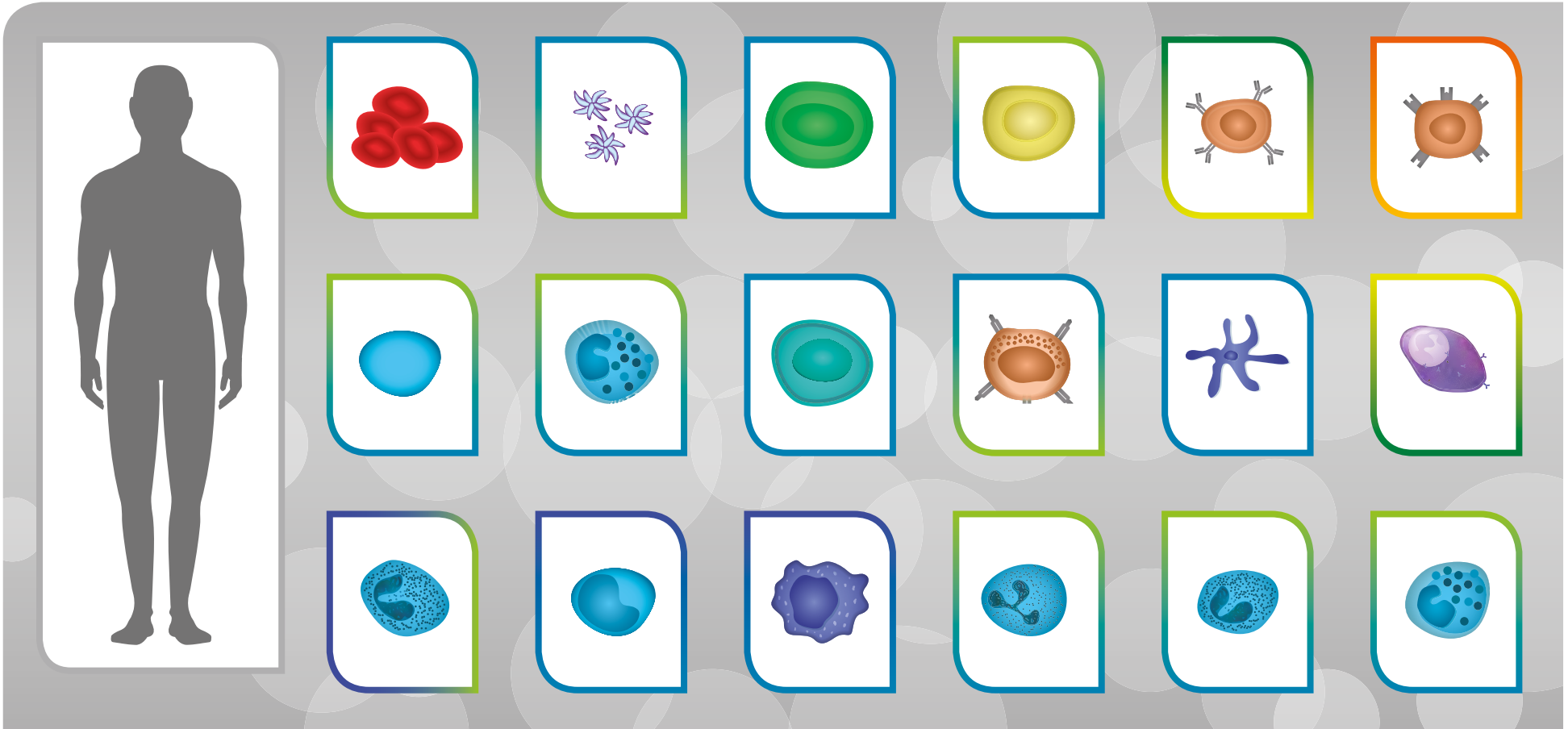


Lineage Biomarkers of the Human Immune System



Think Antibodies, Think Bio-Rad





Introduction & Table of Contents



Your Antibody Partner for Immunity Research

Every Step of the Way

At Bio-Rad Laboratories, we understand the challenges you face when selecting the right antibodies. Lots of choice, lots of decisions and all with the added pressure of getting a result.

Our comprehensive range of tools and resources is designed to provide all the information needed to select the best marker and the right antibody with ease, and design experiments with confidence.

This guide focuses on human cells and compiles in one place:

- Development of mature human immune cells from their precursors
- Signature biomarkers (both CD and non-CD) specific to each immune cell type
- Experimentally relevant information regarding each marker
- Antibodies available for each marker

Also included are immune cell expression profiles for over 400 immunology markers.

Interested in other related tools and resources?

Visit bio-rad-antibodies.com/human-marker, to try our online tool version of the human cell marker database or get a copy of our human lineage or biomarker expression patterns posters.

Working on mouse cells?

Mouse versions of all the resources above are also available from bio-rad-antibodies.com/mouse-marker

Lineage Based Cell Specific Markers

| | |
|-------------------------------------|----|
| Megakaryocyte Erythroid Cells | 4 |
| Specialist Antigen Presenting Cells | 5 |
| Myeloid and Mast Cells | 6 |
| NK cells and Innate Lymphoid Cells | 7 |
| T Cells | 8 |
| CD4 ⁺ T Cells | 9 |
| CD8 ⁺ T Cells | 10 |
| B Cells | 11 |

Marker Specific Information and Associated Antibodies

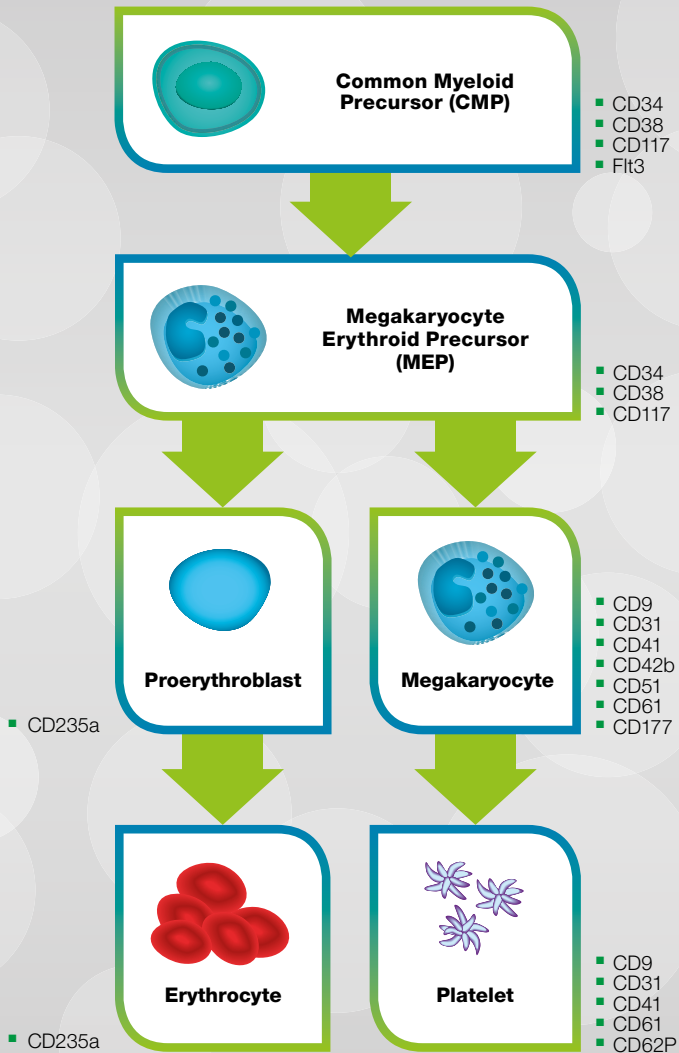
| | | | | | |
|---------------|----|------------------|----|--------------------|----|
| BCR – CD6 | 12 | CD100 – CD110 | 24 | CD265 – CD278 | 36 |
| CD7 – CD14 | 13 | CD123 – CD140a | 25 | CD279 – CD295 | 37 |
| CD15 – CD21 | 14 | CD140b – CD154 | 26 | CD297 – CD307d | 38 |
| CD22 – CD33 | 15 | CD155 – CD158k | 27 | CD307e – CD325 | 39 |
| CD34 – CD44 | 16 | CD159a – CD172a | 28 | CD326 – CD338 | 40 |
| CD44 – CD49c | 17 | CD172a – CD184 | 29 | CD339 – CD360 | 41 |
| CD49d – CD58 | 18 | CD184 – CD201 | 30 | CD361 – CXCR3 | 42 |
| CD58 – CD63 | 19 | CD202b – CD213a2 | 31 | Dectin-1 | |
| CD64 – CD74 | 20 | CD215 – CD227 | 32 | – IL-13alpha1 | 43 |
| CD74 – CD85j | 21 | CD227 – CD239 | 33 | IL-21R | |
| CD85k – CD99R | 22 | CD240CE – CD252 | 34 | – Notch 1, 2, 3, 4 | 44 |
| CD100 – CD110 | 23 | CD253 – CD264 | 35 | PAL-E – ZAP70 | 45 |

Biomarker Expression Patterns in Human Immune Cells 46 – 55

Megakaryocyte Erythroid Cells

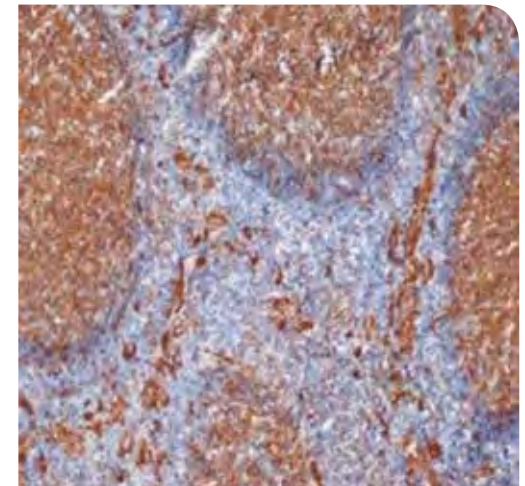


- CD9
- CD31
- CD34
- CD38
- CD41
- CD42b
- CD51
- CD61
- CD62P
- CD117
- CD177
- CD235a
- Flt3



Featured Product: Anti-Human Megakaryocyte and Platelet Marker CD9

Cell membrane glycoprotein CD9 is involved in cell adhesion, platelet activation and B cell development. CD9 is present on a number of cell types including megakaryocytes, platelets, T cells and eosinophils. Mouse Anti-Human CD9 Antibody (MCA469G), clone MM2/57 recognizes human CD9, also known as Leukocyte antigen MIC3 and MRP.



Anti-Human CD9 (MCA469G) Immunohistochemistry staining

Acetone fixed frozen human tonsil stained with Mouse Anti-Human CD9 antibody (MCA469G). Visualized using STAR3000 kit.

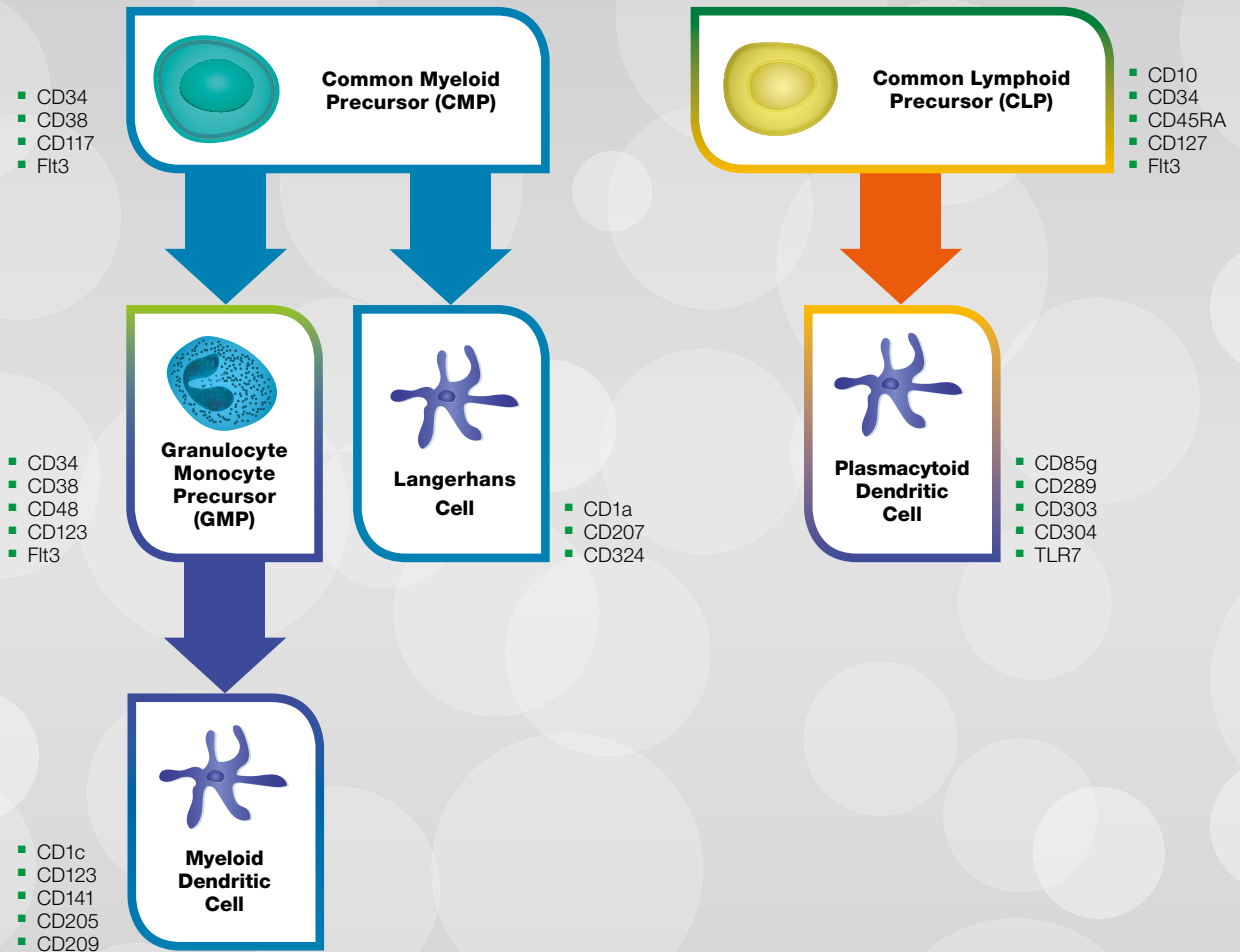
Citations: Over 75 on CiteAb

Applications: FC, IHC-F, WB

Specialist Antigen Presenting Cells



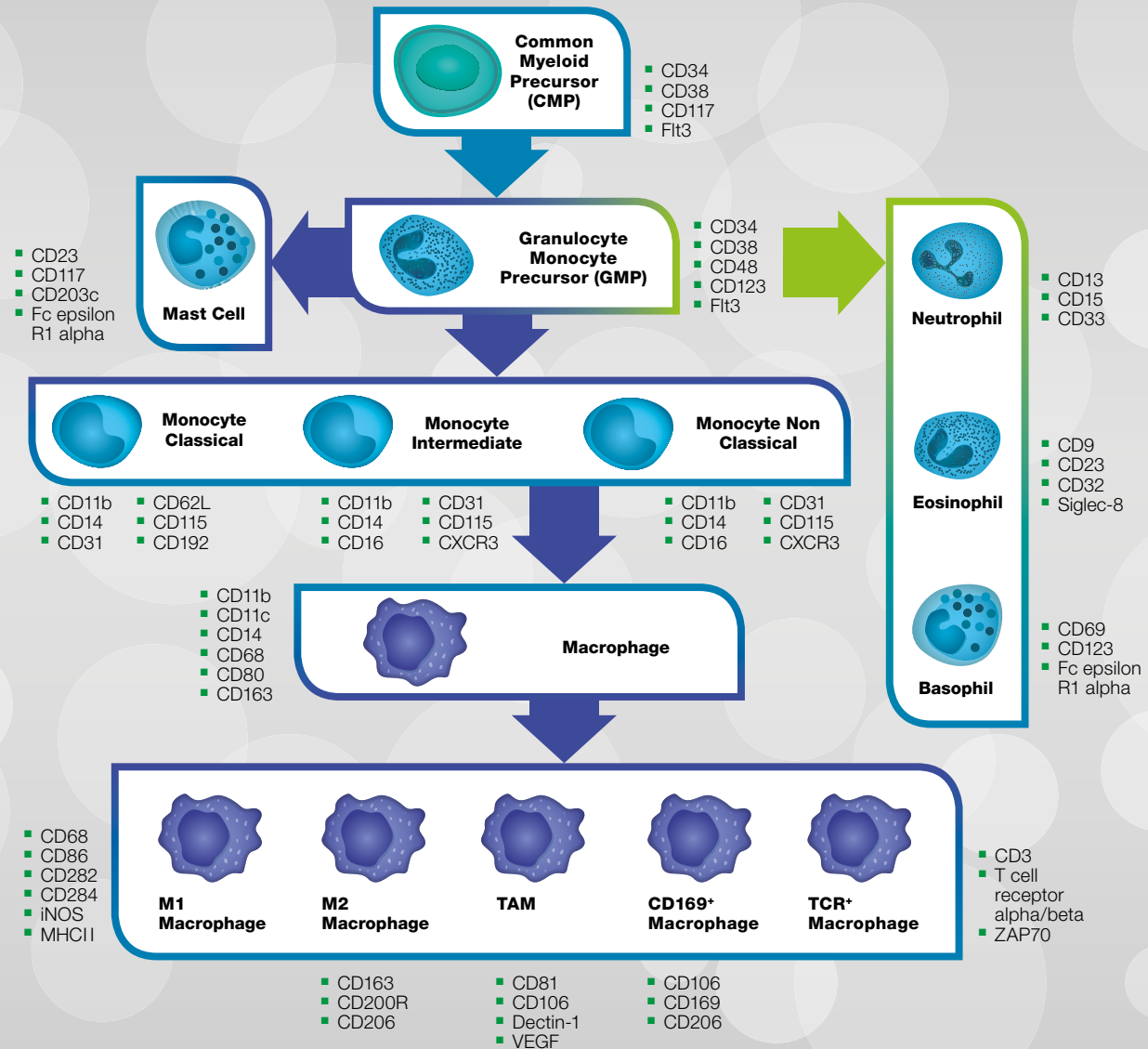
- CD1a
- CD1c
- CD10
- CD34
- CD38
- CD45RA
- CD48
- CD85g
- CD117
- CD123
- CD127
- CD141
- CD205
- CD207
- CD209
- CD289
- CD303
- CD304
- CD324
- Flt3
- TLR7



Myeloid and Mast Cells



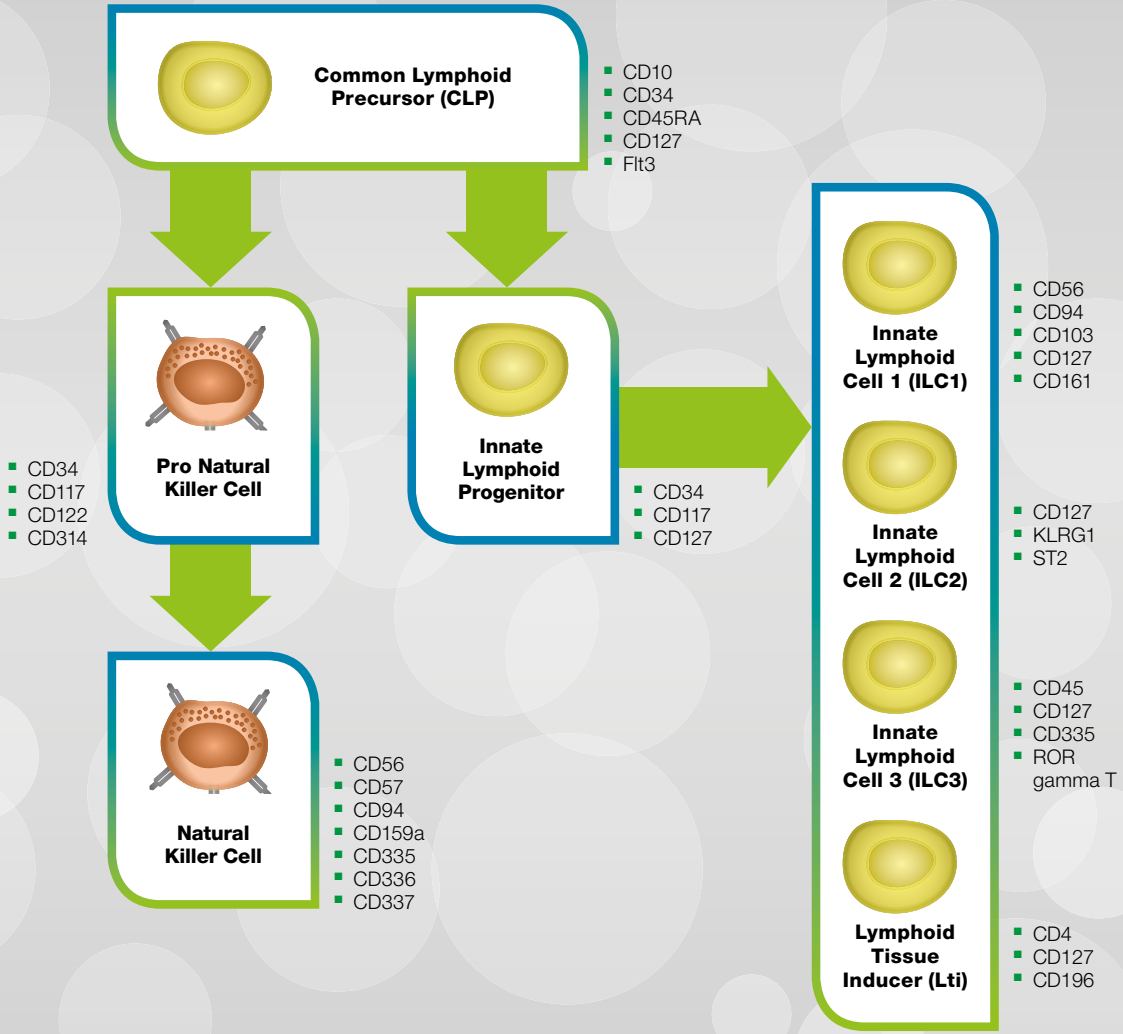
- CD3
- CD9
- CD11b
- CD11c
- CD13
- CD14
- CD15
- CD16
- CD23
- CD31
- CD32
- CD33
- CD34
- CD38
- CD48
- CD62L
- CD68
- CD69
- CD80
- CD81
- CD86
- CD106
- CD115
- CD117
- CD123
- CD163
- CD169
- CD192
- CD200R
- CD203c
- CD206
- CD282
- CD284
- CXCR3
- Dectin-1
- Fc epsilon R1 alpha
- Flt3
- iNOS
- MHC class II
- Siglec-8
- TCR alpha/beta
- VEGF
- ZAP70



NK Cells and Innate Lymphoid Cells



- CD4
- CD10
- CD34
- CD45
- CD45RA
- CD56
- CD57
- CD94
- CD103
- CD117
- CD122
- CD127
- CD159a
- CD161
- CD196
- CD314
- CD335
- CD336
- CD337
- Flt3
- KLRG1
- ROR gamma T
- ST2

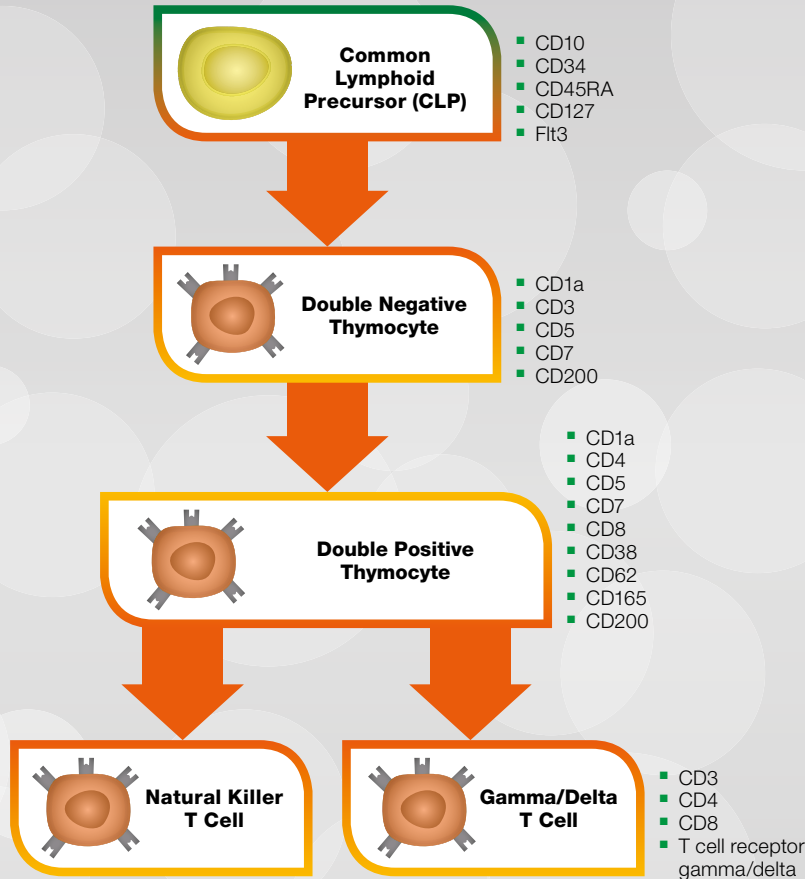


T Cells



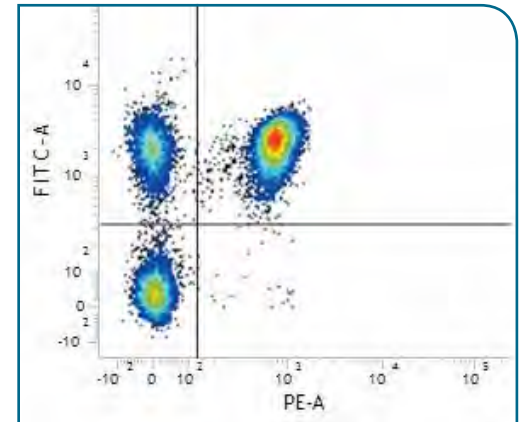
- CD1a
- CD1d
- CD3
- CD4
- CD5
- CD7
- CD8
- CD10
- CD34
- CD38
- CD45RA
- CD62
- CD127
- CD160
- CD165
- CD200
- Flt3
- T cell receptor alpha/beta
- T cell receptor gamma/delta

- CD1d
- CD160
- T cell receptor alpha/beta



Featured Product: Anti-Human T Cell Marker CD4

CD4 identifies T helper cells that interact with MHC class II; it is involved in positive signal transduction and adhesion within T cells. Mouse Anti-Human CD4 Antibody, clone RPA-T4 recognizes epitope within domain 1 of this 55 kDa cell surface glycoprotein. CD4 is primarily expressed on a subpopulation of T lymphocytes, but is also found on monocytes and macrophages.



Anti-Human CD4 (MCA1267) Flow Cytometry analysis

FITC conjugated Mouse Anti-Human CD3 (MCA463F) and RPE conjugated Mouse Anti-Human CD4 (MCA1267PE). Experiments performed on red cell lysed human peripheral blood gated on lymphocytes in the presence of Human SeroBlock (BUF070A).

