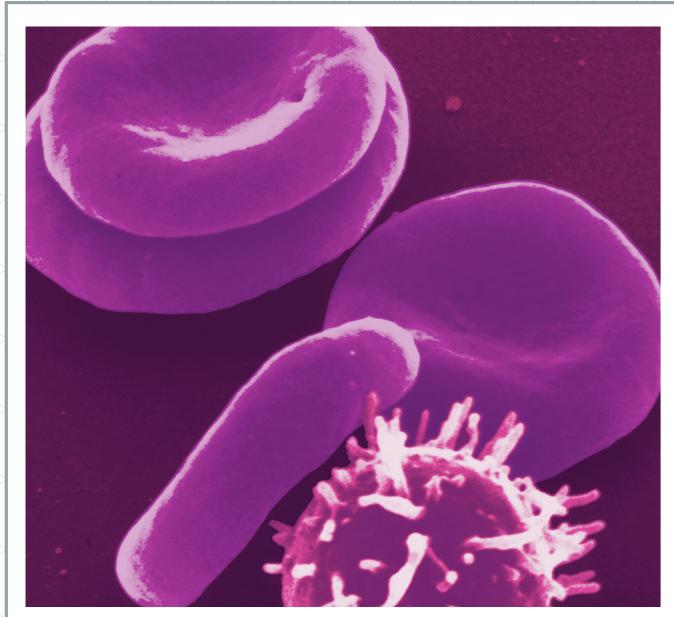
CD Antigens





| CD 1 c | | Cellular expression | Functions Non-poptide Agreemation | Reported markers of* |
|--|--|--|--|--|
| CDla | 27992, 22352, 27991, 708 | Cortical thy, Langerhans, DC | Non-peptide Ag presentation | Thymics - marks T cells at the short cortical thymic stage of differentiation |
| CD1b | 23992 | Cortical thy, Langerhans, DC | Non peptide Ag presentation | Cortical thy |
| CD1c | 18216 | Cortical thy, Langerhans, DC, B cell subset | Non peptide Ag presentation | Myeloid DC 1; cortical thy |
| CD1d | 11076 | Intestinal epi, B cell subset, DC | Non peptide Ag presentation | |
| CD1e | General CD1 antibodies: 24877, 25599, 24837, 24986 | DC | Non peptide Ag presentation | |
| CD2 | 27995, 25241, 27994, 34250 | Thy, NK cells, T and B cells | Adhesion; T cell activation | Pan T cells (with CD4+ suppressor/inducer T cells; with CD8+ cytotoxic/suppressor T cells); |
| CD3 | 24947, 27349, 27331, 33429, 3985 | Mature T cells, thy | Signaling T cell activation; regulation of TCR expression | human NK cells; thy Pan T cells (with CD4+ suppressor/ inducer T cells; with CD8+ cytotoxic/suppressor T cells); |
| CD4 | 48391, 21418 , 33437, 34271, 23803, | Thy subset, T helper/ inducer and regulatory cells, mono, mac | T cell activation; thymic differentiation; HIV receptor | NK cells TH cells; regulatory T cells; mono; marker of HIV infection; subcortical and cortical thy; CD4+ medullary thy subset (when used in conjunction with other |
| CD5 | 25280, 24500 , 24873, 25161, 36466 | Thy, T and B cell subset, B-CLL | Regulates T cell-B cell lymphocyte interaction | thy markers) Pan T cells (with CD4+ suppressor/inducer T cells; with CD8+ cytotoxic/suppressor T cells); |
| CD6 | 34290, 33782, 9181, 49503, | Thy, T and B cell subset, neuron subset | Thy development; T cell activation | subcortical thy T and B lph; a potential marker of cell activation |
| CD7 | 22381 1158, 27324, 34293, 8236, 16042 | Thy, T cells, NK cells, pluripotent HSC, thy | T cell costimulation | Pan T cells (with CD4+ suppressor, inducer T cells; with CD8+ cytotoxic/suppressor T cells); thy; |
| CD8 | 26004, 34153, 25417, 34282, 34364 | Thy subset | | pluripotent HSC Tc cells; subcortical and medulary thy subset (when used in conjunction with other |
| CD8a | 25499, 25676 , 25498, 25167, 25478, 33786 | Thy subset, Tc cells, NK cells, DC subset | Co-receptor for MHC class 1 molecules | thy markers) |
| CD8b | 21246, 21247, 21245, 41328, 21248 | Thy subset, Tc cells | Co-receptor for MHC class 1 molecules | |
| CD9 | 34162, 34161, 2215 | Plt, pre-B cells, eos, Baso, activated T cells, endo and epi cells | Cell adhesion and migration; platelet activation | ESC; plt; Baso; mono |
| CD10 | 28096, 27384, 35268, 34199 | B and T cell precursors, fib, neu, bone marrow stromal cells | Peptidase; regulates B cell growth | Mesenchymal / lymphoid stem cells; neu; pre-pre B lph |
| CD11a | 19570, 25500, 24951, 52895 | Lk, lph, gran, mono and mac | Intracellular adhesion and costimulation | |
| CD11b | 25482, 24874 , 25175, 24954 , 6332, | Gran, mono, NK cells, T and B cells, DC | Cell adhesion; apoptosis; chemotaxis | Mesenchymal stem cells; macrophage/monocyte/myeloid cells; gran; microglial cells |
| CD11c | 42800, 33485, 52632, 11029 | Mono, mac, gran, T and B cell subset | Cell adhesion | Marker for CD11c subset of myeloid cells; type 1 myeloid DC; monocyte and mac; gran |
| CD14 | 46882, 46883, 25723, 7417 25620, 16174, | Gran, mono (+ precursors), endo cells, epi cells. Mono, mac | Zinc binding metalloproteinase Receptor for complex of LPS and LBP | Mesenchymal stem cells; mono; gran Monocyte and mac; endo |
| CD14 | 16175, 21889, 8103 | (myelomoncytic cells) Langerhans, gran | Receptor for complex of LP3 and LBP | progenitors |
| CD15 | 42751, 28103, 20137 | Gran, mono, neu, eos | Cell adhesion | Endo progenitors; granylocyte/ neu; mono; cancers - Reed- Sternberg cells of Hodgkin's disease; on T cell lymphomas including mycosis fungoides and |
| CD16 | 46885, 46886, 52047, 664 | Neu, NK cells, mac | Low affinity Fc receptor; mediates phagocytosis and ADCC | on some leukemias. Gran; neu; NK cells; mac |
| CD17 CDw17 | 1902 | Mono, plt, B cell subset, gran, DC, T cells, plt, neu | Lactocyl ceramide; cell surface glycosphingolipid | Mono; neu/Baso Plt |
| CD18 | 40911, 52049 , 25489, 52050 , | Lk | Cell adhesion | |
| CD19 | 8220 25484, 1167, 52056, 25609, | B cells (but NOT plasma cells), FDC | Signal transduction | Pro and pre B lph; FDC |
| CD20 | 31947 25542, 51792, 46896, 25610, 32090 | T and B cell subset | B cell activation and proliferation | B Cells; Baso; cancers - used for the typing of malignant lymphomas and other |
| CD21 | 24887, 25355, 24827, 24992 | Mature B cells, FDC, T cell subset | Signal transduction | lymphoproliferative disorders. |
