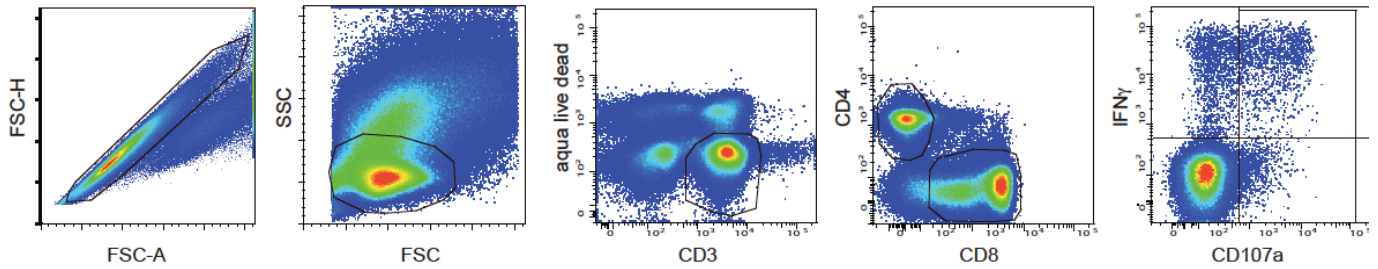


Supplementary Figure 1

Gating strategy of CD4 T cell sorting

A doublet exclusion gate was first used, followed by a lymphocyte gate and a viability gate. Live single lymphocytes were then separated into CD4 and CD8 cell gates and sorted according to CD107a⁺ IFN γ ⁺ and CD107a⁻ IFN γ ⁺.



Supplementary Table 1

Fluidigm Gene Panel

The panel of genes used during the Biomark Fluidigm analysis is listed in alphabetical order. The gene, description and probe sequence are listed for all 96 genes utilized in the panel.

