BD Biosciences Mouse CD Marker Chart

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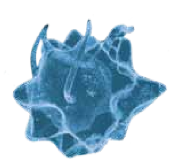
CD	Alternative Name	Ligands & Associated Molecules	T Cell	B Cell	Dendritic Cell	NK Cell	Stem Cell/Precursor	Macrophage/Monocyte	Granulocyte	Platelet	Erythrocyte	Endothelial Cell	Epithelial Cell
CD1d	CD1.1, CD1.2, Ly-38	Lipid, Glycolipid Ag	+	+	+	+	+	+	+				+
CD2	LFA-2, Ly-37, Ly37	CD48, CD58, CD59, CD15	+	+		+	+	+					
CD3γ	CD3γ, CD3 γ chain, T3γ	TCR complex	+										
CD3δ	CD3δ, CD3 δ chain, T3δ	TCR complex	+										
CD3ε	CD3ε, CD3 ε chain, CD3, T3ε	TCR complex	+			+							
CD4	L3T4, Ly-4	MHC class II, HIV gp120, IL-16	+		+	+	+	−					
CD5	Ly-1, Lyt-1, Ly-12, Ly-A	CD72	+	+									
CD5.1	Ly-1.1	CD72	+	+									
CD6	T12	CD166 (ALCAM), 3A11	+										
CD7	gp40		+	+		+	+						
CD8a	Ly-2, Lyt-2, Ly-B, Ly-35	MHC class I	+		+								
CD8b	Ly-3, Lyt-3, Ly-C, CD8b1	MHC class I	+										
CD8b.2	Ly-3.2, Lyt-3.2	MHC class I	+										
CD9	Tspan29	CD63, CD81, CD82, CD315, CD316	+	+	+		+	+	+	+			
CD10	CALLA, MME, NEP	Peptides	+	+			+						
CD11a	Ly-15, Ly-21, Integrin αL	CD54, CD102, CD50	+	+	+	+		+	+				
CD11b	Integrin αM, Ly-40, CR3, CR3A, MAC1	CD54, iC3b, Fibronectin			+	+		+					
CD11c	ITGAx [Integrin αx], CR4 [complement receptor-4], iC3b receptor, Leu M5, p150,95, CD18/CD11c	iC3b, Fibronectin, ICAM-1	+		+	+	+	+	+				
CD13	Aminopeptidase N, gp150	L-Leucyl-β-naphthylamine			+			+				+	+
CD14	Mo2, LPS Receptor	LPS/LPB complex, TLR2, TLR4			+			+	+				
CD15	SSEA-1, FAL, Lewis x	CD62					+		+				
CD16	FcgRIII, Fc gRIIIa, Ly-17, FCGR3, IGFR3	IgG Fc		+	+	+		+	+				
CD18	Integrin β2	CD11a, b, c	+	+	+	+		+	+	+	−	−	−
CD19	B4	CD21, CD81	−	+	+	−	+	−	−	−	−	−	−
CD20	Ly-44, B1			+				+	+				
CD21	CR2/CR1	C3d, EBV, CD23, CD19, CD81	+	+									
CD22.2	Lyb-8.2, Siglec-2	N-Glycolyl neuraminic acid		+									
CD23	FceRII, Ly-42	IgE, CD21, CD11b, CD11c		+	+								
CD24	Heat Stable Antigen, Ly-52, Nectadrin	CD62P (P-Selectin)	+	+	+		+						
CD25	Ly-43, IL-2 Receptor α chain, p55	IL-2 Receptor α	+	+	+			+					
CD26	Dipeptidyl peptidase, DPP IV, THAM	Polypeptides	+	+		+							+
CD27	T14, s152, tnfrs7, Tp55	CD70, TRAF2, TRAF5	+	+		+							
CD28	T90/44 antigen or Tp44	CD80 (B7-1), CD86 (B7-2)	+	−		+							
CD29	Integrin β1, VLAb, gpIIa	VCAM-1, MAdCAM-1, ECM	+	+	+	+		+	+	+		+	+
CD30	Ki-1	CD153	+	+		+		+					
CD31	PECAM-1, gpIIa, endoCAM, platelet endothelial cell adhesion molecule, PECA1	CD38, Vitronectin receptor	+	+		+		+	+	+	−	+	
CD32	FcgRII, Ly-17, Ly-m20; Fc-γ receptor 2, Low affinity immunoglobulin γ Fc receptor II	IgG		+				+	+	+			
CD33	gp67; SIGLEC-3; Sialic acid-binding Ig-like lectin 3, myeloid cell surface antigen CD33	Sialylated glycoproteins; Sugar chains containing sialic acid; α-2,6-linked sialic acid	−	−	+	−	+	+	+	−	−	−	−
CD34	Mucosialin	CD62L (L-Selectin)	−	−	−	−	+	−	−	−	−	+	−
CD35	CR1, C3b receptor	C3b, C4b, iC3, iC4	+	+	+	+		+	+		+		
CD36	Scavenger receptor, FAT, GPIV, Scarb3	Oxidized LDL, Thrombospondin, Collagen			+		+	+		+	+	+	
CD37	gp52-40, Leukocyte antigen CD37, Tetraspanin-26, TSPAN26	CD53, CD81, CD82, MHC class II	+	+		−		+	+	−	−		
CD38	ADP-ribosyl cyclase, T10, Cyclic ADP-ribose hydrolase 1	CD31, Hyaluronic acid, CD3/TcR complex, CD16, HLA Class II	+	+	+	+	+	+	−				
CD39	NTPDase-1; Ectonucleoside triphosphate diphosphohydrolase 1 (ENTPD1), ATPde-hydrogenase, NTPdehydrogenase-1	ATP, ADP		+	+	+		+		−		+	+
CD40	gp39 receptor, Bp50, MGC9013, TNFRSF5, Tumor necrosis factor receptor super-family member 5	CD154	−	+	+	−	+	+	−		−	+	+
CD41	GPIIb, Integrin αIIb, Platelet membrane glycoprotein IIb, ITGA2B, Integrin α2b, Human Platelet Antigen-3 (HPA-3)	Fibronectin, Fibrinogen, von Willebrand factor, Thrombospondin	−	−	−	−	+	−	−	+	−	−	−
CD42a	GPIX, GP9, Platelet glycoprotein IX	von Willebrand factor	−	−	−	−	+	−	−	+	−	−	−
CD42b	GPIbα, Platelet glycoprotein Ib α	von Willebrand factor	−	−	−	−	+	−	−	+	−	−	−
CD42c	GPIbβ, Platelet glycoprotein Ib β	von Willebrand factor	−	−	−	−	+	−	−	+	−	−	−
CD42d	GPV, Platelet glycoprotein V	von Willebrand factor	−	−	−	−	+	−	−	+	−	−	−
CD43	Ly-48, Sialophorin, Leukosialin, Galactoglycoprotein, SPN	CD54	+			+	+	+	+	+			
CD44	Ly-24, ECMRII, H-CAM, Pgp-1, Phagocytic glycoprotein I, Extracellular matrix receptor III, GP90 lymphocyte homing/adhesion receptor, Hyaluronate receptor	Hyaluronate, Collagen, Fibronectin, Laminin, Osteopontin	+	+		+		+	+		+	+	+
