

Supplementary Table S7 Functional pathway analysis of genes with differentially methylated CpG sites (DMCs) in the case-case association analysis comparing DNA methylation in patients with SLE and patients with pSS

Pathway	Molecules	p-value
Neutrophil degranulation	ACPP, AMPD3, ANXA2, ARG1, ATG7, AZU1, CD44, CD59, CD63, CHI3L1, CHIT1, CLEC4C, CLEC5A, CRISPLD2, CTSG, CTSZ, DOCK2, ELANE, FCAR, FCER1G, FGR, FOLR3, GALNS, GSN, IMPDH1, IQGAP2, ITGAL, LCN2, LGALS3, LPCAT1, LRG1, MANBA, MAPK14, MPO, MS4A3, OLR1, OSCAR, P2RX1, PDXK, PLAC8, PRG2, PRTN3, PSMB7, PTPRJ, RAB10, RAB44, RNASE3, S100A8, S100A9, S100P, SLC15A4, SLC44A2, SLPI, TARM1, TBC1D10C, TIMP2, TMEM63A, TNFAIP6, TNFRSF1B, TOLLIP, TRPM2, UBR4, VAT1, YPEL5	4.19x10 ⁻¹¹
Innate immune system	ACPP, ADCY7, AHCYL1, AKT2, AMPD3, ANXA2, APP, ARG1, ATG7, ATP6V1E2, AZU1, BAIAP2, BCL2, C4BPA, CAMK2G, CARD11, CCR6, CD247, CD300LB, CD44, CD59, CD63, CDKN1A, CHI3L1, CHIT1, CLEC4A, CLEC4C, CLEC5A, CLU, CREBBP, CRISPLD2, CSK, CTSG, CTSZ, CUL1, DNM3, DOCK2, DUSP6, ELANE, ELMO1, FCAR, FCER1G, FGF17, FGR, FOLR3, GALNS, GSN, HLA-E, IMPDH1, IQGAP2, IRAK3, ITGAL, KSR1, LCN2, LGALS3, LPCAT1, LRG1, LRRFIP1, MANBA, MAP2K1, MAP2K6, MAP3K11, MAPK14, MAPKAPK2, MEFV, MPO, MS4A3, MYO10, MYO1C, NCK1, NLRC4, NLRP3, NOS3, OLR1, OSCAR, P2RX1, PAK2, PDXK, PHLPP1, PIK3CD, PIP5K1A, PLAC8, PRG2, PRTN3, PSMB7, PSMB8, PTEN, PTPRJ, RAB10, RAB44, RASA3, RNASE3, RPS6KA2, S100A7A, S100A8, S100A9, S100P, SARM1, SHC1, SLC15A4, SLC44A2, SLPI, SPRED2, SPTBN1, SYNGAP1, TARM1, TBC1D10C, TIMP2, TLR6, TMEM63A, TNFAIP6, TNFRSF1B, TOLLIP, TREM1, TREM2, TRPM2, UBR4, VAT1, WIPF1, YPEL5	3.22x10 ⁻⁹
C-MYB transcription factor network	BCL2, CASP6, CBX4, CDK6, CDKN1A, CREBBP, ELANE, ETS2, HIPK2, MAD1L1, MPO, MYB, PRTN3, SKI, SP1, SPI1	3.37x10 ⁻⁶
Regulation of transcriptional activity by PML	CREBBP, FASLG, PRAM1, RARA, RB1, TNF, TNFRSF1B	1.59x10 ⁻⁵
Notch-HLH transcription pathway	CREBBP, MAML1, MAML2, MAML3, NOTCH1, NOTCH4	3.04x10 ⁻⁵
Cyclin D associated events in G1	CCND2, CCNH, CDK6, CDKN1A, CUL1, E2F3, MNAT1, PPP2R2A, RB1, TFDP1	3.07x10 ⁻⁵
Pre-NOTCH expression and processing	ATP2A2, CREBBP, E2F3, LFNG, MAML1, MAML2, MAML3, NOTCH1, NOTCH4, ST3GAL3, TFDP1	3.14x10 ⁻⁵
Sphingolipid signaling pathway	ABCC1, ADORA3, AKT2, BCL2, FCER1G, GNA12, GNAI3, MAP2K1, MAPK14, NOS3, PIK3CD, PLCB2, PPP2R2A, PRKCZ, PTEN, S1PR2, SGMS2, TNF	6.12x10 ⁻⁵
Metal sequestration by antimicrobial proteins	LCN2, S100A7A, S100A8, S100A9	1.17x10 ⁻⁴
Hemostasis	ACTN4, AKT2, ANXA2, APP, ATP2A2, CBX5, CD44, CD63, CLU, CREBBP, CSK, DOCK2, DOK2, EHD1, F10, FAM49B, FCER1G, FERMT3, FGR, GNA12, GNA15, GNAI3, GNG7, GP9, GRB7, GYPC, INPP5D, ITGAL, ITPK1, KDM1A, KIF13B, KIF1B, KIF21B, KIF2A, MAFG, MAPK14, MYB, NFE2, NOS3, OLR1, P2RX1,	1.32x10 ⁻⁴

	<i>PHACTR2, PIK3CD, PIK3R5, PRKCZ, PRTN3, RAD51B, RAPGEF3, RCOR1, SHC1, SLC16A1, SLC16A8, SLC7A7, SLC7A8, STIM1, TREM1, TRPC3</i>	
IL2 signaling events mediated by STAT5	<i>BCL2, CCND2, CDK6, FASLG, LTA, PRF1, SHC1, SP1</i>	1.43x10 ⁻⁴
Pre-NOTCH transcription and translation	<i>CREBBP, E2F3, MAML1, MAML2, MAML3, NOTCH1, NOTCH4, TFDP1</i>	1.43x10 ⁻⁴
Map kinase inactivation of SMRT corepressor	<i>MAP2K1, MAPK14, NCOR2, RARA, ZBTB16</i>	1.61x10 ⁻⁴
Regulation of retinoblastoma protein	<i>ATF7, BRD2, CBX4, CDKN1A, CREBBP, MAPK14, PPARG, RB1, SFTPD, SPI1, TFDP1</i>	1.72x10 ⁻⁴
Insulin resistance	<i>AKT2, CREB3L2, G6PC3, NOS3, OGA, PCK2, PIK3CD, PRKAG1, PRKAG2, PRKCZ, PTEN, RPS6KA2, SLC27A1, SLC2A1, SREBF1, TNF</i>	1.96x10 ⁻⁴
Notch signaling pathway	<i>CDKN1A, CUL1, DLK1, DTX1, ENO1, KDM1A, MAML1, MAML2, NCOR2, NOTCH1, NOTCH4</i>	2.38x10 ⁻⁴
HIF-1 signaling pathway	<i>AKT2, BCL2, CAMK2G, CDKN1A, CREBBP, CUL2, EGLN1, ENO1, IFNGR2, LTBR, MAP2K1, MKNK1, NOS3, PIK3CD, SLC2A1</i>	3.33x10 ⁻⁴
Chagas disease (American trypanosomiasis)	<i>AKT2, CALR, CD247, FASLG, GNA15, GNAI3, GNAO1, IFNGR2, IL10, MAPK14, PIK3CD, PLCB2, PPP2R2A, TLR6, TNF</i>	3.71x10 ⁻⁴
Signaling by NOTCH	<i>ATP2A2, CREBBP, CUL1, DLK1, DTX1, E2F3, HDAC4, LFNG, MAML1, MAML2, MAML3, NCOR2, NOTCH1, NOTCH4, ST3GAL3, TFDP1</i>	3.71x10 ⁻⁴
