

# Human CD Listings

Antigen Name	Alternate Names	Distribution	Function	eBioscience Clone	Species
CD1a	R6, Leu-6, R4	cortical thymocytes, Langerhans cells, DC	antigen presentation, w/ $\beta_2m$	HI149	Human
CD1b	T1	cortical thymocytes, Langerhans cells, DC	antigen presentation, w/ $\beta_2m$	eBioCD13	Human
CD1c	R7, M241	cortical thymocytes, Langerhans cells, DC, B subset	antigen presentation, w/ $\beta_2m$	S1.1	Human
CD1d	R3	intestinal epith. B subset, mononuclear	antigen presentation, w/ $\beta_2m$	S1.1	Human
CD1e	RF2	DC	antigen presentation, w/ $\beta_2m$	CD1e	Human
CD2	T11, LFA-2, SPARC-R	Thymocytes, T, NK	CD28 ligand, adhesion, T cell activation	SP9-2.10	Human
CD2R	T11-3	T <sup>H</sup>	activation-dependent form of CD2		Human
CD2R <sub>10</sub>	T11-3	T <sup>H</sup>	w/ TCR, TCR surface expression/transduction		Human
CD3	T3	T, thymocyte subset	w/ TCR, TCR surface expression/transduction	OKT3	Human
CD4	T4, Leu3a	Thymocyte subset, T subset, mono, mac	MHC class II co-receptor, HIV receptor, T cell differentiation/activation	OKT4	Human
CD5	T1, T67, Leu1	Thymocytes, T, B subset, B-CLL	CD22 receptor, TCR or BCR signaling, T-B interaction	UCHL1	Human
CD6	T12	Thymocytes, T, B subset	CD18 receptor, T cell differentiation/costimulation		Human
CD7	Leu9	hematopoietic progenitors, thymocytes, T, NK	T costimulation	eBioCD4-101 (12A-101)	Human
CD8	T8, Leu-2	Thymocyte subset, T subset, NK	MHC class I co-receptor, receptor for some mutated H1V-1, T cell differentiation/activation	RPA-78	Human
CD8b				OKT8	Human
CD9	p24, MRP-1	Thymocyte subset, T subset, pre-B, eosinophils, basophils, platelets, T <sup>H</sup>	cellular adhesion and migration	eBioCD9 (CD4 CD3 CD32)	Human
CD10	CALLA, NEP, gp100	B precursors, T precursors, neutrophils	cell-binding metalloproteinase, B cell development	eBioCD10 (CD10-CA1A)	Human
CD11a	LFA-1, integrin $\alpha L$	lymph, gran, mono, mac	CD11a/CD18 receptor for ICAM-1, -2, -3, intercellular adhesion, T costimulation	ICAM1	Human
CD11b	Mac-1, integrin $\alpha M$	myeloid cells, NK, B <sup>+</sup>	intercellular adhesion, T costimulation	CD11b	Human
CD11c	p150, 95, CR4, Integrin $\alpha X$	DC, myeloid cells, NK, B <sup>+</sup> , T subset	binds CD54, fibronectin and IC2b	3.9	Human
CD12					Human
CD13	Aminopeptidase N, APN	myeloid cells	zinc-binding metalloproteinase, antigen processing, receptor for coronavirus spike protein	WM-15	Human
CD14	LPS-R	mono, mac, Langerhans cells, gran, neutrophils, eosinophils, monocytes	receptor for LPS/LPS recognition	61D3	Human
CD15	Lewis-x, Lex	gran, neutrophils, eosinophils, monocytes, neutrophils, eosinophils, monocytes, helper T, T <sup>H</sup> and B, NK, HEV	CD62L and CD62P ligand, adhesion	H98	Human
CD15a	Sulfated Lewis X	myeloid subset			Human
CD16	Fc $\gamma$ RIIIa	neutrophils, mac, NK	adhesion of low affinity Fc receptor, phagocytosis and ADCC	eBioCD16 (CD16)	Human
CD17	Fc $\gamma$ RIIb	neutrophils	adhesion of low affinity Fc receptor, phagocytosis and ADCC		Human
CD18	Integrin $\beta 2$	broad, all leukocytes	w/ CD11a, b, c, adhesion	CLB-LFA-11	Human