CD45	Leukocyte Common Antigen (LCA)	CD150, Galectin-1, CD2, CD3, CD4, CD45AP, p56lck, p59fyn, Src kinases	+	+	+	+	+	+	+	−	−	−	−
CD45.1	Ly-5.1, Ly-5a, PTPRCa		+	+	+	+	+	+	+	−	−	−	−
CD45.2	Ly-5.2, Ly-5b, PTPRCb		+	+	+	+	+	+	+	−	−	−	−
CD45R	B220, Ly-5, Lyt-4, T200, Protein tyrosine phosphatase receptor type C (PTPRC)		+	+	+	+	+	+	+	−	−	−	−
CD45RA			+	+	+	+	+	+	+	−	−	−	−
CD45RB			+	+	+	+	+	+	+	−	−	−	−
CD45RC	Protein tyrosine phosphatase, receptor type C (PTPRC)		+	+	+	+	+	+	+	−	−	−	−
CD45RO			+	+	+	+	+	+	+	−	−	−	−
CD46	Membrane Cofactor Protein (MCP), Trophoblast leukocyte common antigen, TRA2.10	C3b, C4b, Measles virus	+	+		+		+	+	+	−	+	+
CD47	Integrin-associated protein (IAP), OA3, Neurophilin, MER6, gp42	SIRP (CD172), CD61, Thrombospondin	+	+	+	+		+	+	+	+	+	+
CD48	Blast-1, Hulym3, BCM-1, OX-45, MEM-102	CD2, lck, fyn, CD229, CD244	+	+		+	+	+					
CD49a	VLA-1α, Integrin α1	Collagen, Laminin	+	−		+		+	−	−	−	−	
CD49b	VLA-2α, Integrin α2, gPIa	Collagen, Laminin, MMP-1	+	+		+	+	+	−	+	−	+	+
CD49c	VLA-3α, Integrin α3, GAPB3, Galactoprotein B3, MSK18, Very Common Antigen-2 (VCA-2)	Fibronectin, laminin, collagen	+	+		−		+			−	+	+
CD49d	VLA-4α, Integrin α4	CD106 (VCAM1), MAdCAM, Fibronectin, Paxillin	+	+	+	+	+	+	−	−	−	+	
CD49e	VLA-5α, Integrin α5, Fibronectin receptor	Fibronectin, Invasin, Fibrinogen	+		+	+	+	+		+	+	+	+
CD49f	VLA-6α, Integrin α6, gpI	Laminin, Invasin	+				+	+		+		+	+
CD51	Integrin αv, VNR-α, Vitronectin-Rα	Vitronectin, fibronectin, fibrinogen, thrombospondin, von Willebrand factor, CD31						+	−	+		+	
CD52	CAMPATH-1, HE5, Epididymal secretory protein E52, CLS1, MB7, B7		+	+		+		+		−	−		+
CD53	MOX44, TSPAN25, Tetraspanin-25	VLA-4, Integrins	+	+	−	+	+	+	+	−	−		−
CD54	ICAM-1, Ly-47, MALA-2	LFA-1, Mac-1, CD43, CD11a/CD18, CD11b/CD18, Rhinovirus, CD227	+	+				+				+	
CD55	Decay accelerating factor (DAF), complement-glycosylphosphatidylinositol, Cromer blood group, Daf-GPI, Daf1, GPI-DAF	C3b, C4b, CD97, Echovirus	+	+		+	+	+	+	+	+	+	+
CD56	Leu-19, NKH-1, Neural Cell Adhesion Molecule (NCAM)	NCAM-1, Heparin sulfate	+			+							
CD59	1F5Ag, H19, protectin, MACIF, MIRL, P-18	C8-α, C9, lck, fyn	+			+		+	+		+		
CD61	GP IIIa, Integrin β3	Fibrinogen, PTK2, ITGB3BP, TLN1 and CIB1						+		+		+	
CD62E	E-Selectin, ELAM-1, LECAM-2	Sialyl Lewis x,a, CLA, CD162										+	
CD62L	L-Selectin, LECAM-1, Lnhr, Ly-22, Ly-m22, Lyam-1, Lyam1	CD34, GlyCAM-1, MAdCAM-1	+	+		+		+	+				
CD62P	P-Selectin, GMP-140, PADGEM	CD162, CD24								+		+	
CD63	LIMP, MLA1, gp55, NGA, LAMP-3, ME491, OMA81H, TSPAN30, granulophysin, melanoma 1 antigen	VLA-3, VLA-6, CD81, CD9, PI4-kinase, CD117, CD82						+	+	+		+	
CD64	FcγRI, Fc-γ receptor 1, High affinity immunoglobulin γ Fc receptor I, FcγRIA	IgG	−	−	+	−	+	+	+	−	−	−	−
CD66a	BGP, CEA-1				+				+	+			
CD66b	CGM6, CEA-3								+				
CD68	Macrosiali lysosomal glycoprotein 110	LDL			+			+					
CD69	Very Early Activation Antigen					+							
CD70	CD27 Ligand	CD27	+	+									
CD71	Transferrin Receptor	Transferrin	+	+		+							
CD72	Lyb-2, Ly-m19	CD5, CD100	+	+	+			+					
CD73	NT, Ecto-5′-nucleotidase	NMP	+	+	+								
CD74	Ia-associated invariant chain (Ii)	CD44, MHC class II	+	+	+								
CD77	Pk blood group antigen; BLA; CTH; Gb3, α-1,4-Galactosyltransferase, Gb3 synthase, A4galt												
CD79a	Iga, mb-1, Ly-54	Ig, CD5, CD19, CD22, CD79b		+									
CD79b	Igb, B29	Ig, CD5, CD19, CD22, CD79a		+									
CD80	B7/BB1, B7-1, Ly-53	CD28, CD152	+	+	+			+					
CD81	TAPA-1	CD9, CD19, CD21, CD225, CD315, CD316	+	+	+	+		+					
CD82	C33 Ag, KAI1	MHC molecules, CD4, CD8, CD20, CD37, CD81, Integrins								+			
CD83	HB15		+	+	+								
CD84	GR6	TLR4	+	+	+			+	+	+			
CD86	B7-2, B70, Ly-58	CD28, CD152	+	+	+			+				+	
CD87	uPA Receptor	uPA, Vitronectin	+			+		+	+				
CD88	C5a Ligand, C5aR	C5a			+			+	+				
CD90	Thy-1, q, T25		+		+	+		+					
CD90.1	Thy-1.1, q-AKR		+		+	+		+					
CD90.2	Thy-1.2, q-C3H		+		+	+		+					
CD90.2	LRP, A2MR, AI316852, α 2-Macroglobulin receptor	LDL, LRPAP1, α2M						+					
CD93	AA4.1, C1qRp	CCL21						+				+	
CD94	KP43, klrd1	Qa-1/Qdm	+			+	+						
CD95	Fas, APO-1	CD178 (Fas Ligand)	+	+	+			+			+		
CD96	Tactile	CD155, Nectin-1	+	+		+							
CD97	TM7LN1, TM7S	CD55	+	+	+	+		+			+		
CD98	4F2, Ly-10, RL-388	CD29, CD147, Tropomyosin, Actin	+	+		+							