| | | | | |
| CD22 | 25267, 24971, 25369, 21890, 25135 | Mature B cells | B cell adhesion; signal transduction | Mature B cells; plt; Baso; cancers - useful in phenotyping mature leukemias. |
| | 25369, 21890, | Mature B cells, activated mac, eos, FDC, plt | B cell adhesion; signal transduction Low affinity receptor for IgE; ligand for CD19; CD21 and CD81 | - useful in phenotyping mature leukemias. |
| CD23 | 25369, 21890, 25135 25457, 46908, 24999, 24957, 710 51535, 25657, 25646, 25658, | Mature B cells, activated | Low affinity receptor for IgE; ligand for | useful in phenotyping mature leukemias. Activated mac; plt; activated eos |
| CD23 CD24 | 25369, 21890, 25135 25457, 46908, 24999, 24957, 710 51535, 25657, | Mature B cells, activated mac, eos, FDC, plt B cells, gran, epi cells, | Low affinity receptor for IgE; ligand for CD19; CD21 and CD81 Regulation of B cell proliferation and | useful in phenotyping mature leukemias. Activated mac; plt; activated eos activated B cells Pancreatic cancers; Pro B lph; |
| CD23 CD24 CD26 CD27 | 25369, 21890, 25135 25457, 46908, 24999, 24957, 710 51535, 25657, 25646, 25658, 31622 30359, 30360, | Mature B cells, activated mac, eos, FDC, plt B cells, gran, epi cells, mono Mature thy, T cells (upregulated on activation), activated B cells, NK cells, epi cells, | Low affinity receptor for IgE; ligand for CD19; CD21 and CD81 Regulation of B cell proliferation and differentiation | - useful in phenotyping mature leukemias. Activated mac; plt; activated eos activated B cells Pancreatic cancers; Pro B lph; neutrophil/Baso |
| CD22 CD23 CD24 CD26 CD27 CD28 CD29 | 25369, 21890, 25135 25457, 46908, 24999, 24957, 710 51535, 25657, 25646, 25658, 31622 30359, 30360, 42897, 3154 30366, 30367, 10456 25488, 24908, 25487, 25178, | Mature B cells, activated mac, eos, FDC, plt B cells, gran, epi cells, mono Mature thy, T cells (upregulated on activation), activated B cells, NK cells, epi cells, mac T cells, medullary thy, B cell subset, NK cells Most T cells, thy, plasma cells, NK cells, activated | Low affinity receptor for IgE; ligand for CD19; CD21 and CD81 Regulation of B cell proliferation and differentiation Exoprotease; HIV pathogenesis Costimulation of T cell and B cell activation | - useful in phenotyping mature leukemias. Activated mac; plt; activated eos activated B cells Pancreatic cancers; Pro B lph; neutrophil/Baso Activated B and T cells; mac |
| CD23 CD24 CD26 CD27 CD28 | 25369, 21890, 25135 25457, 46908, 24999, 24957, 710 51535, 25657, 25646, 25658, 31622 30359, 30360, 42897, 3154 30366, 30367, 10456 25488, 24908, 25487, 25178, 13463 36468, 23834, 30393, 23825, | Mature B cells, activated mac, eos, FDC, plt B cells, gran, epi cells, mono Mature thy, T cells (upregulated on activation), activated B cells, NK cells, epi cells, mac T cells, medullary thy, B cell subset, NK cells Most T cells, thy, plasma cells, NK cells, activated B cells | Low affinity receptor for IgE; ligand for CD19; CD21 and CD81 Regulation of B cell proliferation and differentiation Exoprotease; HIV pathogenesis Costimulation of T cell and B cell activation Costimulation Interacts with CD49a in VLA-1 integrin Regulates lymphocyte proliferation and cell death. Has a critical role in the pathophysiology of Hodgkin's disease | - useful in phenotyping mature leukemias. Activated mac; plt; activated eos activated B cells Pancreatic cancers; Pro B lph; neutrophil/Baso Activated B and T cells; mac |
| CD23 CD24 CD26 CD27 CD28 CD29 | 25369, 21890, 25135 25457, 46908, 24999, 24957, 710 51535, 25657, 25646, 25658, 31622 30359, 30360, 42897, 3154 30366, 30367, 10456 25488, 24908, 25487, 25178, 13463 36468, 23834, 30393, 23825, 7168 24976, 25187, | Mature B cells, activated mac, eos, FDC, plt B cells, gran, epi cells, mono Mature thy, T cells (upregulated on activation), activated B cells, NK cells, epi cells, mac T cells, medullary thy, B cell subset, NK cells Most T cells, thy, plasma cells, NK cells, activated B cells Lk Activated T and B cells, mono, activated NK cells, | Low affinity receptor for IgE; ligand for CD19; CD21 and CD81 Regulation of B cell proliferation and differentiation Exoprotease; HIV pathogenesis Costimulation of T cell and B cell activation Costimulation Interacts with CD49a in VLA-1 integrin Regulates lymphocyte proliferation and cell death. Has a critical role in the | - useful in phenotyping mature leukemias. Activated mac; plt; activated eos activated B cells Pancreatic cancers; Pro B lph; neutrophil/Baso Activated B and T cells; mac B cell malignancies Activated B cells ESC; activated T and B cells; cell surface antigen of Hodgkin's and Reed-Sternberg cells Mesenchymal stem cells; plt; mon and mac; gran; T cells (with CD4+ suppressor/inducer T cells; with |