Citations: Over 30 on CiteAb

Applications: FC, FN, IHC-F*

CD4⁺ T Cells



- CCR10
- CD1a
- CD3
- CD4
- CD5
- CD7
- CD8
- CD10
- CD25
- CD34
- CD38
- CD39
- CD45RA
- CD45RO
- CD62
- CD62L
- CD73
- CD103
- CD126
- CD127
- CD140a
- CD140b

- CD161
- CD165
- CD178
- CD183
- CD185
- CD193
- CD194
- CD195
- CD196
- CD198
- CD200
- CD212
- CD218alpha
- CD279
- CD294
- Flt3
- IL-9
- IL-13 alpha 1
- IL-21R
- T cell receptor alpha/beta

- CD3
- CD4
- CD25
- CD45RO
- CD62L
- T cell receptor alpha/beta

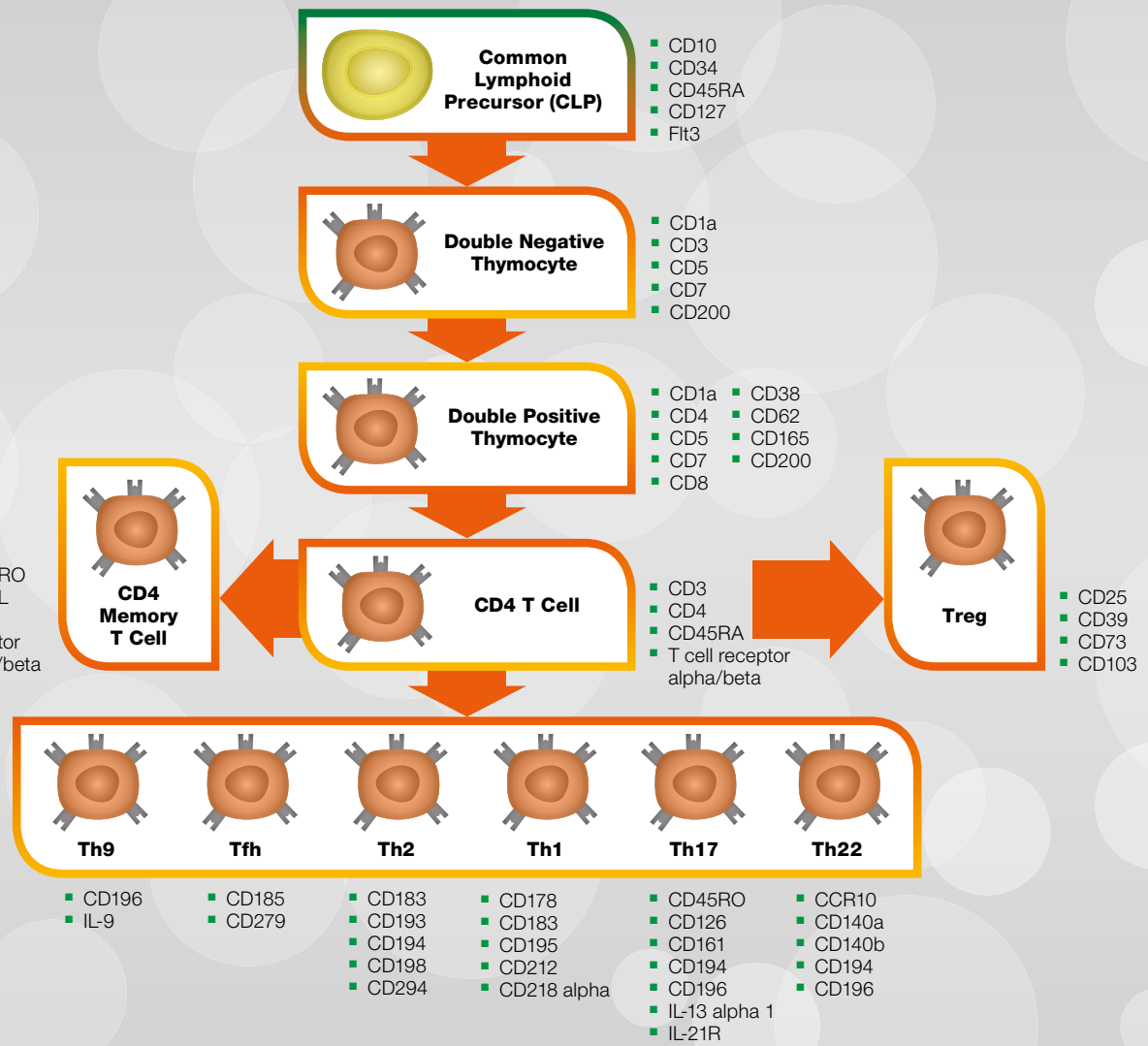
- CD196
- IL-9

- CD185
- CD279

- CD183
- CD193
- CD194
- CD198
- CD294

- CD178
- CD183
- CD195
- CD212
- CD218 alpha

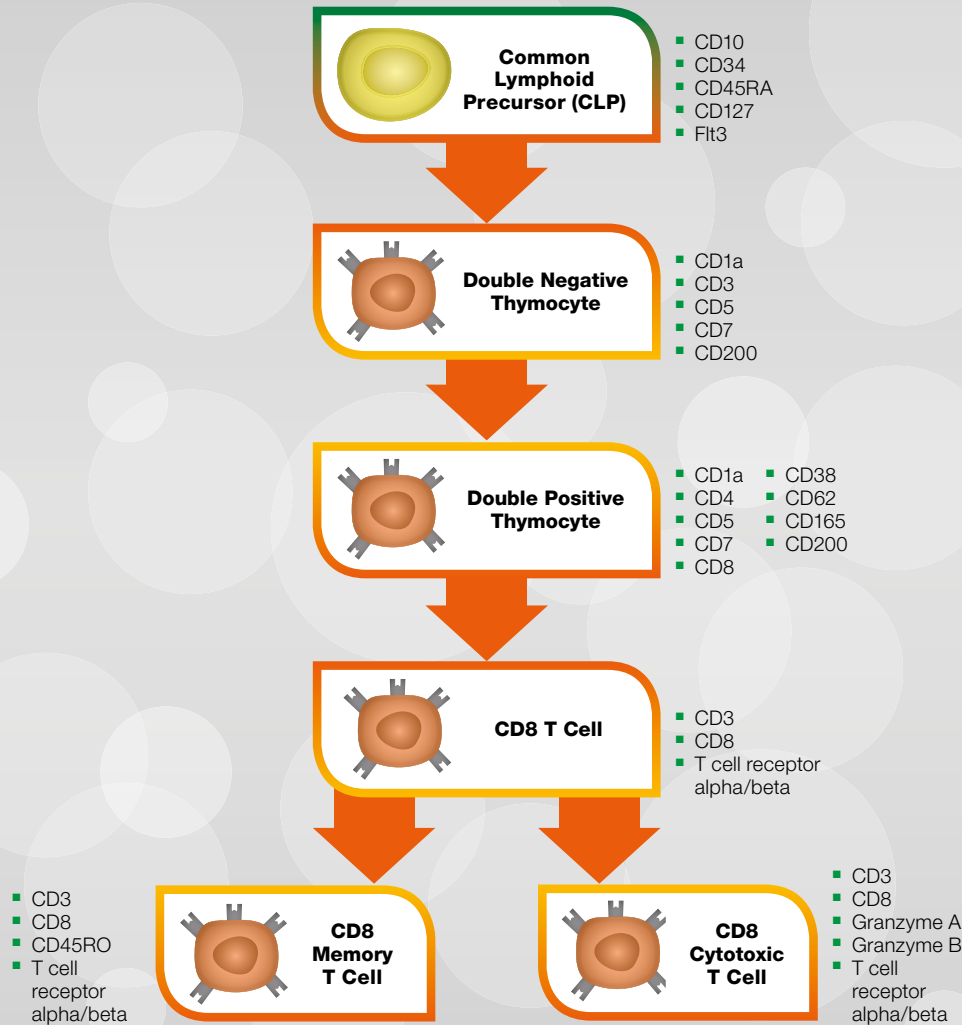
- CD45RO
- CD126
- CD161
- CD194
- CD196
- IL-13 alpha 1
- IL-21R
- CCR10
- CD140a
- CD140b
- CD194
- CD196



CD8+ T Cells

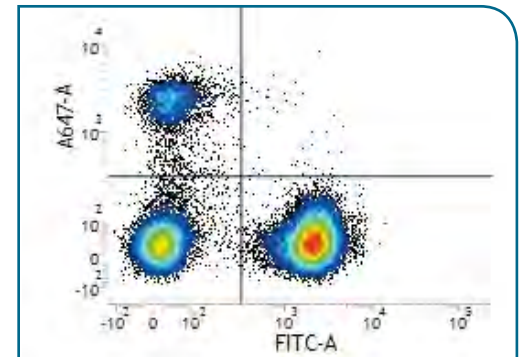


- CD1a
- CD3
- CD4
- CD5
- CD7
- CD8
- CD10
- CD34
- CD38
- CD45RA
- CD45RO
- CD62
- CD127
- CD165
- CD200
- Flt3
- Granzyme A
- Granzyme B
- T cell receptor alpha/beta



Featured Product: Anti-Human T Cell Marker CD3

T cell surface glycoprotein CD3 forms a complex of subunits that mediates T cell signal transduction and activation. CD3 is found on a variety of T cells including double negative thymocytes, gamma/delta T cells and mature T cells. Mouse Anti-Human CD3 Antibody, clone UCHT1 recognizes the human T cell surface glycoprotein CD3 epsilon chain, also known as T-cell surface antigen T3/Leu-4 epsilon chain or CD3ε.



Anti-Human CD3 (MCA463) Flow Cytometry analysis

Alexa 647 conjugated Mouse Anti-Human CD19 (MCA1940A647) and FITC conjugated Mouse Anti-Human CD3 (MCA463F). Experiments performed on red cell lysed human peripheral blood gated on lymphocytes in the presence of Human SeroBlock (BUF070A).

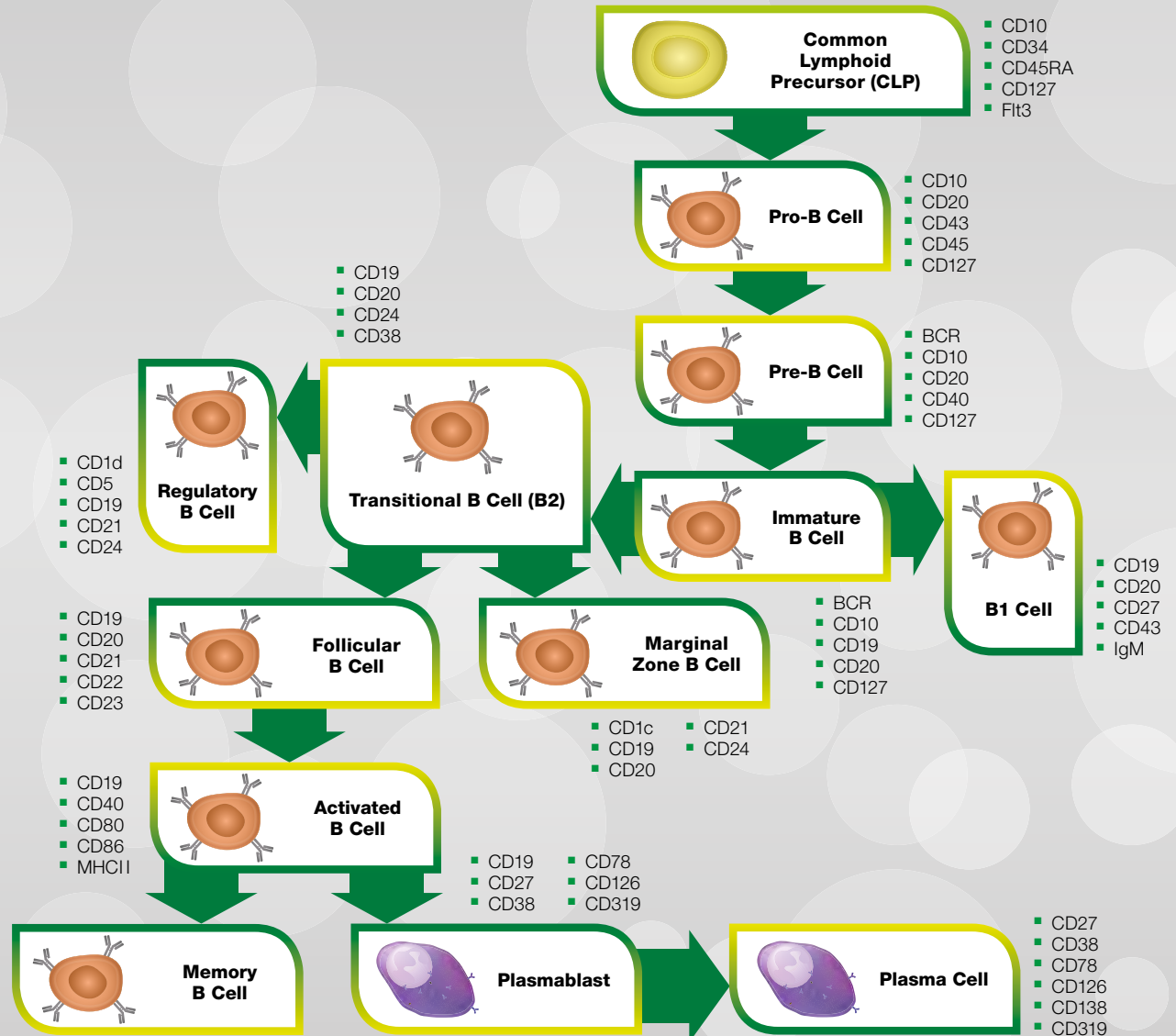
Citations: Over 100 on CiteAb

Applications: FC, IHC-F

B Cells



- BCR _____
- CD1c _____
- CD1d _____
- CD5 _____
- CD10 _____
- CD19 _____
- CD20 _____
- CD21 _____
- CD22 _____
- CD23 _____
- CD24 _____
- CD27 _____
- CD34 _____
- CD38 _____
- CD40 _____
- CD43 _____
- CD45 _____
- CD45RA _____
- CD78 _____
- CD80 _____
- CD84 _____
- CD86 _____
- CD126 _____
- CD127 _____
- CD138 _____
- CD319 _____
- Flt3 _____
- IgM _____
- MHC Class II _____