CD	Alternative Name	Ligands & Associated Molecules	T Cell	B Cell	Dendritic Cell	NK Cell	Stem Cell/Precursor	Macrophage/Monocyte	Granulocyte	Platelet	Erythrocyte	Endothelial Cell	Epithelial Cell
CD99	Paired immunoglobin-like type 2 receptor-ligand	PILRB	+	+					+			+	
CD100	Semaphorin H, coll-4, Semaphorin 4D, Sema 4D	CD72, Plexin-B1, CD45	+	+									
CD101	IGSF2, V7		+		+			+	+				
CD102	ICAM-2, Ly-60	LFA-1, Mac-1	+	+	+			+		+			
CD103	Integrin aIEL	E-Cadherin	+										
CD104	Integrin β4	Laminin, Plectin	+										
CD105	Endoglin	TGF-β					+	+					
CD106	VCAM-1	VLA-4			+			+					
CD107a	LAMP-1	Collagen, Laminin, Fibronectin	+	+				+					
CD107b	LAMP-2, LGP-96, LAMP-B		+					+					
CD108	Sema7a	Tyrosine kinases	+										
CD110	Thrombopoietin, Receptor, c-mpl	JAK2, Thrombopoietin					+			+			
CD111	PRR1, Nectin-1, CD111, CLPED1, ED4, HIgR, HVEC, MGC142031, MGC16207, OFC7, PRR, PVRR, PVRR1, SK-12	a-Herpesvirus, Nectin-3, Afadin,					+						
CD112	PRR2, Nectin-2, PVRL2, HVEB, MPH, Pvr, Pvs, CD112, AI325026, AI987993, Nectin-2, Pvrl2	CD226, PRR3, afadin						+				+	+
CD113	PVRL3, Nectin-3	Nectin-1, Nectin-2, PVR										+	
CD114	G-CSF Receptor, CSF3R, HG-CSFR, Granulocyte colony-stimulating factor receptor, G-CSFR	G-CSF, JAK1, JAK2					+		+				
CD115	M-CSF Receptor, CSF-1R, c-fms, Fim-2	M-CSF					+	+					
CD116	GM-CSF Receptor α chain	GM-CSF			+			+	+			+	
CD117	c-kit, Steel factor receptor, Dominant white spotting	c-Kit Ligand (Steel, stem-cell, or mast-cell growth factor)	+	+	+	+	+	+	+				
CD118	IFN-α/β Receptor, Type I IFN-R, IFN-α Receptor	IFN-α, IFN-β					+	+					
CD119	IFN-γ Receptor α chain	IFN-γ	+	+	+	+		+	+			+	+
CD120a	TNFR1, TNF-R55	TNF, Lymphotoxin A (TNF-β)	+	+	+	+	+	+	+			+	
CD120b	TNFR2, TNF-R75	TNF, Lymphotoxin A (TNF-β)	+	+	+	+	+	+	+			+	
CD121a	IL-1 Receptor, Type I	IL-1α, IL-1β	+		+							+	
CD121b	IL-1 Receptor, Type II	IL-1α, IL-1β	+	+	+			+					
CD122	IL-2 and IL-15 Receptor b chain	IL-2, IL-15	+	+		+		+					
CD123	IL-3 Receptor α chain	IL-3			+		+	+	+			+	
CD124	IL-4 Receptor α chain	IL-4, IL-13	+	+	+				+		+		+
CD125	IL-5 Receptor α chain	IL-5		+					+				
CD126	IL-6 Receptor α chain	IL-6	+	+	+				+				+
CD127	IL-7 Receptor α chain	IL-7	+	+				+					
CD130	gp130, Common β chain	CD126, IL-11R, LIF-R	+	+	+	+					+	+	
CD131	AIC2A and AIC2B, bIL-2 and bc	IL-3 (AIC2A), CD123, CD125, CD116	+	+			+						
CD132	Common γ chain	Subunit of IL-2, IL-4, IL-7, IL-9, IL-15, IL-21 receptors	+	+	+			+					
CD133	AC133, Prominin-1 (PROM1)						+					+	+
CD134	Ly-70, OX-40 antigen, ACT35 antigen	OX-40 Ligand	+	+									
CD135	Flk-2, Flt3, Ly-72	flt3 Ligand	+	+	+			+			+		
CD136	STK, Mst1r, RON, MSP Receptor	MSP, HGFI					+	+					+
CD137	4-1BB, Ly-63, Tnfrsf9	4-1BBL, Fibronectin, Laminin, Vitronectin, Collagen VI	+	+	+	+		+					+
CD138	Syndecan-1, Sdc1	Interstitial matrix proteins		+						+			+
CD140a	PDGF Receptor α chain, PDGFR-α	PDGF-A, PDGF-B, PDGF-C								+			
CD140b	PDGF Receptor β chain, PDGFR-β	PDGF-B, PDGF-D											
CD141	Thrombomodulin, TM	Thrombin						+		+		+	
CD142	Tissue Factor, Coagulation Factor III	Plasma Factor VII/VIIa (FVII)						+		+		+	+
CD143	Angiotensin converting enzyme, Dipeptidyl peptidase, ACE	Angiotensin I, Bradykinin			+			+				+	+
CD144	VE-Cadherin, Cdh5, 7B4, VECD	CD144, β Catenin					+					+	
CD146	MUC18, S-endo, Mcam		+		+							+	
CD147	Basigin, HT7, Neurothelin, gp42, Neurothelin									+	+	+	
CD148	PTPb2, ByP, Scc-1, RPTPJ		+	+	+			+	+	+		+	
CD150	IPO-3, ESTM51, Slam	Measles virus, CD45	+	+	+				+			+	
CD151	SFA-1, PETA-3, Tspan24	Integrin β1								+		+	+
CD152	CTLA-4, Ly-56	CD80, CD86	+	+									
CD153	CD30 Ligand	CD30	+	+				+					
CD154	gp39, CD40 Ligand, Ly-62, HIGM1, IMD3, T-BAM, Tnfsf5	CD40	+	+				+		+			
CD155	Polio virus receptor (pvr), Tage4	CD96, CD226, Nectin-3	+	+	+			+					+
CD156a	MS2, ADAM 8							+	+				
CD156b	TACE, ADAM17	TNF-α, APP, CD62L	+	+	+			+	+	+		+	+
CD156c	ADAM10, Kuz, Kubanian, Madm	pro-TNF-α, APP, Notch											
CD157	Ly-65, BP-3; BST-1		+	+				+	+			+	