| CD23 CD24 CD26 CD27 CD28 CD29 CD30 CD31 | 25369, 21890, 25135 25457, 46908, 24999, 24957, 710 51535, 25657, 25646, 25658, 31622 30359, 30360, 42897, 3154 30366, 30367, 10456 25488, 24908, 25487, 25178, 13463 36468, 23834, 30393, 23825, 7168 24976, 25187, 25186, 23766 | Mature B cells, activated mac, eos, FDC, plt B cells, gran, epi cells, mono Mature thy, T cells (upregulated on activation), activated B cells, NK cells, epi cells, mac T cells, medullary thy, B cell subset, NK cells Most T cells, thy, plasma cells, NK cells, activated B cells Lk Activated T and B cells, mono, activated NK cells, Reed-Sternberg cells Mono, plt, gran, endo, lymphocyte subset, epi cells B cells, mono, gran, plt, endo cells | Low affinity receptor for IgE; ligand for CD19; CD21 and CD81 Regulation of B cell proliferation and differentiation Exoprotease; HIV pathogenesis Costimulation of T cell and B cell activation Costimulation Interacts with CD49a in VLA-1 integrin Regulates lymphocyte proliferation and cell death. Has a critical role in the pathophysiology of Hodgkin's disease and other CD30+ lymphomas. Cell adhesion Regulation of B cell function; induces phagocytosis and mediator release | - useful in phenotyping mature leukemias. Activated mac; plt; activated eos activated B cells Pancreatic cancers; Pro B lph; neutrophil/Baso Activated B and T cells; mac B cell malignancies Activated B cells ESC; activated T and B cells; cell surface antigen of Hodgkin's and Reed-Sternberg cells Mesenchymal stem cells; plt; mon and mac; gran; T cells (with CD4+ suppressor/inducer T cells; with CD8+ cytotoxic/suppressor T cells) monocyte and mac; neu |
| CD23 CD24 CD26 CD27 CD28 CD29 CD30 CD31 | 25369, 21890, 25135 25457, 46908, 24999, 24957, 710 51535, 25657, 25646, 25658, 31622 30359, 30360, 42897, 3154 30366, 30367, 10456 25488, 24908, 25487, 25178, 13463 36468, 23834, 30393, 23825, 7168 24976, 25187, 25186, 23766 25563, 23359, 25644, 7389, 7388 30356, 30357, 30355, 45143 25773, 25906, 21892, 30371 | Mature B cells, activated mac, eos, FDC, plt B cells, gran, epi cells, mono Mature thy, T cells (upregulated on activation), activated B cells, NK cells, epi cells, mac T cells, medullary thy, B cell subset, NK cells Most T cells, thy, plasma cells, NK cells, activated B cells Lk Activated T and B cells, mono, activated NK cells, Reed-Sternberg cells Mono, plt, gran, endo, lymphocyte subset, epi cells B cells, mono, gran, plt, endo cells Mono, gran, mast cells, myeloid progenitors | Low affinity receptor for IgE; ligand for CD19; CD21 and CD81 Regulation of B cell proliferation and differentiation Exoprotease; HIV pathogenesis Costimulation of T cell and B cell activation Costimulation Interacts with CD49a in VLA-1 integrin Regulates lymphocyte proliferation and cell death. Has a critical role in the pathophysiology of Hodgkin's disease and other CD30+ lymphomas. Cell adhesion Regulation of B cell function; induces phagocytosis and mediator release Lectin acitivity; adhesion | - useful in phenotyping mature leukemias. Activated mac; plt; activated eos activated B cells Pancreatic cancers; Pro B lph; neutrophil/Baso Activated B and T cells; mac B cell malignancies Activated B cells ESC; activated T and B cells; cell surface antigen of Hodgkin's and Reed-Sternberg cells Mesenchymal stem cells; plt; mon and mac; gran; T cells (with CD4+ suppressor/inducer T cells; with CD8+ cytotoxic/suppressor T cells) monocyte and mac; neu Myeloid cells; mono |
| CD23 CD24 CD26 CD27 CD28 CD29 CD30 | 25369, 21890, 25135 25457, 46908, 24999, 24957, 710 51535, 25657, 25646, 25658, 31622 30359, 30360, 42897, 3154 30366, 30367, 10456 25488, 24908, 25487, 25178, 13463 36468, 23834, 30393, 23825, 7168 24976, 25187, 25186, 23766 25563, 23359, 25644, 7389, 7388 30356, 30357, 30355, 45143 25773, 25906, | Mature B cells, activated mac, eos, FDC, plt B cells, gran, epi cells, mono Mature thy, T cells (upregulated on activation), activated B cells, NK cells, epi cells, mac T cells, medullary thy, B cell subset, NK cells Most T cells, thy, plasma cells, NK cells, activated B cells Lk Activated T and B cells, mono, activated NK cells, Reed-Sternberg cells Mono, plt, gran, endo, lymphocyte subset, epi cells B cells, mono, gran, plt, endo cells Mono, gran, mast cells, | Low affinity receptor for IgE; ligand for CD19; CD21 and CD81 Regulation of B cell proliferation and differentiation Exoprotease; HIV pathogenesis Costimulation of T cell and B cell activation Costimulation Interacts with CD49a in VLA-1 integrin Regulates lymphocyte proliferation and cell death. Has a critical role in the pathophysiology of Hodgkin's disease and other CD30+ lymphomas. Cell adhesion Regulation of B cell function; induces phagocytosis and mediator release | - useful in phenotyping mature leukemias. Activated mac; plt; activated eos activated B cells Pancreatic cancers; Pro B lph; neutrophil/Baso Activated B and T cells; mac B cell malignancies Activated B cells ESC; activated T and B cells; cell surface antigen of Hodgkin's and Reed-Sternberg cells Mesenchymal stem cells; plt; mon and mac; gran; T cells (with CD4+ suppressor/inducer T cells; with CD8+ cytotoxic/suppressor T cells) monocyte and mac; neu |