CD19	B4	B, FDC	component of CD19 and CD81, BCR	HLB-19	Human
CD20	B1, Bc35	B, T subset	component of CD19 and CD81, BCR	2H7	Human
CD21	CD3R, CR2, EBV-R	B, FDC, T subset	complement C3b and EBV receptor, complex w/ CD19 and CD81, BCR co-receptor	BU22	Human
CD22	BL-CAM, Siglec-2	B	adhesion, B mono, B-T interactions	eBioCD22 (CD22)	Human
CD23	Fc $\gamma$ RIIb	B, activated, mac, eosinophils, FDC, platelets	CD19-CD21-CD81 receptor, IgE low affinity receptor	EBV22	Human
CD24	BA-1, HSA	Thymocytes, myeloid cells, peripheral lymph, myeloid	binds P-selectin	eBioCD24 (CD24)	Human
CD25	Tac, p55	T <sup>H</sup> , B <sup>+</sup> , lymph progenitors	IL-2R $\alpha$ , w/ IL-2R $\beta$ and $\gamma$ to form high affinity complex	CD25	Human
CD26	DPP IV, Tst1	Thymocyte subset, T <sup>H</sup> soluble form	dipeptidyl peptidase, T costimulation, HIV entry	246	Human
CD27	T14		CD70 receptor, T costimulation	0323	Human
CD28	T644, T44	most T, Thymocytes, plasma cells	CD80, CD86 receptor, T costimulation	CD28	Human
CD29	Integrin $\beta 1$ , p150, GPIIb	lymph, mono, gran, platelets, mast cells, fibroblasts, endoth	w/ CD49 (VLA-1) receptor for VCAM-1, MAdCAM-1, endoth	MEM-101A	Human
CD30	gp130, Bc-Hc	B <sup>+</sup> , T <sup>H</sup> and NK, Reed-Sternberg cells, anaplastic large cell lymphoma	CD30 receptor, lymph proliferation/apoptosis		Human
CD31	PECAM-1	mono, platelets, gran, endoth, lymph subset	CD31 receptor, adhesion, signal transduction	WM59	Human
CD32	Fc $\gamma$ RI	mono, gran, B, platelets	low affinity Fc receptor for aggregated Ig and immune complexes		Human
CD33	p67, Siglec-3	myeloid progenitors, mono, gran, DC, mast cells, T <sup>H</sup>		HIM3-4	Human
CD34	MY10	hematopoietic precursors, capillary endothelium, embryonic fibroblasts	stem cell marker, adhesion, CD62L receptor	WM33	Human
CD35	CR1	erythrocytes, B, mono, neutrophils, eosinophils, FDC, T subset	complement receptor 1, binds C3b and C4b, adhesion, phagocytosis	4H11	Human
CD36	GPIIb, GPIIb	platelets, mono, mac, endoth, early erythrocytes	ECM receptor, adhesion, phagocytosis	eBioCD36 (CD36)	Human
CD37	gp49-52	B, T <sup>H</sup> , gran <sup>+</sup>	signal transduction		Human
CD38	T10	variable levels on majority of hematopoietic cells, high expression on plasma cells, B and T <sup>H</sup>	ecty-ADP-ribosyl cyclase, cell activation, cytokine & hydrolyase activity	HT2	Human
CD39	ENTP1-1, GP90, Bc-Hc, Bc-L3	NK, mac, Langerhans cells, DC, B <sup>+</sup> , T <sup>H</sup>	B cell adhesion, protects activated cells from Treg	eBioA1 (A1)	Human
CD40	TNFRSF5	B, mono, mac, FDC, endoth, T subset	CD40 receptor, B differentiation/activation, lymphotoxin-binding, rescues B cells from apoptosis	5C3	Human
CD41	gpIIb	platelets, megakaryocytes	w/ CD61 forms GPIIb, binds fibronectin, fibronectin, vWF, thrombospondin, platelet activation and aggregation	HP2	Human
CD42a	GPIX	platelets, megakaryocytes	complex w/ CD42b, c and d, receptor for vWF and thrombin, platelet adhesion to subendothelial matrices		Human
CD42b	GPIIb	platelets, megakaryocytes	complex w/ CD42a, c and d, binds to vWF and thrombin, platelet adhesion activation	HPI1	Human