CD159a	NKG2A, NKG2B	Qa-1/Qdm, HLA-E	+			+							
CD159c	NKG2C, KLRC2	HLA-E, CD94	+			+							
CD160	BY55	HLA-C	+			+							
CD161a	NKR-P1A, Ly55a		+			+							
CD161b	NKR-P1B, Ly55b, Ly55d		+			+							
CD161c	NKR-P1C, NK-1.1, Ly-55c, Ly-59		+			+							
CD162	P-Selectin glycoprotein ligand (PSGL-1), P-Selectin-IgG fusion protein	CD62P, CD62L	+				+	+	+	+			
CD163	Scavenger receptor cysteine-rich type 1 protein M130	CSNK2B						+					
CD164	MGC-24, A115, A24	CXCR4					+	+					+
CD166	ALCAM, BEN, DM-Grasp, MuSC, SC1	XΔ6	+	+			+	+					+
CD167a	Cak, Nep, Ddr1	Collagen			+								+
CD168	RHAMM, Hmmr	CD44	+					+					
CD169	Sialoadhesin, Siglec-1, Sn	CD43, CD162, CD227, CD206	+	+				+					
CD170	Siglec-5, Siglecf, Siglec9	Ganglioside			+			+					
CD171	L1, L1-NCAM, NCAM-L1, L1cam	L1, CD56, CD24	+	+	+			+					
CD172a	SIRPa, SHPS-1, BIT, P84 Antigen, SIRP, SHP-1, Ptpns1, AI835480	CD47, PTPN11, CD22, PTPN6			+		+	+	+				
CD172b	SIRPb1, 9930027N05Rik, Sirpb1a	DAPI2			+			+	+				
CD176	TF,HP, Tfn, hpx, AI266983, MGC102653, Trf	TFRC, Transferrin receptor											
CD177	NB1, Pdp3, 1190003K14Rik		+			+		+	+			+	
CD178	CD95L, Fas Ligand, Tnfsf6; APT1LG1	CD95	+		+								
CD178.1	mFasL.1	CD95	+		+								
CD179a	VpreB, MGC151428, Vpreb1	IGLL1	+	+				+					
CD179b	I5			+									
CD180	RP105, Ly-78, F630107B15	LPS, LY86		+	+			+					
CD181	CXCR1, IL8Ra	MIP2, KC, (human IL-8)				+		+	+			+	
CD182	CXCR2, IL8Rb, CDw128, Cmkar2, Gpcr16	CXCL2, CXCL3, CXCL5, CXCL6, MIP2, KC, (human IL-8), GCP-2, LIX				+		+	+			+	
CD183	CXCR3, Cmkar3, gpr9	CXCL9, CXCL10, CXCL11, IP-10, CRG-2, 6Ckine, Mig, I-TAC	+	+		+		+					
CD184	CXCR4, Cmkar4, Fusin/LESTR	CXCL12, SDF-1, PBSF, HIV-1	+	+				+	+				
CD185	CXCR5, BLR1, Gpcr6	CXCL13, BLC	+	+	+								
CD186	CXCR6, BONZO, STRL33, BB217514	CXCL16, HIV-1, SIV	+	+	+	+							
CD191	CCR1, MIP-1aR, Cmkbr1	CCL3, 5, 7, 8, 14, 15, 23, MIP-1a, RANTES, MRP2, CCF18, MIP-1g	+	+	+		+	+					
CD192	CCR2, Ckr2, Ccr2a, Ccr2b, Ckr2a, Ckr2b, mJe-r, Cmkbr2, Cc-ckr-2	CCL2, 7, 8, 12, 13, 16, HIV-1, MCP-5	+	+	+			+					
CD193	CCR3, MIP-1aRL2, CKR3, Cmkbr3, CC-CKR3, Cmkbr1l2, MGC124265, MGC124266, Ccr3	CCL3, 5, 7, 8, 11, 14, 15, 24, 26, HIV-1	+		+			+	+				
CD195	CCR5, Cmkbr5, AM4-7	MIP-1a, MIP-1b, RANTES, MCP-1, HIV-1	+		+	+		+					
CD196	CCR6, KY411, Cmkbr6, CC-CKR-6	CCL20, CCL19, b-Defensin, MIP-3a, LARC, Exodus-1	+	+	+								
CD197	CCR7, EBI-1, BLR2, CMKBR7	CCL21, CCL19, SLC	+	+	+								
CDw198	CCR8, TER1, CC-CKR-8, CKRL1, CMKBR8, CMKBRL2, CY6, GPRCY6, MGC129966, MGC129973	CCL1, vCCL1	+	+	+			+					
CDw199	CCR9, CMKBR10, GPR-9-6; A130091K22Rik	CCL25, TECK											
CD200	OX-2, Mox2	CD200 receptor (OX-2R)	+	+	+							+	
CD201	CCD41, EPCR, Protein C Receptor, Ccca, AI325044, Procr	Protein C					+					+	
CD202	Endothelial-specific receptor tyrosine kinase, Tie2, Tek, Hyk, CD202b, RP23-345A23.1, AA517024	Angiopoietin					+					+	
CD203c	Ly-41, PC-1, E-NPP1, Pca, ttw, twy, M6S1, NPP1, Npps	Extracellular nucleotides		+					+				
CD204	Macrophage scavenger receptor, MSR1, Scvr, SR-AII, Scara1	LPS, collagen, LDL, lipoproteins						+				+	
CD205	DEC-205, Ly-75			+	+			+					
CD206	Mannose receptor C type-1 (MRC1), MMR, CLEC13D	CD169 , CD45, Bacterial cell wall molecules, Viral glycoproteins, Yeast proteins, Chitin, Lysosomal hydrolases, Plant glycoproteins, Neoglycoproteins, Lutropin, Chondroitin sulfate			+			+					
CD207	Langerin, C-type lectin domain family 4 member K (CLEC4K)	Mannose-bearing glycoproteins, Glycolipids on microbial pathogens			+								
CD208	LAMP3, DC-LAMP, LAMP, TSC403, 1200002D17Rik				+								
CD209a	DC-SIGN, CDSIGN, CIRE, CD209 antigen-like protein A (CD209a), CLEC4L)	CD50 (ICAM-3), CD102 (ICAM-2), Mannose-bearing glycoproteins on several pathogens including HIV gp120			+			+				+	
CDw210a	IL-10RA , IL-10R1	IL-10, CDw210b	+	+	+	+		+					
CDw210b	IL-10RB, IL-10R2	IL-22, IL-28, IL-29, CDw210a, IL-22RA1, IL-28R1, IL-29R1	+	+	+	+		+					
CD212	IL-12β1, IL-12β, CD212b1	IL-12, IL-23, IL-12Rβ, IL-23R	+	+	+	+		+					
CD213a1	IL-13Rα1, NR4	IL-13, IL-4, IL-4Rα		+	+			+	+			+	