Marker Specific Information and Associated Antibodies



| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---------------------------------|---|--|---|-----------------------------------|-------------------------------|----------------|------------|--------------------------------|
| BCR | B cell receptor | B cell, Pre-B cell | B cell survival and proliferation | Cell membrane | Immunoglobulin superfamily | | | | |
| CCR10 | GRP2 | Plasma cell, T cell | Regulation of T cell homing into cutaneous site and IgA secreting cells migration | Cell membrane | Chemokine receptor | CCL27, CCL28 | AHP1812 | Polyclonal | E, FC, IHC-P, WB |
| CD1a | R4, T6, HTA1 | T cell, langerhans cell, dendritic cell, double negative thymocyte, double positive thymocyte | Lipid antigen presenting protein | Cell membrane | MHC class I-like | Lipid antigen | MCA80 | NA1/34-HLK | FC, IHC-F |
| CD1b | R1, CD1, CD1B | Dendritic cell, langerhans cell, macrophage, monocyte | Antigen presentation | Cell membrane and late lysosomes | Immunoglobulin superfamily | Lipid, glycolipid | | | |
| CD1c | M241, R7, T6 | B cell, T cell, dendritic cell, langerhans cell | Antigen presenting protein | Cell membrane | MHC class I-like | Lipid antigen | | | |
| CD1d | R3G1, R3 | B cell, T cell, NKT cell, dendritic cell, epithelial cell | Antigen presenting protein | Cell membrane | MHC class I-like | Lipid antigen | | | |
| CD1e | R4, R2, CD1A | T cell, dendritic cell, monocyte, macrophage, langerhans cell | Antigen presentation | Golgi apparatus, endosomes, lysosomes and cell membrane | Immunoglobulin superfamily | Lipid, glycolipid | | | |
| CD2 | T11/Leu-5, LFA-2 LFA-3 receptor | T cell, NKT cell | Cell adhesion, T cell activation | Cell membrane | Immunoglobulin superfamily | | MCA1194 | LT2 | FC, FN, IHC-F*, IP |
| CD2 | | | | | | | MCA2814GA | RPA-2.10 | FC, IHC-F |
| CD3 | T3, OKT3, Leu4 | T cell, double negative thymocyte, gamma/delta T cell, NKT cell, macrophage | T cell receptor expression and T cell signaling, pan T cell marker | Cell membrane | Immunoglobulin superfamily | Peptide antigen bound to MHC | MCA463 | UCHT1 | FC, IHC-F |
| CD3 | | | | | | | MCA1477 | CD3-12 | FC*, IF/ICC, IHC-F, IHC-P*, WB |
| CD3 | | | | | | | MCA2184 | MEM-57 | FC, IP |
| CD3 | | | | | | | VMA00015 | | WB |
| CD4 | T4, OKT4, Leu3a | T cell, innate lymphoid cell, monocyte, macrophage, double positive thymocyte, gamma/delta T cell | Signal transduction, MHC II co-receptor, T cell differentiation and HIV receptor | Cell membrane | Type I transmembrane glycoprotein | MHC II, IL-16, HIVgp120 | MCA1267 | RPA-T4 | FC, FN, IHC-F* |
| CD4 | | | | | | | MCA484G | YNB46.1.8 | FC, IHC-F |
| CD4 | | | | | | | MCA2072PE | 7E14 | FC |
| CD4 | | | | | | | VMA00370 | UMAB64 | WB |
| CD4 | | | | | | | MCA6002 | 4B12 | IHC-P* |
| CD5 | Leu-1, Ly-1, T1, Tp67 | T cell, B cell, dendritic cell, double negative thymocyte, double positive thymocyte | Modulates TCR and BCR signaling, thymocyte maturation and T to B interaction | Cell membrane | Scavenger receptor superfamily | CD72 | MCA1341 | MF7-14.5 | FC, IHC-F, IP |
| CD5 | | | | | | | MCA2809GA | UCHT2 | FC, IHC-F, WB |
| CD5 | | | | | | | MCA1804 | 4C7 | IHC-P*, WB |
| CD6 | T120 | T cell, B cell, NK cell | Mediates cell-cell contacts, regulates T cell responses via its interaction with ALCAM/CD166 | Cell membrane | Scavenger receptor superfamily | ALCAM, LPS, lipoteichoic acid | MCA1808 | MEM-98 | FC, IP, WB |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|---|---|-----------------------|---|---|----------------|--------------|----------------------------|
| CD7 | gp40 | T cell, NK cell, LT-HSC, double negative thymocyte, double positive thymocyte | T cell activation | Cell membrane | Immunoglobulin superfamily | | MCA1197 | LT7 | FC, IHC-F, IP |
| CD7 | | | | | | | MCA2807C | MEM-186 | FC |
| CD8 | T8, OKT8, Leu2 | T cell, NK cell, double positive thymocyte, gamma/delta T cell | MHC class I antigen processing | Cell membrane | Immunoglobulin superfamily | MHC class I | MCA1226 | LT8 | FC, IHC-F, IP |
| CD8 | | | | | | | MCA2511 | Bu88 | FC |
| CD8 | | | | | | | MCA351G | YTC182.20 | FC, IHC-F |
| CD8 | | | | | | | MCA4609GA | RPA-T8 | FC, IHC-F |
| CD8 | | | | | | | MCA1817 | 4B11 | IHC-F, IHC-P*, WB |
| CD9 | Tetraspanin, p24, MRP-1, DRAP-24 | Platelet, Pro-B cell, T cell, granulocyte, megakaryocyte, eosinophil | Adhesion, platelet activation and B cell development | Cell membrane | Tetraspanin family | Associates with CD63, CD81, CD82, CD36, EGFR | MCA469G | MM2/57 | FC, IHC-F, WB |
| CD9 | | | | | | | MCA2655 | Bu16 | FC, IF/ICC, IP, WB |
| CD10 | CALLA, gp100, MME, NEP, neprilysin, enkephalinase | CLP, Pro & Pre-B cells, B cell, neutrophil | Cell membrane metalloproteinase which inactivates bioactive peptides | Cell membrane | Type II transmembrane metalloprotease family | | MCA1556 | SN5c | FC, IHC-F, IP, WB |
| CD10 | | | | | | | MCA1806 | 56C6 | IHC-F, IHC-P*, WB |
| CD11a | LFA-1, LFA1A, ITGAL | T cell, monocyte, granulocyte, B cell, macrophage, neutrophil, basophil, eosinophil | Involved in leukocyte-endothelial cell interaction, cytotoxic T cell mediated killing, antibody dependent killing by granulocytes and monocytes | Cell membrane | Integrin family | ICAM 1-4, F11R | MCA1848 | 38 | FC, FN, IF/ICC, IHC-F, IP |
| CD11b | Integrin alphaM, CR3, Mo1, C3biR, Mac-1, ITGAM | Granulocyte, monocyte, macrophage, dendritic cell, NK cell, T cell, B cell | Adhesion, phagocytosis, chemotaxis and neutrophil activation, pan macrophage marker | Cell membrane | Integrin | ICAM-1, ICAM-2, ICAM-4, CD14, CD23, heparin, iC3b, factor X | MCA551 | ICRF44 | FC, FN, IHC-F*, IP |
| CD11b | | | | | | | VMA00481 | 2D11 | WB |
| CD11c | Integrin alphaX, p150, 95, CR4, ITGAX | Macrophage, T cell, B cell, dendritic cell, NK cell, monocyte | Important for cell-cell adhesion during inflammatory responses and CTL killing | Cell membrane | Integrin | CD54, fibrinogen, iC3b, ICAM-1, ICAM-4 | MCA2087 | BU15 | FC, IHC-F*, IP |
| CD11c | | | | | | | MCA2786Z | CBR-p150/4G1 | FC, FN, IHC-F |
| CD11c | | | | | | | AHP1226 | Polyclonal | IHC-P* |
| CD11d | ADB2, ITGAD | NK cell, B cell, gamma/delta T cell, macrophage | Activation and adhesion functions of leukocytes, phagocytosis of blood-borne pathogens | Cell membrane | Integrin family | ICAM3, VCAM1 | | | |
| CD13 | Macrophage stimulating protein receptor, ANPEP, Aminopeptidase N, AAP, APM, LAP1, P150, PEPN, APN, gp150, EC 3.4.11.2 | CMP, monocyte, granulocyte, endothelial cell, epithelial cell, T cell, neutrophil | Antigen presentation of glycolipids and integral membrane zinc metalloprotease | Cell membrane | Type II integral membrane glycoprotein | Coronavirus receptor | MCA1270 | WM15 | E, FC, FN, IHC-F, IP |
| CD13 | | | | | | | VMA00367 | OT12F10 | WB |
| CD14 | Monocyte differentiation antigen CD14, LPS receptor | Granulocyte, monocyte, macrophage, B cell | LPS receptor, clearance of gram negative pathogens, pan monocyte marker | Cell membrane | Myeloid cell-specific leucine-rich glycoprotein, LPS-receptor | LPS | MCA1568 | TÜK4 | E, FC, FN, WB |
| CD14 | | | | | | | MCA596G | UCHM1 | FC, FN, IF/ICC, IHC-F*, IP |
| CD14 | | | | | | | MCA2185 | MEM-18 | E, FC, IP, WB* |
| CD14 | | | | | | | MCA2804C | 61D3 | FC |
| CD14 | | | | | | | AHP1059 | Polyclonal | E, IHC-P*, WB |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|---|--|-----------------------|---|---|----------------|------------|------------------------|
| CD15 | Lewis X, 3-FAL, LNFP III, SSEA-1 (stage-specific embryonic antigen 1) | Embryonic stem cell, granulocyte, neutrophil | Adhesion, phagocytosis, chemotaxis and Hodgkin lymphoma | Cell membrane | Carbohydrate adhesion molecule, Glycosyltransferase 10 family | CD62E | MCA2458F | MEM-158 | FC |
| CD15 | | | | | | | MCA2656 | Bu28 | FC |
| CD15 | | | | | | | MCA4610T | HI98 | FC, IHC-F, IHC-P |
| CD15 | | | | | | | MCA5669 | MCS-1 | FC |
| CD15s | Sialyl Lex | Granulocyte, monocyte, T cell, B cell, NK cell | Involved in adhesion | Cell membrane | Carbohydrate | CD62E | | | |
| CD15su | 6-sulfo-sialyl Lex | Granulocyte, monocyte, NK cell, T cell, B cell | Strongest binding partner for CD62 L-selectin, involved in adhesion | Cell membrane | Carbohydrate | CD62L | | | |
| CD15u | 3-sulfo Lex | Granulocyte, monocyte, T cell, B cell, NK cell | Adhesion, it is the strongest binding partner for CD62P | Cell membrane | Carbohydrate | CD62P | | | |
| CD16 | FcgammaRIIIA, CD16a | Macrophage, monocyte, NK cell, T cell, B cell, neutrophil | Low affinity receptor for IgG1, IgG3 and immune response modulation, mediates phagocytosis and antibody dependent T cell mediated cytotoxicity | Cell membrane | Immunoglobulin superfamily | Aggregated immunoglobulin | MCA2537 | DJ130c | FC, IHC-F, IHC-P* |
| CD16 | | | | | | | MCA1193 | LNK16 | FC, IP |
| CD16 | | | | | | | MCA5665 | KD1 | FC, FN* |
| CD16 | | | | | | | MCA617G | YFC120.5 | FC, IHC-F |
| CD16 | | | | | | | MCA1569GA | 3G8 | FC |
| CD16b | FcγRIIIB, FCG3, FCGR3, FCR-10, FCRIII, FCRIIIb | Neutrophil, eosinophil | Captures immune complexes in the peripheral circulation | Cell membrane | Immunoglobulin superfamily | Monomeric or aggregated IgG | MCA1725F | 1D3 | FC |
| CD17 | Lactosylceramide, CDw17 | Granulocyte, monocyte, platelet, B cell, T cell, dendritic cell | Possible role in phagocytosis and bacteria binding, involved in metabolism, angiogenesis and apoptosis | Cell membrane | Carbohydrate | Bacteria | MCA5697 | MEM-68 | FC |
| CD18 | b2 integrin, MFI7, LCAMB, LFA-1, MAC-1, ITGB2, LAD | Dendritic cell, neutrophil | Cell adhesion as well as cell-surface mediated signaling | Cell membrane | Integrin family | ICAM1, ICAM2, ICAM3, ICAM4, iC3b, fibrinogen | MCA2086 | MEM-148 | FC, IP, WB |
| | | | | | | | MCA503 | YFC118.3 | FC, FN, IHC-F*, IP |
| | | | | | | | MCA2510F | Bu86 | FC |
| CD19 | B4 | B cell | Complexes with CD21 and CD81, involved in signal transduction, pan B cell marker | Cell membrane | Immunoglobulin superfamily | Associates with CD21, CD81, Leu-13 | MCA1940 | LT19 | FC, IHC-F, IP |
| CD19 | | | | | | | MCA2495 | Bu12 | FC, IP |
| CD19 | | | | | | | MCA2454 | LE-CD19 | E, FC*, IHC-P*, IP, WB |
| CD19 | | | | | | | MCA1235C | SJ25-C1 | FC |
| CD19 | | | | | | | MCA6058GA | HIB19 | FC |
| CD19 | | | | | | | VMA00030 | | WB |
| CD20 | B1, Bp35 | Pro-B cell, Pre-B cell, B cell | B cell activation and src family kinase signal transduction, pan B cell marker | Cell membrane | | SRC family tyrosine kinases, MHC II, CD53, CD81, CD82 | MCA1710 | 2H7 | FC, IHC-F |
| CD20 | | | | | | | MCA1915 | L26 | IHC-F, IHC-P |
| CD20 | | | | | | | MCA6091 | 10F381 | E |
| CD20 | | | | | | | VPA00099 | Polyclonal | WB |
| CD21 | C3dR, CR2, Epstein-Barr virus receptor | B cell, dendritic cell | Complexes with CD19 and CD81, a complement receptor for C3d and EBV receptor | Cell membrane | | C3d, EBV | MCA1195 | LB21 | FC, IHC-F*, IP |
| CD21 | | | | | | | MCA2499 | Bu33 | FC |
| CD21 | | | | | | | MCA1808 | 2G9 | IHC-F, IHC-P* |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|---|---|-----------------------|---|---|----------------|------------|------------------------------|
| CD22 | Siglec-2, BL-CAM | B cell | Binds ligands with sialic acid moieties which leads to phosphorylation and B cell receptor signaling | Cell membrane | Type I transmembrane glycoprotein | | MCA2331 | MEM-01 | FC, IP, WB* |
| CD22 | | | | | | | MCA1380FT | Mc64-12 | FC |
| CD23 | FcεRII, B6, BLAST-2, Leu-20 | B cell, dendritic cell, monocyte, eosinophil, mast cell, platelet, T cell, langerhans cell | Low affinity IgE receptor. Key molecule for B cell activation and growth. This receptor has essential roles in the regulation of IgE production and in the differentiation of B cells | Cell membrane | C-type lectin | | MCA1931 | D3.6 | FC |
| CD23 | | | | | | | MCA2500 | Bu38 | FC, IP |
| CD23 | | | | | | | MCA1810 | 1B12 | FC, IHC-F, IHC-P* |
| CD24 | BBA-1, BA-1, HSA | Epithelial cell, eosinophil, granulocyte, B cell, basophil | Regulation of B cell proliferation and maturation. Regulates binding capacity of CD49d/CD29 | | | | MCA1379 | SN3 | FC, IHC-F* |
| CD25 | Tac, p55, low affinity IL-2R, IL-2Ra | B cell, T cell, monocyte, macrophage | Associates with IL-2B and gamma chains to form a high affinity IL-2R complex | Cell membrane | Type I transmembrane glycoprotein | IL-2 | MCA2127 | MEM-181 | FC |
| CD25 | | | | | | | MCA2808C | BC96 | FC |
| CD26 | Dipeptidyl peptidase IV, ADABP, ADCP2, DPPIV, TP103, DPP4 | T cell, NK cell, B cell, macrophage, epithelial cell | T cell co-stimulatory molecule and cell adhesion molecule. Plays a major role in glucose metabolism and is responsible for the degradation of incretins such as GLP-1 | Cell membrane | Ectodomain family | Proline (or alanine)-containing peptides, collagen, adenosine deaminase | AHP1314 | Polyclonal | IHC-P* |
| CD26 | | | | | | | MCA1317 | M-A261 | FC, IHC-F*, IP |
| CD27 | S152, T14, Tp55, TNFRSF7 | T cell, B cell, NK cell | Co-stimulatory signal for T cell activation and development | Cell membrane | TNF superfamily | CD70 | MCA755 | LT27 | FC, IP |
| CD28 | Tp44, T44 | T cell, neutrophil, NK cell | T cell activation, proliferation and activation; enhances production of IL-10 and IL-4 in T cells | Cell membrane | Immunoglobulin superfamily | CD80, CD86 | MCA709G | YTH913.12 | FC, FN, IHC-F |
| CD28 | | | | | | | VPA00258 | Polyclonal | WB |
| CD29 | Integrin b1, ITGB1, FNRB, MDF2, VLAB, GPIIA, MSK12, VLA-BETA | Platelet, endothelial cell, epithelial cell, mast cell, monocyte, low level granulocyte, T cell | Leukocyte to endothelial cells adhesion by controlling JAML homodimerization | Cell membrane | Integrin family | Calcium, magnesium, collagen | MCA1949 | 4B7R | FC, IHC-P*, IP |
| CD29 | | | | | | | MCA2028 | 12G10 | E, FC, IF/ICC, IHC-F, IP, WB |
| CD29 | | | | | | | VMA00063 | | WB |
| CD30 | Ki-1, TNFRSF8, D1S166E | T cell, B cell, granulocyte, NK cell, monocyte | Positive regulator of apoptosis; protects the body against autoimmunity | Cell membrane | TNFR superfamily | CD153, TNFSF8/CD30L | MCA5968GA | C03-8D3 | E |
| CD30 | | | | | | | VMA00395 | OT13B10 | WB |
| CD31 | PECAM-1, endoCAM, platelet endothelial cell adhesion molecule, PECA1 | T cell, B cell, platelet, monocyte, granulocyte, endothelial cell, megakaryocyte | Cell adhesion, activation and migration | Cell membrane | Type I transmembrane glycoprotein | CD38 | MCA1738 | WM59 | FC, IP |
| CD31 | | | | | | | MCA4105Z | 1D2-1A5 | IHC-P* |
| CD31 | | | | | | | MCA1812 | 1A10 | IHC-P* |
| CD31 | | | | | | | VMA00321 | | WB |
| CD32 | FcγRIII | Macrophage, granulocyte, B cell, platelet, eosinophil | Receptor for endocytosis, cytotoxicity and platelet aggregation | Cell membrane | Immunoglobulin superfamily | Polymeric immunoglobulin and immune complexes | MCA1075 | AT10 | FC, FN*, IHC-F*, IP |
| CD33 | p67, SIGLEC-3, Sialic acid-binding Immunoglobulin-like lectin 3, myeloid cell surface antigen | Basophil, granulocyte, dendritic cell, macrophage, monocyte, LT-HSC, neutrophil | Cell adhesion, cell-cell signaling, inhibitory receptor and apoptosis | Cell membrane | Sialoadhesion immunoglobulin superfamily member | Sugar chains containing sialic acid | MCA1271 | WM53 | FC, IHC-F*, IP, WB |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|--|--|-----------------------|---|---|----------------|----------|--------------------------------------|
| CD34 | Hematopoietic progenitor cell antigen CD34, gp10-120, mucosialin, MY10 | MPP, CMP, GMP, CLP, MEP, Pre NK cell, innate lymphoid progenitor, endothelial, LT-HSC | Cell adhesion in sialomucin family | Cell membrane | Type I monomeric sialomucin-like glycosphoprotein | L-selectin, E-selectin | MCA1578 | 581 | FC, IHC-F |
| CD34 | | | | | | | MCA547G | QBEND/10 | EM, FC, IF/ICC, IHC-F, IHC-P, IP, WB |
| CD35 | CR1, C3b/C4b-R, KN, C3BR, C4BR | Erythrocyte, dendritic cell, T cell, B cell, neutrophil, monocyte, macrophage, eosinophil | Binding to particles and immune complexes that have activated complement | Cell membrane | Regulator of complement activation gene family | C1q | MCA554 | E11 | FC, IHC-F, IHC-P*, WB |
| CD36 | GP4, GP3B, GPIV, CHDS7, PASIV, SCARB3, BDPLT10, FAT | Platelet, macrophage, monocyte, endothelial cell, dendritic cell, erythrocyte, basophil | Cell adhesion molecule; transport and regulator of fatty acid transport | Cell membrane | Scavenger receptor | Thrombospondin, collagen, anionic phospholipids, oxidized LDL | MCA722 | SMØ | FC, FN, IHC-F |
| CD36 | | | | | | | VMA00162 | OTI3F4 | WB |
| CD37 | Gp52-40 | B cell, low on T cell, monocyte, macrophage, dendritic cell | Cell development, activation, growth and motility | Cell membrane | Tetraspanin family | CD53, CD81 | | | |
| CD38 | T10, ADP-ribosyl cyclase | CMP, MEP, GMP, T cell, plasma cell, B cell, NK cell, dendritic cell, double positive thymocyte | Synthesis of cyclic ADP ribose. Calcium signaling and cell activation | Cell membrane | | CD31, ATP | MCA1019 | AT13/5 | FC, IHC-F*, IP |
| CD38 | | | | | | | MCA1718GA | HIT2 | FC |
| CD38 | | | | | | | VMA00928 | | WB |
| CD39 | gp80, E-ATPDase, NTPDase-1, ecto-apyrase, Entpd1, Ec3.6.1.5 | T cell, B cell, dendritic cell | Hydrolyses nucleoside triphosphates and diphosphates | Cell membrane | | Nucleoside tri and diphosphates | MCA1268GA | A1 | FC, FN, IF/ICC |
| CD40 | BP50, TNFRSF5 | B cell, Pre-B cell, macrophage, dendritic cell, endothelial cell | B cell differentiation, co-stimulation, class switching and proliferation | Cell membrane | TNFR superfamily | CD154 (CD40L) | MCA1590 | LOB7/6 | FC, IHC-F, IHC-P*, IP |
| CD40 | | | | | | | MCA2788GA | 3B2 | E, IHC-F, WB |
| CD41 | Platelet glycoprotein lib, GPIIb | Platelet, megakaryocyte | Along with CD61 forms receptor for ECM | Cell membrane | ECM receptor | Fibrinogen, fibronectin, vWF | MCA467G | PM6/248 | FC |
| CD42a | GP9 | Platelet, megakaryocyte | Forms a noncovalent complex with glycoprotein Ib; plays role in platelet activation, thrombosis and haemostasis | Cell membrane | Leucine-rich repeat family | von Willebrand factor (VWF) | MCA594 | FMC-25 | FC, IHC-F |
| CD42a | | | | | | | MCA1227 | GRP-P | FC, IP |
| CD42b | Platelet glycoprotein Ib alpha chain, GPIBa | Platelet, megakaryocyte | Platelet surface membrane glycoprotein, receptor for vWF | Cell membrane | vWf receptor | vWF | MCA740 | AK2 | E, FC, FN, IP |
| CD42c | GPIIb, BDPLT1, GPIIb beta; BS; GP1BB | Platelet, megakaryocyte | Mediates platelet adhesion in the arterial circulation | Cell membrane | Leucine-rich repeat family | von Willebrand factor (VWF) | | | |
| CD42d | GPV, GP5 | Platelet, megakaryocyte | Adhesion of platelets to injured vascular surfaces in the arterial circulation | Cell membrane | Leucine-rich repeat family | von Willebrand factor (VWF) | | | |
| CD43 | Sialophorin, Leukosialin, Galactoglycoprotein, SPNI, Ly-48 | Pro-B cell, B cell, basophil, T cell, NK cell, LT-HSC, macrophage, monocyte, platelet, granulocyte, eosinophil | Cell adhesion | Cell membrane | Type II transmembrane glycoprotein | CD54, Siglec-1 | MCA555 | DFT-1 | FC, IHC-F, IHC-P |
| CD44 | IN, LHR, MC56, MDU2, MDU3, MIC4, Pgp1, CDW44, CSPG8, HCELL, HUTCH-I, ECMR-III, HCAM | T cell, erythrocyte, monocyte, endothelial cell, epithelial cell | Involved in cell-cell interactions, cell adhesion and migration; lymphocyte activation, recirculation and homing | Cell membrane | Hyaluronic acid receptor family | Hyaluronic acid, osteopontin, collagens, matrix metalloproteinases (MMPs) | MCA4703 | IM7 | E, FC, IHC-F, IHC-P, IP |
| CD44 | | | | | | | MCA2504 | Bu52 | FC, IHC-F, IHC-P*, IP |
| CD44 | | | | | | | MCA89 | F10-44-2 | FC, IF/ICC, IHC-F, IP |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|---|--|-----------------------|--|--|----------------|------------|---|
| CD44 | | | | | | | MCA2726 | 156-3C11 | FC, IHC-F, IHC-P*, IP, WB |
| CD44 | | | | | | | VMA00034 | | WB |
| CD45 | Leukocyte Common Antigen (LCA), T200 | T cell, Pro-B cell, B cell, NK cell, eosinophil, macrophage, LT-HSC, monocyte, innate lymphoid cell, granulocyte, basophil, mast cell | Regulator of T and B cell antigen receptor signaling, regulator of cell growth and differentiation | Cell membrane | Protein tyrosine phosphatase receptor type C (PTPRC) | Galectin-1, CD2, CD3, CD4 | MCA87 | F10-89-4 | FC, IHC-F, IHC-P*, IP |
| CD45 | | | | | | | MCA345G | YTH24.5 | FC |
| CD45 | | | | | | | MCA1719GA | HI30 | FC |
| CD45 | | | | | | | VMA00169 | 1H2 | WB |
| CD45RA | Leu18 | CLP, T cell, B cell, monocyte | Exon 4 splice variant of CD45, enhances TCR and BCR signaling | Cell membrane | Protein tyrosine phosphatase receptor type C (PTPRC) | Galectin-1, CD2, CD3, CD4 | MCA88 | F8-11-13 | FC, IHC-F, IHC-P |
| CD45RA | | | | | | | MCA2508F | Bu78 | FC |
| CD45RA | | | | | | | MCA2811GA | HI100 | FC |
| CD45RB | LCA, LY5, B220, CD45, L-CA, T200, CD45R, GP180, PTPRC | T cell, B cell, monocyte, macrophage, granulocyte, dendritic cell | Cell growth, differentiation, mitosis, and oncogenic transformation. Essential regulator of T cell and B cell antigen receptor signaling and cytokine receptor signaling | Cell membrane | Protein tyrosine phosphatase family | Galectin-1, CD2, CD3, CD4, Thy-1 | MCA1114 | MEM-55 | FC, IHC-F, IHC-P, IP |
| CD45RC | LCA, LY5, B220, CD45, L-CA, T200, CD45R, GP180, PTPRC | T cell, B cell, monocyte, macrophage, granulocyte, dendritic cell | Cell growth, differentiation, mitosis, and oncogenic transformation. Essential regulator of T cell and B cell antigen receptor signaling and cytokine receptor signaling | Cell membrane | Protein tyrosine phosphatase family | Galectin-1, CD2, CD3, CD4, Thy-1 | | | |
| CD45RO | UCHL-1 | T cell, B cell, monocyte, macrophage, granulocyte | CD45 isoform lacking the A, B and C determinants, enhances TCR and BCR signaling | Cell membrane | Protein tyrosine phosphatase receptor type C (PTPRC) | CD22 | MCA461G | UCHL1 | FC, IHC-F, IHC-P, IP |
| CD46 | MCP, TLX, AHUS2, MIC10, TRA2.10 | Platelet, T cell, macrophage, monocyte, dendritic cell, NK cell, epithelial cell, endothelial cell, B cell | Cofactor activity for inactivation of complement components C3b and C4b by serum factor I | Cell membrane | Regulator of complement activation gene family | C3b and C4b, moesin, c-Src, tetraspanin 4, c-Yes, integrin β1 | MCA2113 | MEM-258 | FC, FN*, IF/ICC, IP, WB |
| CD47 | IAP, OA3, MER6, integrin associated protein | T cell, B cell, monocyte, platelet, erythrocyte | Increase in intracellular calcium concentration that occurs upon cell adhesion to extracellular matrix | Cell membrane | Immunoglobulin superfamily | Thrombospondin | MCA2514 | 1/1A4 | FC, FN, IHC-F, IP |
| CD47 | | | | | | | MCA911 | BRIC126 | FC, FN*, IHC-F, IP, WB* |
| CD48 | Blast-1, SLAMF2, BCM1, HuLy-m3 | GMP, T cell, B cell, dendritic cell, monocyte, macrophage | Contributes to T cell antigen recognition and activation | Cell membrane | GPI anchored membrane protein | CD2 | MCA1053G | MEM-102 | FC, IF/ICC, IHC-F, IHC-P, WB* |
| CD49a | ITGA1, VLA4-1a, a1 integrin | T cell, NK cell | Cell-cell adhesion and may play a role in inflammation and fibrosis | Cell membrane | Integrin family | Collagen, laminin | MCA1133G | TS2/7 | FC, IHC-F, IP |
| CD49a | | | | | | | VPA00569 | Polyclonal | WB |
| CD49b | ITGA2, BR, GPIa, CD49B, HPA-5, VLA-2, VLAA2 | Monocyte, platelet, megakaryocyte, T cell, B cell, endothelial cell, epithelial cell | Adhesion of platelets and other cell types to the extracellular matrix | Cell membrane | Integrin family | Collagen, laminin | MCA2025 | 16B4 | E, FC, FN*, IF/ICC, IHC-F, IHC-P*, IP, WB |
| CD49b | | | | | | | MCA743 | AK7 | FC, FN*, IHC-F* |
| CD49b | | | | | | | MCA2027 | 31H4 | E, FC, IP |
| CD49c | ITGA3, VL3A, FRP-2, GAPB3, ILNEB, MSK18, VCA-2, VLA3a, GAP-B3 | Monocyte, T cell, B cell, dendritic cell, NK cell | Role in cell-cell and cell-matrix adhesion through binding | Cell membrane | Integrin family | Fibronectin, laminin, collagen, epiligrin, thrombospondin, CSPG4 | MCA1948GA | 17C6 | FC, IHC-F |
| CD49c | | | | | | | MCA5694 | P1B5 | FC, IF/ICC, IHC-P, IP |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|--|--|---|-----------------------|--|---|----------------|------------|---------------------------------|
| CD49d | VLA-4 alpha chain, VLA4-4a, Alpha4 integrin, ITGA4 | T cell, B cell, NK cell, dendritic cell, monocyte, eosinophil, mast cell | Lymphocyte migration, T cell activation, stem cell differentiation | Cell membrane | Integrin | Fibronectin, VCAM-1, MadCAM-1 | MCA923 | 44H6 | FC, FN, IHC-F* |
| CD49d | | | | | | | MCA2503 | Bu49 | FC, IHC-F*, IP |
| CD49d | | | | | | | MCA697 | HP2/1 | FC, FN*, IHC-F, IP |
| CD49d | | | | | | | AHP1225 | Polyclonal | IHC-P* |
| CD49e | ITGA5, FNRA, VLA-5, VLA5A | Monocyte, T cell, B cell, NK cell | Role in cell-cell and cell-matrix adhesion through binding | Cell membrane | Integrin family | Fibronectin, fibrinogen, laminin | MCA1187 | JBS5 | FC, FN*, IHC-F, IP |
| CD49f | VLA4-6a, a6 integrin, Integrin alpha 6 | LT-HSC, platelet, monocyte | Cell adhesion and integrin signaling | Cell membrane | Integrin/ECM receptor | ECM | MCA1457 | 450-30A | FC, IHC-F*, WB |
| CD49f | | | | | | | MCA699 | NKI-GoH3 | FC, FN, IHC-F, IP |
| CD50 | CDW50, ICAM-R, ICAM3 | Monocyte, T cell, B cell, dendritic cell, NK cell | Initiation of the immune response | Cell membrane | Immunoglobulin superfamily | LFA-1 | MCA2658 | Bu65 | FC, IP |
| CD50 | | | | | | | MCA2358 | MEM-171 | FC, IP |
| CD51 | Vitronectin R, Integrin alpha 5 | Macrophage, platelet, megakaryocyte | Cell adhesion and integrin signaling | Cell membrane | Integrin/ECM receptor | ECM | | | |
| CD51/CD61 | Integrin alpha v beta 3 | Platelet | Cell adhesion, integrin signaling, mediates adhesion to fibrinogen, fibronectin, vitronectin and thrombospondin | Cell membrane | Integrin/ECM receptor | ECM | MCA757G | 23C6 | FC, IHC-F*, IP |
| CD52 | CDW52, EDDM5 | Monocyte, macrophage, eosinophil, B cell, T cell, neutrophil, dendritic cell | Modulation of the T cell activation and possible effect in organ transplantation | Cell membrane | Sialomucin family | SIGLEC 10 | MCA2188 | HI186 | FC |
| CD52 | | | | | | | MCA1642 | YTH34.5 | E, FC, IHC-F, IHC-P, IP, RE, WB |
| CD52 | | | | | | | MCA349R | YTH66.9HL | FC, IHC-F, WB |
| CD53 | MOX44, TSPAN25 | B cell, T cell, monocyte, macrophage, T cell, neutrophil | Contributes to the transduction of CD2-generated signals in T cells and NK cells; role in growth regulation | Cell membrane | Tetraspanin family | IL-4, CD20, CD2, CD9, IL-2, VLA-4, CD4 | MCA723G | MEM-53 | FC, IHC-F, IP, WB* |
| CD54 | BB2, ICAM1, P3.58 | Monocyte, macrophage, dendritic cell, T cell, B cell, NK cell, granulocyte | Migration into tissues, adhesion and host-virus interaction | Cell membrane | Immunoglobulin superfamily | Integrins of type CD11a / CD18, or CD11b / CD18 | MCA1615 | 15.2 | FC, FN, IHC-F, IP |
| CD54 | | | | | | | MCA532 | 84H10 | E, FC, FN*, IHC-F, IP |
| CD54 | | | | | | | AHP2183 | Polyclonal | E, IHC-P*, WB |
| CD54 | | | | | | | AHP2318 | Polyclonal | WB |
| CD54 | | | | | | | VMA00014 | | WB |
| CD55 | CR, TC, DAF, CROM, DAF | B cell, T cell, monocyte, NK cell | Tissue protection from the cytotoxic complement injury | Cell membrane | Regulator of complement activation gene family | CD97 | MCA1614 | 67 | FC, IHC-F, WB |
| CD55 | | | | | | | MCA2659 | Bu14 | FC |
| CD55 | | | | | | | MCA914 | BRIC216 | FC, FN*, IP, WB* |
| CD56 | NCAM, Leu-19, NKH1 | NK cell, T cell, innate lymphoid cell | Adhesion | Cell membrane | Immunoglobulin superfamily | Heparin sulphate or itself | MCA2693 | 123C3 | E, FC, IHC-F, IHC-P* |
| CD56 | | | | | | | MCA591 | ERIC-1 | E, IB, IHC-F |
| CD56 | | | | | | | MCA2046 | MEM-188 | FC, IHC-F*, IP, WB |
| CD57 | HNK-1, 3-0-sulfated glucuronic acid, NK-1, Leu-7 | NK cell | Function unclear may be involved in cell matrix interactions | Cell membrane | | L-selectin, P-selectin | MCA1305GA | TB01 | FC, IHC-F, IHC-P |
| CD58 | ag3, LFA3, LFA-3 | B cell, dendritic cell, macrophage, T cell, monocyte | Adhesion and activation of T lymphocytes | Cell membrane | Immunoglobulin superfamily | CD2 | MCA2126GA | MEM-63 | FC, IHC-F, IP |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|--|---|--|--|--|----------------|--------------|---|
| CD58 | | | | | | | MCA912 | BRIC5 | FC, WB |
| CD58 | | | | | | | MCA4000Z | 2D11-B10 | IF/ICC, IHC-P*, WB |
| CD59 | 1F5, EJ16, EJ30, EL32, G344, MIN1, MIN2, MIN3, MIRL, HRF20, MACIF, MEM43, MIC11, MSK21, 16.3A5, HRF-20, MAC-IP, p18-20, Protectin H19 | Erythrocyte, NK cell, dendritic cell, B cell | Regulates complement-mediated cell lysis and a role in activation of T cells | Cell membrane | Regulator of complement activation gene family | C8 and/or C9 | MCA1054 | MEM-43 | E, EM, FC, IF/ICC, IHC-F, IHC-P*, IP, WB* |
| CD59 | | | | | | | MCA1927 | MEM-43/5 | FC, IHC-F, WB |
| CD59 | | | | | | | MCA715G | YTH53.1 | FC, FN*, IF/ICC, IHC-F, IHC-P*, WB |
| CD60a | GD3 | T cell, granulocyte | Pro-apoptotic effect and role in cancer | Intracellular, cell membrane | Carbohydrate | | | | |
| CD60b | 9-0-acetyl GD3 | T cell, B cell | Functional impact on activated T and B cells | Cell membrane | Carbohydrate | | MCA1314 | M-T6004 | FC, IHC-F, IP |
| CD60c | 7-0-acetyl GD3 | T cell, B cell | Functional impact on activated T and B cells | Cell membrane | Carbohydrate | | | | |
| CD61 | gpIIb, b3 integrin, integrin beta 3 | Platelet, megakaryocyte | Cell adhesion and integrin signaling | Cell membrane | Integrin/ECM receptor | ECM | MCA2588 | Y2/51 | FC, IHC-F, IHC-P*, WB |
| CD61 | | | | | | | VPA00632 | Polyclonal | WB |
| CD62 | E-selectin, ELAM-1 | T cell, double positive thymocyte, platelet, endothelial cell | Adhesion, neutrophil rolling, platelet-neutrophil and platelet-monocyte interactions | Stored in alpha granules and Weibel-Palade bodies but is rapidly relocated upon activation | Selectin | CD162, CD24, sialylated Lewis X | | | |
| CD62E | ELAM, ESEL, CD62E, ELAM1, LECAM2, E-selectin, SELE | Endothelial cell, neutrophil, monocyte, eosinophil, NK cell | Responsible for the accumulation of blood leukocytes at sites of inflammation by mediating the adhesion of cells to the vascular lining | Cell membrane | C-type lectin family | Sialylated carbohydrates | MCA1969 | CL2/6 | FC, IF/ICC, IHC-F |
| CD62E | | | | | | | MCA5621 | TEA2/1 | FC |
| CD62L | L-selectin, LECAM-1, LAM-1, Leu-8, MEL-14, TQ-1 | B cell, T cell, NK cell, monocyte, granulocyte | Leukocyte homing, tethering and rolling | Stored in alpha granules and Weibel-Palade bodies but is rapidly relocated upon activation | Selectin | CD34, GlyCAM, MAdCAM-1 | MCA1076G | FMC46 | FC, IHC-F, IP |
| CD62L | | | | | | | VPA00599 | Polyclonal | WB |
| CD62P | P-selectin, GMP-140, PADGEM | Platelet, megakaryocyte | Platelet-neutrophil and platelet-monocyte interactions | Stored in alpha granules and Weibel-Palade bodies but is rapidly relocated upon activation | Selectin | P-selectin glycoprotein ligand-1 (PSGL-1), heparan sulfate, fucoidan | MCA796 | AK-6 | FC, IF/ICC, IHC-F, IHC-P, WB |
| CD62P | | | | | | | MCA2420 | Psel.KO.2.12 | FC, IHC-F, IP |
| CD62P | | | | | | | MCA2419 | Psel.KO.2.7 | FC, IHC-F, IP |
| CD62P | | | | | | | MCA2418 | Psel.KO.2.5 | FC, IP |
| CD63 | MLA1, ME491, LAMP-3, OMA81H, TSPAN30, LIMP | B cell, eosinophil, granulocyte, T cell, basophil, mast cell, dendritic cell | It may function as a blood platelet activation marker, interacts with the integrins | Cell membrane, late endosomes, lysosomes, cytotoxic granules | Tetraspanin family | Interacts with Integrins, MHC class II, FcεRI | MCA5672 | TEA3/15 | FC |
| CD63 | | | | | | | MCA2142 | MEM-259 | FC, IF/ICC, IP, WB |
| CD63 | | | | | | | VPA00798 | Polyclonal | WB |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|--|--|---|---------------------------------------|----------------------------|--------------------------------|----------------|-----------------|------------------------------|