CD42c	GPIIb	platelets, megakaryocytes	complex w/ CD42a, b, d		Human
CD42d	GPIIb	platelets, megakaryocytes	complex w/ CD42a, b, c		Human
CD43	Leukosialin, sialoprotein	hematopoietic, except resting B, platelets <sup>+</sup>	inhibition of T cell interaction, CD54, adhesion	eBioCD43 (CD43)	Human
CD44	H-CAM, Pgp-1, Hermes Ag	hematopoietic, except platelets, hepatocytes, testis	binds hyaluronic acid, adhesion, metastasis	IM7	Human
CD44R	CD44 variant 1-10	adhesion, metastasis			Human
CD45	LCA, PTP, B220	hematopoietic cells, multiple isoforms from alternative splicing	tyrosine phosphatase, enhanced TCR & BCR signals	HI30	Human
CD45RB	T200, gp220	B, T subset(nat), mono, gran	exon A isoforms of CD45	CD45RB	Human
CD45RO	L200	B, T subset(nat), mono, gran	exon B isoforms of CD45	CD45RO	Human
CD45RA	L200	B, T subset, NK	exon C isoforms of CD45	CD45RA	Human
CD45RB	L200	B, T subset, NK	exon D isoforms of CD45	CD45RB	Human
CD45RO	L200	B, T subset, NK	exon E isoforms of CD45	CD45RO	Human
CD46	MCP	nucleated cells	membrane cofactor protein, binds C3b & C4b allowing degradation by Factor 1, mediates virus receptor	8E2	Human
CD47	ICP	hematopoietic cells, epith, endoth, fibroblasts, other tissues	hematopoietic cells, epith, endoth, fibroblasts, other tissues	2D3	Human
CD47R	MEM-133	new designation for CD47, similar distribution as CD47 but dimer		8B612	Human
CD48	Blast-1, BGM1	all leukocytes	cell adhesion	156-4H9	Human
CD49a	VLA-1, integrin $\alpha 1$	T <sup>H</sup> , mono	integrin $\alpha 1$ , adhesion, CD49a/CD29 binds collagen and laminin	eBioCD49a	Human
CD49b	VLA-2, integrin $\alpha 2$	B, mono, platelets, T <sup>H</sup> , megakaryocytes	integrin $\alpha 2$ , adhesion, CD49b/CD29 binds collagen and laminin	eBioCD49b	Human
CD49c	VLA-3, integrin $\alpha 3$	B and T <sup>H</sup> , most adhesive cell lines	integrin $\alpha 3$ , adhesion, CD49c/CD29 binds laminin, fibronectin and collagen		Human
CD49d	VLA-4, integrin $\alpha 4$	T, B, NK, Thymocytes, mono, eosinophils, mast, DC	integrin $\alpha 4$ , adhesion, CD49d/CD29 binds fibronectin, VCAM-1 & MAdCAM-1	9F10	Human
CD49e	VLA-5, integrin $\alpha 5$	B, mono, platelets, early and B <sup>+</sup>	integrin $\alpha 5$ , adhesion, CD49e/CD29 binds laminin	eBioCD49e (SAM-1, SAM1)	Human
CD49f	VLA-6, integrin $\alpha 6$	memory T, Thymocytes, mono, platelets, megakaryocytes, epith	integrin $\alpha 6$ , adhesion, CD49f/CD29 binds laminin	eBioCD49f (6H6)	Human
CD50	ICAM-3	hematopoietic, endoth, epidermal Langerhans cells	adhesion, costimulation	17P1-25.1	Human
CD51	Vitronectin receptor	Thymocytes, T, B (not plasma cells), mono, mac	integrin $\alpha 5$ , adhesion, CD51/CD61 binds vitronectin, vWF, fibronectin and thrombospondin	23C6	Human
CD52	CAMPAF14	unknown	unknown		Human
CD53	OX-44	leukocytes, DC, osteoblasts, osteocytes	signal transduction		Human
CD54	ICAM-1	endoth, mono, lymph (high upon activation)	receptor for CD11a/CD18 (LFA-1), CD11b/CD18 (Mac-1) and fibronectin	H458	Human
CD55	DAF	hematopoietic, endoth, soluble in plasma	CD55, complement regulation	143-30	Human