Gene	Description	Gene ID	Probe Seq
ACTB	actin, beta	60	CCCTTTGCCGATCCGCCGCGCCGTC
APOBEC3G	apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3G	60489	TATGCAACCAGGCTCCACATAAACA
B3GAT1	beta-1,3-glucuronyltransferase 1 (glucuronosyltransferase P); CD57	27087	TCAGGATGACGAGGCCTCCTCA
BCL2	B-cell CLL/lymphoma 2	596	AACGGAGGCTGGGATGCCTTTGTGG
BCLX	BCL2-like 1	598	GAAACGGCGCTGGGATGCTTTGTGG
BCL6	B-cell CLL/lymphoma 6	604	GAAACCTTACCATTGTGAGAAGTGT
CCL3	chemokine (C-C motif) ligand 3	619514	CAAGCCCGGTGTCTATCTCTTAACC
CCL4	chemokine (C-C motif) ligand 4	6351	CTCAGCACCAAAATCCAAACCAAAA
CCL5	chemokine (C-C motif) ligand 5	6352	CCAAACCCAGCAGTGTCTTTGTCC
CCR5	chemokine (C-C motif) receptor 5	735311	GAGGCTCCCGAGCGGCAAGTTCAG
CCR6	chemokine (C-C motif) receptor 6	574335	AAAACATTTCCCGCAGACAGGATGA
CCR7	chemokine (C-C motif) receptor 7	574231	CTGGGCTACAGCGCCGCAAGTCC
CD109	CD109 molecule	135228	CCCTTCTGGGAGCCTTGGTTGTGAC
CD244	CD244 molecule, natural killer cell receptor 2B4	51744	GGGCAAAAGATGCCAGGATCAGCT
CD27	CD27 molecule	712693	CGGCACCTGTAACCTGTGTCTTCA
CD28	CD28 molecule	940	AGTAACAGGAAACAAGATTTGGTG
CD28	CD28 molecule	940	TATATTTTTCTGGGTGAGGAGTAA
CD3E	CD3e molecule, epsilon (CD3-TCR complex)	699467	CAGGCAAGGGGCAAAAACAAGGAG
CD4	CD4 molecule	713807	CTCGTGGTGTGAGAGCCACTCAGT
CD40LG	CD40 ligand	574160	AGAAGTTGGACAAGATGAAGATG
CD5	CD5 molecule	921	AGCTGGTATGCCAGGATTTCCAGG
CD69	CD69 molecule	969	AGTGCACAAGAAAATGATGCCACCA
CD84	CD84 molecule	8832	GCTGATAAGTGGGGAAGCCAGCA
CD8A	CD8a molecule	925	TTTACTGCAACCACAGGAACCGAAG
CD8B	CD8b molecule	928	CAGCTGAGTGTGGTGTATTCCTCT
CTLA4	cytotoxic T-lymphocyte-associated protein 4	705673	TGTAATTGATCCAGAACCGTGCCCA
CXCR3	chemokine (C-X-C motif) receptor 3	699438	GCCGCCCTCTGGAAACTTCAGCT
CXCR4	chemokine (C-X-C motif) receptor 4	7852	CATGGAGGGATCAGTATATACACT
CXCR5	chemokine (C-X-C motif) receptor 5	643	AGAACCGAGGAACTCAGAGTCGGA
EOMES	eomesodermin	704711	TACGAAACGAGGAGCGCATGTTT
FASLG	Fas ligand (TNF superfamily, member 6)	356	GAAACAAATAGGCCACCCAGTCCA
FOXP1	forkhead box P1	27086	CCATGCAAGCCGTGCATCCTGTAC
FOXP3	forkhead box P3	574303	GCTCATCGCTGGGCCATCCTGGAG
GAPDH	glyceraldehyde-3-phosphate dehydrogenase	574353	TCCAGGAGGAGATCCCTCCAAAT
GATA3	GATA binding protein 3	2625	CCCACCAAGGGAGCCAGTGTGCGG
GNLY	granulysin	10578	TAAAGCCACCCAGAGAGTGTTCCT
GUSB	glucuronidase, beta	2990	GCTACTACTGAAGATGGTATCGC
GZMA	granzyme A (granzyme 1, cytotoxic T-lymphocyte-associated serine esterase 3)	705712	TGTGTAATTCCTGAAGATGTCTGT
GZMB	granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 1)	716518	AGGACAGATGACGGGAGATCATCG
GZMH	granzyme H (cathepsin G-like 2, protein h-CCPX)	2999	CCCTGGGGCTGGGACAGGAGGATC
GZMK	granzyme K (granzyme 3; tryptase II)	705477	ATATATGTGCTGTTAAGCTCAAAAC
GZMM	granzyme M (lymphocyte met-ase 1)	3004	GCCTGTGTCAGTAGGACGCTCCTTT
HLA-DRB1	major histocompatibility complex, class II, DR beta 1	3123	TGGGACACCCGACCCAGCTTCTCG
ICAM1	intercellular adhesion molecule 1	3383	CCTCACCGGTGATCGACTCCAGAA
ICOS	inducible T-cell co-stimulator	705788	CATGAAAGTTTAAACAGGAGAAAT
IFNG	interferon, gamma	574282	AAAGCTGACCAATATTCTGGTAAT
IFNGR1	interferon gamma receptor 1	3459	TGGGCGCTCCTCAGTGCTCACGCC
IL10	interleukin 10	694931	TTAGTAAGCTCCAAGAGAAAGGGCT
IL12RB1	interleukin 12 receptor, beta 1	3594	GAAAGAGCAGCCAAACCCAGCTGGAG
IL13	interleukin 13	3596	CAGAACCAGAAAGGCTCCGCTCTCCA