CD	Alternative Name	Ligands & Associated Molecules	T Cell	B Cell	Dendritic Cell	NK Cell	Stem Cell/Precursor	Macrophage/Monocyte	Granulocyte	Platelet	Erythrocyte	Endothelial Cell	Epithelial Cell
CD213a2	IL-13Rα2, Interleukin-13-binding protein (IL13BP)	IL-13		+	+			+					+
CD217	Interleukin 17 receptor A (IL-17RA), IL-17R, CDw217	IL-17A, IL-17F, IL-17RC, IL-17RB	+	+	+	+	+	+	+			+	+
CD218a	IL-18R1) IL-18RA, IL-18Rα, IL1 receptor-related protein (IL-1Rrp), IL-R5	IL-18, IL-18Rβ	+	+	+	+			+			+	
CD218b	IL-18Rβ, IL-18 receptor accessory protein (IL-18RAP, IL-18RAcP), IL-1R accessory protein-like (IL-1RAcPL), IL-1R7, CDw218b	Associates with IL-18Rα to form high-affinity IL-18 receptor	+		+	+		+	+			+	
CD220	Insulin receptor (INSR), IR	Insulin, IGF-2	+	+	+	+	+	+	+			+	+
CD221	Insulin-like growth factor 1 receptor (IGF1R), IGF-1R, type I IGF receptor (IGF-IR), JTK13	Insulin-like growth factor 1 (IGF-I), IGF-II, Insulin	+	+	+	+	+	+	+			+	+
CD222	Cation-independent mannose-6-phosphate receptor (M6P-R, CIM6PR, CIMPR, CI-MPR), Insulin-like growth factor 2 receptor (IGF2R, IGFIIR, IGF-IIR), MPR1, MPRI	IGF-II, TGF-β latency-associated peptide (LAP), Proliferin, Prorenin, Plasminogen, Leukemia inhibitory factor (LIF), Herpes simplex virus, Thyroglobulin, Retinoic acid, Cathepsin B, D, L, CD87	+	+	+	+	+	+	+			+	+
CD223	Lymphocyte activation gene 3 (LAG3, LAG-3), FDC protein, Ly-66	MHC class II, TCR-CD3 complex	+	−	−	+							
CD224	γ-glutamyltransferase 1 (GGT1), γ-glutamyl transpeptidase 1 (GGTP), GGT, GTG, EC2.3.2.2	Glutathione, GSH, Leukotriene C4, GSNO	+	+			+	+	+			+	
CD225	Interferon-induced transmembrane protein 1 (IFITM1), IFI17, Interferon-inducible protein 9-27 (9-27), Leu13, Fragilis2	CD21, CD19, TAPA-1, CD81	+	+		+	+					+	
CD226	DNAX accessory molecule 1 (DNAM-1), Platelet and T cell activation antigen 1 (PTA-1), T lineage-specific activation antigen 1 antigen (TLiSA1)	CD112, CD155, LFA-1	+	+		+	+	+	−	+	−		−
CD227	Mucin 1 (MUC1, MUC-1), DF3 antigen, H23 antigen, PUM, PEM, EMA, Tumor-associated mucin, Episialin	CD54, CD169, Selectins; Grb2, βCatenin, GSK-3β	+	+	+		+	+					+
CD228	Melanotransferrin (MT, MTF1), p97 Melanoma antigen (p97, MAP97), Mfi2, gp95	Iron, Plasminogen, pro-UPA					+					+	
CD229	Lymphocyte antigen 9 (Ly9), T-Lymphocyte surface antigen Ly-9, SLAMF3, Lgp100, T100	CD229, SAP, Grb2	+	+		+	+	−	−	−	−		
CD229.1	Lgp-100, Ly-9.1		+	+				+	+		+		
CD230	Prion Protein (PrP, PRNP), Major prion protein, prP27-30, prP33-35C, PrPc	CD230 (homophilic binding); N-CAM (CD56)	+	+	+	+	+	+	+			+	+
CD231	Tetraspanin 7 (TSPAN7), T-cell acute lymphoblastic leukemia-associated antigen 1 (TALLA-1), TM4SF2, Membrane component X chromosome surface marker-1 (MXS1), A15		T-ALL										
CD232	Plexin C1 (PLXNC1), Virus-encoded semaphorin protein receptor (VESPR, VESP-R)	Semaphorin 7A (CD108), poxvirus semaphorin A39R		+	+	+		+	+				
CD233	Solute carrier family 4 anion exchanger member 1 (SLC4A1), Band 3, Anion exchanger 1 (AE1), Diego blood group, EPB3	Glycophorin A, Ankyrin, Hemoglobin, Multiple glycolytic enzymes	−	−	−	−		−	−		+		
