

Supplementary Table S4 Functional pathway analysis of genes with differentially methylated CpG sites (DMCs) shared in SLE and pSS

Pathway	Molecules	p-value
Neutrophil degranulation	ACPP,ALDH3B1,ANXA2,ARG1,ARMC8,ATG7,ATP8B4,AZU1,BRI3,CD44,CD59,CDA,CEACAM6,CHI3L1,CHIT1,CLEC5A,CRISPLD2,CTSG,CTS,DOCK2,ELANE,FCAR,FCER1G,FCGR3B,FOLR3,GALNS,GHDC,GSN,HP,HPSE,IMPDH1,ITGAL,LPCAT1,LRG1,MPO,MS4A3,NBEAL2,OLR1,OSCAR,P2RX1,PECAM1,PRDX6,PRG2,PSMB7,RAB10,RAB44,RAB5C,RNASE2,S100A8,S100A9,S100P,SERPINB1,SERPINB10,SLC11A1,SLC15A4,SLC2A5,SLC44A2,TARM1,TMEM173,TNFAIP6,TNFRSF1B,TOLLIP,TRPM2,TYROBP,UBR4,VAT1	1.12E-11
Innate immune System	ACPP,AHCYL1,ALDH3B1,ANXA2,APP,ARG1,ARMC8,ATG7,ATP6V1E2,ATP8B4,AZU1,BCL2,BIRC2,BPIFB4,BRI3,C4BPA,CAMK2G,CD247,CD300LB,CD3G,CD44,CD59,CDA,CDKN1A,CEACAM6,CHI3L1,CHIT1,CLEC5A,CLU,CRISPLD2,CTSG,CTS,CUL1,CUL3,DNM3,DOCK2,ELANE,ELMO1,ERBB2,FCAR,FCER1G,FCGR3B,FCN3,FOLR3,GALNS,GHDC,GSN,HLA-E,HP,HPSE,IL1B,IMPDH1,IRAK2,IRAK3,ITGAL,ITPR1,KLRD1,KSR1,LCK,LPCAT1,LRG1,MAP2K6,MAP3K11,MAPKAPK2,MEFV,MPO,MS4A3,NBEAL2,NCK1,NFATC1,NLRC4,NLRP3,OLR1,OSCAR,P2RX1,PANX1,PECAM1,PHLPP1,PIK3AP1,PIK3CD,PRDX6,PRG2,PRKCA,PRKCE,PSMB7,RAB10,RAB44,RAB5C,RASA3,RIPK3,RNASE2,RPS6KA1,RPS6KA2,RPS6KB2,S100A7A,S100A8,S100A9,S100P,SARM1,SERPINB1,SERPINB10,SLC11A1,SLC15A4,SLC2A5,SLC44A2,SPTBN1,SYNGAP1,TARM1,TLR6,TMEM173,TNFAIP6,TNFRSF1B,TOLLIP,TRAF2,TREM1,TREM2,TREX1,TRPM2,TXK,TYROBP,UBE2N,UBR4,VAT1,WIPF1	6.52E-10
Keratinocyte differentiation	BCL2,ETS1,ETS2,FASLG,MAP2K6,MAP3K5,PRKCA,PRKCE,SP1,TNF,TNFRSF1B,TRAF2	4.90E-06
p38 MAPK signaling	CCM2,MAP2K6,MAP3K3,MAP3K5,MAPKAPK2,MKNK1,TNF,TRAF2	1.31E-05
IL2 signaling events mediated by STAT5	BCL2,CCND2,CDK6,FASLG,LCK,LTA,PRF1,SP1,STAT5A	2.23E-05
Regulation of retinoblastoma protein	ATF7,BRD2,CBX4,CDKN1A,CTBP1,PPARG,RB1,RUNX2,SFTPD,SMARCA4,SPI1,TFDP1	4.23E-05
Sphingolipid signaling pathway	ABCC1,BCL2,CERS2,FCER1G,GNA12,GNAI2,GNAI3,MAP3K5,PIK3CD,PLCB2,PRKCA,PRKCE,PRKCZ,S1PR1,S1PR2,SGMS2,TNF,TRAF2	7.68E-05
C-MYB transcription factor network	BCL2,CBX4,CD34,CDK6,CDKN1A,ELANE,ETS1,ETS2,HIPK2,MAD1L1,MPO,MYB,SP1,SPI1	7.99E-05
Sphingosine 1-phosphate (S1P) pathway	ABCC1,GNA12,GNAI2,GNAI3,GNAO1,S1PR1,S1PR2	8.81E-05
AMPK signaling pathway	ACACA,ADIPOR2,CPT1A,CREB3L2,G6PC3,PCK2,PFKFB2,PIK3CD,PPARG,PRKAA1,PRKAG1,RAB10,RPS6KB2,RPTOR,SREBF1,STRADA,TBC1D1,ULK1	1.07E-04
Cholinergic synapse	BCL2,CACNA1C,CAMK2G,CHRM3,CREB3L2,GNAI2,GNAI3,GNAO1,GNG7,GNGT2,ITPR1,KCNQ1,PIK3CD,PIK3R5,PIK3R6,PLCB2,PRKCA	1.29E-04
Apoptosis signaling pathway	ATF7,BCL2,BIRC2,CRADD,DIABLO,EIF2AK2,FASLG,LTA,LTB,MAP3K5,PIK3CD,PRKCA,PRKCE,TNF,TNFRSF1B,TRAF2	1.36E-04
Pre-NOTCH expression and processing	ATP2A2,E2F3,FURIN,LFNG,MAML1,MAML3,NOTCH1,NOTCH4,ST3GAL3,TFDP1	1.95E-04