IL16	interleukin 16	3603	AGAGCCAGCCAGTGACCCAAACAT
IL17A	interleukin 17A	3605	GAATCTCCACCAGCAATGAGGACCT
IL2	interleukin 2	708017	AACTAAAGGGATCTGAACAACACT
IL21	interleukin 21	59067	GAAACACAGACTAATCCCTCCCA
IL22	interleukin 22	50616	GAAAAGCTTGGAGAGATGGAGAG
IL23R	interleukin 23 receptor	149233	AAACACCTGAAACAGTTCCECAGG
IL2RA	interleukin 2 receptor, alpha	574300	CAAGTAGCAGTGGCCGCTGTGTTT
IL2RG	interleukin 2 receptor, gamma	3561	GAAAGCACCCAGCTGATTTCTTCC
IL4	interleukin 4	3565	TGCTGCTCCAAGAACCAACTGAG
IL5	interleukin 5 (colony-stimulating factor, eosinophil)	710622	TGCAAGGGGTACTGTGGAAGACT
IL6R	interleukin 6 receptor	3570	AGCCTCCAGTGAAGAAATCTTCTT
IL7R	interleukin 7 receptor	699869	ATCTGGAATTTGAAATATGTGGGG
IL9	interleukin 9	3578	ACAACAAGTGTCCATATTTTCTGCT
KLRB1	killer cell lectin-like receptor subfamily B, member 1	3820	ATAAACAACAGAGAGACCGGGTCT
KLRD1	killer cell lectin-like receptor subfamily D, member 1	3824	CTGCACCTCCAGATATCTATTTCC
KLRF1	killer cell lectin-like receptor subfamily F, member 1	51348	GCAGACCAGACAGTACTATGCCAAT
KLRG1	killer cell lectin-like receptor subfamily G, member 1	716727	AGGAAAATCTTCTCTTCCAGGCG
LAG3	lymphocyte-activation gene 3	713737	CCTCACTGTTCTGGGTCTGGAGCC
LAMP1	lysosomal-associated membrane protein 1	697331	TCTTCCAGTTCGGGATGAATGCAAG
LAMP2	lysosomal-associated membrane protein 2	695379	GAGCACAATGAGTTCCTGTGTGT
MAF	v-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian)	4094	TTCATAACTGAGCCCACTCGCAAG
MK167	antigen identified by monoclonal antibody Ki-67	697883	ATACGCTGAACAGGAGCCAGCAGCT
NKG2D	NKG2D protein	574240	ACAGCAAGAGGACCAAGGATTTACT
PDCD1	programmed cell death 1	10013575	AGAGCTCAGGGTGACAGAGAGGAG
PRDM1	PR domain containing 1, with ZNF domain	639	ACAATGATGAATCTCACACAACAC
PRF1	perforin 1 (pore forming protein)	5551	TGCCGCTTCTACAGTTTCCATGTGG
RORC	RAR-related orphan receptor C	717052	TCAGTATGAGAACACAATTTGAG
RUNX3	runt-related transcription factor 3	864	AATCCAAGGCACCTCGAAGCTGAAC
SELL	selectin L; CD62L	701419	ATCCAATATGTCAAAAATGGACAG
SLAMF1	signaling lymphocytic activation molecule family member 1; CD150	6504	GAGGCTTTTATGAGCAGTCTCCACT
SMAD3	SMAD family member 3	4088	CGATGAGCAGGTTCTGCAAACTCT
SMAD4	SMAD family member 4	4089	TGGCTTCCACAAGTCAAGCTGCCAG
SMAD7	SMAD family member 7	4092	TCTCAACCAACTGCAGACTGTCCA
STAT1	signal transducer and activator of transcription 1, 91kDa	693650	GGCAACAGGTGGCAGGATGTCTCAG
STAT3	signal transducer and activator of transcription 3 (acute-phase response factor)	6774	CAAGCAGTTTCTTCCAGCAGGAT
STAT4	signal transducer and activator of transcription 4	693854	TCAAGAACTATTGTGGTTGAGCC
STAT6	signal transducer and activator of transcription 6, interleukin-4 induced	6778	TGTCAGCCTTCCAGGAGGCTCAACT
TBX21	T-box 21	694044	GCTACCAGAAATGCCGAGATTACTC
TGFB1	transforming growth factor, beta 1	574135	AGTACAGGAAGTCTTGGCCCTGTGA
TNF	tumor necrosis factor	715467	CTCGACTTTGCCGAGTCTGGGCGAG
TNFRSF4	tumor necrosis factor receptor superfamily, member 4	7293	CCCTGGACCAACTGCACCTTGGCTG
TNFRSF9	tumor necrosis factor receptor superfamily, member 9	708281	TGTCGACCTGGCAACAACTGTTCT
TNFSF10	tumor necrosis factor (ligand) superfamily, member 10	694451	TTCAAGAAAAGCAACAAATACTCT
TRIM5	tripartite motif containing 5	85363	ATAAAAAGGACGGAGAACGTGACCT
ZBTB7B	zinc finger and BTB domain containing 7B	51043	TGTTCCGATCCACAGGAAACGCAAG