CD234	Duffy antigen/chemokine receptor (DARC), Dfy, FY, Fy-glycoprotein, Glycoprotein D	CXCL1 (MGSA), CXCL8 (IL-8), CCL2 (MCP-1), CCL5 (RANTES), Malarial parasites Plasmodium knowlesi and P. vivax	−	−	−	−		−	−		+	+	+
CD235a	Glycophorin A (GYPA), Sialoglycoprotein α, Sialoglycoprotein A, MNS blood group antigen, PAS-2	CD170, Influenza virus, Plasmodium falciparum erythrocyte binding antigen EBA-175	−	−	−	−	+	−	−		+		
CD236R	Glycophorin C (GYPC), Gerbich blood group antigen	Plasmodium falciparum erythrocyte binding protein 2 (PfEBP-2), p55, 4.1					+				+		
CD238	Kell blood group glycoprotein (Kel), endothelin-3-converting enzyme (ECE3)	Big Endothelin-3 (intermediate precursor of endothelin-3)					+				+		
CD239	Basal cell adhesion molecule (BCAM, B-CAM), Lutheran blood group glycoprotein, Lu	α5 chain of Laminin 10/11									+	+	+
CD240	Rh blood group system, CD240D (Rh30D, D blood antigen)	CD241, CD242, CD47, CD235b					+				+		
CD241	RHAG, Rh50, Rh-associated glycoprotein	ANK1									+		
CD242	ICAM-4, LW blood group	CD11a, b, CD18, CD49b, d, e											
CD243	P-gp; Pgy1, Mdr1, Abcb1	Cancer drugs, Xenobiotics											
CD244	2B4, C9.1, Ly90, NAIL, Nmrk, NKR2B4, SLAMF4	CD48			+	+							
CD246	Alk												
CD247	CD3ζ, CD3 ζ chain	Janus kinase 3, Protein unc-119 homolog	+										
CD248	TEM1, Endosialin												
CD249	APA, Bp-1/6C3, Ly-51, Ly51			+	+		+					+	+
CD252	OX-40 Ligand, gp34, TNFSF4	OX-40, CD134		+	+								
CD253	TRAIL, APO-2L, TL2, Ly81, Trail, APO-2L, Tnfsf10	TNFRSF10B						+					
CD254	ODF, OPG, OPGL, RANKL, Trance, Tnfsf11	RANK, OPG	+										
CD256	APRIL, TALL2, TRDL1, Tnfsf13	TACI, BCMA						+					
CD257	BLyS, BAFF, TALL-1, TNFSF13B, TNFSF20	TACI, BAMA, BAFF-R		+									
CD258	LTg, HVEML, LIGHT, TR2, HVEM-L, Tnfsf14	HVEM, LTbR, Tnsrsf14											
CD261	APO2, CD261, DR4, MGC9365, TRAILR-1, TRAILR1 Tnfrsf10a	DAP3											
CD262	TRAIL-R2, Apo2, DR5, TRICK2, KILLER	CD253											
CD265	RANK, TRANCE-R, ODFR, Tnfrsf11a	RANK ligand, OPGL, CD254			+								
CD266	TWEAK Receptor, Fn14, Tnfrsf12a	TWEAK (CD255)											
CD267	TACI, Tnfrsf13b	BAFF, APRIL		+									
CD268	BAFFR, Tnfrsf13c	BAFF		+									
CD269	BCMA, BCM, Tnfrsf17	TNFSF13B/TALL-1/BAFF		+									
CD271	NGFR, Bex3, Ngfrap1p75, LNGFR, p75NTR, p75NGFR, Tnfrsf16	NGF, BDNF, NT-3		+				+					
CD272	BTLA, B- and T Lymphocytes, MGC124217, MGC124218, A630002H24	HVEM	+	+	+	+		+					
CD273	B7DC, PD-L2, Btdc, PD-L2, MGC124039, MGC124040, F730015O22Rik, Pdcd1lg2	PD1 (CD279)	+		+			+					
CD274	B7-H1, PD-L1, Pdcd1l1, Pdcd1lg1, A530045L16Rik	CD279	+	+	+	+		+					+
CD275	B7-H2, GL50, B7RP-1, B7h, GI50, LICOS, B7RP-1, GL50-B, ICOS-L, Icoslg, Ly115l, AU044799, BG071784, KIAA0653, mKIAA0653, Icosl	CD278		+	+			+					
CD276	B7h3, B7RP-2, AU016588, 6030411F23Rik	CD26, CD152, TLT-2	+	+	+	+		+					+
CD278	ICOS, Ly115, H4, AILIM	CD275	+										
CD279	PD-1, Programmed death-1, Pdc1, Ly101	CD274, CD273	+	+									
CD280	ENDO180, MRC2, UPARAP, MGC141530, mKIAA0709	Collagen, uPAR						+				+	
CD281	TLR1	Lipoproteins, TLR2			+			+					
CD282	TLR2, Ly105	Lipoproteins, Glycans, TLR1, TLR6	+		+			+	+				
CD283	TLR3, AI957183	dsRNA			+				+				+
