

Table SI. Screening for Co-DEGs in patients with RA using the GSE55457 and GSE77298 datasets.

Co-DEGs	Gene names
Upregulated	<i>XBPI SDC1 TOP2A ENO2 CAPG PRKCZ CFB KIAA010 FOXM1 TYMS PSMB10 CDC20 LOXL2 MAD2L1 SEMA4D GGH DLGAP5 IGF2BP3 CXCL9 HLA-DMB IL2RG CD48 NDC80 CD37 GCH1 PSMB9 KIF21B KIF11 MMP1 TLR8 CXCL10 IRF4 CCL5 CD52 LRMP BTN3A3 MELK ICAM3 CIITA QPCT CXCL13 CR2 LAMP3 ROR2 RASGRP1 LY75 HLA-DOB ITGB7 IL7R CD2 PNOC IL27RA MMP13 ADAM28 HCP5 ADAMDEC1 CD27 SLAMF1 PLA2G7 CENPM KIAA0125 LAG3 AIM2 DAZL TNFRSF17 GZMK PDK1 ASGR1 WISP1 CD3G LILRA3 CRTAM CCR2 CCR5 CD3D UGT2B17 GPR171 BLNK CXCR3 FDXR PTTG3P CORO1A SLC39A8 IGHM APOL1 CYTIP BUB1 TRAC PRKCB MOXD1 HMMR RRM2 CCL18 CD247 TPX2 CCL19 ST8SIA1 FZD2 TNFAIP8 MSX2 GZMH MS4A1 LY9 BIRC3 FLT3LG TNFSF11 WISP3 KMO COL13A1 IGLJ3 IGK SEL1L3 COL5A1 IGJ NCAPH PLXNC1 ITGA4 GUSBP11 RAC2 TRAF3IP3 LRRC15 NKG7 NCF1 TNFRSF4 COL8A1 HOXA1 IGKC IGLC1 IGLV6-57 CCDC88C IGLV1-44 LOC101929272 CD72 IGLL3P MCM5 TRAT1 HLA-DRB6 PLEKHO1 TACC3 SNX10 CDCP1 CEP55 DTL HJURP KIF20A FKBP11 SLAMF7 DOCK10 SLC29A3 SLAMF8 BCL11B EAF2 MREG DHRS9 ASPM UGT2A3 SLC2A6 MZB1 ITM2C KCNMB3 LEF1 IL21R NLRP2 ISG20</i>
Downregulated	<i>APOD EGFR ATP1A2 ENO3 ABCA8 NEFM PHKA1 TCAP ZBTB16 NDRG2 AKR1B10 EDNRB CES1P1 SEMA3E DIO3 FAT2 SLC19A2 NR4A3 C6 SGCA AR LDB3 FHOD3 PODXL2 PCDH9 TRHDE LGALS1 EBF2 NTRK2 ACACB</i>

Co-DEGs, common differentially expressed genes; RA, rheumatoid arthritis.

Table SII. Top five GO (BP, CC and MF) and KEGG terms related to the DEGs between the control and RA groups.

Index	Name	P-value	Adjusted P-value
BP	Leukocyte cell-cell adhesion	1.48×10^{-14}	4.45×10^{-11}
	Lymphocyte differentiation	1.35×10^{-13}	2.02×10^{-10}
	Leukocyte migration	1.22×10^{-12}	1.22×10^{-9}
	Mononuclear cell differentiation	2.00×10^{-12}	1.50×10^{-9}
	Lymphocyte mediated immunity	3.46×10^{-12}	2.08×10^{-9}
CC	External side of plasma membrane	1.77×10^{-16}	4.43×10^{-14}
	Alpha-beta T cell receptor complex	2.16×10^{-6}	2.71×10^{-4}
	Clathrin-coated endocytic vesicle membrane	5.27×10^{-5}	4.37×10^{-3}
	Clathrin-coated endocytic vesicle	1.93×10^{-4}	1.21×10^{-2}
	Endocytic vesicle membrane	4.38×10^{-4}	2.20×10^{-2}
MF	Immune receptor activity	1.61×10^{-6}	6.50×10^{-4}
	Chemokine receptor binding	5.15×10^{-6}	7.02×10^{-4}
	Antigen binding	6.89×10^{-6}	7.02×10^{-4}
	Chemokine activity	6.97×10^{-6}	7.02×10^{-4}
	Cytokine receptor activity	4.04×10^{-5}	3.25×10^{-3}
KEGG	Hematopoietic cell lineage	6.82×10^{-8}	1.55×10^{-5}
	Cytokine-cytokine receptor interaction	3.11×10^{-7}	3.54×10^{-5}
	Viral protein interaction with cytokine and cytokine receptor	7.54×10^{-7}	5.73×10^{-5}
	Chemokine signaling pathway	1.45×10^{-6}	8.28×10^{-5}
	Th17 cell differentiation	1.26×10^{-5}	5.74×10^{-4}

GO, gene ontology; KEGG, Kyoto Encyclopedia of Genes and Genomes; RA, rheumatoid arthritis; BP, biological process; CC, cellular component; DEG, differentially expressed gene; MF, molecular function; Th17, T helper 17.