CD56	NCAM	NK, T subset, neurons, some large granular lymphocyte leukemia, myeloid leukemias	adhesion	MEM188	Human
CD57	HNK-1, Leu-7	NK subset, T subset		T801	Human
CD58	LFA-3	hematopoietic, non-hematopoietic cells	CD2 receptor, adhesion		Human
CD59	Protectin, MAC-inhibitor	hematopoietic, non-hematopoietic cells	binds complement C5 and C6, blocks assembly of membrane attack complex	MEM-43	Human
CD60a	GD3	T subset, platelets, thymic epith, astrocytes	costimulation		Human
CD60b	9-O-acetyl GD3	T subset, B <sup>+</sup>			Human
CD61	7-O-acetyl GD3	T subset			Human
CD62	GPIIb, integrin $\beta 3$	platelets, megakaryocytes, mac, endoth	integrin $\beta 3$ , adhesion, CD61/CD61 or CD62/CD62 adhesion to ECM	23C6	Human
CD62E	E-selectin, ELAM-1	endoth	binds CD15a, cell rolling, mediators		Human
CD62L	P-selectin, LECAM-1	B, soluble and memory T, mono, gran, NK, Thymocytes	CD62a, CD62b, and MAdCAM-1 receptor, leukocyte homing, lectin-like, rolling	Dmg56	Human
CD63	LA-ecto, PADGEM	activated platelets, endoth	CD63, CD63a, adhesion	4k-4	Human
CD64	LAMP-1, LAMP-3	activated platelets, mono, mac	lysosomal membrane protein, moves to cell surface after activation		Human
CD64	Fc $\gamma$ RI	mono, mac, DC, interferon $\gamma$ -G-CSF activated gran	high affinity receptor for IgG, phagocytosis and ADCC	10.1	Human
CD65	VIM2	gran, mono, myeloid leukemia	cytoskeleton, CHO		Human
CD66	ICAM-1, NCA-180	gran	cell adhesion		Human
CD66a	CD27, CD66	gran	cell adhesion, neutrophil activation		Human
CD66b	NCA	neutrophils, colon carcinoma	cell adhesion		Human
CD66c	CEA	neutrophils, gran	putative role in cell adhesion and signaling		Human
CD66d	CEM1	colon epith, colon cancer	cell adhesion		Human
CD66e	CEM2	colorectal epith, colon cancer	cell adhesion		Human
CD66f	CEM3	colorectal epith, colon cancer	cell adhesion		Human
CD66g	CEM4	colorectal epith, colon cancer	cell adhesion		Human
CD66h	CEM5	colorectal epith, colon cancer	cell adhesion		Human
CD66i	CEM6	colorectal epith, colon cancer	cell adhesion		Human
CD66j	CEM7	colorectal epith, colon cancer	cell adhesion		Human
CD66k	CEM8	colorectal epith, colon cancer	cell adhesion		Human
CD66l	CEM9	colorectal epith, colon cancer	cell adhesion		Human
CD66m	CEM10	colorectal epith, colon cancer	cell adhesion		Human
CD66n	CEM11	colorectal epith, colon cancer	cell adhesion		Human
CD66o	CEM12	colorectal epith, colon cancer	cell adhesion		Human
CD66p	CEM13	colorectal epith, colon cancer	cell adhesion		Human
CD66q	CEM14	colorectal epith, colon cancer	cell adhesion		Human
CD66r	CEM15	colorectal epith, colon cancer	cell adhesion		Human
CD66s	CEM16	colorectal epith, colon cancer	cell adhesion		Human
CD66t	CEM17	colorectal epith, colon cancer	cell adhesion		Human
CD66u	CEM18	colorectal epith, colon cancer	cell adhesion		Human
CD66v	CEM19	colorectal epith, colon cancer	cell adhesion		Human
CD66w	CEM20	colorectal epith, colon cancer	cell adhesion		Human
CD66x	CEM21	colorectal epith, colon cancer	cell adhesion		Human
CD66y	CEM22	colorectal epith, colon cancer	cell adhesion		Human
CD66z	CEM23	colorectal epith, colon cancer	cell adhesion		Human