| CD64 | FCRI, CD64A, IGFR1, FcγRI | Dendritic cell, eosinophil, macrophage, monocyte, neutrophil | This protein is a high-affinity Fc-gamma receptor that contributes to antibody-dependent cellular cytotoxicity, phagocytosis, and the clearance of immune complexes | Cell membrane | Immunoglobulin superfamily | Monomeric and aggregated IgG | MCA756G | 10.1 | FC, FN, IF/ICC |
| CD65 | Ceramide-dodecasaccharide 4c | Granulocyte, macrophage, monocyte, CMP | On all myeloid cells during development | Cell membrane | Carbohydrate | | | | |
| CD65s | α2,3-sialylatedceramid edodecasaccharide 4c | Granulocyte, macrophage, monocyte, CMP | Present when the progenitor antigen CD34 disappears | Cell membrane | Carbohydrate | Interacts with CD62E | MCA2520F | VIM-2 | FC |
| CD66a | BGP, BGP1, BGPI, CEACAM1, NCA-160 | Granulocyte, macrophage, NK cell, T cell, B cell, neutrophil | Mediates cell adhesion via homophilic as well as heterophilic binding. Involved in the angiogenesis, apoptosis, tumor suppression, metastasis, and the modulation of innate and adaptive immune responses | Cell membrane | Immunoglobulin superfamily | Bacterial pathogens, integrins | MCA1147G | YTH71.3 | FC, IHC-F |
| CD66b | CD67, CGM6, NCA-95, CEACAM8 | Granulocyte | Cell adhesion, cellular migration, pathogen binding and activation of signaling pathways | Cell membrane | Immunoglobulin superfamily | CD66c | MCA216 | 80H3 | FC |
| CD66c | NCA, CEAL, CEACAM6 | Granulocyte, neutrophil, B cell, endothelia cell, epithelial cell, monocyte, T cell, NK cell | Acts as a receptor for adherent/invasive E. coli adhesion to the surface of epithelial cells and modulates inflammatory response | Cell membrane | Immunoglobulin superfamily | Bacterial pathogens, integrins | MCA1147G | YTH71.3 | FC, IHC-F |
| CD66d | CEA, CGM1, W264, W282, CEACAM3 | Neutrophil, granulocyte | Involved in the phagocytosis of the bacterial species that is dependent on the small GTPase Rac | Cell membrane | Immunoglobulin superfamily | Bacterial pathogens, integrins | MCA1147G | YTH71.3 | FC, IHC-F |
| CD66e | CEA, CEACAM5 | T cell, epithelial cell, monocyte | Regulates differentiation, apoptosis, and cell polarity. Involved in the adhesion process. Clinical biomarker for the gastrointestinal cancers | Cell membrane | Immunoglobulin superfamily | Bacterial pathogens, integrins | MCA1744 | C365D3 (NCRC23) | E, FC, IHC-F, IHC-P* |
| CD66e | | | | | | | 1820-4700 | CB30 | FC, IHC-F, IHC-P*, IP |
| CD66e | | | | | | | 1820-4959 | Polyclonal | IHC-F, WB |
| CD68 | gp110, macrosialin, SCARD1 | Macrophage, monocyte, dendritic cell, granulocyte, T cell, NK cell, LT-HSC, B cell | Macrophage homing, pan macrophage marker | Predominantly in cytoplasmic granules | Sialomucin family | | MCA5709 | KP1 | FC*, IF/ICC, IHC-P*, IP, WB |
| CD68 | | | | | | | MCA2375F | Ki-M7 | FC* |
| CD68 | | | | | | | MCA1815 | 514H12 | IF/ICC, IHC-F, IHC-P* |
| CD68 | | | | | | | MCA6014GA | Y1/82A | FC |
| CD69 | AIM, EA 1, MLR3, gp34/28, VEA, CLEC2C, BL-AP26 | Platelet, granulocyte, basophil, monocyte, macrophage, NK cell, T cell, B cell | Lymphocyte proliferation, signal transmission in NK cells and platelets | Cell membrane | C-type lectin | | MCA2806GA | FN50 | FC, IF/ICC, IHC-F |
| CD70 | CD27L, CD27-L, CD27LG, TNFSF7, TNLG8A, Ki-24 | T cell, B cell, NK cell | It induces proliferation of costimulated T cells, enhances the generation of cytolytic T cells, and contributes to T cell activation | Cell membrane | TNF superfamily | Ligand for CD27 | MCA1765G | Bu69 | FC, IHC-F |
| CD71 | T9, TR, TFR, p90, TFR1, TRFR, IMD46 | T cell, B cell, monocyte, dendritic cell, endothelial, NK cell, macrophage | Role in the cellular iron uptake by the process of receptor-mediated endocytosis. This receptor is required for erythropoiesis and neurologic development | Cell membrane | Transferin receptor family | Fe ⁺ | MCA1148 | DF1513 | FC, IF/ICC |
| CD71 | | | | | | | MCA2775 | 23D10 | E, WB* |
| CD72 | LYB2 | B cell, mast cell, dendritic cell, T cell | Negative regulator of B cell receptor signaling, regulating mast cell growth and differentiation via KIT activation | Cell membrane | C-type lectin family | Ligand for CD5 | MCA2501 | Bu40 | FC, IHC-F, IHC-P*, IP, WB |
| CD73 | Ecto-5'-nucleotidase, L-VAP-2, NT5E, 5'-NT | T cell, B cell, dendritic cell | Co-stimulates T cell activation and adhesion of lymphocytes to follicular dendritic cells | Cell membrane | | Adenosine monophosphate (AMP) | MCA4622GA | 2B6 | E, WB |
| CD73 | | | | | | | MCA6068GA | AD2 | FC |
| CD74 | II, DHLAG, HLADG, Ia-GAMMA | Monocyte, T cell, B cell, NK cell, dendritic cell, macrophage | Important in an antigen presentation for immune response | Cell membrane | No family assigned | MIF, APP | MCA2502 | Bu45 | FC*, FN*, IF/ICC, IHC-F*, IP |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|--|---|-----------------------|---|---|----------------|------------|-------------------------------|
| CD74 | | | | | | | VMA00424 | OT1H3 | WB |
| CD75 | N-acetyllactosamine | B cell, T cell | Intercellular adhesion and antigen presentation events | Cell membrane | Carbohydrate | Ligand for CD22 | | | |
| CD75s | CDw76, 2,6-sialylated N-acetyllactosamine | Epithelial cell, B cell, T cell, erythrocyte | Involved in adhesion | Cell membrane | Carbohydrate | CD22 | MCA1481G | LN-1 | FC, IHC-F, IHC-P* |
| CD77 | Globotriaosylceramide, Gb3, BLA, CTH | B cell | Adhesion, B cell development and apoptosis | Cell membrane | Glycosphingolipid | CD19 | MCA579 | 38-13 | FC |
| CD78 | Cdw78, Ba antigen, Leu-21 LO-panB-a | B cell, macrophage | Part of MHC class II | Cell membrane | | | | | |
| CD79a | MB1, Immunoglobulin alpha (Iga) | GMP, B cell, T cell | In association with membrane Ig forms the BCR complex | Cell membrane | Immunoglobulin superfamily | | MCA1298 | ZL7-4 | E, FC, IP |
| CD79a | | | | | | | MCA2538 | HM57 | FC*, IHC-F, IHC-P*, WB |
| | | | | | | | VMA00468 | | WB |
| CD79b | Immunoglobulin B (Igb), B29 | B cell | In association with membrane Ig forms the BCR complex | Cell membrane | Immunoglobulin superfamily | | MCA2208 | AT105-1 | FC, IP, WB |
| CD80 | CD28LG, CD28LG1, LAB7, B7, B7-1, BB1 | T cell, B cell, macrophage, dendritic cell, monocyte | Lymphocyte activation and co-stimulation | Cell membrane | Type I transmembrane glycoprotein, member of immunoglobulin superfamily | CD28, CD152 (CTLA-4) | MCA2071 | MEM-233 | FC, IP, WB |
| CD80 | | | | | | | MCA2813C | 2D10 | FC |
| CD80 | | | | | | | VMA00138 | 2B11 | WB |
| CD81 | TAPA-1 | Macrophage, T cell, B cell, NK cell, monocyte, dendritic cell, endothelial cell | Target of the antiproliferative antibody 1 (TAPA-1) and Tetraspanin-28 (Tspan-28). A cell surface glycoprotein that is known to complex with integrins. Regulates cell activation, growth and aggregation | Cell membrane | Transmembrane 4 superfamily (tetraspanin family) | Benzyl salicylate, terfenadine | HCA086 | 6083 | E, FC |
| CD81 | | | | | | | HCA087 | 6084 | E, FC |
| CD81 | | | | | | | HCA112 | 8863 | E, FC |
| CD81 | | | | | | | HCA113 | 8864 | E, FC |
| CD81 | | | | | | | MCA1847 | 1D6 | FC, FN, IF/ICC, IHC-P, IP, WB |
| CD82 | R2, 4F9, C33, IA4, ST6, GR15, KAI1, SAR2, TSPAN27 | T cell, B cell, monocyte, dendritic cell, granulocyte, epithelial cell, endothelial cell, platelet | Costimulatory for T cells and metastasis suppressor | Cell membrane | Tetraspanin family | Integrins | MCA1311 | BL-2 | FC, IHC-F |
| CD82 | | | | | | | AHP1709 | Polyclonal | IHC-P*, WB |
| CD83 | HB15 | Dendritic cell, langerhans cell, B cell, T cell | Antigen presentation and lymphocyte activation | Cell membrane | Immunoglobulin superfamily | | MCA1582 | HB15e | FC, IF/ICC, IHC-F, IHC-P*, IP |
| CD84 | Ly9b, SLAMF5, GR6 | B cell, monocyte, platelet, T cell | Adhesion and T cell activation | Cell membrane | Immunoglobulin superfamily | CD84 | MCA2123 | CD84.1.21 | FC, IP |
| CD85a | HL9, ILT5, LIR3, PIRB, CD85A, ILT-5, LIR-3, PIR-B, LILRA6, LILRB3 | Monocyte, B cell, macrophage, granulocyte, dendritic cell | Regulating receptor-mediated signaling in the immune cells. Interacts with MHC class I molecules. Controls inflammatory responses and cytotoxicity to help focus the immune response and limit autoreactivity | Cell membrane | Immunoglobulin superfamily | CD32 | | | |
| CD85d | LILRB2, ILT4, LIR2, ILT-4, LIR-2, MIR10, MIR-10 | Monocyte, granulocyte | Inhibitory immunoreceptor contributing to maternal tolerance of the foetus | Cell membrane | Immunoglobulin superfamily | HLA-A, -B, -G1, and E molecules | | | |
| CD85g | Immunoglobulin-like transcript 7, LILRA4 | Plasmacytoid dendritic cell | Negatively regulates pDC mediated innate immune function | Cell membrane | FcεR1g leukocyte Immunoglobulin like superfamily | | MCA6059PE | 17G10.2 | FC |
| CD85j | LILRB1, ILT2, LIR1, MIR7, PIRB, ILT-2, LIR-1, MIR-7, PIR-B | Monocyte, macrophage, NK cell, dendritic cell, T cell, B cell, plasma cell | Inhibitory immunoreceptor involved in downregulation of the effector mechanisms, such as NK and T cells cytolytic functions | Cell membrane | Immunoglobulin superfamily | HLA-C alleles, cytomegalovirus, classical and non-classical MHC class I | MCA2515 | 4F9 | FC, IHC-F |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|--|---|--|---|---|--|----------------|--------------|-------------------------------|
| CD85k | LILRB4, ILT3, LIR5, ILT-3, LIR-5 | Monocyte, dendritic cell, macrophage | Inhibitory immunoreceptor involved in the immune tolerance | Cell membrane | Immunoglobulin superfamily | Integrin | | | |
| CD86 | B7-2, B70 | Monocyte, macrophage, B cell, T cell, dendritic cell | T cell co-stimulation | Cell membrane | Immunoglobulin superfamily | CD28, CD152 | MCA1118 | BU63 | FC, IHC-F, IP |
| CD87 | UPAR, URKR, U-PAR, urokinase receptor | Granulocyte, monocyte, T cell, macrophage, endothelial cell | Localization and promotion of plasmin formation | Cell membrane | Ly-6 superfamily | Urokinase plasminogen activator | MCA2516 | VIM-5 | FC, FN, IHC-F, IP |
| CD87 | | | | | | | VPA00490 | Polyclonal | WB |
| CD88 | C5A, C5AR, C5R1 | Mast cell, macrophage, neutrophil, monocyte, endothelial cell | Stimulates chemotaxis, granule enzyme release and superoxide anion production | Cell membrane | G protein-coupled receptor superfamily | Chemotactic and inflammatory peptide anaphylatoxin C5a | MCA2059 | P12/1 | FC, IHC-F, IHC-P, WB |
| CD88 | | | | | | | MCA1283 | S5/1 | FC, FN*, IHC-P, WB |
| CD88 | | | | | | | VPA00595 | Polyclonal | WB |
| CD89 | FCAR, FcalphaRI, CTB-61M7.2, IgA R, FcαR | Monocyte, macrophage, neutrophil, T cell, B cell | Phagocytosis, antibody-dependent cell-mediated cytotoxicity, and stimulation of the release of inflammatory mediators | Cell membrane | Immunoglobulin superfamily | Fc region of IgA | MCA1824 | MIP8a | E, FC, FN, IP, WB |
| CD90 | CDw90, Thy-1 | T cell, endothelial cell, LT-HSC | Cell adhesion and cell communication | Cell membrane | Immunoglobulin superfamily | | MCA907 | F15-42-1 | FC, IF/ICC, IHC-F*, IP |
| CD91 | LRP1, APR, KPA, LRP, A2MR, APOER, LRP1A, TGFBR5, IGFBP3R | Monocyte, dendritic cell, T cell, endothelial cell | Lipid homeostasis and clearance of apoptotic cells. Integrin maturation and recycling. Associated with Alzheimer's disease | Cell membrane | Low-density lipoprotein receptor family | Heat shock protein gp96 | MCA1965 | A2Mr alpha-2 | E, FC, IF/ICC, IHC-F, IP, WB* |
| CD92 | CTL1, CDW92, CHTL1, SLC44A1 | Neutrophil, monocyte, endothelial cell, platelet, T cell | Transport of choline across the membrane for synthesis of cell membrane components and the neurotransmitter, acetylcholine | Cell membrane | Solute carrier family | Cholin | MCA2521 | VIM-15b | FC, IHC-F, IP |
| CD93 | C1QR1, C1qRP, CDw93, ECSM3, MXRA4, C1qR(P), dJ737E23.1 | Neutrophil, monocyte, endothelial cell | Intercellular adhesion and clearance of apoptotic cells, phagocytosis and neutrophil degranulation | Cell membrane | C-type lectin family | Complement component C1q, calcium ion binding, lectin | MCA1207 | X-2 | FC, IHC-F, IP |
| CD94 | Kp43 | NK cell, T cell, NKT cell, innate lymphoid cell | Inhibits NK cell function | Cell surface as a heterodimer with NKG2 | C-type lectin | | MCA2254 | DX22 | FC |
| CD95 | FAS1, APO-1, FASTM, ALPS1A, TNFRSF6, APT1, Fas | T cell, B cell, monocyte, neutrophil | Central role in the physiological regulation of programmed cell death. Activates activate NF-kappaB, MAPK3/ERK1, and MAPK8/JNK | Cell membrane | TNFR superfamily | Calmodulin, TNF | MCA1539 | LOB3/17 | FC, IP |
| CD96 | TACTILE, EMR1, BL-KDD/F12 | T cell, NK cell | Adhesive interactions of activated T and NK cells. Negative regulation of IFN-γ production | Cell membrane | Immunoglobulin superfamily | CD155 | MCA4643 | NK92.39 | FC |
| CD97 | TM7LN1, EMR1, ADGRE5 | T cell, B cell, granulocyte, monocyte, macrophage, dendritic cell | Cell adhesion and cell-cell signaling, leukocyte activation, recruitment and migration | Cell membrane | G protein coupled receptor superfamily | Calcium, binding to chondroitin sulphate and CD55 | MCA1878 | MEM-180 | FC, IP |
| CD98 | MDU1, 4F2HC, 4T2HC, NACAE, CD98HC, 4F2, SLC3A2, FRP-1 | T cell (weak), B cell (weak), monocyte (strong), granulocyte | Amino acid transport, calcium ion transport, carbohydrate metabolic process, cell growth, leucine import, leukocyte migration, tryptophan catabolic and tryptophan transport | Cell membrane | Solute carrier family | dsRNA, cadherin | MCA1105G | 44D7 | FC, IHC-F, IP |
| CD98 | | | | | | | VPA00372 | Polyclonal | WB |
| CD98 | | | | | | | AHP1139 | Polyclonal | IHC-P*, WB |
| CD98 | | | | | | | AHP1369 | Polyclonal | IHC-P* |
| CD99 | MIC2, HBA71, MIC2X, MIC2Y, MSK5X, E2 | T cell | Involved in leukocyte migration, T cell adhesion and death by a caspase-independent pathway | Cell membrane | Sialomucin family | CD99 | MCA1850 | DN16 | FC, IHC-F, WB |
| CD99 | | | | | | | MCA1919 | O13 | IHC-F, IP* |
| CD99R | E2 | T cell, NK cell, monocyte | Cell adhesion, migration, apoptosis, cell differentiation and regulation of protein trafficking | Cell membrane | Sialomucin family | | | | |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|--|---|---|-----------------------|---|---------------------------------|----------------|------------|------------------------------------|
| CD100 | SEMAJ, coll-4, C9orf164, M-sema-G, SEMA4D | T cell, B cell, dendritic cell | Regulating negative signaling by CD72 and significantly enhancing the effects of CD40 on B cell and dendritic cell responses | Cell membrane | Semaphorin family | Plexin B2 | MCA1269 | A8 | FC, IP, WB |
| CD101 | V7, IGSF2, EWI-101, P126 | Granulocyte, macrophage, T cell, dendritic cell, langerhans cell, monocyte | Inhibitor of T cell proliferation, inhibits expression of IL2RA and secretion of IL2 | Cell membrane | Immunoglobulin superfamily | | MCA2236 | BB27 | FC, IHC-F, IP |
| CD102 | ICAM-2 | Endothelial cell, monocyte, T cell, B cell | Lymphocyte recirculation by blocking LFA-1-dependent cell adhesion and NK cell mediated clearance | Cell membrane | Immunoglobulin superfamily | Integrin alpha-L/ beta-2 | MCA2290 | CBRIC2/2 | FC, IHC-F, IP |
| CD102 | | | | | | | MCA1140 | B-T1 | FC, IF/ICC, IP, WB |
| CD103 | ITGAE | T cell, innate lymphoid cell, epithelial cell, dendritic cell | Integrin for E cadherin for homing to intestinal sites | Cell membrane | Integrin | E-cadherin | MCA1416G | LF61 | FC, IHC-F*, IP |
| CD103 | | | | | | | MCA708 | 2G5.1 | FC, IHC-F*, IP |
| CD104 | GP150, ITGB4, TSP-1180, integrin b4-subunit | Epithelial cell | Hemidesmosome assembly and a role in invasive carcinoma | Cell membrane | Integrin family | Laminin | MCA1456 | 450-9D | FC, IF/ICC, IHC-F*, IP, WB |
| CD104 | | | | | | | VMA00285 | | WB |
| CD105 | Endoglin, END, HHT1, ORW1 | Endothelial cell, macrophage, monocyte | Cellular response to TGF-β1, regulation of angiogenesis and a major glycoprotein of vascular endothelium | Cell membrane | TGF-β superfamily | Beta1 and beta3 peptides, TGF-β | MCA1557 | SN6 | FC, IHC-F*, IP, WB |
| CD105 | | | | | | | MCA5674 | 2H6F11 | E, FC, WB |
| CD106 | Vascular cell adhesion protein 1, vascular cell adhesion molecule 1, VCAM-1, INCAM-110 | Macrophage, endothelial cell, dendritic cell | VCAM-1 functions as a cell adhesion molecule, mediates the adhesion of lymphocytes, monocytes, eosinophils and basophils to vascular endothelium | Cell membrane | Type I membrane protein, member of the immunoglobulin superfamily | VLA-4 (CD49d/ CD29) | MCA2237 | STA | FC, IP |
| CD106 | | | | | | | MCA907 | 1.G11B1 | E, FC, FN*, IF/ICC, IHC-F, IP, WB* |
| CD106 | | | | | | | VMA00461 | 3H10 | WB |
| CD107a | LAMP-1, LGP120, LMPA | Platelet, dendritic cell, endothelial cell, granulocyte, macrophage, neutrophil, T cell | Provides selectins with carbohydrate ligands, autophagic cell death, granzyme-mediated apoptotic signaling pathway | Cell membrane | LAMP family | Galaptin | MCA2881Z | B-T47 | FC, IHC-P |
| CD107a | | | | | | | AHP2448 | Polyclonal | IF/ICC, IHC-P, WB |
| CD107a | | | | | | | VPA00561 | Polyclonal | WB |
| CD107b | LAMP-2, LGP-96, LGP110, LAMPB | Platelet, T cell | Important role in chaperone-mediated autophagy. Required for the fusion of autophagosomes with lysosomes during autophagy and cellular response to starvation | Cell membrane | LAMP family | Galaptin | AHP2324 | Polyclonal | WB |
| CD107b | | | | | | | AHP2325 | Polyclonal | E, WB |
| CD107b | | | | | | | AHP1634 | Polyclonal | IHC-F, WB |
| CD107b | | | | | | | VPA00316 | Polyclonal | WB |
| CD108 | SEMAL, CDw108, SEMAK1, H-Sema-L, H-SEMA-K1, JMH, GPI-gp80, SEMA7A | T cell, erythrocyte, eosinophil | Important role in integrin-mediated signaling and functions both in regulating cell migration and immune response, olfactory lobe development, osteoblast differentiation | Cell membrane | Semaphorin family | Plexin C1 binding | | | |
| CD109 | p180, r150, CPAMD7, platelet activation factor, 8A3, E123 | Platelet, T cell, endothelial cell, LT-HSC | The protein binds to and negatively regulates signaling by transforming growth factor beta (TGF-beta) | Cell membrane | Alfa2 macroglobulin family | TGF-β | | | |
| CD110 | MPLV, TPOR, C-MPL, CD110, THCYT2, MPL | Platelet, megakaryocyte, endothelial cell, LT-HSC | Megakaryocyte and platelet formation, eosinophil, monocyte and neutrophil homeostasis | Cell membrane | Cytokine receptor family | Thrombopoietin | | | |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|---|--|-----------------------|----------------------------|---|----------------|---------------|-------------------|
| CD111 | PVRL1, PVRR1, SK-12, CLPED1, nectin-1, ED4, PRR, HlgR, HV1S, HVEC, OFC7, PRR1, PVRR | Neutrophil, macrophage, plasmacytoid dendritic cell | Promotes cell-cell contacts by forming homophilic or heterophilic trans-dimers, virus entry and desmosome organisation | Cell membrane | Immunoglobulin superfamily | Glycoprotein D of Herpes simplex and Pseudorabies virus. Interacts with integrin alphaV/beta3, FGFR1, FGFR2 and FGFR3 | | | |
| CD112 | PVRL2, PVRR2, HVEB, PRR2, NECTIN2 | Monocyte, neutrophil, endothelial cell | Plasma membrane component of adherents junctions and a role in cell adhesion | Cell membrane | Immunoglobulin superfamily | Interacts with CD226; entry receptor for viruses | MCA1937 | R2-525 | FC, IHC-F, IP |
| CD113 | PVRL3, PVRR3, CDW113, NECTIN-3, PPR3, PRR3, NECTIN3 | T cell, epithelial cell | Role in cell-cell adhesion through heterophilic trans-interactions with nectin-like proteins or nectins and formation of cell-cell junctions | Cell membrane | Immunoglobulin superfamily | Nectin-1, nectin-2, PVR | | | |
| CD114 | GCSFR, SCN7, CSF3R, HG-CSF3R | Granulocyte, monocyte, neutrophil, platelet, CMP | Involved in the production, differentiation, and function of granulocytes. Function in some cell surface adhesion or recognition processes and neutrophil chemotaxis | Cell membrane | Cytokine receptor family | Colony stimulating factor 3, interacts with CEACAM1 | MCA1544PE | LMM775 | FC |
| CD115 | CSF-1R, M-CSFR, c-fms | Monocyte, macrophage, dendritic cell, plasmacytoid dendritic cell, B cell | Cytokine receptor; differentiation and proliferation | Cell membrane | Tyrosine kinase receptor | | | | |
| CD116 | CSF2R, SMDP4, CDw116, CSF2RX, CSF2RY, GMCSFR, CSF2RAX, CSF2RAY, GM-CSF-R-alpha, GMR | Monocyte, macrophage, neutrophil, eosinophil, endothelial cell, granulocyte, dendritic cell | Proliferation, differentiation, and functional activation of hematopoietic cells and involved in the MAPK cascade | Cell membrane | Cytokine receptor family | Colony stimulating factor 2 | | | |
| CD117 | c-KIT, SCFR, PBT | LT-HSC, MPP, CMP, MEP, Pre NK cell, innate lymphoid progenitor, mast cell | Receptor tyrosine kinase important for mast cell survival, proliferation, activation, and chemotaxis | Cell membrane | Tyrosine kinase receptor | SCF receptor | MCA1841 | 104D2 | FC |
| CD118 | SWS, SJS2, STWS, LIF-R | Epithelial cell, monocyte (low), NK cell (low), endothelial cell | Mediates the action of the leukemia inhibitory factor and the positive regulation of cell proliferation | Cell membrane | Cytokine receptor family | LIF | | | |
| CD119 | IFNGR, IMD27A, IMD27B, IFNGR1, IFNYRa, IFNy receptor a-chain | Monocyte, macrophage, B cell, T cell, dendritic cell | Associates with IFNGR2 to form a receptor for the cytokine interferon gamma | Cell membrane | Cytokine receptor family | IFNy | MCA1450 | BB1E2 | E, FC, IHC-F, WB |
| CD120a | FPF, p55, p60, TBP1, TNF-R, TNFAR, TNFR1, p55-R, CD120a, TNFR55, TNFR60, TNF-R-I, TNF-R55, TNFRSF1A | Granulocyte, monocyte, macrophage, neutrophil, T cell, endothelial cell | Cell survival, apoptosis, and inflammation | Cell membrane | TNFR superfamily | TNF α , TNF- β | MCA1340 | H398 | E, FC, FN, R |
| CD120b | p75, TBPII, TNFBR, TNFR2, TNFR1B, TNFR80, TNF-R75, p75TNFR, TNF-R-II, TNFRSF1B | Monocyte, macrophage, granulocyte, B cell, endothelial cell, T cell, NK cell, NKT cell, basophil, eosinophil, CMP, LT-HSC | Mediates the recruitment of two anti-apoptotic proteins, c-IAP1 and c-IAP2, which possess E3 ubiquitin ligase activity | Cell membrane | TNFR superfamily | TNF α , TNF- β | 0100-0288 | 22221 (2/220) | E, FN, IHC-F, WB* |
| CD120b | | | | | | | AHP1833 | Polyclonal | E, FN, IF/ICC, WB |
| CD120b | | | | | | | VPA00343 | Polyclonal | WB |
| CD121a | P80, IL1R, IL1RA, D2S1473, IL-1R-alpha, IL1R1 | T cell, endothelial cell | Receptor for interleukin-1 alpha, interleukin-1 beta, and interleukin-1 receptor antagonist. Immune response and regulation of the inflammatory response | Cell membrane | Immunoglobulin superfamily | IL-1 α , IL-1 β , IL1RN | 0100-0242 | 35730 (49/20) | E, WB |
| CD121b | IL1RB, IL1R2c, CDw121b, IL-1R-2, IL-1RT2, IL-1RT-2, IL1R2 | B cell, T cell, monocyte, macrophage | Reduces IL1B activities, a role in the competitive binding to IL1B and preventing its binding to IL1R1 | Cell membrane | Immunoglobulin superfamily | IL-1 α , IL-1 β , IL1R1/IL1RA | | | |
| CD122 | IL2Rbeta, IL-2/15Rb, p75 | Macrophage, monocyte, Pre NK cell, NK cell, T cell, B cell | B subunit of the receptor for IL-2, which is involved in receptor mediated endocytosis and transduction of mitogenic signals from IL-2 | Cell membrane | | | MCA6060GA | TU27 | FC |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|---|--|-----------------------|-----------------------------------|--|----------------|---------------|------------------------------------|
| CD123 | IL-3 receptor alpha chain, IL-3Ra | GMP, basophil, mast cell, macrophage, dendritic cell, megakaryocyte | A subunit of the IL-3 receptor and plays an important role in hematopoietic progenitor cell growth and differentiation | Cell membrane | Immunoglobulin superfamily | IL-3 | MCA1263GA | 6H6 | FC, IHC-F, IP, WB |
| CD124 | IL4RA, IL-4RA, IL4R | T cell, B cell, endothelial cell | Regulate IgE production and differentiation of Th2 cells | Cell membrane | Cytokine receptor family | IL4, IL13 | 0100-0462 | 25463 (49/20) | E, FC, IHC-P, WB* |
| CD125 | IL5R, CDw125, HSIL5R3, IL5RA | Eosinophil, basophil | Regulation of IL-5 production and proliferation | Cell membrane | Cytokine receptor family | IL5, binds to syndecan binding protein | | | |
| CD126 | IL-6Ra, gp80, BSF-2 | B cell, epithelial cell, T cell | Subunit of IL-6 cytokine receptor | Cell membrane | | | MCA822 | B-R6 | E, FC, IF/ICC, IHC-F, IP |
| CD127 | IL-7R, p90 | CLP, Pro-B cell, Pre-B cell, B cell, T cell, innate lymphoid progenitor, innate lymphoid cell | Subunit of IL-7 cytokine receptor, pan innate lymphoid cell marker | Cell membrane | Type I transmembrane glycoprotein | IL-7 | HCA145 | 11592 | FC |
| CD127 | | | | | | | HCA144 | 11590 | FC*, IHC-F |
| CD127 | | | | | | | AHP2450 | Polyclonal | IHC-P, WB |
| CD129 | IL-9R, IL-9Ra, IL9R | T cell, eosinophil, mast cell, macrophage, B cell, CMP, MEP | Cell proliferation, positive regulation of cell growth, positive regulation of protein targeting to mitochondrion | Cell membrane | Cytokine receptor family | IL-9 | | | |
| CD130 | gp130 | B cell, T cell, mast cell, epithelial cell | Common receptor subunit for IL-6 family of cytokines which include IL-6, IL-11, IL-27, Oncostatin M and LIF | Cell membrane | | | MCA1136 | B-T2 | E, FC |
| CD130 | | | | | | | MCA1137F | B-R3 | FC |
| CD131 | IL3RB, IL5RB, SMDP5, CDw131, CSF2RB, common b-chain | Neutrophil, eosinophil, endothelial cell, B cell, monocyte, LT-HSC | Cellular response to interleukin-3 and interleukin-3-mediated signaling pathway, interleukin-5-mediated signaling pathway, MAPK cascade and response to lipopolysaccharide | Cell membrane | Cytokine receptor family | IL-3, IL-5, CSF | | | |
| CD132 | P64, CIDX, IMD4, SCIDX, IL-2RG, SCIDX1, IL2RG, common y-chain | T cell, B cell, NK cell, monocyte, granulocyte | Immune response, interleukin-2-mediated signaling pathway, interleukin-4-mediated signaling pathway, interleukin-7-mediated signaling pathway, MAPK cascade | Cell membrane | Cytokine receptor family | IL-2, IL-4, IL-7 | | | |
| CD133 | Prominin-1, PROML-1, AC133 | LT-HSC | Member of pentaspan transmembrane glycoproteins and may localize to cellular protrusions | Cell membrane | | | | | |
| CD134 | OX40, ACT35, IMD16, TXGP1L, TNFSF4 | T cell, B cell, endothelial cell | Activates NF-kappaB, interacts with TRAF2 and TRAF5, positive B cell proliferation, T cell activation, differentiation and apoptosis | Cell membrane | TNFR superfamily | OX40L, TNF | | | |
| CD135 | FLK2, STK1, FLK-2, FLT3 | Dendritic cell, hematopoietic stem cell, Pro/Pre-B cell | Regulates differentiation, proliferation and survival of hematopoietic progenitor cells and of dendritic cells | Cell membrane | Immunoglobulin superfamily | FLT3LG | | | |
| CD136 | RON, PTK8, NPCA3, CDw136, MSP-R | Macrophage, epithelial cell | Cell survival, migration and differentiation | Cell membrane | Semaphorin family | MST1, macrophage-stimulating protein (MSP) | AHP1321 | Polyclonal | IHC-P* |
| CD137 | ILA, 4-1BB, CDw137, TNFRSF9 | T cell, B cell, dendritic cell, monocyte, macrophage | Apoptotic processes and apoptotic signaling pathway, negative regulation of IL-12 and IL-10 secretion, inflammatory response, clonal expansion, survival, and development of T cells | Cell membrane | TNFR superfamily | TNFSF9/4-1BBL | MCA2653 | JG1.6A | E, FC |
| CD137 | | | | | | | AHP863B | Polyclonal | E, WB |
| CD138 | Syndecan-1, B-B4 | Pre-B cell, B cell | Control cell morphology and adhesion | Cell membrane | | | MCA2459 | B-A38 | FC, FN*, IF/ICC, IHC-F, IHC-P*, WB |
| CD140a | PDGF receptor alpha | T cell | Receptor tyrosine kinase for PDGF | Cell membrane | Receptor tyrosine kinase | PDGF | 0100-0220 | 35248(57/20) | E, IHC-P, WB |
| CD140a | | | | | | | AHP2567 | Polyclonal | WB |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|--|--|---|------------------------------|-------------------------------------|-------------------------------|----------------|------------|----------------------------------|
| CD140b | PDGF receptor beta | T cell | Receptor tyrosine kinase for PDGF | Cell membrane | Receptor tyrosine kinase | PDGF | AHP1326 | Polyclonal | IHC-P* |
| CD140b | | | | | | | 7460-3104 | PR7212 | FC, IHC-F, IHC-P, IF/ICC, IP, WB |
| CD141 | Thrombomodulin, fetomodulin | Endothelial cell, epithelial cell, megakaryocyte, dendritic cell, monocyte, neutrophil | Protein kinase C activation and anti-coagulation pathway | Cell membrane | Type I transmembrane glycoprotein | Thrombin | MCA641 | QBEND/40 | FC, IHC-F, IHC-P* |
| CD142 | TF, TFA, F3, thromboplastin | Monocyte, endothelial cell, epithelial cell | Initiates blood coagulation by forming a complex with circulating factor VII or VIIa | Cell membrane | Cytokine receptor family | Vlla | MCA2548F | CLB/TF-5 | FC |
| CD142 | | | | | | | MCA2549 | CLB/TF-1 | E, FC |
| CD142 | | | | | | | 9010-5059 | TF9-10H10 | FC, IF/ICC, IHC-F, WB |
| CD143 | DCP, ACE1, DCP1, peptidyl-dipeptidase A, ACE | Endothelial cell, macrophage, T cell | Involved in catalyzing the conversion of angiotensin I into a physiologically active peptide angiotensin II | Cell membrane | Metalloendopeptidase family | Angiotensin I, bradykinin | MCA2057 | 9B9 | E, FC, IHC-F*, IP |
| CD143 | | | | | | | MCA2056 | 2E2 | E, IHC-P*, WB |
| CD144 | 7B4, CDH5, VE-cadherin, cadherin-5 | Endothelial cell | Role in endothelial adherens junction assembly and maintenance and homophilic cell adhesion | Cell membrane, cell junction | Cadherin superfamily | Beta-catenin, calcium ion | | | |
| CD146 | MUC18, MCAM, Mel-CAM, s-endo | T cell, endothelial cell, dendritic cell | Role in cell adhesion, and in cohesion of the endothelial monolayer at intercellular junctions, angiogenesis, extravasion and/or homing of activated T cells | Cell membrane | Immunoglobulin superfamily | Netrin-1, galectin 1 | MCA2141 | OJ79c | E, FC, IHC-F |
| CD146 | | | | | | | VMA00201 | OT12G10 | WB |
| CD147 | OK, 5F7, TCSF, EMMPRIN, BSG | Erythrocyte, platelet, endothelial cell | Important in spermatogenesis, embryo implantation, neural network formation and tumor progression | Cell membrane | Immunoglobulin superfamily | Manose, cadherin | MCA1876 | MEM-M6/1 | FC, IP, WB* |
| CD147 | | | | | | | MCA2882Z | MEM-M6/6 | FC, FN, WB |
| CD147 | | | | | | | VMA00021 | | WB |
| CD148 | DEP1, SCC1, HPTPeta, R-PTP-ETA | Granulocyte, monocyte, dendritic cell, T cell | Role in cell adhesion, migration, proliferation and differentiation, and vascular development. Regulator of macrophage adhesion and spreading and positive regulation of platelet adhesion and thrombosis | Cell membrane, cell junction | Protein tyrosine phosphatase family | Beta, delta and gamma catenin | | | |
| CD150 | SLAM, CDw150, SLAMF1, IPO-3 | T cell, B cell, dendritic cell, endothelial cell, LT-HSC | Costimulation, proliferation, Ig production, measles virus receptor, production of IFN-γ in Th1 and required for IL-4 production | Cell membrane | Immunoglobulin superfamily | Acts as a self-ligand | | | |
| CD151 | GP27, MER2, RAPH, SFA1, PETA-3, TSPAN24 | Endothelial cell, platelet | Involved in cellular processes including cell adhesion and may regulate integrin trafficking and/or function, enhances motility and invasion of the cancer cells | Cell membrane | Tetraspanin family | Inegrin | MCA1856 | 11G5a | E, FC, IHC-F, IHC-P*, IP, WB* |
| CD152 | CTLA-4, AILIM, CTL Ag4, cytotoxic T lymphocyte protein 4 | T cell, B cell | Negative regulatory signal, binds to CD80 and CD86 present on APC | Cell membrane | | | MCA1724 | BNI3 | FC*, IHC-F*, IP |
| CD153 | CD30L, CD30LG, TNLG3A, TNFSF8 | B cell, eosinophil, granulocyte, macrophage, monocyte, neutrophil, T cell | Plays an inhibitory role in modulating Ig class switch and induces proliferation of T cells | Cell membrane | TNF superfamily | Ligand for TNFRSF8/CD30 | | | |
| CD154 | IGM, IMD3, TRAP, gp39, CD40L, HIGM1, T-BAM, TNFSF5, hCD40L | Basophil, dendritic cell, macrophage, mast cell, monocyte, NK cell, T cell | Regulates B cell function by engaging CD40 on the B cell surface and is co-stimulatory with CD40 | Cell membrane | TNF superfamily | Ligand for CD40 | MCA1561 | TRAP-1 | FC |
| CD154 | | | | | | | MCA1968F | MK13A4 | FC, FN |
| CD154 | | | | | | | MCA2755 | 1H4 | E, WB |
| CD154 | | | | | | | MCA2756 | 2A3 | E, WB |
| CD154 | | | | | | | AHP1029 | Polyclonal | E, IHC-P*, WB |

