

Table SI. Identified differentially expressed genes with altered methylation status.

A, Hypomethylated and upregulated genes (n=251)

LGALS3BP EMP3 RAB32 SASH3 HSPA6 ARAP3 STEAP3 RFXANK VAMP8 GBP1 CHST11 ZNF300 MFNG CLIC1 AQP1
 TMEM138 PDIA6 FAM129A CNGA3 KATNA1 PROM1 MAP3K7CL PARP9 RBBP4 GDF15 PRKD3 CARD8 CCR1 MCM5
 NMB NES RBM47 SLC16A4 CD93 DRAXIN TNFRSF12A APOBEC3B CDCA3 SLC7A7 ACOX2 PMM2 PDLIM1 TSPO
 CDC45 VAMP5 SRBD1 MMP2 HLA-DQB1 STON1 ASPN GIMAP4 DTL PDLIM4 COL3A1 MMP9 CD74 RPE65 TNFAIP6
 CALD1 ERO1A EMILIN1 ARHGDIB GMFG HLA-DMA UAP1L1 CP ICAM3 CA9 TXLNA IL10RB IFI44 CAPG ARL13B
 TIMP4 BCL2A1 CASP4 CROT DDOST CCDC102B NCF4 BTN3A2 SIGLEC10 CFI ANXA1 ERAP2 TMEM267 C1orf54
 GPRC5A NINJ1 ACTA2 LST1 PLAT PLSCR1 ANXA2 LPP POSTN LYPLA1 SLAMF8 SNRBP HLA-DPB1 CCND1 TREM2
 LY86 HLA-DRA MPZL1 IFI16 PLA2G2A CYTIP COL4A2 COL6A3 GALNT1 LPAR6 CDK1 COL5A1 ZNF217 IL13RA2
 TREM1 BAZ1A ITPRIP LOXL3 C8orf4 EMP1 GPX1 PLEK FABP7 ZNF45 FCER1G HPGDS B3GNT5 NCF2 EVI2B ECM2
 ANGPT1 HK2 RCN1 MORC4 NCAPD2 CHRNA9 DISP1 PIPOX LCP1 ABCB4 PTPRC XBP1 TRPM8 ISG20 CASP1
 HCLS1 CCL2 NXT2 SRPX2 CHST14 LUM HRH1 LRRN4CL RGS18 CD58 SLC43A3 Hist1h2bk ENTPD1 STC2 GPR183
 NID1 TMEM133 SLA LAPT M5 DENND2D CXCL8 MFAP2 TRIM22 PLAC8 CSTA C1QA NUP37 PTGFRN KCNMB1
 LILRB4 CD37 SOCS2 PLEKHA4 GPR65 IL18 POT1 PHLDA1 HDAC1 ALOX5AP TMEM71 DOCK8 APOBEC3G TYROBP
 LYZ C1QTNF5 TNFRSF1A LMO2 ERP27 PALLD PPBP SLC15A3 CCL5 TAP1 A2M SLPI LRRC17 NCKAP1L MS4A6A
 CLEC5A CXCL10 UBD IL1B C5ar1 FPR3 OLR1 TNFSF13B Fcgr2b NUPR1 OAS1 C1R EDNRA ZNF22 CXCL11 MGP
 CCL8 IFI35 ITGB2 PLCE1 C1QC CD53 GBP3 PCOLCE RNASE2 CLEC7A CHI3L2 HLA-DPA1 OLFM12A LAT2 LY96
 TP53I3 ADAMDEC1 SERPINAL FNDC3B S100A10 FCGRT FCGBP BLNK CCL4 NNMT BST2 TM4SF1 MSR1 CHI3L1
 MNDA

B, Hypermethylated and downregulated genes (n=199)

NEFM KCNC1 TSPYL5 EPB41L3 GREM1 CBX7 ME1 HENMT1 C4orf32 MTURN NUA1 NPY ZNF540 SPINT2 SST
 PRKCB HSPA2 ATP8A2 ULK2 RCAN2 PTGDS SLC35F3 TMEM132D SLIT2 THRB RUNDC3B TAC1 HTR1E NEFH
 CBLN2 DOCK9 GLS2 INA HHATL SLC12A5 SYN2 C1orf115 ANK3 KHDRBS2 SPHKAP LDB3 ZNF536 AJAP1 AATK
 ABHD14A CNTNAP2 MOG GPR62 CCDC68 SLITRK4 SLC6A15 HTR5A TCERG1L RELN IQSEC1 PRICKLE1 SYNJ2
 SH3GL3 MAP7D2 CARTPT SDR16C5 TRHDE STYK1 FSD1 CYP4X1 FAM131B KCNK12 LY6H S100A1 WBSCR17
 RIMS3 RYR2 EGR4 SLC2A13 B4GALT6 CCNA1 OPRK1 MACROD2 GRM7 FAAH GPR26 KRT222 PSD3 PCDHAC2
 LRFN5 NSG1 GPR83 FBXO2 C3orf14 PRR18 KLC1 STK32C RASL10A GDA PRKCZ VSTM2L OR2L13 SNX10 PIGZ
 PTPRR CLSTN1 PDIA2 GABRB2 ACTL6B CNDP1 DTNB MCHR2 MEG3 TTLL7 ADCY2 CPNE8 GAD2 MAPRE3 STMN2
 BICDL1 GAS7 SLC8A2 RAP1GAP SNCA PGBD5 TMEM144 SLC26A4 NIPSNAP3B KCNK1 CNTN2 GLT1D1 PPP1R9A
 NAGPA FSTL5 ALDH5A1 FGF14 LARP6 KLHL26 CCK NPM2 ICAM5 GPR22 GABRA1 VIPR1 HHIP MYRIP CDH9
 CD55 MAG ATL1 ST6GALNAC3 KCTD4 CDH12 SPOCK1 EPHX4 NGB GNAL CACNG2 SLC5A11 PTPRN2 ABCA5
 ADGRB3 BASP1 RASAL1 TPPP ADCYAP1 GABRB1 ZNF488 TMEM130 FOXQ1 KCNV1 CHGA KCNQ5 GSTM5 ART3
 ST18 DACH2 CACNG3 NCALD THY1 CADPS SELENBP1 CYFIP2 RERG SNAP91 PCDH8 GFOD1 OAT BIN1 HS3ST2
 MTMR9 GPR85 INPP5A GARNL3 HOOK1 B3GALT2 ANK2 PLP1 ASPHD1 PDE8B SGK494 ASRGL1 DLG2 SYNDIG1

Genes were listed in a descending order according to their levels of aberrant methylation (i.e. logFC values).