CD67	gp130, Bc-Hc	hematopoietic, non-hematopoietic cells	binds complement C5 and C6, blocks assembly of membrane attack complex	MEM-43	Human
CD68	Macrophage marker	macrophages, dendritic cells, monocytes	lysosomal membrane protein, scavenger receptor	eBioCD68	Human
CD69	AM	B, NK and gran, Thymocytes, platelets, Langerhans cells	signal transduction	7K50	Human
CD70	Ki-24	CD27 ligand, T and B cell costimulation			Human
CD71	T9	proliferating cells, reticuloendothelial precursors	transferrin receptor, iron uptake	OKT9	Human
CD72	LY-20	B, FDC	CD59 receptor, B proliferation		Human
CD73	NTSE	B, subset, FDC, epith	ecto-5'-nucleotidase, nucleoside uptake, T costimulation, lymph adhesion		Human
CD74	Inteasin chain	B, mac, mono, Langerhans cells, DC, T <sup>H</sup>	MHC class II traffic and function, binds M $\beta$ , maturation of follicular B cells	L302	Human
CD75	Inteasin chain	B, subset, epith	w/ CD26, CD152, T costimulation		Human
CD75a	Inteasin chain	B, subset, epith	w/ CD26, CD152, T costimulation		Human
CD75b	Inteasin chain	B, subset, epith	w/ CD26, CD152, T costimulation		Human
CD76	gp130, Bc-Hc	hematopoietic, non-hematopoietic cells	binds complement C5 and C6, blocks assembly of membrane attack complex	MEM-43	Human
CD77	gp130, Bc-Hc	hematopoietic, non-hematopoietic cells	binds complement C5 and C6, blocks assembly of membrane attack complex	MEM-43	Human
CD78	gp130, Bc-Hc	hematopoietic, non-hematopoietic cells	binds complement C5 and C6, blocks assembly of membrane attack complex	MEM-43	Human
CD79	gp130, Bc-Hc	hematopoietic, non-hematopoietic cells	binds complement C5 and C6, blocks assembly of membrane attack complex	MEM-43	Human
CD80	B7-1, B7-1	B, T subset, NK	CD28 receptor, T costimulation	CD80	Human
CD81	TAP-1	T, B, NK, Thymocytes, DC, endoth, fibroblasts, melanomas	component of CD19 & CD81, signaling, T costimulation	CD81	Human
CD82	R2	leukocytes, fibroblasts, epith, endoth	signal transduction	53H5	Human

Antigen Name	Alternate Names	Distribution	Function	eBioscience Clone	Species
CD83	HB15	B <sup>+</sup> and T <sup>H</sup> , DC, Langerhans cells	putative cell marker	HB15a	Human
CD84	GR2, SLAMF5	mononuclear cells, B, T subset, mac subset	dentritic role in adhesion, costim	207	Human
CD85a	LR-2, ILT-5, HL-9	mono	signaling through Fc $\gamma$	MK75.7H5.1	Human
CD85b	LR-2, ILT-4, MIR10	NK, mono, mac	suppression of NK cell-mediated cytotoxicity	2706	Human
CD85c	LR-1, ILT-7	gDC	signaling for cytokine production	171010.2	Human
CD85d	LR-7, ILT-1	mono	receptor for MHC class II antigens	133.4	Human
CD85e	LR-1, ILT-2, MIR-7	NK, DC, mono, T cells	inhibitory receptor for MHC class I antigens		Human
CD85f	LR-1, ILT-2, MIR-8	DC, mono, gDC	thought to be an inhibitory receptor	Zmk.1	Human
CD86	CD86, B7-1, B7-2	mono, DC, B <sup>+</sup> and T <sup>H</sup>	binds to CD28, CD137, costimulation	IT2.2	Human
CD87	UPA-R	gran, mono, NK, T <sup>H</sup> , endoth, fibroblasts	urokinase plasminogen activator receptor, inflammatory cell invasion, metastasis		Human
CD88	CSaR	gran, mono, DC	CSa receptor, granulocyte activation		Human