CD140b – CD154

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|--|---|--|-----------------------|----------------------------|------------------------------|----------------|------------|----------------|
| CD155 | PVS, HVED, PVR, NECL5, TAGE4, Necl-5, poliovirus receptor, nectin-like 5 | Monocyte, macrophage, endothelial cell, T cell, NKT cell | Role in the cell attachment to the extracellular matrix molecule vitronectin, cell migration, and serve as entry receptors for viruses | Cell membrane | Immunoglobulin superfamily | Acts as a ligand for DNAM-1 | MCA4644 | SKII4 | FC, FN, IF/ICC |
| CD156a | MS2, CD156a, ADAM8 | Eosinophil, dendritic cell, B cell, monocyte, neutrophil | Cell-cell and cell-matrix interactions; including fertilization; muscle development; and neurogenesis. Possible involvement in extravasation of leukocytes | Cell membrane | ADAM family | Zinc ion, calcium ion | | | |
| CD156b | J1, TCRGJ1, TACE, ADAM17, snake venom-like protease | Eosinophil, dendritic cell, B cell, monocyte, neutrophil, endothelial cell, epithelial cell | Cleaves the membrane-bound precursor of TNF-alpha to its mature soluble form and an activator of Notch pathway by mediating cleavage of Notch | Cell membrane | ADAM family | Zinc ion, integrin | AHP589 | Polyclonal | WB |
| CD156b | | | | | | | AHP1071 | Polyclonal | E, WB |
| CD156c | RAK, kuz, AD10, AD18, MADM, CDw156, HsT18717, ADAM10 | Eosinophil, dendritic cell, B cell, monocyte, neutrophil, T cell | Proteolytic cleavage of cell-surface molecules including Notch, TNF- α , APP and ephrin-A2 | Cell membrane | ADAM family | Zinc ion, integrin | AHP586 | Polyclonal | WB |
| CD157 | BST1, BP-3/IF7, Mo5 | Granulocyte, monocyte, Pro/Pre-B cell, endothelial cell, macrophage | Facilitates pre-B cell growth, synthesizes the second messengers cyclic ADP-ribose and nicotinate-adenine dinucleotide phosphate | Cell membrane | Ectoenzyme family | NAD, NADP | | | |
| CD158a | NKAT1, KIR2DL1, KIR221, NKAT-1, KIR-K64, p58.1 | NK cell, T cell | Receptor for HLA-C alleles, prevents cell lysis and inhibition of NK activity and interacts with ARRB2 | Cell membrane | Immunoglobulin superfamily | HLA-C alleles | | | |
| CD158b1 | NKAT6, p58.2, NKAT-6, CD158B1, KIR2DL2 | NK cell, T cell | Receptor for HLA-Cw1, 3, 7, 8 allotypes, prevents cell lysis and inhibition of NK activity and interacts with ARRB2 | Cell membrane | Immunoglobulin superfamily | HLA-Cw1, 3, 7, 8 allotypes | MCA2340 | 190IIC311 | FC, WB |
| CD158b1 | | | | | | | MCA1584 | GL183 | FC, IP |
| CD158b2 | p58, NKAT, GL183, NKAT2, NKAT2B, CD158B2, KIR-K7b, KIR-K7c, KIR2DS5, KIRCL23, KIR-023GB, KIR2DL3 | NK cell, T cell | Receptor for HLA-C alleles, prevents cell lysis and inhibition of NK activity and interacts with ARRB2 | Cell membrane | Immunoglobulin superfamily | HLA-Cw1, HLA-Cw3 and HLA-Cw7 | | | |
| CD158d | G9P, KIR103, KIR-2DL4, KIR103AS, KIR-103AS, KIR2DL4 | NK cell | Receptor for HLA-C alleles, prevents cell lysis and inhibition of NK activity and interacts with ARRB3 | Cell membrane | Immunoglobulin superfamily | HLA Bw4 | | | |
| CD158e | KIR, NKB1, NKAT3, NKB1B, NKAT-3, CD158E1, KIR3DL1/S1, KIR3DL1 | NK cell, T cell | Inhibits the activity of NK cells thus preventing cell lysis and involved in the regulation of the immune response | Cell membrane | Immunoglobulin superfamily | HLA Bw4 | | | |
| CD158f1 | KIR2DL5.1, KIR2DL5A | NK cell, T cell | Receptor for HLA-C alleles, prevents cell lysis and inhibition of NK activity | Cell membrane | Immunoglobulin superfamily | HLA-C alleles | | | |
| CD158f2 | KIR2DL5B, CD158F2 | NK cell, T cell | Receptor for HLA-C alleles, prevents cell lysis and inhibition of NK activity and interacts with ARRB2 | Cell membrane | Immunoglobulin superfamily | HLA-C alleles | | | |
| CD158g | NKAT9, KIR2DS5 | NK cell, T cell | Receptor for HLA-C alleles, does not inhibit the activity of NK cells | Cell membrane | Immunoglobulin superfamily | HLA-C alleles | | | |
| CD158h | KIR2DS1, p50.1 | NK cell, T cell | Receptor for HLA-C alleles, does not inhibit the activity of NK cells | Cell membrane | Immunoglobulin superfamily | HLA-C alleles | | | |
| CD158i | KKA3, KIR1D, NKAT8, KIR412, NKAT-8, KIR-2DS4, KIR2DS4 | NK cell, T cell | Doesn't inhibit the NK cell activity, receptor for HLA-C alleles | Cell membrane | Immunoglobulin superfamily | HLA-C alleles | | | |
| CD158j | KIR2DS2, NKAT5, cl-49, 183Act1, KIR-2DS2 | NK cell, T cell | Doesn't inhibit the NK cell activity, receptor for HLA-C alleles | Cell membrane | Immunoglobulin superfamily | HLA-C alleles | | | |
| CD158k | 3DL2, p140, NKAT4, NKAT-4, NKAT4B, KIR-3DL2 | NK cell, T cell | Inhibits the activity of NK cells thus preventing cell lysis | Cell membrane | Immunoglobulin superfamily | HLA-A alleles | | | |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|---|--|---|---|--|----------------|--------------|-------------------------------------|
| CD159a | NKG2A, NKG, KLRC1 | NK cell, T cell | Forms heterodimer with CD94 and binds to HLA-E | Cell membrane | NK cell receptor | | | | |
| CD159c | NKG2C, NKG2-C, KLRC2 | NK cell, T cell | Receptor for the recognition of MHC class I HLA-E molecules by NK cells and some cytotoxic T cells | Cell membrane | C-type lectin family | MHC class I HLA-E, heterodimer with CD94 | | | |
| CD160 | | T cell, NKT cell, NK cell | Broad specificity for binding to both classical and non-classical MHC class I molecules | Cell membrane | Immunoglobulin super family | | MCA2238 | BY55 | FC, IP |
| CD161 | NKR-P1A | NK cell, T cell, innate lymphoid cell | C-type lectin membrane glycoprotein involved in triggering NK cell cytotoxicity | Cell membrane | C-type lectin | | MCA1855 | B199.2 | FC, IHC-F, IP |
| CD162 | PSGL1, PSGL-1, CLA, SELPLG | Monocyte, granulocyte, neutrophil | High affinity counter-receptor for the cell adhesion molecules P-, E- and L- selectin expressed on myeloid cells and stimulated T cells | Cell membrane | Sialomucin family | Sialic acid | | | |
| CD163 | Mature macrophage marker, M130, MM130, GHI/61, D11, D11C163A, RM3/1 | Monocyte, macrophage, B cell | Differentiation and regulation of monocyte and macrophage function | Cell membrane | Scavenger receptor | | MCA1853 | EDHu-1 | E, FC, IF/ICC, IHC-F, IHC-P, IM, WB |
| CD164 | DFNA66, MGC-24, MUC-24, MGC-24v, endolyn | LT-HSC, epithelial cell, monocyte | Role in hematopoiesis by facilitating the adhesion of CD34 ⁺ cells, negative regulation of CD34 ⁺ CD38(lo ⁻) cell proliferation and interacts with the C-X-C chemokine receptor type 4 | Cell membrane, lysosome and endosome membrane | Sialomucin family | | | | |
| CD165 | AD2, SN2, gp37 | T cell, monocyte, platelet, double positive thymocyte | Mediates adhesive interactions between thymocytes and epithelial cells in the thymus | Cell membrane | | | MCA6061PE | SN2 (N6-D11) | FC |
| CD166 | MEMD, ALCAM | Monocyte, T cell, B cell, dendritic cell, epithelial cell, endothelial cell, LT-HSC | Homotypic and heterotypic cell adhesion, and T cell activation and proliferation | Cell membrane | Immunoglobulin superfamily | CD6; interaction with LGALS1 or LGALS3 inhibits interaction with CD6 | MCA1926 | 3A6 | E, FC, IHC-F, IP |
| CD167a | CAK, DDR, NEP, HGK2, PTK3, RTK6, TRKE, EDDR1, MCK10, NTRK4, PTK3A, DDR1 | Epithelial cell, langerhans cell | Regulates cell attachment to the extracellular matrix, remodelling of the extracellular matrix, cell migration, differentiation, survival and cell proliferation | Cell membrane | Protein kinase superfamily | Calcium ion, ATP, collagen | | | |
| CD167b | TKT, MIG20a, NTRKR3, TYRO10, DDR2 | Epithelial cell | Cell surface receptor for fibrillar collagen, a role in bone development, osteoblast differentiation and chondrocyte maturation, and fibroblast migration and proliferation | Cell membrane | Protein kinase superfamily | ATP, collagen | | | |
| CD168 | IHABP, RHAMM, HMMR | Monocyte, T cell | Involved in the cell motility; forms complex with the BRCA1 and BRCA2 | Cell membrane | Hyaluronic acid receptor family | Hyaluronic acid | | | |
| CD169 | Sialoadhesin, Siglec-1 | Macrophage, dendritic cell | Macrophage restricted cell adhesion molecule that mediates cell-cell interactions | Cell membrane | Type I transmembrane glycoprotein and prototypic member of the Siglec (sialic acid binding Ig-like lectin) family | Sialylated ligands | | | |
| CD170 | OBBP2, CD33L2, OB- BP2, SIGLEC 5 | Macrophage, neutrophil, monocyte, dendritic cell | Inhibits the activation of several cell types including monocytes, macrophages and neutrophils | Cell membrane | Immunoglobulin superfamily | Lectin | MCA5787GA | 1A5 | E, FC, IF/ICC, IP |
| CD171 | S10, HSAS, MASA, MIC5, SPG1, CAML1, HSAS1, N-CAML1, NCAM-L1, N-CAM-L1, neuronal adhesion molecule, L1 | Monocyte, T cell, B cell, dendritic cell, endothelial cell | Cell adhesion, important role in the development of the nervous system and homotypic cell-cell interactions | Cell membrane | Immunoglobulin superfamily | Axonin binding on neurones; binds CD9, CD24, CD56, CD142, CD166, and integrins | VMA00265 | OTI2G9 | WB |
| CD172a | BIT, MFR, P84, SIRP, MYD-1, SHPS1, PTPNS1, SIRPA | Monocyte, macrophage, dendritic cell, LT-HSC, granulocyte | Role in intracellular signaling during synaptogenesis and in synaptic function. Negative regulation of receptor tyrosine kinase-coupled cellular responses and negative regulation of phagocytosis | Cell membrane | Immunoglobulin superfamily | CD47 | MCA2518 | 15-414 | FC, IHC-F |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|---|---|-----------------------------------|--|--|----------------|------------|-------------------|
| CD172a | | | | | | | MCA5404Z | 4C7 | IF/ICC, WB |
| CD172a | | | | | | | AHP444 | Polyclonal | IHC-F, WB |
| CD172b | SIRP-BETA-1, SIRPB1 | Monocyte, dendritic cell, granulocyte | Negative regulation of receptor tyrosine kinase-coupled signaling processes and neutrophil degranulation | Cell membrane | Immunoglobulin superfamily | Interact with TYROBP/DAP12 | | | |
| CD172g | SIRPB2, SIRP-B2, bA77C3.1, SIRPgamma, SIRPG | T cell, NK cell, B cell | Cell-cell adhesion, enhanced antigen-specific T cell proliferation and co-stimulates T cell activation | Cell membrane | Immunoglobulin superfamily | CD47 | MCA2584 | OX119 | FC, IP |
| CD173 | Blood group H | Erythrocyte, platelet | Can co-express with CD174 and involved in cell matrix interaction | Cell membrane | Carbohydrate | | MCA1984 | BRIC231 | FC |
| CD174 | Blood group Lewis Y | Epithelial cell, LT-HSC | Can co-express with CD173 and involved in cell matrix interaction, and also inhibits in vitro angiogenesis | Cell membrane | Carbohydrate | | | | |
| CD175 | Tn Ag | Epithelial cell, LT-HSC | Reported to be expressed by malignant hematopoietic cells, expressed in various cancer cell lines | Cell membrane | Carbohydrate | | MCA1985 | BRIC111 | E, IHC-F |
| CD175s | Sialyl-Tn | Erythroblast, endothelial cell, epithelial cell | Reported to be expressed by malignant hematopoietic cells, expressed in many human epithelial cancers | Cell membrane | Carbohydrate | TFRA | | | |
| CD176 | Thomsen-Friedenreich Ag | LT-HSC, endothelial cell, erythrocyte | Reported to be expressed by malignant hematopoietic cells, expressed in various cancer cell lines | Cell membrane | Carbohydrate | | | | |
| CD177 | Neutrophil specific antigen 1, HNA-2a, PRV1, NB1 | Granulocyte, megakaryocyte | Glycosyl-phosphatidylinositol (GPI) linked cell surface glycoprotein, with a role in neutrophil activation | Cell membrane | GPI glycoprotein | | MCA2045 | MEM-166 | FC, IP, WB* |
| CD178 | Fas Ligand, TNFSF6, CD95L | Neutrophil, monocyte, T cell, NK cell | Fas-mediated killing of lymphocytes | Cell membrane | Type II transmembrane glycoprotein | CD95 | MCA2409 | 14C2 | E, FC*, IP |
| CD178 | | | | | | | MCA2408GA | 10F2 | E, FC, FN, IP |
| CD179a | IGI, IGVPB, VPREB, VPREB1 | Pro/Pre-B cells | Regulates Ig gene rearrangements in the early steps of B cell differentiation | Cell membrane | Immunoglobulin superfamily | Associates with CD179b | | | |
| CD179b | IGO, 14.1, AGM2, IGL1, IGL5, IGLL, IGVPB, VPREB2, IGLJ14.1, IGLL1 | Pro/Pre-B cells | Critical for B cell development | Cell membrane | Immunoglobulin superfamily | Associates with CD179a, immunoglobulin receptor binding, antigen binding | | | |
| CD180 | LY64, Ly78, RP105, Bgp95 | B cell, dendritic cell, macrophage, monocyte, plasma cell | Mediate the innate immune response to LPS in B cells, and NF-kappa-B activation | Cell membrane | TLR family | MD-1 | | | |
| CD181 | C-C, CD128, CKR-1, IL8R1, IL8RA, CMKAR1, IL8RBA, CDw128a, C-C-CKR-1, CXCR1, IL-8R-a | Monocyte, neutrophil, T cell, granulocyte, NK cell, mast cell, endothelial cell, megakaryocyte | Receptor for IL-8, activation of neutrophils and dendritic cell chemotaxis | Cell membrane | G protein-coupled receptor superfamily | IL-8 | | | |
| CD182 | IL8R2, IL8RA, IL8RB, CMKAR2, CDw128b, CXCR2, IL-8R-b | Endothelial cell, epithelial cell, neutrophil, basophil, NK cell, T cell, monocyte | Receptor for IL-8, activation of neutrophils, dendritic cell chemotaxis, neutrophil chemotaxis and degranulation | Cell membrane | G protein-coupled receptor superfamily | IL-8, CXCL3, GRO/MGSA and NAP-2 | | | |
| CD183 | CXCR3, CKR-L2, GPR9 | T cell, B cell, NK cell, plasmacytoid dendritic cell, mast cell, monocyte, macrophage, eosinophil | Chemotaxis | Cell membrane | G-protein coupled chemokine receptor | CXCL9, CXCL10, CXCL11 | | | |
| CD184 | FB22, HM89, LAP3, LCR1, NPYR, WHIM, LAP-3, LESTR, NPY3R, NPYRL, WHIMS, HSY3RR, NPY3R, D2S201E, CXCR4, fusin | Endothelial cell, epithelial cell, B cell, dendritic cell, LT-HSC, granulocyte, megakaryocyte, monocyte, platelet, T cell | MAPK1/MAPK3 activation, cardiac ventricular septum formation, cerebellar development, and together with CD4 supports HIV entry into the cells | Cell membrane, endosome, lysosome | G protein-coupled receptor superfamily | CXCL12/SDF-1, actin, extracellular ubiquitin | AHP442 | Polyclonal | FC, IHC-F, IP, WB |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|--|--|-----------------------|--|--|----------------|------------|---------------------------|
| CD184 | | | | | | | AHP1808 | Polyclonal | E, IHC-P, WB |
| CD184 | | | | | | | AHP2451 | Polyclonal | IHC-P, WB |
| CD185 | CXCR5, BLR1, MDR 15 | B cell, T cell | Chemotaxis | Cell membrane | G-protein coupled chemokine receptor | CXCL13 | | | |
| CD186 | BONZO, STRL33, TYMSTR, CXCR6 | T cell, NKT cell, NK cell, monocyte, B cell | Co-receptor by SIVs and by strains of HIV-2 and m-tropic HIV-1, and involved in chemotaxis | Cell membrane | G protein-coupled receptor superfamily | CXCL16 | AHP569 | Polyclonal | WB |
| CD191 | CKR1, CKR-1, HM145, CMKBR1, MIP1aR, SCYAR1, CCR1 | Macrophage, monocyte, NK cell, T cell, basophil, eosinophil | Stem cell proliferation, C-C chemokine binding. Involved in exocytosis, calcium transport and regulation of ERK1 and ERK2 | Cell membrane | G protein-coupled receptor superfamily | MIP-1-alpha, MIP-1-delta, RANTES, MCP-3, MIP-1-beta or MCP-1 | | | |
| CD192 | CCR2, CKR2, CCR2A, CCR2B, CKR2A, CKR2B, CMKBR2, MCP2-1-R, CC-CKR-2 | Monocyte, macrophage, dendritic cell, B cell, T cell | Chemotaxis | Cell membrane | G-protein coupled chemokine receptor | CCL1, CCL7, CCL8, CCL13, CCL16 | AHP1810 | Polyclonal | E, IHC-P, WB |
| CD193 | CCR3, eosinophil eotaxin receptor, CKR3 | Eosinophil, T cell, basophil | Chemotaxis | Cell membrane | G-protein coupled chemokine receptor | CCL11, CCL24, CCL26, CCL13 | AHP1010 | Polyclonal | IF/ICC, IHC-F, IHC-P*, WB |
| CD193 | | | | | | | MCA6071GA | 5E8 | FC |
| CD194 | CCR4, CKR4, K5-5, CMKBR4, ChemR13, CC-CKR-4, MGC88293 | T cell, B cell, basophil, monocyte, NK cell | Chemotaxis | Cell membrane | G-protein coupled chemokine receptor | CCL17, CCL22 | AHP1809 | Polyclonal | E, FC, IHC-F, IHC-P, WB |
| CD195 | CCR5, CKR5, C-C chemokine receptor type 5, HIV-1 fusion co-receptor | T cell, monocyte | Chemotaxis | Cell membrane | G-protein coupled chemokine receptor | MIP1a, MIP1b, RANTES | MCA2175 | HEK/1/85a | FC |
| CD195 | | | | | | | AHP568 | Polyclonal | IHC-P*, WB |
| CD195 | | | | | | | AHP1807 | Polyclonal | E, IHC-F, IHC-P*, WB |
| CD195 | | | | | | | VPA00044 | Polyclonal | WB |
| CD196 | CCR6, BN-1, CKR6, DCR2, CKRL3, DRY-6, GPR29, CKR-L3, CMKBR6, GPRCY4, STRL22, LARC receptor, GPR-CY4 | Dendritic cell, B cell, T cell, innate lymphoid cell | Chemotaxis | Cell membrane | G-protein coupled chemokine receptor | CCL20 | AHP1813 | Polyclonal | E, IHC-P, WB |
| CD197 | BLR2, EB11, CCR-7, CDw197, CMKBR7, CC-CKR-7, CCR7, EB11 | T cell, dendritic cell, B cell | Regulation of cell adhesion and cell-matrix adhesion, positive regulation of dendritic cell antigen processing and presentation, and neutrophil chemotaxis. Induced by EBV, dendritic cell maturation and T cell migration | Cell membrane | G protein-coupled receptor superfamily | MIP-3-beta, chemokine (C-C motif) ligand 19 binding, chemokine (C-C motif) ligand 21 binding | | | |
| CD198 | CC-CKR-8, CCR8, TER-1, ChemR1, CKRL1 | Macrophage, eosinophil, T cell, langerhans cell | Chemotaxis | Cell membrane | G-protein coupled chemokine receptor | CCL1, CCL8 | | | |
| CD199 | GPR28, CDw199, GPR-9-6, CC-CKR-9, CCR9 | T cell, dendritic cell, monocyte, macrophage, B cell | Involved in the T cell development, expressed by naive CD8+ T cells, but not by naive CD4+ T cells. Alternative coreceptor with CD4 for HIV-1 infection | Cell membrane | G protein-coupled receptor superfamily | CCL25 | | | |
| CD200 | OX2, Orexin Receptor 2 | T cell, double negative thymocyte, double positive thymocyte | Co-stimulates T cell proliferation | Cell membrane | Immunoglobulin superfamily | CD200R, OX2R | MCA1960 | OX-104 | FC, IHC-F |
| CD200R | Orexin Receptor 2, OX2R | Macrophage, monocyte, neutrophil, T cell, mast cell | The interaction between CD200 and CD200R may contribute to pathways that suppress macrophage induced inflammatory damage | Cell membrane | Membrane glycoprotein | CD200, OX2 | MCA2282 | OX108 | FC |
| CD201 | CCCA, EPCR, CCD41, endothelial protein C receptor | Endothelial cell, monocyte, neutrophil | Increases activation of the protein C and role in the protein C pathway controlling blood coagulation | Cell membrane | MHC class family | Activated protein C | | | |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|---|---|--|--------------------------------|---|----------------|------------|------------------------|
| CD202b | TIE2, VMCM, GLC3E, TIE-2, VMCM1, TEK | Endothelial cell | Regulates angiogenesis, endothelial cell survival, maintenance of vascular quiescence, anti-inflammatory effects and post-natal hematopoiesis | Cell membrane | Protein kinase superfamily | ATP, ANGPT1, ANGPT2 and ANGPT4 | | | |
| CD203c | E-NPP3, PDNP3, PD-1b, ENPP3 | Mast cell | Member of the ectoenzyme family, involved in the hydrolysis of extracellular oligonucleotides, nucleoside phosphates, and NAD | Cell membrane | | Oligonucleotides, nucleoside phosphate, NAD | | | |
| CD204 | SRA, SR-A, SR-AI, phSR1, phSR2, SCARA1, SR-AII, SR-AIII, MSR1, MSR, macrophage scavenger receptor | Macrophage, dendritic cell | Mediates the endocytosis of macromolecules like LDL, implicated in the pathologic deposition of cholesterol in arterial walls, cholesterol transport and lipoprotein transport | Cell membrane | Scavenger receptor superfamily | LDL | AHP563 | Polyclonal | E, IHC-P, WB |
| CD205 | DEC-205, lymphocyte Ag75, MSR, SR-A, phSR1, phSR2, SCARA1, MSR1 | Dendritic cell, macrophage | Macrophage scavenger receptor that mediates the endocytosis of modified low density lipoproteins (LDLs) | Cell membrane | Macrophage scavenger receptor | LDLs | MCA4755 | HD30 | FC, IHC-F, WB |
| CD205 | | | | | | | MCA2258 | MG38 | FC*, IHC-F, IP |
| CD206 | Mannose receptor C type-1 (MRC1), CLEC13D, macrophage mannose receptor (MMR) | Monocyte, macrophage, dendritic cell, endothelial cell | Antigen processing, presentation and phagocytosis | Cell membrane | PRR, lectin superfamily | Mannose, fucose, N-acetyl glucosamine | MCA5552Z | 5C11 | IHC-P |
| CD206 | | | | | | | MCA2519 | 7-450 | IHC-F |
| CD206 | | | | | | | MCA2155 | 15-2 | FC, IF/ICC, IHC-F, WB* |
| CD207 | Langerin, CLEC4K | Dendritic cell, langerhans cell | 40 kDa C-type Lectin receptor | Cell membrane | C-type lectin receptor | | | | |
| CD208 | DCLAMP, LAMP-3, TSC403, DC LAMP, DC-LAMP, LAMP, LAMP3 | Dendritic cell | Role in dendritic cell function and in adaptive immunity, regulation of autophagy and the viral life cycle, and might change the lysosome function | Cell membrane, lysosome membrane, cytoplasmic vesicles | LAMP family | | | | |
| CD209 | DC-SIGN, CLEC4L | Dendritic cell | Dendritic cell migration and T cell proliferation | Cell membrane | C-type lectin receptor | ICAM2, ICAM3, BTN2A-1 | MCA2318 | MR-1 | FC, FN, IF/ICC |
| CD209 | | | | | | | AHP627 | Polyclonal | IF/ICC, IHC-F, WB |
| CD210 | CD210a, CDW210A, HIL-10R, IL-10R1, IL10R, IL10RA, IL10R-a | Monocyte, B cell, T cell, NK cell, macrophage, dendritic cell, neutrophil | Mediates the immunosuppressive signal of interleukin 10, and inhibits the synthesis of pro-inflammatory cytokines | Cell membrane | Cytokine receptor family | IL-10 | | | |
| CDw210b | CRFB4, CRF2-4, D21S58, D21S66, CDW210B, IL-10R2, IL10RB, IL10R-b | T cell, B cell, NK cell, monocyte, macrophage, dendritic cell, neutrophil | Accessory chain essential for the active interleukin 10 receptor, co-expression with IL10RA is essential for the IL10-induced signal transduction, and required for the activation of IL-10, IL-22, IL-26, IL-28, and IFNL1 | Cell membrane | Cytokine receptor family | Co-receptor for IFNL2 and IFNL3, IL-10 reacts with IL-19, IL-22, IL-26, IL-28 | | | |
| CD212 | IL-12 receptor B1 (LI-12R-b1) | B cell, macrophage, NK cell, T cell | Cytokine receptor, forms dimer to make the IL-12 receptor and with IL-23R to form the IL-23 receptor | Cell membrane | Interleukin receptor | | | | |
| CD213a1 | NR4, CT19, CD213A1, IL-13Ra, IL-13R-a1 | B cell, T cell, endothelial cell, monocyte | Together with IL-4RA, it can form a functional receptor for IL-13, also an alternate accessory protein for IL-4 | Cell membrane | Cytokine receptor family | IL-13, IL-4 | | | |
| CD213a2 | CT19, IL-13R, IL13BP, CD213A2, IL13RA2, IL-13R-a2 | B cell, T cell, endothelial cell, monocyte | A role in the internalization of IL-13 | Cell membrane | Cytokine receptor family | IL-13 but not IL-4 | | | |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|--|---|--|--|--|--|----------------|---------------|----------------------------------|
| CD215 | IL15RA, IL-15R-a | Monocyte, dendritic cell, T cell, NK cell, NKT cell | Enhances cell proliferation and expression of apoptosis inhibitor BCL2L1/BCL2-XL and BCL2 | Cell membrane, nuclear membrane, golgi and endoplasmic reticulum | Cytokine receptor family | IL-15 | | | |
| CD217 | IL17R, IL-17Ra, IL-17AR | B cell, T cell, NK cell, monocyte, macrophage, granulocyte | Cytokine receptor | Cell membrane | Interleukin receptor | IL-17 | | | |
| CD218 alpha | IL-18 receptor, CDw218a, IL-18 receptor alpha (LI-18R-a) | NK cell, neutrophil, B cell, T cell | Cytokine receptor | Cell membrane | Interleukin receptor | IL-18 | MCA6062GA | H44 | FC |
| CD218b | IL-1R7, IL18RB, CDw218b, IL-1R-7, IL-18RAcP, IL-1RAcPL, IL-18Rbeta, IL-18R-beta, ACPL, IL-18R-b | T cell, NK cell, monocyte, dendritic cell, endothelial cell | IL18-dependent signal transduction, leading to NF-kappa-B and JNK activation, and also a co-receptor for IL18R1 | Cell membrane | Immunoglobulin superfamily | | | | |
| CD220 | HHF5, INSR, insulin receptor | Monocyte, granulocyte, erythrocyte, endothelial cell | Involved in the regulation of glucose uptake and release, as well as the synthesis and storage of carbohydrates, lipids and protein | Cell membrane | Protein kinase superfamily | Insulin, insulin like growth factor, ATP, GTP binding | AHP1216 | Polyclonal | IHC-P* |
| CD221 | IGFIR; JTK13; IGFR; IGF1 receptor; type IGF receptor | NK cell, endothelial cell | Cell proliferation and survival; activation of the PI3K/Akt and MAPK pathways; crucial for tumor transformation and survival of malignant cell | Cell membrane | Protein kinase superfamily | Insulin like growth factor (IGF-1 and IGF-2); insulin; ATP | MCA2344 | 1H7 | FC, FN, IHC-P*, WB |
| CD222 | MPR1, MPRI, CIMPR, M6P-R, MPR300, CI-M6PR, MPR 300, M6P/IGF2R, IGF2R, manose-6-phosphate receptor | B cell, T cell, endothelial cell | Intracellular trafficking of lysosomal enzymes, the activation of transforming growth factor beta, and the degradation of insulin-like growth factor 2 | Cell membrane, lysosomal membrane | P-type lectin family | Manose-6-phosphate, IGF-2, retinoic acid binding | MCA2048 | MEM-238 | FC*, IF/ICC |
| CD223 | LAG3 | T cell, NK cell | Involved in lymphocyte activation, binding to HLA class-II antigens, negative regulation of the T cell activation, and positive regulation of the NK cell mediated cytotoxicity | Cell membrane | Immunoglobulin superfamily | HLA class-II | | | |
| CD224 | GGT, GTG, GGT 1, D22S672, D22S732, GGT1, γ-glutamyl transferase | T cell, B cell, macrophage, monocyte | Initiates extracellular glutathione (GSH) breakdown, provides cells with a local cysteine supply and contributes to maintain intracellular GSH level. Involved in glutathione metabolism | Cell membrane | Peptidase protein family | Glutamate binding | MCA3141Z | 1F9 | IHC-P*, WB |
| CD225 | IFI17, LEU13, DSPA2a, 9-27, IFITM1, IFN-induced TM protein 1 | NK cell, T cell, B cell, dendritic cell | Inhibits the entry of viruses to the host cell cytoplasm, permitting endocytosis, but preventing subsequent viral fusion and release of viral contents into the cytosol | Cell membrane | IFN-inducible transmembrane protein family | Interacts with CD81 | VPA00603 | Polyclonal | WB |
| CD226 | PTA1, DNAM1, DNAM-1, TLISA1 | NK cell, platelet, monocyte, T cell, B cell | Mediates cellular adhesion of platelets and megakaryocytic cells to vascular endothelial cells, and plays a role in megakaryocytic cell maturation | Cell membrane | Immunoglobulin superfamily | NECTIN2 | MCA2257 | DX11 | FC, FN, IP |
| CD226 | | | | | | | VPA00420 | Polyclonal | WB |
| CD227 | H23AG, MCKD1, MUC-1, ADMCKD, ADMCKD1, CA 15-3, MUC-1/X, MUC1/ZD, MUC-1/SEC, EMA, MCD, PEM, PUM, KL-6, MAM6, MCKD, PEMT, MUC1 | Epithelial cell, T cell, B cell, monocyte, dendritic cell | Provides a protective layer on epithelial cells against bacterial and enzyme attack, and modulates signaling in ERK, SRC and NF-kappa-B pathways | Cell membrane | Sialomucin family | | 1695-0028 | VU-4H5 | E, IHC-F, IHC-P, WB |
| CD227 | | | | | | | 6378-0135 | VU-3C6 | FC, IHC-F, IHC-P*, IP, WB |
| CD227 | | | | | | | MCA1742 | C595 (NCRC48) | E, FC, IF/ICC, IHC-F, IHC-P*, WB |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|---|---|--|--|--|----------------|------------|---------------------------|
| CD227 | | | | | | | MCA5848G | 149.1G8 | IHC-P* |
| CD227 | | | | | | | MCA4849G | 149.1E6 | IHC-P* |
| CD228 | MAP97, MTF, MFI2, MTF1 | Epithelial cell | Involved in iron cellular uptake and homeostatis, and may also bind zinc | Cell membrane | Transferrin superfamily | Iron ion, carbonate binding | | | |
| CD229 | Ly-9, SLAMF3 | MPP, T cell, B cell, NK cell | Homophilic adhesion molecule, cytoplasmic tail of CD229 binds to SAP and Grb2 proteins | Cell membrane | | | MCA2124 | HLy9.1.25 | FC, IP |
| CD230 | AltPrP, p27-30, PrP27-30, PrP33-35C, CJD, GSS, PrP, ASCR, KURU, PRIP, PrPc, prion protein | T cell, dendritic cell, B cell, epithelial cell, monocyte | May play a role in neuronal development, and an agonist for ADGRG6 receptor | Cell membrane | Prion family | Copper, zinc, homotypic binding | AHP498 | Polyclonal | E, IHC-P, WB |
| CD231 | MRX58, CCG-B7, TM4SF2, TALLA-1, TM4SF2b, DXS1692E, A15, MXS1, TSPAN7, TALLA-1, TM4SF2 | T cell, endothelial cell | Role in the regulation of cell development, activation, growth and motility, and also neurite outgrowth | Cell membrane | Tetraspanin family | Integrins | | | |
| CD232 | VESPR, PLXN-C1, PLXNC1 | Monocyte, dendritic cell, neutrophil, B cell | Receptor for SEMA7A, smallpox semaphorin A39R, vaccinia virus semaphorin A39R and for herpesvirus Sema protein | Cell membrane | Plexin family | Semaphorins | | | |
| CD233 | DI, FR, SW, WD, WR, AE1, CHC, SAO, WD1, BND3, EPB3, SPH4, EMPB3, RTA1A, SLC4A1 | Erythrocytes | Mediates electroneutral anion exchange across the cell membrane, required for normal flexibility and stability of the erythrocyte membrane and for normal erythrocyte shape, and mediates chloride-bicarbonate exchange | Cell membrane | Solute carrier family | Bicarbonate and chloride transport, ankyrin binding | | | |
| CD234 | WBCQ1, DARC/ACKR1, Fy, Dfy, GPD, DARC, GpFy, CCBP1, ACKR1, DARC, Fy-glycoprotein | Endothelial cell, erythrocyte | Controls chemokine levels and localization via high-affinity chemokine binding, regulates chemokine bioavailability, and is called chemokine-scavenging receptor | Cell membrane, recycling, early endosome | G protein-coupled receptor superfamily | CCL2, CCL5, CCL7, CCL11, CCL13, CCL14, CCL17, CXCL5, CXCL6, IL8/ CXCL8, CXCL11, GRO, RANTES, MCP-1, TARC | AHP1708 | Polyclonal | IHC-P*, WB |
| CD234 | | | | | | | AHP1707 | Polyclonal | IHC-P*, WB |
| CD235a | Glycophorin A, PAS-2 | Proerythroblast, erythrocyte | 36 kDa glycoprotein expressed exclusively by cells of erythrocyte lineage | Cell membrane | | | MCA506G | YTH89.1 | CT, FC, IHC-F, IHC-P |
| CD235a | | | | | | | 4720-5010 | Polyclonal | E, IP, WB |
| CD235b | SS, GPB, GYP, MNS, PAS-3, GYPB, Glycophorin B | Erythrocyte | This protein is a minor sialoglycoprotein in erythrocyte membranes, and is involved in leucocyte migration | Cell membrane | Glycophorin family | Sialic acid | | | |
| CD236 | PAS-2, CD236R, PAS-2*, GE:GPC:GPD:GYPD, GE, GPC, GPD, GYPD, GYPC, Glycophorin C/D | Erythrocyte | Important role in regulating the mechanical stability of erythrocytes, and is a minor sialoglycoprotein in human erythrocyte membranes | Cell membrane | Glycophorin family | Sialic acid | MCA1980 | BRIC10 | FC, WB |
| CD236 | | | | | | | MCA1984 | BGRL100 | IHC-F, IP, WB |
| CD236 | | | | | | | MCA1986 | BRIC4 | FC, IHC-F, WB |
| CD236R | Glycophorin C | Erythrocyte | Spliced variant of CD236 | Cell membrane | Glycophorin family | | | | |
| CD238 | Kell blood group Ag, ECE3, KEL | Erythrocyte, dendritic cell | Cleaves EDN1, EDN2 and EDN3. Zinc endopeptidase with endothelin-3-converting enzyme activity, and involved in calcium and magnesium ion homeostasis | Cell membrane | Peptidase protein family | Zinc ion | MCA1987 | BRIC203 | FC, IP |
| CD239 | AU, LU, MSK19, BCAM, lutheran glycoprotein | Epithelial cell, endothelial cell | Laminin alpha-5 receptor, cell adhesion and cell-matrix adhesion | Cell membrane | Immunoglobulin superfamily | Laminin alpha-5 | MCA1982 | BRIC221 | E, FC, IF/ICC, IHC-F, WB* |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|--|---|--|---|--|--|----------------|------------|-------------------------------|
| CD240CE | RhIVb(J), RHCe(152N), RH, RHC, RHE, Rh4, RHPI, RhVI, RH30A, RHIXB, RhVIII, RHCE, Rh blood group system, Rh30CE | Erythrocyte | Transport or channel function in the erythrocyte membrane | Cell membrane | Rh blood group system family | Ammonium transport | | | |
| CD240DCE | Rh30D/CE | Erythrocyte | Spliced variant | Cell membrane | Rh blood group system family | Ammonium transport | MCA1981 | BRIC69 | FC, IP |
| CD240D | RHXIII, RHDVA(TT), RhK562-II, RH, Rh4, RH30, RhII, RhPI, DIIIc, RHCED, RHDel, RHPII, RhDCw, RHD, RH1, Rh30D, rhesus blood group Ag | Erythrocyte | Transport or channel function in the erythrocyte membrane | Cell membrane | Rh blood group system family | Ammonium transport | | | |
| CD241 | RH50A, Rh50GP, SLC42A1, OHS, RH2, OHST, Rh50, RHAG, RhAg, Rh50, Rh-associated Ag | Erythrocyte | Associated with rhesus blood group antigen expression and monovalent cation transport | Cell membrane | Rh blood group system family | Ammonium transport, ankyrin binding | | | |
| CD242 | LW, ICAM4, LW blood group | Erythrocyte | ICAM4 is also a ligand for alpha-4/beta-1 and alpha-V integrins | Cell membrane | Immunoglobulin superfamily | Integrins | | | |
| CD243 | CLCS, MDR1, P-GP, PGY1, ABC20, GP170, pgp 170, P-glycoprotein | Endothelial cell, LT-HSC, T cell | Energy-dependent efflux pump responsible for decreased drug accumulation in multidrug-resistant cells, ceramide translocation, stem cell proliferation, membrane transport, and mediates the development of resistance to anticancer drugs | Cell membrane | ATP-binding cassette transporters superfamily | ATP | MCA2671 | UIC2 | FC, IF/ICC, IHC-F, IHC-P*, IP |
| CD243 | | | | | | | MCA857H | JSB-1 | IHC-F, IHC-P* |
| CD243 | | | | | | | AHP1311 | Polyclonal | IHC-P* |
| CD243 | | | | | | | VMA00324 | OTI2C7 | WB |
| CD244 | NKG2B4, 2B4, SLAMF4 | MPP, NK cell, T cell, monocyte | Modulates NK cell cytolytic activity | Cell membrane | NK cell receptor | CD48 | MCA2421 | 2B4.69 | FC, IP |
| CD245 | Myosin 18A | NK cell, macrophage | Critical role in cytoskeleton organization, golgi budding, golgi membrane trafficking and could indirectly give its flattened shape to the golgi apparatus. Also regulates trafficking, expression, and activation of innate immune receptors on macrophages | Cell membrane, endoplasmic reticulum (ER), golgi, cytoplasm | TRAFAC class myosin-kinesin ATPase superfamily | Surfactant A SFTPA1/SP-A, ATP, ADP, DNA, RNA | | | |
| CD246 | NBLST3, ALK | Endothelial cell, T cell lymphomas | Important role in the genesis and differentiation of the nervous system, and regulates cell growth and apoptosis | Cell membrane | Protein kinase superfamily | Midkine, pleiotrophin, ATP | AHP2275 | Polyclonal | WB |
| CD247 | T3Z, CD3H, CD3Q, CD3Z, TCRZ, IMD25, CD3-ZETA, TCR z-chain | T cell, NK cell | Role in assembly and expression of the TCR complex as well as signal transduction upon antigen triggering, and regulates defence response to viruses | Cell membrane | CD3Z/FCER1G family | TCR complex | VMA00220 | | WB |
| CD248 | TEM1, CD164L1, endosialin | T cell | Role in tumor angiogenesis, and helps to maintain naïve CD8 ⁺ human T cells in a quiescent state | Cell membrane | C-type lectin family | Calcium, lectin | | | |
| CD249 | Aminopeptidase A, APA, gp160, ENPEP | Epithelial cell, endothelial cell, Pre-B cell | Role in the catabolic pathway of the renin-angiotensin system, in regulating growth and differentiation of early B-lineage cells, and in angiogenesis | Cell membrane | Peptidase protein family | Zinc ion, angiotensin II, cholecystokinin-8 | | | |
| CD252 | GP34, OX40L, TXGP1, CD134L, OX-40L, TNLG2B | B cell, dendritic cell, endothelial cell, mast cell, monocyte, T cell | Stimulates T cell proliferation and cytokine production, involved in T cell-APC interactions and mediates adhesion of activated T cells | Cell membrane | TNF superfamily | TNFRSF4 | | | |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|--|---|--------------------------------------|------------------|---|----------------|------------|-------------------|
| CD253 | TL2, APO2L, TRAIL, Apo-2L, TNLG6A, TNFSF10 | NK cell, T cell | Induces apoptosis in transformed and tumor cells, activation of MAPK8/JNK, caspase 8, and caspase 3. Involved in the response to insulin | Cell membrane | TNF superfamily | TNFRSF10A/TRAILR1, TNFRSF10B/TRAILR2, TNFRSF10C/TRAILR3, TNFRSF10D/TRAILR4, TNFRSF11B/OPG, zinc ion | MCA2144EL | 2E5 | FC, FN, WB |
| CD253 | | | | | | | AHP1215 | Polyclonal | E, FN, IHC-P*, WB |
| CD253 | | | | | | | AHP440 | Polyclonal | IHC-P*, WB |
| CD254 | ODF, OPGL, sOdf, OPTB2, RANKL, TNLG6B, TRANCE, hRANKL2 | T cell | Osteoclast differentiation and activation factor, augments the ability of dendritic cells to stimulate naive T cell proliferation | Cell membrane | TNF superfamily | TNFRSF11B/OPG, TNFRSF11A/RANK | MCA5971GA | C01-2D2 | E |
| CD254 | | | | | | | AHP1209 | Polyclonal | E, IHC-P*, WB |
| CD256 | APRIL, TALL2, ZTNF2, TALL-2, TNLG7B, TRDL-1, UNQ383/PRO715, TNFSF13 | Monocyte, macrophage | Involved in monocyte/macrophage-mediated immunological processes, and important for B cell development | Secreted, membrane, cytosol, exosome | TNF superfamily | TNFRSF13B/TACI, TNFRSF17/BCMA | MCA5994GA | D05-1D4 | E |
| CD256 | | | | | | | AHP953 | Polyclonal | IHC-P, WB |
| CD257 | DTL, BAFF, BLYS, TALL1, THANK, ZTNF4, TALL-1, TNLG7A, TNFSF20, TNFSF13B | Monocyte, macrophage, T cell, dendritic cell, B cell | Involved in the stimulation of B and T cell function and co-stimulation | Cell membrane | TNF superfamily | TNFRSF13B/TACI, TNFRSF17/BCMA | MCA5984GA | A01-1A12 | E |
| CD257 | | | | | | | MCA2677 | 2B | E |
| CD257 | | | | | | | MCA4619T | T7-241 | E, FC |
| CD257 | | | | | | | AHP587 | Polyclonal | WB |
| CD258 | LTg, HVEM, LIGHT, TNFSF14 | Dendritic cell, granulocyte, monocyte, NK cell, T cell | Stimulates the proliferation of T cells, receptor for Herpes simplex virus, involved in the apoptotic process, and positive regulation of the T cell chemotaxis | Cell membrane | TNF superfamily | TNFRSF3/LTBR, TNFRSF6B | | | |
| CD261 | DR4, APO2, TRAILR1, TRAILR-1, TNFRSF10A | T cell | Involved in the activation of NF-kappa-B, transduces cell death signal and induces cell apoptosis | Cell membrane | TNFR superfamily | TNFSF10/TRAIL | MCA2332 | DR-4-02 | FC, IP |
| CD261 | | | | | | | AHP438 | Polyclonal | WB |
| CD261 | | | | | | | AHP439 | Polyclonal | IHC-F, WB |
| CD262 | DR5, KILLER, TRICK2, TRICKB, ZTNFR9, TRAILR2, TRICK2A, TRICK2B, TRAIL-R2, KILLER/DR5, TNFRSF10B | Basophil | Essential for ER stress-induced apoptosis, contains an intracellular death domain, and expression is upregulated by interferon-alpha | Cell membrane | TNFR superfamily | TNFSF10/TRAIL | MCA4638T | DJR2-4 | FC, IF/ICC |
| CD262 | | | | | | | AHP488 | Polyclonal | IHC-F, WB |
| CD262 | | | | | | | AHP1806 | Polyclonal | E, FC, IHC-P |
| CD263 | LIT, DCR1, TRID, TRAILR3, TRAIL-R3, DCR1-TNFR, TNFRSF10C | T cell | Not capable of inducing apoptosis, and it may protect cells against TRAIL mediated apoptosis | Cell membrane | TNFR superfamily | TRAIL | MCA2559 | 2B8 | FC, IP |
