

Table SI. Antibodies used for cell characterization by immunofluorescence.

CD	Fluorophore	Clone	Cat. no.	Lot	Cell subset
CD1c	PE	F10/21A3	564900	0162405	Myeloid DCs
CD3	FITC	HIT3a	555339	0064351	T cells
CD4	PE	RPA-T4	555347	0128475	T helper
CD8	APC-Cy7	SK1	557834	0247872	CTLs (T-cell subsets)
CD11b	APC	ICRF44	550019	0128389	DCs
CD11c	PE-CF594	B-ly6	562393	0108833	DCs
CD14	FITC	M5E2	555397	9315119	Monocytes
CD16	PE	B73.1	561313	0073839	NK
CD19	PE-CF594	HIB19	562294	0230909	B cells
CD25	APC	M-A251	555434	0064948	Regulatory T cells
CD45	PerCP-Cy TM 5.5	HI30	564105	0216944	PBMCs
CD45RO	PE-CF594	UCHL1	562299	0293276	T memory
CD56	PE	B159	555516	0160477	NK
CD57	APC	NK-1	560845	0212460	Senescent cells
CD127 (IL-7R α)	PerCP-Cy TM 5.5	HIL-7R-M21	560551	0142744	Memory and effector T cells
CD183 (CXCR3)	PerCP-Cy TM 5.5	1C6/CXCR3	560832	0279904	T effector
CD279 (PD-1)	PerCP-Cy TM 5.5	EH12.1	561273	0300813	Senescent cells
CD303 (BDCA-2)	BV510	V24-785	748005	0323865	Plasmacytoid DCs
HLA-DR	APC	G46-6	559866	0028348	Activated cells

All of the antibodies were obtained from BD Biosciences. CD, cluster of differentiation; DCs, dendritic cells; CTLs, cytotoxic T lymphocytes; NK, natural killer; PBMCs, peripheral blood mononuclear cells.

Table SII. Combinations of markers used for distinct populations of PBMC analysis.

Gating	Cell subset
CD45 ⁺ /SSC	CD45 ⁺ PBMCs
CD45 ⁺ CD14 ⁺	Monocytes
CD45 ⁺ CD14 ⁻ CD1c ⁺	DCs
CD45 ⁺ CD14 ⁺ D11c ⁺ CD1c ^{low}	Inflammatory monocyte-derived DCs
CD45 ⁺ CD14 ⁻ CD1c ⁺ CD11c ⁺ CD11b ^{low}	Classical DCs
CD45 ⁺ CD14 ⁺ CD11c ^{low} CD11b ^{dim}	Regulatory DCs
CD45 ⁺ CD303 ⁺ HLA-DR ⁺	Plasmacytoid DCs
CD45 ⁺ CD3 ⁺ /SSC	T cells
CD45 ⁺ CD3 ⁻ CD19 ⁺	B cells
CD45 ⁺ CD3 ⁻ CD16 ⁺ CD56 ⁺	NK cells
CD3 ⁺ CD4 ⁺ CD8 ⁻	Th cells
CD3 ⁺ CD4 ⁺ CD45RO	Memory T cells
CD3 ⁺ CD4 ⁺ CD8 ⁻ CXCR3 ^{low}	Effector CD4 ⁺ T cells
CD3 ⁺ CD4 ⁺ CD8 ⁻ HLA-DR ⁺	Activated CD4 ⁺ T cells
CD3 ⁺ CD4 ⁺ CD8 ⁻ CD57 ⁺ PD-1 ^{low}	Senescent CD4 ⁺ T cells
CD3 ⁺ CD4 ⁺ CD8 ⁻ HLA-DR ⁺ PD-1 ^{low}	Exhausted CD4 ⁺ T cells
CD3 ⁺ CD4 ⁺ CD8 ⁻ CD57 ⁺ PD-1 ^{low} CD45RO ⁺	Senescent memory CD4 ⁺ T cells
CD3 ⁺ CD4 ⁺ CD8 ⁻ CD25 ^{low} CD127 ^{low}	Regulatory CD4 ⁺ T cells
CD3 ⁺ CD4 ⁻ CD8 ⁺	Cytotoxic T lymphocytes
CD3 ⁺ CD4 ⁻ CD8 ⁺ CXCR3 ^{low}	Effector CD8 ⁺ T cells
CD3 ⁺ CD4 ⁻ CD8 ⁺ HLA-DR ⁺	Activated CD8 ⁺ T cells
CD3 ⁺ CD4 ⁻ CD8 ⁺ CD57 ⁺ PD-1 ^{-/low}	Senescent CD8 ⁺ T cells
CD3 ⁺ CD4 ⁻ CD8 ⁺ CD57 ⁺ PD-1 ^{-/low} CD45RO ⁺	Senescent memory CD8 ⁺ T cells
CD3 ⁺ CD4 ⁻ CD8 ⁺ HLA-DR ⁺ PD-1 ^{-/low}	Exhausted CD8 ⁺ T cells
CD3 ⁺ CD4 ⁺ CD8 ⁺	Double-positive T-cells
CD3 ⁺ PD-1 ^{low}	PD1 ^{low} T cells
CD3 ⁺ PD-1 ^{low}	PD1 ^{low} non-T cells
CD3 ⁺ CD25 ⁺	CD25 ⁺ (IL2R) T cells
CD3 ⁺ CD127 ^{low}	CD127 ^{low} (IL7R) T cells

PBMC, peripheral blood mononuclear cell; DCs, dendritic cells.; NK, natural killer.

Table SIII. Primer sequences used for miRNA detection.

Name	Forward	Reverse
hsa-miR-21-5p	5'-TAGCTTATCAGACTGATGTTGA-3'	
hsa-miR-27a-3p	5'-TTCACAGTGGCTAAGTTCCGC-3'	
hsa-miR-126-3p	5'-TCGTACCGTGAGTAATAATGCG-3'	Universal reverse primer kit ^a
hsa-miR-133a-3p	5'-TTTGGTCCCCTTCAACCAGCTG-3'	
hsa-miR-146a-5p	5'-TGAGAACTGAATTCCATGGGT-3'	
hsa-miR-221-3p	5'-AGCTACATTGTCTGCTGGGTTC-3'	
U6	5'-CTCGCTTCGGCAGCACA-3'	5'-AACGCTTCACGAATTTGCGT-3'

^amiRNA 1st Strand cDNA Synthesis kit; cat. no. 600036; Agilent Technologies, Inc. miRNA or miR, microRNA.