

Antibody	Clone	Fluorochrome	Reference and manufacturer
Lineage	UCHT1; HCD14; 3G8; HIB19; 2H7; HCD56	Pacific Blue	Biolegend - 348805
CD7	M-T701	PE CF594	BD Biosciences – 562541
CD127	HIL-7R-M21	PE CY7	BD Biosciences – 560822
CD294/CRTH2	BM16	ALEXA FLUOR 647(APC)	BD Biosciences – 558042
CD117	104D2	BV605	BD Biosciences – 562687
ElastinR	HP59	FITC	Elastin Products Company
Zombie NIR		APC/Cy7	Biolegend - 423105
Tbet	AD2	PE	BD Biosciences - 561258
GATA3	L50-823	BB700	BD Biosciences - 566642
RORyt	REA278	Vio-B515	Miltenyi Biotec - 130-123-840
IL-4	MP4-25D2	APC-Cy7	Biolegend - 500834
IL-17	BL168	PerCP/Cy5.5	Biolegend - 512314
IFN γ	B27	PE	BD Biosciences - 559327
CD3	UCHT1	BV421	BD Biosciences – 562426
CD4	SK3	PECy7	BD Biosciences – 348809
CD8	SK1	BV510	BD Biosciences - 563919

Supplementary Table S1: Flow cytometry antibodies

Step number	Step	Parameters and values
1	Classifier	FDR=0.01
2	Cell Size Distribution	binStep=200, minCellSize=500
3	Mitochondrial Content	Method=absoluteThreshold, binStep=0.3, maxFraction=0.1
4	NumGenes Vs NumUmis	RegressionType=linear, p.level=0.0002221235
5	Doublet Scores	binStep=0.02, ProbabilityThreshold=0.2
6	Data Integration	Method=harmony, NumGenes=2000, Normalisation=logNormalize
7	Dimensionality Reduction	Method=rpca, numPCs=30, ExcludeGeneCategories=cellCycle
8	Embedding Settings	Method=umap, distanceMetric=cosine, minimumDistanc=0.3
9	Clustering Settings	Method=Louvain, resolution=1.2

Supplementary Table S2: Pipeline used for scRNAseq analysis

Primer	Sequence
<i>IL4</i> F	CCGTAACAGACATCTTTGCTGCC
<i>IL4</i> R	GAGTGTCCCTTCTCATGGTGGCT
<i>IL5</i> F	GGAATAGGCACACTGGAGAGTC
<i>IL5</i> R	CTCTCCGTCTTTCTTCTCCACAC
<i>IL13</i> F	ACGGTCATTGCTCTCACTTGCC
<i>IL13</i> R	CTGTCAGGTTGATGCTCCATACC
<i>IL25</i> F	AACCGCCACCCAGAGTCCTGT
<i>IL25</i> R	ACAGGCAACGGGCGTGGTACA
<i>IL33</i> F	GCCTGTCAACAGCAGTCTACTG
<i>IL33</i> R	TGTGCTTAGAGAAGCAAGATACTC
<i>AREG</i> F	GCACCTGGAAGCAGTAACATGC
<i>AREG</i> R	GGCAGCTATGGCTGCTAATGCA
<i>GAPDH</i> F	GTCTCCTCTGACTTCAACAGCG
<i>GAPDH</i> R	ACCACCCTGTTGCTGTAGCCAA

Supplementary Table S3: RT-qPCR primers