| CD23 CD24 CD26 CD27 CD28 CD29 CD30 CD31 CD32 CD32 CD33 | 25369, 21890, 25135 25457, 46908, 24999, 24957, 710 51535, 25657, 25646, 25658, 31622 30359, 30360, 42897, 3154 30366, 30367, 10456 25488, 24908, 25487, 25178, 13463 36468, 23834, 30393, 23825, 7168 24976, 25187, 25186, 23766 25563, 23359, 25644, 7389, 7388 30356, 30357, 30355, 45143 25773, 25906, 21892, 30371 18225, 46924, 46970, 21252, | Mature B cells, activated mac, eos, FDC, plt B cells, gran, epi cells, mono Mature thy, T cells (upregulated on activation), activated B cells, NK cells, epi cells, mac T cells, medullary thy, B cell subset, NK cells Most T cells, thy, plasma cells, NK cells, activated B cells Lk Activated T and B cells, mono, activated NK cells, Reed-Sternberg cells Mono, plt, gran, endo, lymphocyte subset, epi cells B cells, mono, gran, plt, endo cells Mono, gran, mast cells, myeloid progenitors HSC and progenitors, | Low affinity receptor for IgE; ligand for CD19; CD21 and CD81 Regulation of B cell proliferation and differentiation Exoprotease; HIV pathogenesis Costimulation of T cell and B cell activation Costimulation Interacts with CD49a in VLA-1 integrin Regulates lymphocyte proliferation and cell death. Has a critical role in the pathophysiology of Hodgkin's disease and other CD30+ lymphomas. Cell adhesion Regulation of B cell function; induces phagocytosis and mediator release Lectin acitivity; adhesion | - useful in phenotyping mature leukemias. Activated mac; plt; activated eos activated B cells Pancreatic cancers; Pro B lph; neutrophil/Baso Activated B and T cells; mac B cell malignancies Activated B cells ESC; activated T and B cells; cell surface antigen of Hodgkin's and Reed-Sternberg cells Mesenchymal stem cells; plt; mon and mac; gran; T cells (with CD4+ suppressor/inducer T cells; with CD8+ cytotoxic/suppressor T cells) monocyte and mac; neu Myeloid cells; mono Pro and pre B lph; eryth; stem cell and early and late progenitors; lymphoid stem cells; endo |

| CD Antiger | AbID | Cellular expression | Functions | Reported markers of* |
|----------------|--|---|--|---|
| CD37 | 30414, 518, 19701 | Mature B cells, myeloid cells. Low level of expression in T cells, gran and mono | Signal transduction | |
| CD38 | 25041, 24978 , 24977, 25004, 2577 | Variable expression levels on most hematopoietic and some non- hematopoietic cells. High levels on plasma cells, early T and B cells, activated T cells, germinal | Regulates cell activation, proliferation and adhesion | Immature and activated B and T cells; plasma cells; mono; Baso; thy; hematopoietic/lymphoid stem cells |
| CD39 | 30423, 30424, 3042 | centre B cells Mac, Langerhans, DC, activated B cells, NK cells, | B cell adhesion; protects activated cells from lysis | Neuronals; potential marker of NK cells |
| CD40 | 25567, 2728 1, 25270, 27927, 25298 | microglial cells B cells, mono/mac, FDC, endo, fib, keratinocytes | Costimulation of B cell growth; differentiation and isotype switching | mono |
| CD41 | 19687, 19690, 30434, 15021 | Plt, megaK | Plt activation and aggregation | Plt |
| CD42a CD42b | 30398, 30399, 30397, 19729 30401, 30402, | Plt, megaK Plt, megaK | Plt adhesion and aggregation Plt adhesion and aggregation | Plt |
| CD42d CD43 | 30400, 2578 23773 46727, 33873, 13471, 28104, 9088 | Plt, megaK Ik (except resting B cells). Low expression in plt | Plt adhesion and aggregation Anti-adhesion; binds CD45 to mediate adhesion | Plt Mono; granulocyte/neutrophil/ basohphils; T cells (with CD4+ suppressor/inducer T cells; with |
| CD44 | 25451, 19622, 25224, 25171, 6124 | Hematopoietic and non- hematopoietic cells (not plt) | Lk rolling, homing and aggregation. Adhesion of lk to endo cells, stromal cells, and the extracellular matrix. | CD8+ cytotoxic/suppressor T cells) Mesenchymal stem cells; eryth |
| CD45 CD45RA | 25519, 27287, 25603, 19592, 8216 30507, 27290, | Hematopoietic cells (not eryth and plt) B and T cell subset (naïve | Critical for T cell and B cell receptor mediated activation. Critical for T cell and B cell receptor | Lk; hematopoietic progenitors Naïve T cell subsets; B cell subsets; |
| CD45RB | 27292, 30476, 22363 28331, 25006, | T), mono, medullary thy T cell subset, B cells, mono, | mediated activation Critical for T cell and B cell receptor | mono Mono and mac |
| CD45RC | 25647, 28110, 8218 24937, 25521, | mac, gran, DC, NK cells B cells, NK cells, CD8+ T | mediated activation Critical for T cell and B cell receptor | |