Apelin signaling pathway	<i>CALML4, CDH1, GNAI2, GNAI3, GNG7, GNGT2, HDAC4, ITPR1, KLF2, NRF1, PIK3R5, PIK3R6, PLCB2, PRKAA1, PRKAG1, PRKCE, RPS6KB2, SLC8A1, SMAD3</i>	1.99E-04
Inflammasomes	<i>APP, BCL2, MEFV, NLRC4, NLRP3, PANX1</i>	2.01E-04
PDGF signaling pathway	<i>ARHGAP15, ARHGAP26, EHF, ETS1, FLI1, ITPR1, MAPKAPK2, MKNK1, NCK1, NCK2, PIK3CD, PIK3R5, PRKCA, PRR5-ARHGAP8, RPS6KA1, RPS6KA2, RPS6KB2, STAT5A</i>	2.01E-04
Nucleotide-binding domain, leucine rich repeat containing receptor (NLR) signaling pathways	<i>APP, BCL2, BIRC2, IRAK2, MAP2K6, MEFV, NLRC4, NLRP3, PANX1, UBE2N</i>	2.35E-04
Insulin resistance	<i>CPT1A, CREB3L2, G6PC3, NR1H3, OGA, PCK2, PIK3CD, PRKAA1, PRKAG1, PRKCE, PRKCZ, RPS6KA1, RPS6KA2, RPS6KB2, SREBF1, TNF</i>	2.40E-04
Hematopoietic cell lineage	<i>CD22, CD34, CD3G, CD44, CD59, CD7, CSF3R, FLT3, GP5, GP9, HLA-DMA, HLA-DMB, IL1B, ITGA5, TNF</i>	2.56E-04
Pre-NOTCH processing in Golgi	<i>ATP2A2, FURIN, LFNG, NOTCH1, NOTCH4, ST3GAL3</i>	2.87E-04
Downstream signaling in naive CD8+ T cells	<i>CD247, CD3G, FASLG, NFATC1, PRF1, PRKCA, PRKCE, PTPN7, TNF, TNFRSF9</i>	3.34E-04
Caspase cascade in apoptosis	<i>APP, BCL2, BIRC2, CRADD, DIABLO, GSN, PRF1, SREBF1, TNF, TRAF2</i>	3.34E-04
HTLV-I infection	<i>CALR, CCND2, CD3G, CDC16, CDKN1A, E2F3, ETS1, ETS2, HLA-DMA, HLA-DMB, HLA-E, ITGAL, LCK, LTA, LTBR, MAP3K3, MYB, NFATC1, PIK3CD, RB1, SMAD3, SPI1, STAT5A, TERT, TNF, VDAC2, WNT5B, ZFP36</i>	4.10E-04
Chagas disease (American trypanosomiasis)	<i>CALR, CD247, CD3G, FASLG, GNAI2, GNAI3, GNAO1, IFNGR2, IL10, IL1B, PIK3CD, PLCB2, SMAD3, TLR6, TNF</i>	4.47E-04
IL1-mediated signaling events	<i>IL1B, IRAK3, MAP2K6, MAP3K3, PRKCZ, TMED7-TICAM2, TOLLIP, UBE2N</i>	5.09E-04
African trypanosomiasis	<i>F2RL1, FASLG, IL10, IL18, IL1B, PLCB2, PRKCA, TNF</i>	5.09E-04
S1P5 pathway	<i>GNA12, GNAI2, GNAI3, GNAO1</i>	5.35E-04
Nef and signal transduction	<i>CD247, DOCK2, ELMO1, LCK</i>	5.35E-04
S1P1 pathway	<i>ABCC1, GNAI2, GNAI3, GNAO1, PLCB2, S1PR1</i>	5.45E-04
Pathways in cancer	<i>BCL2, BIRC2, CDH1, CDK6, CDKN1A, CSF3R, CTBP1, E2F3, EPAS1, ERBB2, ETS1, FASLG, FLT3, GNA12, GNAI2, GNAI3, GNG7, GNGT2, LAMA3, NCOA4, PIK3CD, PLCB2, PPARG, PRKCA, RALBP1, RASSF5, RB1, RUNX1, RXRA, SMAD3, SPI1, STAT5A, TCF7, TPM3, TRAF2, TRAF5, WNT5B, ZBTB16</i>	5.71E-04
Hemostasis	<i>ACTN1, ACTN4, ANXA2, APP, ATP2A2, CD44, CEACAM6, CLU, DGKZ, DOCK2, DOCK5, F10, FAM49B, FCER1G, FERMT3, GNA12, GNAI2, GNAI3, GNG7, GNGT2, GP5, GP9, GRB7, INPP5D, ITGA5, ITGAL, ITPK1, ITPR1, KIF2A, LCK, MYB, NFE2, OLR1, P2RX1, PDE9A, PECAM1, PHACTR2, PIK3CD, PIK3R5, PIK3R6, PRKCA, PRKCE, PRKCZ, RAD51B, RAPGEF3, RCOR1, SERPINB2, SLC16A8, SLC7A7, SLC7A8, SLC8A1, STIM1, TBXA2R, TREM1, WDR1</i>	6.50E-04