CD89	Fc $\gamma$ RIIc	mono, mac, gran, neutrophils, B subset, T subset	antigen receptor, phagocytosis, degradation, respiratory burst		Human
CD90	Thy-1	CD34 <sup>+</sup> hematopoietic subset, neurons	hematopoietic stem cell and neuron differentiation, adhesion, signal transduction	eBioCD90 (SE10)	Human
CD91	$\alpha$ 3AR	mono, mac, neurons, fibroblasts	receptor for $\alpha$ -macroglobulin		Human
CD92	p70, CHT11	neutrophils, mono, platelets, endoth, fibroblasts	putative ligand transporter		Human
CD93	CD149	neutrophils, mono, endoth	cleavage of apoptotic cells	R139	Human
CD94	KP43, KLRD1	NK, T subset	complex w/ NKG2, inhibits NK function	DX2	Human
CD95	Apo-1, Fas, TNFRSF6	lymph (high upon activation), mono, neutrophils	FasL (CD178) receptor, apoptosis	CD95	Human
CD96	TACTILE	NK, T <sup>H</sup>	adhesion of activated T and NK		Human
CD97	BL-KODD12	B <sup>+</sup> and T <sup>H</sup> , mono, gran	cellular activation	5E5	Human
CD98	4F2, CD98c	T, B, NK, gran, all human cell lines	T cell activation, adhesion	3B2.T48	Human
CD99	MCC-2, E2	T, NK, myeloid cells	isoform of CD99		Human
CD99R	Sema4D	hematopoietic cells except immature bone marrow cells, BCR and platelets	cell adhesion, cellular activation	133-1C6	Human
CD100	V7, p126	mono, gran, DC, T <sup>H</sup>	T cell activation	B827	Human
CD101	ICAM-2	lymph, endoth	binds CD11a/CD18, costimulation	CD101	Human
CD102	HAL-1, $\alpha 6$ , integrin $\alpha 6$	epithelial lymph, lymph subset, activated lymph	w/ integrin $\beta 7$ binds E-cadherin, lymph homing/transit	B-ly7	Human
CD104	p4 integrin	epith, Schwann cells, keratinocytes, some tumor cells	w/ integrin $\alpha 3$ (CD49), cell adhesion, embryogenesis, metastasis		Human
CD105	Endoglin	endoth, bone marrow subset, activated endoth	cell response to TGF- $\beta$ , adhesion, embryogenesis, angiogenesis	5N6	Human
CD106	VCAM-1	activated endoth, FDC	adhesion, costimulation	5T4	Human
CD107a	LAMP-1	activated platelets, T, endoth, metastatic tumors	a lysosomal membrane protein	eBioCD107a (H4A3)	Human
CD107b	LAMP-2	activated platelets, T, endoth, metastatic tumors	a lysosomal membrane protein	eBioCD107b (H4B4)	Human
CD108	SEMA7A	erythrocytes, lymphoblasts, resting lymph <sup>+</sup>	putative role in inflammation		Human
CD109	Platelet specific glycoprotein IIb/IIIa	T <sup>H</sup> and platelets, CD34 <sup>+</sup> subset, endoth	negative regulator of TGF- $\beta$ in keratinocytes	HU17	Human
CD110	TPD, C, rpl	megakaryocytes, platelets, some stem cell subsets	megakaryocyte progenitor, cell growth/differentiation		Human
CD111	PRR1, Nectin-1	stem cell subset, mac, neutrophils	intercellular adhesion		Human
CD112	PRR2, Nectin-2	mono, neutrophils, CD34 <sup>+</sup> subset, megakaryocytes, endoth, epith	intercellular adhesion		Human
CD113	PVR13, Nectin-3	testis, placenta	adhesion molecule that interacts with adspn		Human
CD114	C-SPR	myeloid progenitors, endoth	myeloid differentiation/proliferation		Human
CD115	M-CSFR, c-fms	mono, mac, monocytic progenitors	CSF-1, monocytic differentiation/proliferation	12-3A3-1B10	Human