| CD45RO | 25213, 3135 51564, 19758, 19741, 23 | cells, subset of CD4+ T, medullary thy, mono, DC Activated T and memory T and B cells subset, mono/ | mediated activation Critical for T cell and B cell receptor mediated activation | Monocyte and mac; gran; helper, inducer T cells |
| CD46 | 28068, 26014, 28067, 789 | mac, gran, cortical thy, DCsubset Lk, plt, endo cells, epi cells, Placental trophoblasts, sperm and some tumor cells, hematopoietic and non hematopoietic | Co-factor for factor 1 proteolytic cleavage of C3b and C4b; sets protective barrier threshold against inappropriate complement activation | |
| CD47 | 33950, 33953, 48517, 9089 | nucleated cells Hematopoietic cells, epi cells, endo cells, | Adhesion | |
| CD48 | 48314, 51595, 30478, 28111, 9185 | mesechymal cells Lk | Cell adhesion; T cell costimulation | T cells (with CD4+ suppressor/inducer T cells; with CD8+ cytotoxic/suppressor T cells) |
| CD49a CD49b | 33672, 34160, 34445 41460, 30486, | Activated T cells, mono, melanoma cells, endo cells PIt, B cells, mono, | Adhesion; embryo development Adhesion; platelet aggregation; | NK cells; plt; mono; cctivated |
| CD49c | 42775, 30485, 30487 30488, 30489, | activated T cells, epi cells, endo cells, NK cell subset, megaK Most adhesion cell lines. | receptor for echovirus 1 Adhesion and signal transduction | T cells |
| CD49d | 20140 25796, 25666, 24944, 220 | Low expression on B and T cells T and B cells, thy, mono, eos, Baso, NK cells, mast | Adhesion, cell migration, homing and activation | T cells (with CD4+ suppressor/inducer T cells; with CD8+ |
| CD49e | 23815, 25461, 25189, 24694 | cells, DC, erythroblastic precursors Thy, T cells, mono, plt, early and activated B cells, | Adhesion; regulation of cell survival and apoptosis | cytotoxic/suppressor T cells); neuronal stem cells mono; activated T cells |
| CD49f | 30496, 30497, 28080, 20142 | endo cells, epi cells Memory B cells, T cells, thy, mono, plt, megaK, epi, endo, cytotrophoblasts | Adhesion and cell migration; embryogenesis | ESC; mono; plt; activated T cells |
| CD50 | 47029, 42907, 21895, 10804 | Lk, thy, Langerhans, endo cells, T and B cells, gran, mono | Adhesion and costimulation | |
| CD51 | 33078, 48520, 34226 | Plt, activated T cells, endo cells, osteoblasts, melanoma cells, megaK | Adhesion; signal transduction | |
| CD52 | 33083, 36443, 2576 | Thy, lph (not plasma cells), mono/mac, epi cells | Glycosylphosphatidylinositol (GPI) anchored antigen which may play a role in carrying and orienting carbohydrate | Gran |
| CD53 CD54 | 33864, 667 24869, 25553, | Lk, DC, osteoblasts, osteoclasts Endo, mono, | Signal transduction Extravasation of lk from blood vessels; | Endo cells |
| SD34 | 25007, 2213 | hematopoietic and non- hematopoietic cells. Low expression on resting lph, upregulation on activation | regulates T cell activation | Endo cons |
| CD55 CD56 | 25634, 25540, 25635, 1422 48524, 7169, | Hematopoietic and nonhematopoietic cells Neural tissues, NK cells, T | Regulates complement activation; ligand or protective molecular in fertilization; signal transduction Homophilic and heterophilic adhesion | Eryth Neuronals: NK cells |
| CD57 | 48522, 19774, 9272 25605, 25577, | cell subset, small cell lung carcinoma NK cell subset, T cell subset, | Adhesion | NK subsets |
| CD58 | 25614, 8597 26006, 27301, 21897, 1420 | mono Lk, eryth, epi cells, endo cells, fib, hematopoietic and non-hematopoietic | APC-T, killer target cell interaction; costimulation | |
| CD59 | 36467, 15686, 42788, 28114, 9182 | cells Hematopoietic and non- hematopoietic cells | Prevents complement polymerization; protects cells from complement mediated lysis | Hematopoietic stem cells; eryth |
| CDw60 | 22384, 25755 | Subset of CD4+ and CD8+ peripheral T-cells, plt, mono | Co-stimulation of T cells | Pit |
| CD61 | 33271, 33272, 19784, 7167 | With CD41 on plt, with CD51 on mac, endo, flb, megaK, osteoclasts, mast cells, mac | Mediates cell adhesion to diverse matrix proteins | MegaKaryocyte and plt |
| CD62E | 51241, 13481, 51529, 6630 | Activated endo cells, E-Selectin | Lk rolling; tumor cell adhesion; angiogenesis | Endo progenitors |
| CD62L CD62P | 41459, 24876, 25600, 3920 33279, 42795, | B and T cell subset, mono, gran, NK cells, thy Activated plt, endo cells, | Lk rolling and homing (L-selectin) Lk terythering and rolling | Naïve/effector memory T cells |
| CD63 | 19787, 18236, 1318 | megak, P-selectin Activated plt, mono, mac, gran, endothelium | Translocated to cell surface on activation of plt, endo cells and gran. Associated with the early stages of melanoma tumor progression (in regulation of motility and adhesion of | Plt, endo cell, and granulocyte activations; monocyte and mac; melanomas – involved in early stages of melanoma tumor progression |
