

- 1 **Supplementary Table S10.** Key resource table of antibodies and proteins used for flow
- 2 cytometry, multiplex immunohistochemistry and surface plasmon resonance studies.

Antibodies	Source	Identifier
Anti-human CD11c BUV395 (Clone B-Ly6)	BD Biosciences	Cat#: 563787 RRID: AB_2744274
Anti-human CD40-BUV496 (Clone 5C3)	BD Biosciences	Cat#: 741159 RRID: AB_2870735
Anti-human CD16-BUV563 (Clone 3G8)	BD Biosciences	Cat#: 748851 RRID: AB_2873254
Anti-human HLA-DR BUV661 (Clone G46-6)	BD Biosciences	Cat#: 612980 RRID: AB_2870252
Anti-human CD14 BUV805 (Clone MØP9)	BD Biosciences	Cat#: 742069 RRID: AB_2871355
Anti-human CD86 BV711 (Clone IT2.2)	BioLegend	Cat#: 305440 RRID: AB_2565835
Anti-human CD56 BV786 (NCAM1) (Clone B159)	BD Biosciences	Cat#: 555516 RRID: AB_395906
Anti-human CD19 FITC (Clone HIB19)	BioLegend	Cat#: 302206 RRID: AB_314236
Anti-human CD45 Nova Blue 610 (Clone 2D1)	Thermo Fisher	Cat#: H005T03B05 RRID: AB_2896532
Anti-human CD3 PE/Cy5 (Clone UCHT1)	BioLegend	Cat#: 300410 RRID: AB_314064
Anti-human CD8 BUV395 (HIT8a)	BD Biosciences	Cat#: 740303 RRID: AB_2740042
Anti-human CD4 BUV496 (Clone SK3)	BD Biosciences	Cat#: 612936 RRID: AB_2870220
Anti-human CD127 BV605 (A019D5)	BioLegend	Cat#: 351333 RRID: AB_2562019
Anti-Human CD3-BV421 (Clone UCHT1)	BioLegend	Cat#: 300434 RRID: AB_10962690
Anti-Human CD45-PerCP-Cy5.5 (Clone HI30)	BioLegend	Cat#: 304028 RRID: AB_893338
Anti-Human FoxP3 FITC (Clone 206D)	BioLegend	Cat#: 320106 RRID: AB_439752
Anti-Human FoxP3 AF488 (Clone 206D)	BioLegend	Cat#: 320112 RRID: AB_430883
Anti-human CD25 APC (Clone BC96)	BioLegend	Cat#: 302610 RRID: AB_314280
L/D NIR	Thermo Fisher	Cat#: L34975
Anti-Human CD3 Alexa700 (Clone UCHT1)	Biolegend	Cat# 300424 RRID: AB_493741
Anti-Human CD4 PerCP-Cy5.5 (Clone RPA-T4)	Biolegend	Cat# 300530 RRID: AB_893322
Anti-Human CD45RO APC-Fire 750 (Clone UCHL1)	Biolegend	Cat# 304250 RRID: AB_2616717

