

Supplemental Table 4: B Cell Gene Sets

Naive B cells	Autoimmune B cell	Memory B cells	plasma cells	RA autoimmune B cell	RA plasmablast	RA FCRL4+
CD1B	ITGAX	GPR183	SPAG4	ITGAX	MZB1	FCRL4
ABCB4	TBX21	SLC15A3	MZB1	ZEB2	XBP1	GPR82
TCL1A	FCRL4	ZBTB32	CHST15	CD52	FKBP11	KCTD12
P2RX1	FCRL5	SP140	QPCT	ACTB	SSR4	CCR5
P2RY14	CD27	MNDA	CD38	HLA-DPB1	HSP90B1	LOC731424
CCL8	HLA-DRA	TCF7	PDK1	TMSB4X	DERL3	SMPDL3A
CD72	CD24	TRBC1	MAN1A1	LRMP	SEC11C	CCR1
TREM1	TNF	NCR3	IGHE	ARPC1B	FKBP2	NR4A3
ZNF135	TNFSF11 (RANKL)	BCL2A1	MAST1	ARPC2	RRBP1	LOC102724297
IL4R	RUNX2	CD86	RRP12	PLEK	HDLBP	GPR34
	AICDA			ACTG1	SEL1L	C7orf26
	SOX5			SH3BGRL3	PRDX4	NR4A2
				CD19	FNDC3B	LOC90784
				ARPC5	SLAMF7	SCN3A
				COTL1	SDF2L1	GPR137B
				SAMD9L	SDC1	LMO2
				ARL6IP5	LMAN1	GSN
				RFTN1	NUCB2	SIGLEC6
				IFI44L	SSR3	LOC100130357
				LAPTM5	ITM2C	

Reference
 RA ABC and plasmablast Zhang Nat Imm 2019 PMID: 31061532
 ABC Ehrhardt JEM 2008 PMID: 18625746
 RA FCRL Amara J Autoim 2017 PMID: 28343748
 Naive, memory Plasma cells CIBERSORT Newman Nat Methods 2015 PMID: 25822800