

Supplemental Table 3: T Cell Gene Sets

CD4 Naive	CD4 Memory	TH1	TH17	Treg	CD4 RA (PD-1hi)	CD4 Chronic Ag
BACH2	SPIC	SMAD3	RORC	PMCH	PDCD1	IKZF2
FOXP1	KLF6	RASGRF2	HLF	CD7	TOX	EOMES
MYC	VGLL4	STOM	CCR6	SKAP1	ITM2A	MAF
	JUNB	YARS	ADAM12	SIT1	TIGIT	PRDM1
	JUN	TBX21	PTPN13	CD5	MAF	PAWR
	ARNTL	LYAR	NR1D1	IFI44L	CST7	JAZF1
		CBLB	CTSH	LAIR2	SCO2	NAB1
		KIAA0182	AQP3	FOXP3	CDCA7	NFATC1
		HCG18	CRY1	CD70	RAB37	ZBTB32
		CXCR3	S100A4	TYR	ICA1	KLF4
						MCM6
						TSHZ2
						SAP30
						BAZ1A
						NFAT5
						MDFIC
						PBX3

Reference
 CD4 Naive Crawford et al. Immunity 2014 PMID: 24530057
 CD4 Memory Crawford et al. Immunity 2014 PMID: 24530057
 TH1 GSE56179_TH1_VS_TH2/TH17_UP - Top 10 DEGs (Arlehamn et al J. Immunol 2014 PMID: 25092889)
 TH17 GSE56179_TH17_VS_TH1/TH2_UP - Top 10 DEGs (Arlehamn et al J. Immunol 2014 PMID: 25092889)
 Treg *Newman AM et al Nat Methods 2016 PMID: 25822800
 CD4 RA (PD-1hi) Rao DA et al Nature 2017 PMID: 28150777 (Peripheral Helper)
 Direct Ag Stim GSE13738_TCR_VS_BYSTANDER_ACTIVATED_CD4_TCELL_UP
 CD4 Chronic , Crawford et al. Immunity 2014 PMID: 24530057

*We selected a gene set of the top 10 most abundantly expressed genes that were differentially expressed between Tregs and other type of CD4 T cells.

Direct Ag Stimulated

ACADM	BTBD11	COL6A3	EGR1	HIBADH	MCTP2	NRAS	QSOX2	SLC25A44	TCEA2
ACSL3	BTBD3	COX10	ELP5	HMG20A	MGST2	NREP	RAB27A	SLC35G2	TENT4B
ADAT2	C2orf76	COX15	ETS2	HSD17B6	MOB1B	NT5C2	RAB33A	SLC39A14	TMEM135
AGPAT5	CACNA2D4	CPPED1	ETV6	IFT27	MOK	NTRK1	RCL1	SLC5A3	TNIP3
AHCYL2	CASP9	CPSF6	FAM210A	IFT74	MPP1	OSBP2	RGL4	SLC7A5	TPRG1
AIF1	CCDC51	CREB3L4	FASLG	ILDR2	MPZL1	PALLD	RGS3	SLC9B2	TRAK1
AP2B1	CCKAR	CTTN	FASN	IMPAD1	MRPS15	PAQR6	RHOBTB3	SOCS6	TRIM25
APOLD1	CCR7	CXCL13	FDX1	INTS6L	MRPS6	PDE7B	RNASEH2B	SOX4	TXNDC17
ARHGFE2	CD2	DBN1	FGGY	ITCH	MYB	PDGFA	RPAP2	SPA17	UBE2G1
ARHGFE6	CD200	DECR1	GEM	ITGAE	MYEF2	PI4K2A	RPRD2	SPON2	UBE2V2
ARHGFE7	CD27	DENR	GFI1	KCNK5	MYO7B	PMS1	RUBCNL	SPRY1	VAMP1
ASCC1	CD38	DHCR24	GFOD1	KYAT3	NAB1	PPA1	SEC11A	SPTBN1	VNN2
ATP8A1	CDK5	DHTKD1	GK	LANCL2	NBAS	PPP2R5A	SEC31B	SQLE	VPS8
ATP8B3	CENPV	DIXDC1	GNA12	LASP1	NDFIP2	PRF1	SELL	SSBP2	VWA5A
B3GNT5	CHMP5	DLEU1	GRAMD4	LAT2	NEMP2	PRPF6	SERPINB1	STAG3	YES1
B3GNTL1	CHRNA6	DNAH14	GRK3	LINC01281	NFATC3	PTDSS1	SIAH2	STAMBP	YWHAQ
BABAM2	CHSY1	DUS2	GRK4	LINC01588	NHS	PTGFRN	SIRPG	STK26	ZFYVE1
BATF3	CLDN12	DYNLL1	GSTO2	LRRCC1	NME7	PTPN14	SLC12A6	STMP1	ZSCAN30
BEND5	CLTC	EEF1AKNMT	GZMH	MAPRE2	NOA1	PTPN3	SLC15A4	SUOX	
BSPRY	CNIH1	EFL1	HDC	MCCC2	NR5A2	PXYLP1	SLC16A5	TARBP1	