

List of antibodies for Multi-color Flow Cytometry and CITE-seq

Table 1. Antibody cocktail for cell surface markers. CB NK cells will not be fixed, and freshly stained samples will be sent for acquisition on the same day of the experiment.

Laser	Fluorochrome	Markers	Notes	Clones	Catalog No.
Violet	BV421	CD94	Differentiation	HP-3D9	BD Bioscience, 743948
Violet	eFluor 450	CD158a/g/h	Inhibitory Receptor	HP-MA4	48-1589-41 Thermofisher
Violet	BV480	LAIR1	Inhibitory Receptor	DX26	BD Bioscience, 746807
Violet	BV510	CD38	Cytolytic Function	HIT2	BioLegend, 303539
Violet	BV570	HLA-DR	Differentiation	L243	307637 BioLegend
Violet	BV605	CD56	Differentiation	HCD56	318334 BioLegend
Violet	BV650	CXCR3	Chemokine Receptor expressed on CD56 bright cells. CX3CR1 expressed on CD56 dim cells	G025H7	353729 BioLegend
Violet	BV711	DNAM-1	Activation Receptors	11A8	338333 BioLegend
Violet	BV750	Tim3	Inhibitory Receptor	F38-2E2	345055 BioLegend
Violet	BV785	NKp30	Activation Receptors	P30-15	325230 BioLegend
Blue	Vio-BB515	NKG2A	Inhibitory Receptor	REA110	130-126-972 Miltenyi
Blue	FITC	CD158e1	Inhibitory Receptor	DX9	312706 BioLegend
Blue	AF532	CD62L	Differentiation	DREG-56	58-0629-42 Thermofisher
Blue	NovaFluor Blue 585	CD11b	Differentiation/ Adhesion molecule	M1/70	M015T02B04 Thermofisher
Blue	NovaFluor Blue 610-70S	CD27	Differentiation	O323	H012T03B06 Thermofisher
Blue	NovaFluor™ Blue 660-120S	NKp46	Activation Receptors	9E2	H040T03B08 Thermofisher
Blue	PerCP	CD161	Inhibitory Receptor	HP-3G10	339933 BioLegend
Blue	PerCP-Cy5.5	CD2	Adhesion Molecule/ Cytolytic Marker	RPA-2.10	300216 BioLegend
Blue	PerCP-eFluor 710	NKp44	Activation Receptors	44.189	46-3369-42 Thermofisher
Yellow-Green	PE	CD132	Cytokine Receptor	TUGh4	338606 BioLegend

Yellow-Green	AF594	CD11a	Adhesion Molecule	HI111	301222 BioLegend
Yellow-Green	PE-AF610	CD45	Lineage	HI30	MHCD4522 ThermoFisher
Yellow-Green	PE-Cy5	NKG2D	Activation Receptors	1D11	320843 BioLegend
Yellow-Green	PE-Cy5.5	CCR7	Chemokine Receptor	3D12	35-1979-42 ThermoFisher
Yellow-Green	PE-AF700	CD16	Differentiation	3G8	MHCD1624 ThermoFisher
Yellow-Green	PE-Cy7	CD158b/j	Inhibitory Receptor	DX27	312609 BioLegend
Red	APC	CD158d	Inhibitory Receptor	mAb33	347008 BioLegend
Red	eFluor 660	CD57	Differentiation	TB01 (TBO1)	50-0577-42 ThermoFisher
Red	AF660	CD69	Activation Marker	FN50	606-0699-42 ThermoFisher
Red	AF700	CD25	Cytokine Receptor/ Activation Marker	BC96	302622 BioLegend
Red	APC-Cy7	DUMP channel = following	Lineage exclusion		
		CD3		HIT3A	300318 BioLegend
		TCR gd		B1	331206 BioLegend
		CD127		A019D5	351346 BioLegend
		CD33		WM53	303426 BioLegend
		CD14		HCD14	325624 BioLegend
		CD19		HIB19	302204 BioLegend

Table 2. Antibody cocktail for intracellular markers (CB NK cells will be fixed and permeabilized).