Anti-Human CCR7 BV421 (Clone G043H7)	Biologend	Cat# 353208 RRID: AB_11203894
Anti-Human CXCR3 Alexa647 (Clone G025H7)	Biologend	Cat# 353712 RRID: AB_10962948
Anti-Human CXCR5 Alexa488 (Clone J252D4)	Biologend	Cat# 356912 RRID: AB_2561894
Anti-Human HLA-DR BV510 (Clone L243)	Biologend	Cat# 307646 RRID: AB_2561948
Anti-Human CD8 BUV496 (Clone RPA-T8)	BD Bioscience	Cat# 612942 RRID: AB_2870223
Anti-Human ICOS BUV395 (Clone DX29)	BD Bioscience	Cat# 564777 RRID: AB_2738946
Anti human CD127 PE (Clone HIL-7R-M21)	BD Bioscience	Cat# 561028 RRID: AB_2296056
Anti-human CD32a FITC (Clone IV.3)	STEMCELL Technologies	Cat# 561028 RRID: AB_2296056
Anti-human CD8a BV605 (Clone RPA-T8)	Biologend	Cat# 301040 RRID: AB_2563185
Anti-human Ki-67 BUV805 (Clone B56)	BD Bioscience	Cat# 569635 RRID: N/A
Anti-TCR V β 22 PE (Clone IMMU 546)	Beckman Coulter	Cat# IM2051 RRID: AB_131306
Anti-human CD127 BUV395 (Clone HIL-7R-M21)	BD Bioscience	Cat# 742547 RRID: AB_2740857
Anti-human IL-2 PE/Cyanine7 (Clone MQ1-17H12)	Biologend	Cat# 500326 RRID: AB_2125594
Anti-human CD3-BV785 (Clone OKT3)	Biologend	Cat# 317330 RRID: AB_2563507
Anti-human CD45 PerCP/Cyanine 5.5 (Clone HI30)	Biologend	Cat# 304028 RRID: AB_893338
Anti-human CD56 PE-Cy7 (Clone NCAM 16.2)	BD Bioscience	Cat# 335791 RRID: AB_399970
Anti-human CD19 PE/Cyanine5 (Clone SJ25C1)	Biologend	Cat# 363042 RRID: AB_2801004
Anti-human CTLA-4 PE-Cy7 (Clone BNI3)	Biologend	Cat# 369614 RRID: AB_2632875
Anti-mouse CD45 AF700 (Clone 30-F11)	BD Bioscience	Cat#565478; RRID:AB_2739257
Anti-mouse CD3 BUV496 (Clone 145-2c11)	BD Bioscience	Cat#612955; RRID:AB_2870231
Anti-mouse CD4 PECy5 (Clone GK1.5)		Cat#612952; RRID:AB_2813886
Anti-mouse CD8 BUV805 (Clone 53-6.7)	BD Bioscience	Cat#612898; RRID:AB_2870186
Anti-mouse CD11b PerCPCy5.5 (Clone M1/70)	Biologend	Cat#101228; RRID:AB_893233
Anti-mouse CD19 PerCPCy5.5 (Clone 6D5)	Biologend	Cat#115534; RRID:AB_2072925

Anti-mouse CD25 PE-CF594 (Clone PC61)	BD Bioscience	Cat#562694; RRID:AB_2744346
Anti-mouse CD44 BV605 (Clone IM7)	Biologend	Cat#103047; RRID:AB_2562451
Anti-mouse CD62L BV711 (Clone MEL-14)	Biologend	Cat#104445; RRID:AB_2564215
Anti-mouse CD319 (Slamf7) APC (Clone 4G2)	Biologend	Cat#152004; RRID:AB_2632674
Anti-mouse CX3CR1 BV785 (Clone SA011F11)	Biologend	Cat#149029; RRID:AB_2565938
Anti-mouse F4/80 PerCPCy5.5 (Clone BM8)	Biologend	Cat#123128; RRID:AB_893496
Anti-mouse FOXP3 FITC (Clone FJK-16s)	Thermo Fisher Scientific	Cat#11-5773-82; RRID:AB_465243
Anti-mouse Granzyme PacBlue (Clone GB11)	Biologend	Cat#515408; RRID:AB_2562195
Anti-mouse Ly-6G PerCPCy5.5 (Clone 1AB)	Biologend	Cat#127616; RRID:AB_1877271
Anti-mouse PD-1 PECy7 (Clone J43)	Thermo Fisher Scientific	Cat#25-9985-82; RRID:AB_10853805
Anti-mouse Vβ8 TCR+ Alexa Fluor 647 (Clone KJ16-133.18)	Biologend	Cat#118414; RRID:AB_1186096
Anti-human Ki-67 BUV395 (Clone B56)	BD Bioscience	Cat#564071; RRID:AB_2738577
Zombie Near IR	Biologend	Cat#423106
Rat IgG2a, κ Alexa Fluor 647 (Clone RTK2758)	Biologend	Cat#400526; RRID:AB_2864284
Anti-mouse CD11c BB700 (Clone HL3)	BD Biosciences	Cat#566504; RRID: AB_2869773
Anti-mouse PD-L1 PE (Clone 10F.9G2)	BioLegend	Cat#124308; RRID: AB_2073556
Anti-mouse CD86 PE-Cy7 (Clone GL1)	Thermo Fisher	Cat#25-0862-82; RRID: AB_2573372
Anti-mouse CD80 PE-Cy5 (Clone 1G-10)	SouthernBiotech	Cat#1730-13; RRID: AB_2795209
Live/Dead Near-IR	Thermo Fisher	Cat#L34976
Anti-mouse XCR1 APC (Clone ZET)	BioLegend	Cat#148206; RRID: AB_2563932
Anti-mouse NKp46 BV785 (Clone 29A1.4)	BioLegend	Cat#137637; RRID: AB_2734201
Anti-mouse CD3 BV785 (Clone 17A2)	BioLegend	Cat#100232; RRID: AB_2562554
Anti-mouse CD103 BV711 (Clone M290)	BD Biosciences	Cat#564320; RRID: AB_2738743
Anti-mouse CD19 BV650 (Clone 6D5)	BioLegend	Cat#115541; RRID: AB_11204087
Anti-mouse CD172a BV605 (Clone p84)	BD Biosciences	Cat#740390; RRID: AB_2740120
Anti-mouse Ly-6C BV510 (Clone HK1.4)	BioLegend	Cat#128033; RRID: AB_2562351