| CD263 | | | | | | | AHP934 | Polyclonal | WB |
| CD264 | DCR2, TRUNDD, TRAILR4, TRAIL-R4, TNFRSF10D | T cell, B cell, NK cell, macrophage, monocyte, granulocyte | Not capable of inducing apoptosis but protects against TRAIL-mediated apoptosis, and contains only truncated death domain | Cell membrane | TNFR superfamily | TRAIL | AHP489 | Polyclonal | IHC-F, WB |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|--|--|--|-----------------------|-------------------------------------|---|----------------|------------|---------------|
| CD265 | FEO, OFE, ODFR, OST5, PDB2, RANK, OPTB7, TRANCER, LOH18CR1, TNFRSF11 | Erythrocyte, dendritic cell, monocyte | Involved in the regulation of interactions between T cells and dendritic cells | Cell membrane | TNFR superfamily | TNFSF11/RANKL/ TRANCE/OPGL and sodium ion | | | |
| CD266 | FN14, TWEAKR, TNFRSF12A | T cell, epithelial cell | Weak inducer of apoptosis, involved in the angiogenesis and the proliferation of endothelial cells, and modulates cellular adhesion to matrix proteins | Cell membrane | TNFR superfamily | TNFSF12/TWEAK | MCA4699 | ITEM-4 | FC, IHC-F, WB |
| CD267 | CVID, RYZN, TACI, CVID2, IGAD2, TNFRSF14B | B cell, T cell | Facilitates calcineurin-dependent activation of NF-AT, NF-kappa-B and AP-1, and involved in the stimulation of B and T cell function | Cell membrane | TNFR superfamily | TNFSF13/APRIL, TNFSF13B/TALL1/ BAFF/BLYS | AHP955 | Polyclonal | WB |
| CD268 | BAFFR, BR3, TNFRSF13C, B cell activating factor, Bly5 receptor 3 | B cell | Role in B cell development maturation and function | Cell membrane | Type III transmembrane TNF receptor | BAFF | AHP954 | Polyclonal | IHC-P*, WB |
| CD269 | BCM, BCMA, TNFRSF13A, TNFRSF17 | B cell | Enhances B cell survival and activates NF-kappa-B and JNK | Cell membrane | TNFR superfamily | TNFSF13B/Bly5/ BAFF, TNFSF13/ APRIL | | | |
| CD270 | TR2, ATAR, HVEA, HVEM, LIGHTR, TNFRSF14 | T cell, B cell, macrophage, dendritic cell | Involved in lymphocyte activation, positive regulation of the T cell migration, and in the defence against gram negative and positive bacteria | Cell membrane | TNFR superfamily | BTLA, TNFSF14/ LIGHT, TNFSF1/ lymphotoxin-alpha | MCA6072GA | 122 | FC |
| CD271 | p75NTR, TNFRSF16, p75(NTR), Gp80-LNGFR, NGFR | Dendritic cell, epithelial cell | Role in the regulation of the translocation of GLUT4 to the cell surface, and involved in the cell survival and death | Cell membrane | TNFR superfamily | NGF, BDNF, NT-3, NT-4 | AHP1014 | Polyclonal | IHC-F, WB |
| CD271 | | | | | | | VPA00240 | Polyclonal | WB |
| CD272 | BTLA | B cell, T cell, NK cell | Lymphocyte inhibitory receptor which inhibits lymphocytes during immune response | Cell membrane | Immunoglobulin superfamily | TNFRSF14 | MCA2631 | MIH26 | FC, IHC-F |
| CD273 | B7DC, Btdc, PDL2, PD-L2, PDCD1L2, bA574F11.2 | Dendritic cell, macrophage | Co-stimulatory signal, essential for T cell proliferation, interaction with PDCD1 inhibits T cell proliferation, and negative regulation of IL-10 and IFN-gamma | Cell membrane | Immunoglobulin superfamily | Ligand for CD279 | MCA2630 | MIH14 | FC, IHC-F |
| CD273 | | | | | | | AHP1704 | Polyclonal | IHC-P*, WB |
| CD274 | B7-H, B7H1, PDL1, PD-L1, PDCD1L1, PDCD1LG1 | T cell, B cell, dendritic cell, macrophage | Co-stimulatory signal, essential for T cell proliferation and production of IL10 and IFN-gamma, in an IL-2 dependent and a PDCD1 independent manner | Cell membrane | Immunoglobulin superfamily | Ligand for CD279 | MCA2627 | MIH26 | FC |
| CD274 | | | | | | | AHP2128 | Polyclonal | E, IHC-P*, WB |
| CD274 | | | | | | | AHP1703 | Polyclonal | IHC-P*, WB |
| CD275 | B7H2, GL50, B7-H2, B7RP1, ICOSL, LICOS, B7RP-1, ICOS-L | B cell, dendritic cell, endothelial cell, epithelial cell, monocyte | Co-stimulatory signal for T cell proliferation and cytokine secretion, and induces B cell proliferation and differentiation into plasma cells | Cell membrane | Immunoglobulin superfamily | Ligand for ICOS | MCA2629 | MIH11 | FC, IHC-F |
| CD276 | B7H3, B7-H3, B7RP-2, 4lg-B7-H3 | Dendritic cell, epithelial cell, monocyte, B cell | Regulation of T cell mediated immune response, isoform 1 and isoform 2 appear to be redundant in their ability to modulate CD4 T cell responses, and involved in positive regulation of T cell proliferation | Cell membrane | Immunoglobulin superfamily | | MCA2633 | MIH42 | FC, IHC-F |
| CD276 | | | | | | | HCA143 | 11434 | IHC-P* |
| CD277 | BTF5, BT3.1, BTN3.1 | B cell, dendritic cell, endothelial cells, monocyte, macrophage, T cell, NK cell | Role in T cell activation and adaptive immune response, regulation of the T cell proliferation, and involved in the release of cytokines and IFN-gamma by activated T cells | Cell membrane | Immunoglobulin superfamily | | | | |
| CD278 | ICOS, H4 | T cell | Co-stimulates T cell activation and proliferation | Cell membrane | | B7h/b7RP-1/GL-50, B7-H2 | | | |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|--|---|--------------------------------------|----------------------------|---|----------------|------------|-----------------------|
| CD279 | PD-1, PDCD1, hPD-1, SLEB2 | T cell, Pro-B cell | Programmed cell death protein 1 functions as an immune checkpoint by preventing T cell activation and thereby regulating immune response | Cell membrane | Immunoglobulin superfamily | PD-L1, PD-L2 | MCA2628 | MIH4 | FC, IHC-F |
| CD279 | | | | | | | MCA4624GA | 4F12 | E, WB |
| CD279 | | | | | | | AHP1705 | Polyclonal | IHC-P*, WB |
| CD279 | | | | | | | AHP1706 | Polyclonal | IHC-P*, WB |
| CD280 | UPARAP, CLEC13E, ENDO180, MRC2 | Macrophage, endothelial cell | Role as endocytotic lectin receptor displaying calcium-dependent lectin activity, and in extracellular matrix remodelling | Cell membrane | C-type lectin family | Calcium, lectin | | | |
| CD281 | TIL, rsc786, TIL, LPRS5, TLR1 | Monocyte, macrophage, dendritic cell, granulocyte, NK cell | Role in the innate immune response to microbial agents and bacterial lipoproteins or lipopeptides. Forms the activation cluster TLR2:TLR1:CD14 | Endoplasmic reticulum (ER), endosome | TLR family | Lipopeptide binding | MCA2153 | GD2.F4 | FC |
| CD281 | | | | | | | AHP1181 | Polyclonal | IHC-F, WB |
| CD282 | TLR-2, TLR2, TIL4 | Monocyte, macrophage, dendritic cell, granulocyte | Co-receptor with TLR1 to activate innate host defence against pathogens | Cell membrane | Toll-like receptor | Microbial lipoproteins, peptidoglycans, lipoteichoic acid | MCA2484 | 11G7 | FC, FN, IP |
| CD282 | | | | | | | MCA2152 | TLR2.3 | FC, IHC-F |
| CD282 | | | | | | | MCA2151 | TL2.1 | FC, FN*, IHC-F, IP |
| CD282 | | | | | | | AHP1635 | Polyclonal | IHC-P*, WB |
| CD283 | IIAE2, TLR3, TLR 3 | Dendritic cell, epithelial cell, NK cell, monocyte, T cell, endothelial cell | Key component of innate and adaptive immunity, activated by double-stranded RNA, a sign of viral infection | Cell membrane | TLR family | Two TLR3 molecules and a ds-RNA | MCA2267 | TLR3.7 | FC*, IP |
| CD283 | | | | | | | AHP1019 | Polyclonal | IHC-F, WB |
| CD284 | Toll-like receptor 4, TLR4, TLR-4 | Monocyte, macrophage, B cell, granulocyte | Activate innate host defence against pathogens | Cell membrane | Toll-like receptor | LPS | MCA2061 | HTA125 | FC, FN, IP, WB |
| CD284 | | | | | | | AHP1822 | Polyclonal | IHC-P*, WB |
| CD286 | TLR6, TLR 6 | Monocyte, macrophage, dendritic cell, granulocyte | Role in the innate immune response to gram-positive bacteria and fungi, and functionally interacts with toll-like receptor 2 to mediate cellular response to bacterial lipoproteins | Cell membrane | TLR family | Lipopeptide binding | AHP1021 | Polyclonal | IHC-F, WB |
| CD288 | TLR8, TLR 8 | Monocyte, dendritic cell, macrophage | Key role in innate and adaptive immunity, involved in the anti-viral immune response, brain development and hematopoiesis | Cell membrane | TLR family | DNA and RNA | AHP868 | Polyclonal | WB |
| CD289 | TLR-9, TLR9 | Dendritic cell, plasmacytoid dendritic cell, macrophage, monocyte | Activate innate host defence against pathogens | Intracellular | Toll-like receptor | Unmethylated CpG | MCA2265 | 5G5 | FC*, IHC-F, IHC-P, WB |
| CD289 | | | | | | | AHP1823 | Polyclonal | IHC-P*, WB |
| CD289 | | | | | | | AHP1022 | Polyclonal | IHC-F, WB |
| CD290 | TLR10, TLR 10 | B cell, dendritic cell | Role in innate immune response to microbial agents and a co-receptor to TLR2 | Cell membrane | TLR family | | AHP935 | Polyclonal | WB |
| CD292 | ALK3, SKR5, ACVRLK3, 10q23del, BMPR1A | Epithelial cell | Involved in hair morphogenesis, anti-apoptosis and embryogenesis | Cell membrane | Protein kinase superfamily | BMP2, BMP4, BMP7, GDF5, GDF6, ATP | HCA004 | 1564 | E, FN, WB |
| CDw293 | ALK6, AMDD, BDA2, ALK-6, BDA1D, BMPR1B | Epithelial cell | Involved in chondrocyte differentiation, bone formation and embryogenesis | Cell membrane | Protein kinase superfamily | BMP7/OP-1, GDF5, ATP | | | |
| CD294 | CRTH2, GPR44 | T cell, eosinophil, basophil | Chemoattractant receptor | Cell membrane | | Prostaglandin D2 | AHP2174 | Polyclonal | E, IHC-P, WB |
| CD295 | OBR, OB-R, LEP-R, LEPRD, Leptin-R, B219 | LT-HSC, epithelial cell, NK cell | Involved in the regulation of fat metabolism, as well as in a novel hematopoietic pathway that is required for normal lymphopoiesis | Cell membrane | Cytokine receptor family | Leptin | AHP1396 | Polyclonal | E, WB |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|--|--|-----------------------|----------------------------|---|----------------|------------|--------------|
| CD297 | DO, DOK1, ARTC4, ART4 | Monocyte, macrophage, basophil, endothelial cell, T cell | Contains a mono-ADP-ribosylation (ART) motif and is the carrier of the Dombrock blood group alloantigens | Cell membrane | Ectoenzyme family | NAD, NADP | | | |
| CD299 | LSIGN, CD209L, L-SIGN, DCSIGNR, HP10347, DC-SIGN2, DC-SIGNR, CLEC4M | Endothelial cell | Pathogen-recognition receptor involved in peripheral immune surveillance, mediates the endocytosis of pathogens which are subsequently degraded in lysosomal compartments, and is involved in T cell trafficking | Cell membrane | C-type lectin family | ICAM3, Calcium | | | |
| CD300a | IRC1, IRC2, CLM-8, IRp60, IGSF12, CMRF35H, CMRF-35H, CMRF35-H, CMRF35H9, CMRF35-H9, IRC1/IRC2, CMRF-35-H9 | B cell, T cell, macrophage, monocyte, dendritic cell, neutrophil, mast cell, NK cell | Involved in down-regulation of cytolytic activity in NK cells and mast cell degranulation, and also involved in the negative regulation of TLR signaling | Cell membrane | Immunoglobulin superfamily | Phosphatidylethanolamine, phosphatidyl serine | MCA2704GA | MEM-260 | FC, WB |
| CD300a | | | | | | | MCA5747 | P192 | FC |
| CD300c | LIR, CLM-6, CMRF35, IGSF16, CMRF-35, CMRF35A, CMRF-35A, CMRF35A1, CMRF35-A1 | Monocyte, neutrophil, T cell, B cell, dendritic cell, macrophage | Role in the regulation of TNF- α and IFN- α secretion in activated plasmacytoid dendritic cells | Cell membrane | Immunoglobulin superfamily | | | | |
| CD300e | CLM2, CLM-2, IREM2, PIGR2, IREM-2, PIGR-2, CD300LE, CMRF35-A5 | Monocyte, macrophage, dendritic cell | Interacts with the TYRO protein tyrosine kinase-binding protein, and acts as an activating receptor | Cell membrane | Immunoglobulin superfamily | Associates with DAP12 | | | |
| CD301 | HML, MGL, HML2, CLECSF13, CLECSF14 | Macrophage, dendritic cell | Binds in a calcium-dependent manner to terminal galactose and N-acetylgalactosamine units, linked to serine or threonine, and involved in cell adhesion and macrophage migration | Cell membrane | C-type lectin family | Lectin | | | |
| CD302 | DCL1, DCL-1, BIMLEC, CLEC13A | Monocyte, macrophage, dendritic cell, granulocyte | Play a role in endocytosis and phagocytosis as well as in cell adhesion and migration | Cell membrane | C-type lectin family | Lectin | | | |
| CD303 | CLEC4C, CLECSF11, CLECSF7, DLEC, HECL, BDCA-2 | Plasmacytoid dendritic cell | Antigen capture and inhibition of IFN production | Cell membrane | Lectin superfamily | | | | |
| CD304 | Neuropilin 1, NRP1, VEGF165R, BDCA4 | Plasmacytoid dendritic cell, endothelial cell, T cell | Angiogenesis, co-receptor for VEGF | Cell membrane | Type I transmembrane | VEGF165, semaphoring-3A | | | |
| CD305 | LAIR-1, LAIR1 | Monocyte, macrophage, B cell, T cell, NK cell, dendritic cell, eosinophil, basophil, mast cell | Inhibitory receptor that plays a constitutive negative regulatory role on cytolytic function of NK cells, B cells and T cells | Cell membrane | Immunoglobulin superfamily | CD326, collagens | MCA2242 | NKTA255 | FC, IP, WB |
| CD305 | | | | | | | AHP2257 | Polyclonal | E, WB |
| CD306 | LAIR2, LAIR-2 | Monocyte, T cell | Soluble receptor that may play roles in both inhibition of collagen-induced platelet aggregation and vessel formation during placental implantation | Cell membrane | Immunoglobulin superfamily | CD326, collagens | | | |
| CD307a | FCRH1, IFGP1, IRTA5, FCRL1 | B cell | Activating co-receptor in B cells, and a role in B cell activation and proliferation | Cell membrane | Immunoglobulin superfamily | IgG | | | |
| CD307b | FCRH2, IFGP4, IRTA4, SPAP1, SPAP1A, SPAP1B, SPAP1C, FCRL2 | B cell | Role in normal and neoplastic B cell development | Cell membrane | Immunoglobulin superfamily | IgG | | | |
| CD307c | FCRH3, IFGP3, IRTA3, SPAP2, FCRL3 | B cell | Immunoreceptor-tyrosine activation motifs and immunoreceptor-tyrosine inhibitory motifs in its cytoplasmic domain and may play a role in regulation of the immune system | Cell membrane | Immunoglobulin superfamily | IgG | | | |
| CD307d | FCRH4, IGFP2, IRTA1, FCRL4 | B cell | B cell receptor inhibition through activation of the tyrosine kinases SHP-1 and 2 | Cell membrane | Immunoglobulin superfamily | IgG | | | |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|---|---|---|---|--|----------------|------------|-------------------------------|
| CD307e | FCRH5, IRTA2, BXMAS1, CD307e, PRO820, FCRL5 | B cell | Involved in B cell development and differentiation in peripheral lymphoid organs, and has an immunoregulatory role in marginal zone B cells | Cell membrane | Immunoglobulin superfamily | IgG | | | |
| CD308 | FLT, FLT-1, VEGFR1, VEGFR-1 | Endothelial cell, epithelial cell, monocyte | Plays an essential role in the development of embryonic vasculature, the regulation of angiogenesis, cell survival, and cell migration | Cell membrane | Immunoglobulin superfamily, tyrosine kinase | VEGF, VEGF-A, VEGF-B, PlGF | | | |
| CD309 | FLK1, VEGFR, VEGFR2, KDR | Endothelial cell, megakaryocyte, platelet | Role in the regulation of angiogenesis, vascular development, vascular permeability, and embryonic hematopoiesis | Cell membrane, endoplasmic reticulum (ER) | Immunoglobulin superfamily, tyrosine kinase | VEGFA, VEGFC, VEGFD, VEGFE | | | |
| CD310 | FLT-4, VEGFR3 | Endothelial cell | Role in the generation of lymphatic vessels angiogenesis | Cell membrane | Immunoglobulin superfamily, tyrosine kinase | VEGF-C, VEGF-D | | | |
| CD312 | EMR2, VBU | Monocyte, macrophage, neutrophil, dendritic cell | Promotes granulocyte chemotaxis, degranulation and adhesion, and in macrophages helps release of inflammatory cytokines, including IL8 and TNF | Cell membrane | EGF family | Chondroitin sulphate, calcium | MCA2330 | 2A1 | FC, IHC-F, IP, WB |
| CD314 | NKG2D, KLRK1 | Pre NK cell, NK cell, T cell | Cytolytic killing of target cells expressing NKG2D ligands, co-stimulation of NK and T cells | Cell membrane | C-type lectin | MICA, MICB, UL16 binding proteins | MCA2405 | 1D11 | FC, FN, IHC-F, IP |
| CD315 | FPRP, EWI-F, CD9P-1, SMAP-6, PTGFRN | Endothelial cell, epithelial cell, megakaryocyte, B cell, monocyte | Inhibits the binding of PGF2-alpha to its specific FP receptor | Endoplasmic reticulum (ER), golgi | Immunoglobulin superfamily | CD9, CD81 | | | |
| CD316 | EWI2, PGRL, EWI-2, KCT-4, CD81P3, LIR-D1, IGSF8 | T cell, B cell, NK cell | Functions as a tumor suppressor by inhibiting the proliferation of certain cancers, suppresses T cell mobility coordinately with CD81, and plays a role in integrin-dependent morphology and motility functions | Cell membrane | Immunoglobulin superfamily | CD9, CD81, CD82 | | | |
| CD317 | TETHERIN, BST2 | B cell, T cell, dendritic cell, monocyte, NK cell | May play a role in pre-B cell growth and in rheumatoid arthritis | Cell membrane | Bone marrow stromal Ag 2 precursor | RNA binding | | | |
| CD318 | TRASK, SIMA135, CDCP1 | Epithelial cell, LT-HSC | Involved in cell adhesion and cell matrix association, and plays a role in the regulation of anchorage versus migration or proliferation versus differentiation via its phosphorylation | Cell membrane | CUB family | | AHP1567 | Polyclonal | E, WB |
| CD319 | CD2 like receptor activating cytotoxic cells, CRACC, SLAMF7, CS1, 19A24 | NK cell, dendritic cell, B cell | Regulation of T and NK cell function | Cell membrane | Type I transmembrane glycoprotein, member of the immunoglobulin superfamily | | MCA4645 | 162 | FC, IP |
| CD320 | 8D6, 8D6A, TCBLR | Dendritic cell, T cell, NK cell | CD320 augments the proliferation of plasma cell precursors generated by IL-10, and are involved in B cell proliferation and immunoglobulin secretion | Cell membrane | Low-density lipoprotein receptor family | Cobalamin | | | |
| CD321 | JAM, KAT, JAM1, JAMA, JCAM, PAM-1, F11R | T cell, epithelial cell, endothelial cell, dendritic cell, monocyte | Involved in cell proliferation and cell motility, and is an important regulator of tight junction assembly in epithelia | Cell membrane | Immunoglobulin superfamily | Ligand for the integrin LFA1 | MCA2269 | BV16 | FC, IHC-F |
| CD321 | | | | | | | MCA2270 | M.Ab.F11 | FC, FN*, IF/ICC, IP, WB |
| CD322 | JAMB, JAM-B, VEJAM, PRO245, VE-JAM, C21orf43, JAM2 | Endothelial cell | Role in the processes of lymphocyte homing to secondary lymphoid organs | Cell membrane | Immunoglobulin superfamily | Integrins | AHP2452 | Polyclonal | WB |
| CD324 | Cadherin-1, CDH1, E-cadherin | Langerhans cell, epithelial cell, endothelial cell | Cell to cell junctions and cytoskeleton | Cell membrane | Cadherin | | VMA00241 | | WB |
| CD324 | | | | | | | VMA00502 | | WB |
| CD325 | CDHN, NCAD, CDw325, CDH2, N-cadherin | Endothelial cell | Involved in neuronal recognition mechanism, negative regulation of canonical WNT signaling and a role in the establishment of left-right asymmetry | Cell membrane | Cadherin superfamily | Calcium, alpha, beta and gamma catenin binding | MCA5698 | 13A9 | IF/ICC, IHC-F, IHC-P*, IP, WB |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|--|---|--|--|---|----------------|----------------|------------|---------------------------|
| CD326 | ESA, KSA, M4S1, MK-1, DIAR5, EGP-2, EGP40, KS1/4, MIC18, TROP1, EGP314, HNPCC8, TACSTD1 | Endothelial cell | Homotypic calcium-independent cell adhesion molecule, used as a target for immunotherapy treatment. Plays a role in embryonic stem cells proliferation and differentiation | Cell membrane | EPCAM family | Cadherin | MCA1870G | VU-1D9 | FC, IHC-F, IHC-P*, IP, WB |
| CD326 | | | | | | | MCA2162XZ | MOC-31 | FC, IHC-F, IHC-P* |
| CD326 | | | | | | | MCA850G | HEA-125 | FC, IF/ICC, IHC-F, IHC-P* |
| CD326 | | | | | | | VMA00193 | OTI2G1 | WB |
| CD327 | CD33L, OBBP1, CD33L1, CD33L2, CDW327, SIGLEC 6 | B cell | Adhesion molecule that mediates sialic-acid dependent binding to cells | Cell membrane | Immunoglobulin superfamily | Lectin | | | |
| CD328 | p75, QA79, AIRM1, CDw328, D-siglec, SIGLEC 7, SIGLECP2, SIGLEC19P, p75/AIRM1' | NK cell, monocyte, granulocyte | Adhesion molecule that mediates sialic-acid dependent binding to cells, binds to alpha-2,3- and alpha-2,6-linked sialic acid. Inhibits differentiation of CD34+ cell precursors towards myelomonocytic cell lineage in vitro | Cell membrane | Immunoglobulin superfamily | Lectin | MCA5782GA | S7.7 | E, FC, FN, IP, WB |
| CD328 | | | | | | | MCA2522 | 5-386 | FC, IHC-F |
| CD329 | CDw329, FOAP-9, siglec-9, OBBP-LIKE, SIGLEC9 | Monocyte, neutrophil, B cell, NK cell, T cell, eosinophil, macrophage | Adhesion molecule that mediates sialic-acid dependent binding to cells, binds to alpha-2,3- or alpha-2,6-linked sialic acid, and involved in neutrophil degranulation | Cell membrane | Immunoglobulin superfamily | Lectin | MCA5890GA | K8 | E, FC, IF/ICC, IP, WB |
| CD331 | CEK, FLG, HH2, OGD, ECCL, FLT2, KAL2, BFGFR, FGFR, FLT-2, HBGFR, N-SAM, FGFR-1, HRTFDS, bFGF-R-1 | Epithelial cell, endothelial cell | Essential role in the regulation of embryonic development, cell proliferation, differentiation and migration, and required for normal mesoderm patterning and correct axial organization during embryonic development | Cell membrane | Immunoglobulin superfamily | FGFs | VPA00268 | Polyclonal | WB |
| CD332 | BEK, JWS, BBDS, CEK3, CFD1, ECT1, KGFR, TK14, TK25, BFR-1, K-SAM, FGFR2 | Epithelial cell, endothelial cell | Essential role in the regulation of embryonic development, cell proliferation, differentiation and migration, and required for normal mesoderm patterning and correct axial organization during embryonic development | Cell membrane, golgi, cytoplasmic vesicle | Immunoglobulin superfamily | FGFs | VPA00476 | Polyclonal | WB |
| CD333 | ACH, CEK2, JTK4, HSFGR3EX, FGFR3 | Epithelial cell | Plays an essential role in the regulation of chondrocyte differentiation, proliferation and apoptosis, and is required for normal skeleton development | Cell membrane, cytoplasmic vesicle, endoplasmic reticulum (ER) | Immunoglobulin superfamily | FGFs, ATP | AHP2453 | Polyclonal | WB |
| CD334 | TKF, JTK2, FGFR4 | Epithelial cell | Role in the regulation of cell proliferation, differentiation and migration, and in regulation of lipid metabolism, bile acid biosynthesis, glucose uptake, vitamin D metabolism and phosphate homeostasis | Cell membrane, endosome, endoplasmic reticulum (ER) | Immunoglobulin superfamily | FGFs, ATP | | | |
| CD335 | NKp46, NCR1 | NK cell, innate lymphoid cell | Cytotoxicity in NK cells, pan NK cell marker | Cell membrane | Natural cytotoxicity receptor | | MCA4646 | 9E2 | FC, FN |
| CD335 | | | | | | | MCA2339 | N1d9 | FC, WB |
| CD336 | NKp44, NCR2, lymphocyte antigen 95 homolog | NK cell | Cytotoxicity in NK cells | Cell membrane | Natural cytotoxicity receptor | DAP12 | MCA4665 | 3.43 | FC |
| CD337 | NKp30, NCR3 | NK cell | Cytotoxicity in NK cells | Cell membrane | Natural cytotoxicity receptor | CD59, TCR zeta | MCA6073GA | P30-15 | FC |
| CD338 | MRX, MXR, ABCP, BCRP, BMDP, MXR1, ABC15, BCRP1, GOUT1, MXR-1, CDw338, UAQTL1, EST157481, ABCG2 | Epithelial cell | Plays a role in porphyrin homeostasis, cellular export of hemin and heme, as a xenobiotic transporter, and urate metabolism | Cell membrane, mitochondrial membrane | ATP-binding cassette transporters superfamily | ATP | OBT1177 | BXP-21 | IHC-F, WB |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|--|---|---|-----------------------|--|--|----------------|------------|--------------|
| CD339 | AGS, AHD, AWS, HJ1, AGS1, JAGL1, JAG1 (Jagged 1) | Epithelial cell | Involved in the mediation of Notch signaling, in cell-fate decisions during hematopoiesis, and mammalian cardiovascular development | Cell membrane | Jagged ligands family | Functions as a ligand for the receptor Notch 1, and calcium binding | | | |
| CD340 | NEU, NGL, HER2, TKR1, CD340, HER-2, MLN 19, HER-2/neu, ERBB2 | Epithelial cell, LT-HSC | Essential component of a neuregulin-receptor complex, and regulates outgrowth and stabilization of peripheral microtubules | Cell membrane | Protein kinase superfamily | Binds tightly to other ligand-bound EGF receptor family members to form a heterodimer, ATP binding | AHP2601 | Polyclonal | WB |
| CD340 | | | | | | | AHP2602 | Polyclonal | WB |
| CD340 | | | | | | | AHP2603 | Polyclonal | WB |
| CD340 | | | | | | | VMA00147 | OT14F10 | WB |
| CD340 | | | | | | | VMA00553 | AB04/4D7 | WB |
| CD344 | Fz4, EVR1, FEVR, Fz-4, FzE4, GPCR, hFz4, FZD4S, FZD4 | Endothelial cell, epithelial cell | Critical role in retinal vascularization, stimulation of LEF/TCF-mediated transcriptional programs, and involved in transduction and intercellular transmission of polarity information during tissue morphogenesis | Cell membrane | G protein-coupled receptor superfamily | WNT proteins and norrin | | | |
| CD349 | FZD3, FZD9 | Epithelial cell | Coupled to the beta-catenin canonical signaling pathway, involved in the activation of disheveled proteins, inhibition of GSK-3 kinase, nuclear accumulation of beta-catenin and activation of Wnt target genes | Cell membrane | G protein-coupled receptor superfamily | WNT2 | | | |
| CD350 | Fz10, FzE7, FZ-10, hFz10, FZD10 | Epithelial cell | Involved in transduction and intercellular transmission of polarity information during tissue morphogenesis and/or in differentiated tissues | Cell membrane | G protein-coupled receptor superfamily | WNT proteins | | | |
| CD351 | MSS4, STM7, PIP5K1B, FCAMR | Monocyte, macrophage, T cell, B cell, dendritic cell | Mediates endocytosis of IgA and IgM | Cell membrane | Immunoglobulin superfamily | IgA, IgM | | | |
| CD352 | KALI, NTBA, KAL1b, Ly108, NTB-A, SF2000, SLAMF6 | NK cell, B cell, T cell | Positive regulation of IL-17, regulation and interconnection of both innate and adaptive immune response, and NK cells proliferation and differentiation | Cell membrane | Immunoglobulin superfamily | Self-ligand receptor | | | |
| CD353 | BLAME, SBB142, SLAMF8 | Dendritic cell, monocyte, macrophage, B cell | Role in B-lineage commitment and/or modulation of signaling through the B cell receptor | Cell membrane | Immunoglobulin superfamily | | | | |
| CD354 | TREM-1, TREM1 | Dendritic cell, macrophage, neutrophil, monocyte, B cell | Stimulates neutrophil and monocyte-mediated inflammatory responses, crucial mediator of septic shock, enhances inflammatory responses, and is involved in neutrophil chemotaxis | Cell membrane | Immunoglobulin superfamily | PGLYRP1 | MCA4697T | TREM-37 | FC, WB |
| CD355 | CRTAM | T cell, NK cell, B cell | Promotes NK cell cytotoxicity and IFN- γ secretion by CD8 ⁺ cells | Cell membrane | Immunoglobulin superfamily | CADM1 binding | | | |
| CD357 | AITR, GITR, GITR-D, TNFRSF18, GITR | T cell, B cell | Involved in interactions between activated T lymphocytes and endothelial cells, and the regulation of T cell receptor-mediated cell death | Cell membrane | TNFR superfamily | TNFSF18 | | | |
| CD358 | DR6, BM-018, TNFRSF21 | T cell, B cell, dendritic cell, macrophage | Negative regulation of IL-10, IL-13, IL-4, IL-5 and IFN- γ , promotes apoptosis, involved in the B cell apoptotic process, and negatively regulates the production of IgG and IgM | Cell membrane | TNFR superfamily | APP | MCA2333 | DR-6-04-EC | FC, IP |
| CD360 | NILR, IL21R | B cell, dendritic cell, T cell, NK cell, NKT cell, macrophage | Transduces the growth promoting signal of IL-21, and is important for the proliferation and differentiation of T cells, B cells, and NK cells | Cell membrane | Cytokine receptor family | IL-21 | AHP608 | Polyclonal | WB |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|-------------|---|--|--|----------------------------|--|--|----------------|-------|--------------------|
| CD361 | EVDB, D17S376, EVI2B | Granulocyte, B cell | Targeted by C/EBP α , knockout murine model has altered properties of hematopoietic progenitors and impaired G-CSF dependent myeloid colony formation | Cell membrane | EVI2 family | | | | |
| CD362 | HSPG, HSPG1, SYND2, SDC2 | Epithelial cell, B cell, endothelial cell, macrophage | Induces dendritic spine formation in hippocampal neurons, a surface proteoglycan that bears heparan sulphate. Involved in glycosaminoglycan metabolism, retinoic metabolism, and B cell activation | Cell membrane | Syndecan proteoglycan family | Fibronectin, TACI, IL-8 | | | |
| CD363 | EDG1, S1P1, ECGF1, EDG-1, CHEDG1, D1S3362, S1PR1 | B cell, endothelial cell, NK cell | Role in cell migration, formation of lamellipodia. Important for normal movement of mature T cells from the thymus into the blood stream and into peripheral lymphoid organs | Cell membrane, endosome | G-protein-coupled receptor superfamily | S1P | MCA5960GA | 2B9 | FC, IF/ICC, IP, WB |
| CD364 | PSPBP, CRISP9, MSMBBP, PI16 | T cell | Inhibits cardiomyocyte growth, T cells expressing CD364 express also high levels of CCR4 and CCR6 | Secreted exosomes membrane | CAP superfamily | | | | |
| CD365 | TIM; KIM1; TIM1; HAVCR; KIM-1; TIM-1; TIMD1; TIMD-1; HAVCR-1; hepatitis A virus cellular receptor 1 | T cell, B cell, NK cell, dendritic cell | Role in T helper cell development and the regulation of asthma and allergic diseases; receptor for hepatitis A virus and dengue, Marburg, Ebola virus | Cell membrane | Immunoglobulin superfamily | TIMD4 | | | |
| CD366 | TIM3, CD366, KIM-3, TIMD3, Tim-3, TIMD-3, HAVcr-2 | Dendritic cell, macrophage, monocyte, T cell | Th1-specific cell surface protein that regulates macrophage activation, inhibits Th1-mediated auto and alloimmune responses, and promotes immunological tolerance. In CD8 ⁺ cells, attenuates TCR-induced signaling, specifically by blocking NF-kappaB and NFAT. Positively regulates innate immune response and in synergy with Toll-like receptors promotes secretion of TNF-alpha | Cell membrane | Immunoglobulin superfamily | Phosphatidylserine, calcium ion | | | |
| CD367 | DCIR, LLIR, DDB27, CLECSF6, HDCGC13P, CLEAC4A, DCIR, CLECSF6 | Dendritic cell, monocyte, macrophage, B cell, granulocyte, neutrophil | Role in inflammatory and immune response, and in modulating dendritic cells differentiation and/or maturation | Cell membrane | C-type lectin family | Lectin | | | |
| CD368 | MCL, MPCL, CLEC6, CLEC-6, CLECSF8, CLEC4D | Monocyte, macrophage | Involved in antigen uptake at the site of infection | Cell membrane | C-type lectin family | Lectin | | | |
| CD369 | CLEC7A, BGR, CANDF4, SCARE2, DECTIN1, CLECSF12 | B cell, dendritic cell, endothelial cell, granulocyte, macrophage, monocyte, T cell, eosinophil, mast cell, neutrophil | Important for the TLR2-mediated inflammatory response and for TLR2-mediated activation of NF-kappa-B. Increases cytokine production in macrophages and dendritic cells, mediates phagocytosis of C.albicans conidia, and has a role in T cell activation | Cell membrane, cytoplasm | C-type lectin family | Lectin, metal binding, beta-1, 3-linked and beta-1, 6-linked glucans | | | |
| CD370 | DNGR1, DNGR-1, UNQ9341, CLEC9A | Dendritic cell, monocyte (only CD14 ⁺) | Endocytic receptor on a small subset of myeloid cells specialized for the uptake and processing of material from dead cells, and mediates the cross-presentation of dead-cell associated antigens | Cell membrane | C-type lectin family | Lectin | | | |
| CD371 | CLL1, M1CL, CLL-1, DCAL-2, CLEC12A | Neutrophil, eosinophil, monocyte, dendritic cell, macrophage | Modulates signaling cascades and mediates tyrosine phosphorylation of target MAP kinases. Shown to enhance LPS responses and induce expression of CCR7, and might be involved in the migration and T cell stimulation | Cell membrane | C-type lectin family | Lectin | | | |
| CXCR3 | CD183, CKR-L2, GPR9 | T cell, B cell, NK cell, plasmacytoid dendritic cell, mast cell, monocyte, macrophage, eosinophil | Chemotaxis | Cell membrane | G-protein coupled chemokine receptor | CXCL9, CXCL10, CXCL11 | | | |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|---------------------|--|---|---|-----------------------|---|---|----------------|------------|---------------------------------|
| Dectin-1 | CLEC7A | Macrophage, monocyte, dendritic cell | A pattern recognition receptor that plays important roles in immune responses to pathogens such as bacteria and virus, but especially important in antifungal immunity | Cell membrane | C-type lectin domain family 7 member A, type II membrane receptor | CD4 ⁺ , CD8 ⁺ T cells | MCA4661 | GE2 | FC, FN |
| Dectin-1 | | | | | | | MCA4662 | BD6 | FC |
| Delta-Like 4 | | Arterial blood vessels endothelial cell, thymic epithelial cell | Binding results in the activation of Notch signaling, involved in the regulation of angiogenesis | Cell membrane | Transmembrane protein | Notch receptors | MCA5706 | HMD4-2 | FC, FN, IHC-F, IHC-P* |
| Delta-Like 4 | | | | | | | AHP1274 | Polyclonal | E, IHC-P, WB |
| EphB2 | Cek5, Nuk, Erk, Qek2, Tyro5, Sek3, Hek5, Drt | Endothelial cell | Role in angiogenesis. Ephrins are divided into two classes; ephrin-A class, having glycosylphosphatidylinositol link to the membrane, and ephrin-B class, which are transmembrane proteins | Cell membrane | Receptor tyrosine kinase family | Ephrin ligand family; ephrin-B1, ephrin-B2, and ephrin-B3 | | | |
| EphB4 | HTK, MYK1, soluble EPHB4 variant 1, 2, 3, TYRO11 | Endothelial cell | Role in angiogenesis, plays an essential role in vascular development | Cell membrane | Receptor tyrosine kinase family | Ephrin-B2 | HCA001 | 1327 | E, IHC-P, WB |
| EphB4 | | | | | | | HCA025 | 3934 | E, IHC-P*, WB |
| Fc epsilon R1 alpha | Fc epsilon RI alpha chain, Feer1a, high affinity ImmunoglobulinE receptor | Mast cell, basophil | Binds IgE leading to internalization, signaling, degranulation and histamine release | Cell membrane | | | MCA2368 | 9E1 | E, FC, IF/ICC, IP, WB |
| Flt3 | CD135, Flk2, STK1, Flt3/Flk2 | LT-HSC, MPP, CMP, CLP, GMP | Signaling through CD135 plays a role in cell survival, proliferation and differentiation. CD135 is important for lymphocyte (B cell and T cell) development, but not for the development of other blood cells (myeloid development) | Cell membrane | | | | | |
| Granzyme A | | T cell, NK cell | 60 kDa serine protease expressed in granules of cytotoxic cells | Cytoplasmic granules | | | MCA2117 | GA6 | IHC-P*, WB |
| Granzyme B | | T cell, NK cell | 60 kDa serine protease expressed in granules of cytotoxic cells | Cytoplasmic granules | | | MCA2120 | GB11 | E, FC*, IF/ICC, IHC-F, IP |
| Granzyme B | | | | | | | MCA2119B | GB10 | E |
| Granzyme B | | | | | | | MCA2118 | GB7 | IHC-P*, WB |
| IgM | Immunoglobulin M | B cell | Basic antibody that is produced by B cells | Cell membrane | | | MCA1662 | M15/8 | E, FC, IHC-F, IHC-P, IP |
| IgM | | | | | | | 5278-5159 | 47.2.E9 | FC, IF/ICC |
| IgM | | | | | | | MCA1894 | CM7 | E, FC, IHC-P, WB |
| IgM | | | | | | | 5278-5204 | HM-7 | E |
| IgM | | | | | | | OBT1507 | Polyclonal | E |
| IgM | | | | | | | STAR145 | Polyclonal | E, FC, IF/ICC, IHC-F, IHC-P, WB |
| IgM | | | | | | | STAR146 | Polyclonal | E, FC, IF/ICC, IHC-F |
| IL-9 | P40, Mast cell growth factor, megakaryoblast growth factor, T cell growth factor 3 | T cell | T cell growth factor and enhances mast cell activity | Secreted | Cytokine | IL-9R | MCA6074GA | MH9A4 | E, FC* |
| IL-13alpha1 | CD213a1, bB12804.2.1, NR4, cancer/testis antigen 19 | B cell, T cell | Coupled with IL-4RA can form a functional receptor for IL-13 | Cell membrane | Type I cytokine receptor family | IL-13 | | | |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|------------------|---|--|---|-----------------------|--|--|----------------|-------------|--------------------|
| IL-21R | NILR, IL-21 receptor | B cell, NK cell, T cell | Proliferation of NK cells and cytotoxic T cells, with an inhibitory effect | Cell membrane | Single pass type I membrane protein | IL-21 | AHP1819 | Polyclonal | E, IHC-P |
| IL-21R | | | | | | | AHP608 | Polyclonal | WB |
| iNOS | HEP-NOS | Epithelia, macrophage | Produces nitric oxide (NO), a messenger molecule | Intracellular | NOS family, contains FAD binding FR-type domain and 1 flavodoxin like domain | | | | |
| Jagged2 | JAG2 | Epithelial cell | Jagged 2 binds to Notch 1 resulting in signaling that plays a role in male germ cells differentiation | Cell membrane | Jagged ligands family | Notch receptors | | | |
| KLRG1 | MAFA, 2F1-Ag | NK cell, NKT cell, innate lymphoid cell, T cell | Regulates NK cell proliferation, maturation and homeostasis | Cell membrane | Lectin-like transmembrane receptor | E cadherin | | | |
| LYVE-1 | Lymphatic vessel endothelial hyaluronan receptor 1, XLKD1 | Endothelial cell | A role in dendritic cell lymphatic diapedesis, lymphatic hyaluronan transport and in tumor metastasis | Cell membrane | Type I integral membrane glycoprotein | Hyaluronan | MCA4629GA | 4G1 | E, WB |
| MARCO | Scavenger receptor class A, member 2, SCARA2 | Macrophage, monocyte | Pattern recognition receptor | Cell membrane | Type II transmembrane superfamily | Binds microbes | | | |
| MHC class II | HLA-DR, HLA-DP, HLA-DQ | B cell, T cell, monocyte, macrophage, dendritic cell | Peptide presentation for cellular activation | Cell membrane | Immunoglobulin superfamily, heterodimeric transmembrane protein | CD3/TCR, CD4 | MCA2812GA | L243 | FC |
| MHC class II | | | | | | | MCA1879 | HL-39 | FC, IHC-F |
| MHC class II | | | | | | | MCA72G | YD1/63.4.10 | FC, IHC-F* |
| MHC class II | | | | | | | MCA477 | WR18 | FC, FN*, IHC-P* |
| MHC class II | | | | | | | MCA71R | YE2/36-HLK | FC, IHC-F, IHC-P* |
| MHC class II | | | | | | | MCA2497 | Bu26 | FC |
| MHC class II | | | | | | | MCA3169Z | 6C6 | IHC-P* |
| MHC class II | | | | | | | MCA379G | SPV-L3 | FC, FN*, IHC-F, IP |
| MHC class II | | | | | | | VPA00443 | Polyclonal | WB |
| MHC class II | | | | | | | VPA00683 | Polyclonal | WB |
| MHC class II | | | | | | | VPA00409 | Polyclonal | WB |
| Neuropilin 2 | NPR2, VEGF165R2 | Endothelial cell | Role in angiogenesis, and lymphatic and cardiovascular development | Cell membrane | Type I transmembrane | Semaphoring-3C, semaphoring-3F, VEGF-A, VEGF-C | | | |
| Notch 1, 2, 3, 4 | | | Notch 1, 2, 3 and 4 genes are members of the epidermal growth factor like homeotic genes, involved in differentiation | Cell membrane | Transmembrane protein | Delta-Serrate-Lag2 (DSL) family | AHP1289 | Polyclonal | E, WB |
| Notch 1, 2, 3, 4 | | | | | | | AHP2180 | Polyclonal | E, IHC-P* |
| Notch 1, 2, 3, 4 | | | | | | | MCA5702 | HMN2-35 | FC |
| Notch 1, 2, 3, 4 | | | | | | | MCA5703 | HMN3-133 | FC |