Laser	Fluorochrome	Markers	Notes	Clones	Catalog No.
Violet	eFluor 450	Granzyme B	Cytolytic Function	GB11	BD Bioscience, 561151
Violet	BV510	Ki67	Proliferation		350517 BioLegend
Violet	BV570	HLA-DR	Differentiation	L243	307637 BioLegend
Violet	BV605	CD56	Differentiation	HCD56	318334 BioLegend
Blue	AF488	Perforin	Cytolytic Function	B-D48	353310 BioLegend
Blue	NovaFluor Blue 585	CD11b	Differentiation	M1/70	M015T02B04 Thermofisher
Blue	PerCP	CD27	Differentiation	O323	H012T03B06 Thermofisher
Blue	PerCP-Cy5.5	CD2	Cytolytic Function	RPA-2.10	300216 BioLegend
Yellow-Green	PE	TBET	Transcription Factor	4B10	644810 BioLegend
Yellow-Green	PE-Cy5.5	EOMES	Transcription Factor	WD1928	Thermofisher 35-4877-42
Yellow-Green	PE-Cy7	CD45	Lineage	HI30	MHCD4522 Thermofisher
Red	APC	Granzyme A	Cytolytic Function	CB9	507220 BioLegend
Red	AF700	CD16	Differentiation	3G8	302026 BioLegend
Red	APC-Cy7	DUMP	Lineage		

Table 3. DNA-barcoded antibody cocktail for cell surface protein in CITE-seq.

Markers	Notes	Biolegend TotalSeq B
CD94	Differentiation	TotalSeq™-B0867
CD158 (KIR2DL1/S1/S3/S5)	Inhibitory Receptor	TotalSeq™-B0420
CD38	Cytolytic Function	TotalSeq™-B0389
HLA-DR	Differentiation	TotalSeq™-B0159
CD56 (NCAM)	Differentiation	TotalSeq™-B0047
CD183 (CXCR3)	Chemokine Receptor expressed on CD56 bright cells. CX3CR1 expressed on CD56 dim cells	TotalSeq™-B0140
CD226 (DNAM-1)	Activation Receptors	TotalSeq™-B0368
CD366 (Tim-3)	Inhibitory Receptor	TotalSeq™-B0169
CD337 (NKp30)	Activation Receptors	TotalSeq™-B0801
CD159a (NKG2A)	Inhibitory Receptor	TotalSeq™-B1374
CD158e1 (KIR3DL1, NKB1)	Inhibitory Receptor	TotalSeq™-B0599
CD62L	Differentiation	TotalSeq™-B0147
CD11b	Differentiation/ Adhesion molecule	TotalSeq™-B0161
CD27	Differentiation	TotalSeq™-B0154
CD335 (NKp46)	Activation Receptors	TotalSeq™-B0101
CD161	Inhibitory Receptor	TotalSeq™-B0149
CD2	Adhesion Molecule/ Cytolytic Marker	TotalSeq™-B0367
CD11a	Adhesion Molecule	TotalSeq™-B0185
CD45	Lineage	TotalSeq™-B0391
CD314 (NKG2D)	Activation Receptors	TotalSeq™-B0165
CD197 (CCR7)	Chemokine Receptor	TotalSeq™-B0148
CD16	Differentiation	TotalSeq™-B0083
CD158b/j (KIR2DL2/L3/S2)	Inhibitory Receptor	TotalSeq™-B0592
CD57	Differentiation	TotalSeq™-B0168
CD69	Activation Marker	TotalSeq™-B0146
CD25	Cytokine Receptor/ Activation Marker	TotalSeq™-B0085
TCR γ/δ	TCRgd T cells	TotalSeq™-B0139
CD3e	T cells	TotalSeq™-B0049
CD8a	CD8 T cells, NKT, cDC	TotalSeq™-B0080
CD127 (IL-7Ra)	Immature T and B cells	TotalSeq™-B0390
CD33	myeloid cells	TotalSeq™-B0052
CD14	classical monocytes	TotalSeq™-B0081
CD19	B cells	TotalSeq™-B0050
CD20	B cells	TotalSeq™-B0100
CD34	Stem and progenitor cells	TotalSeq™-B0054
CD123 (IL3RA)	pDC, CMP, GMP	TotalSeq™-B0064
CD1c	cDC1	TotalSeq™-B0160
CD66b	neutrophils	TotalSeq™-B0166
CD28	Costimulatory molecule for T, plasma cells and NK	TotalSeq™-B0386
IgG1 k Isotype Control	Negative control	TotalSeq™-B0090