Anti-mouse CD40 eFluor450 (Clone HM40-3)	Thermo Fisher	Cat#48-0402-82; RRID: AB_2574017
Anti-mouse CD8 BUV805 (Clone 53-6.7)	BD Biosciences	Cat#612898; RRID: AB_2870186
Anti-mouse F4/80 BUV737 (Clone T45-2342)	BD Biosciences	Cat#749283; RRID: AB_2873658
Anti-mouse CD11b BUV661 (Clone M1/70)	BD Biosciences	Cat#612977; RRID: AB_2870249
Anti-mouse CD45 BUV563 (Clone 30-F11)	BD Biosciences	Cat#612924; RRID: AB_2870209
Anti-mouse IA/IE BUV496 (Clone M5/114.15.2)	BD Biosciences	Cat#750281; RRID: AB_2874472
Anti-mouse Ly-6G BUV395 (Clone 1A8)	BD Biosciences	Cat#563978; RRID: AB_2716852
Multiplex Immunohistochemistry Antibodies		
Rat anti-mouse CD3-BX021-Cy5-RX021 (Clone 17A2)	Akoya Biosciences	Cat#4350014; RRID: AB_627010
Rat anti-mouse CD4-BX026-Atto 550-RX026 (Clone RM4-5)	Akoya Biosciences	Cat#4250016; RRID: AB_627057
Rat anti-mouse CD8 α -BX029-Atto 550-RX029 (Clone 53-6.7)	Akoya Biosciences	Cat#4250017; RRID: AB_627207
Anti-human CD8 (SP57)	Ventana	Cat#790-4460; RRID: AB_2335985
Anti-human FoxP3 (SP97)	Abcam	Cat# Ab99963; RRID: AB_10675258
Anti-human CD68 (KP-1)	Ventana	Cat#790-2931; RRID: AB_2335972
Detection Reagents	Source	Identifier
OmniMap Anti-Ms HRP	Roche/Ventana	Cat# 760-4310
OmniMap Anti-Rb HRP	Roche/Ventana	Cat# 760-4311
DISCOVERY Anti-Rb	Roche/Ventana	Cat# 760-4817
DISCOVERY Anti-NP	Roche/Ventana	Cat# 760-4827
DISCOVERY Yellow kit	Roche/Ventana	Cat# 760-239
DISCOVERY Purple kit	Roche/Ventana	Cat# 760-229
DISCOVERY Teal HRP Kit	Roche/Ventana	Cat# 760-247
Alexa Fluor® 647 AffiniPure™ F(ab') ₂ Fragment Goat Anti-Mouse IgG	Jackson ImmunoResearch Laboratories Inc.	Cat# 115-606-072; RRID: AB_2338928
PD-L1 staining kit	Source	Identifier
PD-L1 IHC 28-8 pharmDx	Dako/Agilent	Cat#SK005
Proteins	Source	Identifier
Recombinant human FcGR11A V176F	R&D Systems	Cat# 8894-FC
Recombinant human FcGR11a/CD16a	R&D Systems	Cat# 4325-FC
Recombinant human CTLA-4 Fc	Acro Biosystems	Cat# CT4-H5255

Recombinant human CTLA-4 (his)	Sino Biological	Cat# 11159-H08H
3 Research Resource Identifier (RRID)		