CD284	TLR4, Ly87, Ran/M1, Rasl2-8	Lipopolysaccharides, MD2, CD14											
CD286	TLR6	MyD88, TRAF6						+	+			+	
CD288	TLR8	MyD88, UNC93B1, poly(A)/T rich DNA		+	+			+					
CD289	TLR9	CpG DNA		+	+			+					
CD292	BMPR1A, ALK3, SKR5, ALK3, Bmpr, AU045487, 1110037I22Rik	BMP2, 4, 7, GDF-5											
CDw293	BMPR1B, ALK6, SKR6, Acvrlk6, CFK-43a, AI385617, AV355320	BMP2, 4, 7, GDF-5											
CD294	CRTH2, GPR44, Grp45, MGC130436	PGD2	+						+				
CD295	LeptinR, LEPR, db, Obr, obl, Modb1, LEPROT, OB-RGRP, MGC105189, obese-like	Leptin					+						
CD296	ART1, RT6, ART2, ADPRT, Yac-1	PDGFb, Integrins, Defensin											
CD297	ART4, Dombrock blood group, DO, DOK1, 4432404K01Rik		+										
CD298	Na+/K+-ATPase b3 subunit, AA409958, AI664000, AW212096, Atp1b3		+	+	+			+	+		+	+	
CD301a	Clec10a, Mgl, Mgl1				+			+					
CD302	Clec13A, DCL-1				+			+					
CD304	BDCA4, Neuropilin 1, NP-1	VEGF165, SEMA3A	+		+							+	
CD305	LAIR1	Ep-CAM, CD326	+	+	+	+		+					
CD307	Fcrl5 Fc receptor-like 5, Fcrh3, mBXMH2, Fcrl5		+										
CD309	VEGFR2, Flk-1, KDR	VEGF-A, C, D, E					+					+	
CD314	NKG2D, KLRK1	MICA, MICB, H60, ULBPs	+		+	+							
CD315	CD9P1	CD9, CD81		+				+					+
CD316	EWI2, PGRL, KASP	CD9, CD81	+	+		+						+	+
CD317	BST2		+										
CD318	CDCP1	CDH2/N-Cadherin, CDH3/P-Cadherin, SDC1/Syndecan-1, SDC4/Syndecan-4, ST14/MT-SP1					+						
CD319	CRACC, SLAMF7	CS1	+	+	+	+							
CD320	Transcobalamin receptor				+			+					
CD321	JAM1, F11 receptor, KAR	PAR3, LFA-1, Reovirus	+	+		+				+	+		+
CD322	JAM2, VE-JAM	PAR3, JAM3	+					+					
CD324	E-Cadherin, Uvomorulin	CD103, Catenins, PS1, Internalin								+			+
CD325	N-Cadherin, Cadherin-2	Catenins, FGFR, PS1					+						
CD326	Ep-CAM, Ly-74	LAIR-1, LAIR-2	+		+								+
CD329	siglec9	GD1a, LSTc	+	+	+	+		+	+				
CD331	FGFR1, FLT2, N-SAM	aFGF, bFGF, K-FGF, SHB, KLB, GRB10											+
CD332	FGFR2, KGFR, KSAM	aFGF, bFGF, K-FGF, FGF-6											+
CD333	FGFR3, ACH, CEK2	aFGF											+
CD334	FGFR4, TKF	aFGF, FGF20	+	+				+					+
CD335	NKp46, Ly-94	Viral hemagglutinins, Heparan sulfate proteoglycans				+							
CD338	ABCG2, Mxr, ABC15, BCRP1	Xenobiotics					+				+		
CD339	Jagged-1, Serrate1	Notch 1, 2, 3											+
CD340	c-erbB2, HER2, Neu	PRKCABP, PLXNB1, EGFR, PIK3C2A, MUC1											+
CD344	FZD4, Frizzled homolog 4	MAGI3, NDP					+					+	+
CD349	FZD9, Frizzled homolog 9						+						
CD350	FZD10, Frizzled homolog 10						+						+
CD351	FCAMR, Fc receptor, IgA, IgM, high affinity			+	+								
CD352	Ly-108, SLAMF6	PTN6, PTN11, SH2D1A/SAP	+	+									
CD353	SLAMF8, BLAME			+	+			+					
CD354	TREM1	DAP12, TLR						+	+				
CD355	CRTAM	CADM1	+			+							+
CD357	TNFRSF18, Tumor necrosis factor receptor superfamily, member 18, GITR	GITRL	+	+	+			+					
CD358	TNFRSF21, Tumor necrosis factor receptor superfamily, member 21, DR6	TRADD, N-APP	+	+				+					
CD360	IL21R	Common γ-chain, IL-21, Jak-1, Jak-3, STAT1, STAT3, STAT5	+	+									
CD361	EVI2B (ectopic viral integration site 2B)		+	+	+	+		+	+				
CD362	Syndecan-2, Hspg1, Synd2		+	+				+	+				
CD363	S1PR1, Sphingosine-1-phosphate receptor 1, EDG-1	Sphingosine-1-phosphate	+	+								+	+