| CD64 | 34224, 23890, 27928, 924 8 | Mono, mac | melanoma cells). High affinity receptor for IgG | Monocyte and mac; activated neutrophil, eosinophil and Baso |
| CD65 CD66 | 51913, 51912 | Gran, myeloid cells. Low expression on mono Neu | | Useful for studies of stages of myeloid cell proliferation Activated neutrophil, eosinophil |
| CD66 CD66a | CD66a,c,d,e | Mature gran, eptithelial cells, hematopoietic tissues, neu, colon and liver | Homophilic and heterophilic adhesion; neutrophil activation | Activated neutropnii, eosinopnii and Baso Neu |
| CD66b CD66c | 51534, 48589 | Gran Neu, epi cells, colon carcinoma | Cell adhesion; neutrophil activation | Gran; neu Gran |
| CD66d CD66e | | Neu Adult colon epi, colon | Neu activation Homophilic and heterophilic adhesion | Neu |
| CD66f | | carcinoma Eptihelial, placental syncytiotrophoblasts, fetal liver | Immune regulation and protection of fetus from maternal immune system; pregnancy specific glycoprotein. | |
| CD68 | 955 | Mono, mac, neu, Baso, DC, myeloid progenitors | Possibly has a role in phagocytic activities of tissue mac, both in intracellular lysosomal metabolism and extracellular cell-cell and cell-pathogen interactions; binds to tissue- and organspecific lectins or selectins, allowing homing of macrophage subsets to particular sites; recirculation of CD68 | Mac; mono and microgilals |
| CD69 | 24848, 25570, | Activated Ik, NK cells, thy | from endosomes and lysosomes to the plasma membrane; may allow mac to crawl over selectin bearing substrates or other cells. Signal transmitting receptor | Activated mac; T and B cells; |
| CD69 CD70 | 24848, 25570, 25008, 51862 24538, 21950 | Activated Ik, NK cells, thy subset, plt, Langerhans, activated mac Activated B and T cells. | Signal fransmitting receptor Induces proliferation of costimulated | Activated mac; I and B cells; NK cells Activated B and T cells |
| 010 | ,000, Z1YOU | Activated B and I cells, mac | Induces proliferation of costimulated T cells; enhances the generation of Tc cells and contributes to T cell activation. This cytokine is also reported to play a role in regulating B-cell activation, cytotoxic function of NK | sfalsa b ai la i Cells |
| CD71 | 33996, 25622, 7350, 8598 | Proliferating cells, reticulcytes, erythroid precursors activated lk | activation, cytotoxic function of NK cells; and immunoglobulin sythesis. Transferin receptor 1 - controls iron uptake during cell proliferation | Erythroblasts; mac; activated B and T cells |
| CD72 CD74 | 33286, 18223, 8091 54213, 49782 | precursors, activated lk B (not plasma) cells, mac, FDC, epi and endo cells B cells, activated T cells, | B cell activation and proliferation Intracellular sorting of MHC class II | Pro and pre B lph Mono and mac |
| CDw75 | 33287 | mac, Langerhans, DC, endo cells, epi cells B cell subset, T cell subset, enth | molecules Cell adhesion | |
| CD77 | 19795 | eryth Germinal centre B cells, mac. High expression in | Induces apoptosis | |

| CD Antigen CD78 | AbID 24151 | B cells (expresson increases on B cell activation), tissue | Expressed as part of the MHC class II molecule | Reported markers of* |
|---|---|---|--|---|
| CD79a | 33290, 42798, 712 | mac, epi cells B cells | Subunit of B cell antigen receptor (CD79a+CD79b); signal transduction | Pro and pre B cells; Cancers - majority of acute leukemias of precursor B cell type, B cell lymphomas and in some |
| CD79b | 25169, 24939 , 25522, 26275 , | B cells | Subunit of B cell antigen receptor (CD79a+CD79b); signal transduction | myelomas B cells |
| CD80 | 23826 25555, 42803, | Activated B and T cells, | Costimulation of T cell activation and | Activated B cells |
| CD01 | 42925, 24970, 53003 24940, 25513, | mac, DC T and B cells, NK cells, | proliferation Signal transduction | |
| CD81 | 25675, 33697 | mono, thy, DC, endo cells, fib | Signal transduction | |
| CD82 | 27338, 47098 | Lk (upregulation on activation), plt | Signal transduction | |
| CD83 | 48245, 48318 , 48320, 49324 | Activated T and B cells, circulating DC, Langerhans | Regulates immune response | |
| CD84 | 33217, 33218, 3202 | Mature B cells, T cell subset, mono/mac, plt, thy | Homophilic adhesion molecule; enhances T cell activation and cytokine production | Hematopoietic stem cells; plt; mono; |
| CD86 | 25556, 24862 , 25594, 25239, | Mono, activated B and T cells, endo | Costimulation of T cell activation and proliferation | Mono; activated B cells |
| CD87 | 53004 27423, 3129 | Gran, mono, NK cells, T cells, endo cells, fib, | Cell chemotaxis; adhesion | Mono and mac; gran; activated T cells |
| CD88 | 33951, 21652, | hepatocytes Gran, mono, DC, | Gran activation | Reactive astrocytes and |
| CD89 | 54378, 12962 33221, 33211, | astrocytes Mono, mac, gran, neu, B | Induces phagocytosis, degranulation | microglials; mac; gran Mono; neu |