| Specificity | Synonyms | Cellular Expression | Function & Associated Signaling Pathways | Cellular Localization | Receptor Type | Ligand | Catalog Number | Clone | Applications |
|------------------|---|---|---|--|--------------------------------------|--------------------------------------|----------------|-------------|--------------------------|
| Notch 1, 2, 3, 4 | | | | | | | VMA00484 | | WB |
| PAL-E | Endothelial cells - vein associated antigen | Endothelial cell | Defines secretion of vimentin | Cell membrane | | PAL-E-reactive secreted vimentin | 4109-0004 | PAL-E | IF/ICC, IHC-F |
| Podoplanin | PDPN | Multiple cell types | Possible role in the development of heart, lungs, lymphatic system and immune cells such as T cells and dendritic cells | Cell membrane | Mucin-type transmembrane protein | CLEC-2 | MCA2370 | 4D5aE5E6 | IHC-F, IHC-P* |
| Podoplanin | | | | | | | MCA2543 | D2-40 | IF/ICC, IHC-F, IHC-P, WB |
| Prox1 | Prospero homeobox protein 1 | Endothelial cell | Role in embryonic tissue development of the lens and lymphatic system | | | | | | |
| RAG | Recombination-activating genes | MPP, B cell, T cell | Enzymes that play an important role in VDJ recombination. | Nucleus | | | | | |
| ROR gamma T | Retinoid related orphan receptor gamma | T cell, innate lymphoid cell | Ligand dependant transcription factor | Intracellular | | | | | |
| Siglec-8 | Sialoadhesin family member 2 | Eosinophil, basophil, mast cell | Cell adhesion and signal transduction | Cell membrane | Lectin of immunoglobulin superfamily | Phosphatases containing a SH2 domain | | | |
| ST2 | IL-33 Ralpha, IL1RL1, DER4, T1, ST2L | Mast cell, T cell, innate lymphoid cell | Binds IL-33, recruiting MyD88, Irak1, Irak4 and Traf6 | Cell membrane, extracellular | IL-1 receptor family member | IL-33 | | | |
| TCR alpha/beta | | T cell, NKT cell, macrophage | Antigen recognition and T cell activation | Cell membrane | Immunoglobulin superfamily | peptide bound to MHC | MCA2815F | IP26 | FC |
| TCR gamma/delta | | T cell, gamma/delta T cell | Antigen recognition and associates with CD3 complex | Cell membrane | Immunoglobulin superfamily | MHC I, CD1 | | | |
| TLR7 | | Plasmacytoid dendritic cell | Role in pathogen recognition and activation, especially in the regulation of antiviral immunity | Endoplasmic reticulum, endosome, lysosome | Toll-like receptor family | Single stranded RNA | MCA2702GA | 4F4 | E, WB |
| VEGF | | Endothelial cell, macrophage | Growth factor in angiogenesis, vasculogenesis and endothelial growth. | Secreted but also cell associated after binding to heparin | PDGF/VEGF growth factor family | Heparin | MCA5750Z | 4B2-8 | E, FN, WB |
| VEGF | | | | | | | MCA5693 | CH-10 | WB |
| VEGF | | | | | | | AHP831 | Polyclonal | E, FN, IHC-P*, WB |
| VEGF | | | | | | | MCA6089 | Bevacizumab | E |
| ZAP70 | | Macrophage, B cell, T cell, NK cell, NKT cell | ZAP-70 (Zeta-chain-associated protein kinase 70) has a critical role in T cell signaling | | Syk family protein | | VMA00059 | | WB |
| ZAP70 | | | | | | | MCA2513 | ZAP-03 | FC*, WB |
| ZAP70 | | | | | | | 106500 | SB2AP | E, FC* |
| ZAP70 | | | | | | | AHP2540 | Polyclonal | IHC-P, WB |
| ZAP70 | | | | | | | AHP2692 | Polyclonal | IHC-P, WB |