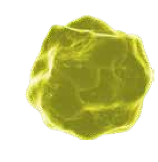
\+ Positive* − Negative

T Cell



Key Markers
CD3
CD4
CD8

B Cell

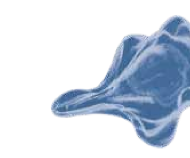


Key Markers
CD45R/B220
CD19
CD22 (B cell activation marker)

Dendritic Cell

Key Markers
CD11c
CD123

NK Cell

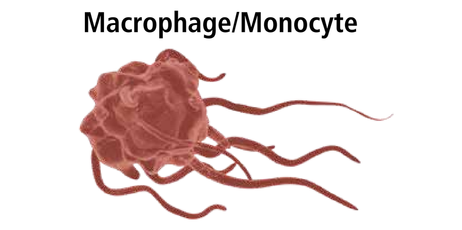


Key Markers
CD335 (NKp46)

Stem Cell/Precursor

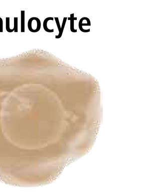
Key Markers
CD34*
hematopoetic stem cell only

Macrophage/Monocyte



Key Markers
CD11b/ Mac-1
Ly-71 (F4/80)

Granulocyte



Key Markers
CD66b
Gr-1/Ly6G
Ly6C

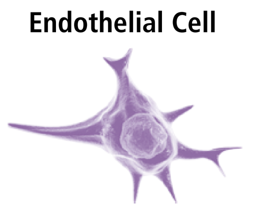
Platelet

Key Markers
CD61 (Integrin β3)
CD9
CD62P (activated platelets)

Erythrocyte

Key Markers
CD235a
Ter-119

Endothelial Cell



Key Markers
CD146 MECA-32
CD106
CD31
CD62E (activated endothelial cells)

Epithelial Cell

Key Markers
CD326 (EPCAM1)

*Positive refers to any expression of this CD marker either in all cells, a subset, or upon activation.

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