| CD90 | 22520 25322, 25672 , | and T cell subset Hematopoeitic cells, | and respiratory burst Costimulation of lph; possible inhibition | Hematopoeitic / lymphoid stem |
| | 24904, 8872 | neurons, fib, stromal cells, HEV endo cells, mouse T cells | of stem cell and neuron differentiation | cells; neuronals |
| CD91 | 33201, 34024, 33200, 28320 | Mono, mac, neurons, fib | Alpha 2 mac; globulin receptor | Mono |
| CD93 | 33223 | Mono, gran, endo cells, neu | May mediate the enhancement of phagocytosis in mono and mac upon interaction with soluble | Mono; neu; endo cells |
| | | | defense collagens; may play a role in intercellular adhesion | |
| CD94 | 25020, 33204, 33203, 19740 | NK cells, T cell subset | Inhibition of NK cell function; induces cytolytic activity and cytokine | NK cells |
| CD95 | 25290, 33227 , 25405, 25559, | Mono, neu, lph, fib | production Fas: Induces apoptosis (Some Abcam antibodies have been | |
| | 2437 | | tested in functional studies for the induction of apoptosis. See <u>www.</u> | |
| CD97 | 23490, 33229, | Gran, mono. Low | abcam.com for details) Neu migration | |
| CD98 | 13023 33236, 42928, 26009, 33232 | expression in lph, mac, DC Mono, lph NK cells, gran. All human cell lines. | Cell activation; cell aggregation | Mono; T cells (with CD4+ suppressor/inducer T cells; with |
| CD99 | 48530, 48531, | Lph, NK cells, mono, gran, | Lk migration; T cell activation; cell | CD8+ cytotoxic/suppressor T cells) |
| | 48529, 9087 | endo cells, epi cells, some tumor cells, thy | adhesion | |
| CD100 CD101 | 33259, 33261, 33260 33263, 33264, | Lk, oligodendrocytes Mono, gran, DC, activated | Mono migration; T and B activation; T cell-B cell and T cell-DC interaction T cell activation and proliferation | Monocyte and mac; gran |
| CD101 CD102 | 33263, 33264, 24039 47207, 25524, | T cells, Langerhans Resting lph, mono, plt, | I cell activation and proliferation Adhesion; costimulation; lymphocyte | Monocyte and mac; gran Mono; T cells (with CD4+ |
| | 25262, 35045 | vascular endo cells | recirculation | suppressor/inducer T cells; with CD8+ cytotoxic/suppressor T cells); |
| CD103 | 24938, 25517, 48246, 25198 | Intraepi lph, some peripheral blood lph, | Lph retention; activation | endo cells |
| CD104 | 22486, 41342, | peripheral blood iph, activated lph Epi cells, endo cells, | Cell adhesion; migration; tumor | |
| CD105 | 25254 18278, 53321, | Shwann cells, keratinocytes Endo, mesenchymal stem | metastasis Angiogenesis; modulates cellular | Mesenchymal stem cells; endo |
| 0010/ | 49228 | cells, erythroid precursors, activated mono, mac | response to TGF beta 1 | progenitors; activated mac |
| CD106 CD107a | 24853, 25452, 7224, 19264 24871, 25367, | Activated endo cells, FDC Activated plt, activated T | Lk adhesion; transmigration and costimulation of T cells LAMP1: Promotes adhesion of human | Activated endo cells |
| OD 107 G | 48247, 25245 | cells, activated endo cells, activated gran | PBMC to vascular endothelium; possibly involved in the adhesion of PBMCs to | |
| CD107b | 25082, 24945, | Activated plt, activated T | the site of inflammation LAMP2: Lysosomes play a critical role in a all later as a table alians. I AMP2 as a second | Lysosomes |
| | 25368, 25447, 25631 | cells, activated endo cells | in cellular metabolism. LAMP2 may be involved in leucocyte adhesion; important in autophagy - process of | |
| CDw108 | 26012, 8222 | Activated T cells, eryth | bulk degradation of cellular protein | Activated T cells |
| CD109 | 27343, 47211 | Activated T, activated plt, subset of CD34+ cells, | | Plt; activated T cells; endo cells |
| CD112 | 16912 | endo cells Mono, neu, subset of CD34+ cells, endo cells, epi | Intracellular adhesion | Mono; neu |
| CD114 | 11411, 10657 | cells, myeloid cells. Myeloid progenitor cells, | Myeloid cell proliferation and | Gran; neu; Baso |
| | | endo and trophoblastic cells | differentiation | |
| CD115 | 37858 | Mono, mac, monocytic progenitors, neuronal cells, osteoclasts | Monocytic cell proliferation and differentiation | Mono |
| CD116 | 10670 | Mono/mac, gran, DC, endo cells, eos | Myeloid cell hematopoiesis and differentiation | Mono; neu; endo cells |
| CD117 | 21321, 42776 , 25364, 21322, 16832 | HSC and progenitors | c-kit: Crucial for development of gonadal and pigment stem cells | Hematopoetic / lymphoid stem cells and progenitors |
| CDW119 | 11286, 21431, 11285 | Lph, NK cells, mono/mac, gran, endo cells, epi cells | Role in host defense and immunopathological processes | |
| CD120 | 25472, 36251, 16920, 19139 | Hematopoietic and non- hematopoietic cells, epi | Cell differentiation; apoptosis; necrosis; anti bacterial; viral and parasitic. | |
| CD121a | 25074, 20876 | cells Low expression in fib, lph, | IL-I receptor I: Mediates IL-1 signaling | Stromal cells; endo cells |