*Requires special treatment, refer to product datasheet. Abbreviations: Axxx, Alexa Fluor; Az. Fr., Azide Free; B., Biotin; CT, Cytotoxic Assay; E, ELISA; EM, Electron Microscopy; FC, Flow Cytometry; FN, Functional Assay; H, Hemagglutination; IB, Immunoblot; IF/ICC, Immunofluorescence/Immunocytochemistry; IHC-F, Immunohistochemistry – Frozen (Cryostat); IHC-P, Immunohistochemistry – Paraffin; IHC-R, Immunohistochemistry – Resin; IM, Immunoassay; IP, Immunoprecipitation; LE, Low Endotoxin; PB, Pacific Blue; Pres. Fr., Preservative Free; Pur., Purified; R, Radioimmunoassay; S/N, Supernatant; WB, Western Blotting.

Biomarker Expression Patterns in Human Immune Cells



| Markers | Stem Cells, Precursors and Progenitors | | | | | | B Cells | | Specialist Antigen Presenting Cells | | | Myeloid and Mast Cells | | | | | | NK Cells and Innate Lymphoid Cells | | | | T Cells | | | | | Megakaryocyte Erythroid Cells | | | Non Hematopoietic Cells | | | | | | |
|---------|--|-----|-----|-----|-----|-----|---------|-----------------|-------------------------------------|------------------------------|------------------|------------------------|------------|----------|------------|----------|-------------|------------------------------------|----------|--------------------|----------------------------|-----------------------|---------|---------------------------|---------------------------|---------------------|-------------------------------|---------------|-----------|-------------------------|-------------|-------------------|------------------|--|--|--|
| | LT-HSC | GMP | CMP | CLP | MEP | MPP | B cells | Pro/Pre B cells | Myeloid dendritic cells | Plasmacytoid dendritic cells | Langerhans cells | Eosinophil | Neutrophil | Basophil | Macrophage | Monocyte | Granulocyte | Mast cells | NK cells | Precursor NK cells | Innate lymphoid progenitor | Innate lymphoid cells | T cells | Double negative thymocyte | Double positive thymocyte | Gamma/Delta T cells | NKT cells | Megakaryocyte | Platelets | Proerythroblast | Erythrocyte | Endothelial cells | Epithelial cells | | | |
| BCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CCR10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD1a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD1b | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD1c | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD1d | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD1e | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD6 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD11a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD11b | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD11c | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD11d | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD15u | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD15s | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD15su | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD16b | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD17 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD19 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD21 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD22 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD23 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD26 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD27 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Markers | Stem Cells, Precursors and Progenitors | | | | | | B Cells | | Specialist Antigen Presenting Cells | | | Myeloid and Mast Cells | | | | | | NK Cells and Innate Lymphoid Cells | | | | T Cells | | | | | Megakaryocyte Erythroid Cells | | | Non Hematopoietic Cells | | | | | |
|---------|--|-----|-----|-----|-----|-----|---------|-----------------|-------------------------------------|------------------------------|------------------|------------------------|------------|----------|------------|----------|-------------|------------------------------------|----------|--------------------|----------------------------|-----------------------|---------|---------------------------|---------------------------|---------------------|-------------------------------|---------------|-----------|-------------------------|-------------|-------------------|------------------|--|--|
| | LT-HSC | GMP | CMP | CLP | MEP | MPP | B cells | Pro/Pre B cells | Myeloid dendritic cells | Plasmacytoid dendritic cells | Langerhans cells | Eosinophil | Neutrophil | Basophil | Macrophage | Monocyte | Granulocyte | Mast cells | NK cells | Precursor NK cells | Innate lymphoid progenitor | Innate lymphoid cells | T cells | Double negative thymocyte | Double positive thymocyte | Gamma/Delta T cells | NKT cells | Megakaryocyte | Platelets | Proerythroblast | Erythrocyte | Endothelial cells | Epithelial cells | | |
| CD271 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD272 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD273 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD274 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD275 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD276 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD277 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD278 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD279 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD280 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD281 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD282 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD283 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD284 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD286 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD288 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD289 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD290 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD292 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CDw293 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD294 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD295 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD297 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD299 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD300a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD300c | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD300e | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD301 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD302 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD303 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD304 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD305 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD306 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD307a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD307b | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD307c | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD307d | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD307e | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD308 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD309 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD310 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD312 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD314 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD315 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD316 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CD317 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Markers | Stem Cells, Precursors and Progenitors | | | | | B Cells | | Specialist Antigen Presenting Cells | | | Myeloid and Mast Cells | | | | | NK Cells and Innate Lymphoid Cells | | | | T Cells | | | | | Megakaryocyte Erythroid Cells | | | Non Hematopoietic Cells | | | | | | | | |
|---------------------|--|-----|-----|-----|-----|---------|---------|-------------------------------------|-------------------------|------------------------------|------------------------|------------|------------|----------|------------|------------------------------------|-------------|------------|----------|--------------------|----------------------------|-----------------------|---------|---------------------------|-------------------------------|---------------------|-----------|-------------------------|-----------|-----------------|-------------|-------------------|------------------|--|--|--|
| | LT-HSC | GMP | CMP | CLP | MEP | MPP | B cells | Pro/Pre B cells | Myeloid dendritic cells | Plasmacytoid dendritic cells | Langerhans cells | Eosinophil | Neutrophil | Basophil | Macrophage | Monocyte | Granulocyte | Mast cells | NK cells | Precursor NK cells | Innate lymphoid progenitor | Innate lymphoid cells | T cells | Double negative thymocyte | Double positive thymocyte | Gamma/Delta T cells | NKT cells | Megakaryocyte | Platelets | Proerythroblast | Erythrocyte | Endothelial cells | Epithelial cells | | | |
| EphB2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| EphB4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Fc epsilon R1 alpha | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Flt3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Granzyme A | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Granzyme B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IgM | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IL-9 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IL-13 alpha 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IL-21R | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| iNOS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jagged2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| KLRG1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LYVE-1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MACRO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MHC class II | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Neuropilin 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PAL-E | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Prox1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RAG | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ROR gamma T | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Siglec-8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ST2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TCR alpha/beta | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TCR gamma/delta | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TLR7 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VEGF | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ZAP70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Key LT-HSC: Long Term Hematopoietic Stem Cell CMP: Common Myeloid Precursor MEP: Megakaryocyte Erythroid Precursor NKT Cell: Natural Killer T Cell
 GMP: Granulocyte Monocyte Precursor CLP: Common Lymphoid Precursor MPP: MultiPotent Progenitor NK Cell: Natural Killer Cell

Colors represent different lineage pathways. For further information visit bio-rad-antibodies.com/resources



Empowering Your Every Step

From antibody selection to successful experiments



1 Choosing the right antibody

Our dedicated antibody website (bio-rad-antibodies.com) makes product search and selection easy.

Access to datasheets, images, published references and reviews validate your choice.

2 Designing experiments with confidence

Our extensive range of application specific resources provide advice, facts, tips and protocols for key applications such as flow cytometry, IHC, IF, WB, and ELISA.

bio-rad-antibodies.com/applications

Search by resources

- Guides and posters
- Interactive tools
- Mini-reviews
- Videos and webinars

bio-rad-antibodies.com/resources

3 Achieving more

At Bio-Rad we can provide all the vital ingredients to achieve more, whether you need antibodies, reagents, instrumentation or expert advice, all from a reliable brand. This leads to reproducible results you can trust, contributing to your recognition and success.

LABEL

IMAGE

SORT

ANALYZE

- Award winning customer support team to assist you
- A 60-year heritage you can rely on

Bio-Rad reagents are for research purposes only, not for therapeutic or diagnostic use. Alexa Fluor and Pacific Blue are trademarks of Thermo Fisher Scientific Inc. and its subsidiaries. Cy® and CyDye® are registered trademarks of GE Healthcare group companies.



**Bio-Rad
Laboratories, Inc.**

Life Science
Group

Web site bio-rad-antibodies.com

Austria, Germany, Netherlands & Switzerland 49 89 80 90 95 21 **Belgium & Luxembourg** 44 1865 852 357 **Canada & USA** 1 800 424 6723 **France** 44 1865 852 357
United Kingdom, Scandinavia & other countries 44 1865 852 700 **Custom Services** 49 89 80 90 95 45

