALX1	8.76E-09	0.207903
cg25701114	HIST1H3B	2.44E-07	0.293994
cg25737664	SIRPD	1.74E-09	-0.21004
cg25756435	MAST1	3.43E-08	0.205867
cg25775494	NR2E1	1.64E-09	0.22941
cg25797887	DLX6AS	5.03E-10	0.239231
cg25800765	ALX1	1.00E-10	0.280768
cg25825506	DLX6AS	2.00E-10	0.257838
cg25830182	NKX6-1	1.96E-09	0.244039
cg25856811	SPRR3	5.55E-10	-0.22111
cg25902889	FSD1	1.53E-10	0.323605
cg25951981	GABRA4	7.73E-11	0.2978
cg26004759	UCP1	1.15E-07	0.252627
cg26014036	ZIC4	1.09E-08	0.266275
cg26090020	C17orf102	1.85E-09	-0.24804
cg26099134	SIM1	7.92E-11	0.248
cg26132298	C14orf39	4.24E-08	0.219674
cg26205771	NPBWR1	2.83E-09	0.289559
cg26222437	FRMPD4	8.33E-07	0.225295
cg26251506	DLX6AS	7.08E-09	0.20019
cg26253500	CHRM2	6.75E-09	-0.2486
cg26295057	GDNF	2.33E-09	0.251214
cg26332560	ADCY8	3.06E-10	0.232897
cg26336935	KRT16	2.20E-10	-0.21271
cg26351229	ADCY8	2.20E-10	0.201802
cg26451345	GPR115	1.02E-10	-0.25427
cg26494929	KREMEN2	1.06E-09	0.27919
cg26509691	PITX1	7.73E-11	0.290448
cg26560222	DMRTA2	9.06E-08	0.239217
cg26567423	FLJ12825	1.32E-10	0.332447
cg26610167	PTPRH	1.76E-28	-0.2642
cg26612727	ZPBP2	7.73E-11	0.217916
cg26668276	DLX6AS	5.90E-09	0.20983
cg26708319	PITX2	7.73E-11	0.334701
cg26745764	GLB1L3	3.80E-09	0.212159
cg26777456	FLJ12825	3.01E-22	0.23097
cg26790247	ZIC4	1.30E-10	0.291894
cg26831119	PITX2	7.73E-11	0.412041

cg26923490	KCNA7	7.29E-09	0.233945
cg26954968	SIM1	2.88E-09	0.261017
cg27278953	NGB	4.71E-09	0.204332
cg27364741	OTX1	7.73E-11	0.370323
cg27406678	NKX6-1	3.77E-10	0.209318
cg27416372	ZIC4	4.64E-09	0.209199
cg27423760	SALL1	1.25E-09	0.232357
cg27502296	DUSP9	1.05E-07	0.226893
cg27549878	SPRED3	7.08E-09	0.270456
cg27606499	ZIC4	2.43E-10	0.314045
cg27618240	SP8	6.55E-09	0.232281
cg27663938	C12orf42	7.73E-11	0.445809

Appendix 1.16 – Differentially methylated CpG probes for thyroid cancer.

cg	Gene_Symbol	<i>pvalue_adjust</i>	$\Delta\beta$
cg01120874	FIBCD1	4.03E-17	-0.24632
cg01441698	PLA2G2E	1.93E-18	-0.20402
cg01802532	NMU	4.60E-19	-0.22039
cg01853665	RNASE11	5.73E-18	-0.29332
cg02196805	CSF2	1.06E-10	-0.30557
cg02325250	CSF2	4.46E-11	-0.34485
cg03255783	ESPN	1.91E-12	-0.20309
cg03448202	MYBPH	9.11E-21	-0.33929
cg03861143	SYT8	1.70E-15	-0.32871
cg04473405	KRT85	2.80E-19	-0.30272
cg05368724	FAM178B	8.11E-17	-0.39207
cg07538160	MUC21	3.75E-18	-0.36499
cg08328750	KRT15	2.49E-12	-0.30161
cg08686879	CSF2	2.68E-09	-0.25585
cg09575189	SYT8	8.47E-16	-0.25799
cg12403889	C1orf187	2.24E-20	-0.29036
cg12747410	MS4A15	3.29E-15	-0.24391
cg13394864	FAM178B	3.78E-18	-0.24701
cg15442792	MUC21	5.75E-19	-0.35681
cg16657886	SYT8	6.55E-18	-0.34399
cg16745930	HPSE2	1.73E-14	-0.33491
cg18122696	SYT8	7.35E-13	-0.3032
cg18512357	AWAT2	1.14E-18	-0.28447
cg18959422	MYBPH	2.97E-18	-0.22881
cg19088218	PLA2G2E	6.71E-20	-0.20654
cg19316579	HPSE2	4.29E-16	0.220356
cg19856444	SLC39A12	2.87E-15	-0.26777

cg20457051	GPR115	4.07E-12	-0.29204
cg20695587	TMPRSS11F	9.05E-15	-0.26451
cg22669120	KCNA1	2.02E-13	-0.22085
cg22717825	PLA2G2E	2.20E-17	-0.36306
cg23449588	ODAM	3.99E-19	0.240315
cg23620049	LIPH	1.82E-18	-0.3957
cg23904115	AWAT2	5.39E-20	-0.28298
cg25065535	IL2	6.54E-11	-0.26785
cg25388882	C1orf180	2.16E-11	-0.34318
cg25959149	BANF2	3.02E-10	0.248938
cg26369418	CSF2	6.78E-12	-0.28102
cg26451345	GPR115	9.73E-10	-0.22535
cg27053580	AWAT2	2.57E-12	-0.22089