| CDw121b | 34939 | mono/mac, gran, DC. epi cells, neural cells | II I recentor II: Modiates pagativo | Manageta and mag |
| CDW121b CD122 | 34838 25516, 24943, | B cells, mono/mac, some T cells, keratinocytes NK cells, resting T cells, | ILI receptor II: Mediates negative signaling IL2 Receptor beta: IL-2 and IL-15 | Monocyte and mac |
| | 21466, 33956, 21467 | subset of B cells, mono | receptor beta chain signaling | |
| CD123 | 21469, 21468, 50277 | Vasophils, eos, hematopoietic progenitors, mac, DC, endo cells, small | IL-3 receptor alpha chain | Baso; mono; granulocyte/neu; pluripotent stem cells |
| CD124 | 50277 | subset of lph Low expression on lk and | Receptor for IL-4 and IL-13 | Lymphoid stem cells; endo cells; |
| | | progenitors, endo and epi cells, fib, mature T and B cells | - | Pro B lph; T cells (with CD4+ suppressor/inducer T cells; with CD8+ cytotoxic/suppressor T cells) |
| CD125 | 10759 | Eos, Baso, activated B cells, mast cells | Receptor for IL-5 (IL5RA) | Baso |
| CD126 | 34304, 47215 | Activated B and plasma cells, T cells, mono, epi | IL-6 receptor subunit | Plasma cells |
| CD127 | 33704, 48527, 48526 | cells, fib B precursors, mature T cells, | IL-7 receptor alpha chain | Lymphoid stem cells; pro B lph; |
| CD128 | 48526 38989, 38991, 8042, 13018 | thy, mono Neu, Baso, T cell subset | IL-8 receptor | mono |
| CD129 CD130 | 48497, 10773 47218, 27359 | T cells, activated B cells, | IL-9 receptor Transmitts activities of IL-6, IL-11, LIF | |
| | | plasma cells, mono, endo cells | and CNF | |
| CD131 | 21581, 45176, | Mono, gran, early B cells, hematopoietic stem cells | Transducing signal from IL-3R, IL-5R and GM-CSFR | neutrophil/Baso |
| CD133 | 16518, 5558 | Hematopoietic stem cell subset, epi and endo precursors, neural | | Stem and early progenitor Cells (including neural and ESC) |
| CD134 | 33960, 34009, | precursors Activated T cells, | OX40: T cell activation, proliferation and | Activated T cells |
| CD135 | 6415 18463, 33285, | regulatory T cells Mutipotential, myelocytic | differentiation ; apoptosis; cell adhesion Receptor tyrosine kinase | Pluripotent stem cells |
| | 23895, 33283, 37847 33289, 3169 | mono and primitive B cell progenitors Activated T cells, FDC, | Costimulation of T cell activation | |
| CD137 | - | mono, activated B cells, epi cells | | |
| | | Plasma cells, pre-B cells, epi cells, neural cells, | ECM receptor / Syndecan | Breast cancers; Plasma cells |
| | 27390, 27329, 27362, 34164 | | | |
| CD138 | | breast cancer cells B cells, mono, gran, FDC, | | |
| CD138 | 27362, 34164 | breast cancer cells B cells, mono, gran, FDC, eryth Fib, mesenchymal cells, plt, | Cell proliferation, differentiation and survival | Stromal cells |
| CD138 CD139 CD140 | 27362, 34164 35664 | breast cancer cells B cells, mono, gran, FDC, eryth | | Stromal cells Myeloid DC; endo cells |
| CD138 CD139 CD140 CD141 CD142 | 27362, 34164 35664 48204, 49310 27396, 6980 35807 | breast cancer cells B cells, mono, gran, FDC, eryth Fib, mesenchymal cells, plt, glial cells, chondrocytes Mono, neu, plt, endo cells Mono, epi, astrocytes, Schwann cells, endo cells | survival Activation of protein C and initiation of protein C anti-coagulant pathway Initiates blood clotting | |
| CD138 CD139 CD140 CD141 CD142 | 27362, 34164 35664 48204, 49310 27396, 6980 | breast cancer cells B cells, mono, gran, FDC, eryth Fib, mesenchymal cells, plt, glial cells, chondrocytes Mono, neu, plt, endo cells Mono, epi, astrocytes, Schwann cells, endo cells Endo, epi cells, DC, neuronal cells, activated | survival Activation of protein C and initiation of protein C anti-coagulant pathway | Myeloid DC; endo cells |
| CD138 CD139 CD140 CD141 CD142 CD143 CD144 | 27362, 34164 35664 48204, 49310 27396, 6980 35807 11709, 33318, 11739, 11738 33321, 7047 | breast cancer cells B cells, mono, gran, FDC, eryth Fib, mesenchymal cells, plt, glial cells, chondrocytes Mono, neu, plt, endo cells Mono, epi, astrocytes, Schwann cells, endo cells Endo, epi cells, DC, neuronal cells, activated mac Endo cells, stem cell subset | survival Activation of protein C and initiation of protein C anti-coagulant pathway Initiates blood clotting Angiotensin converting enzyme Cell adhesion | Myeloid DC; endo cells Mono; endo cells Stem cell subsets; endo cells |
| CD138 CD139 CD140 CD141 CD142 CD143 CD144 CD146 | 27362, 34164 35664 48204, 49310 27396, 6980 35807 11709, 33318, 11739, 11738 33321, 7047 33300, 25435, 24577 | breast cancer cells B cells, mono, gran, FDC, eryth Fib, mesenchymal cells, plt, glial cells, chondrocytes Mono, neu, plt, endo cells Mono, epi, astrocytes, Schwann cells, endo cells Endo, epi cells, DC, neuronal cells, activated mac Endo cells, stem cell subset Endo cells, melanoma, FCD, activated T cells | survival Activation of protein C and initiation of protein C anti-coagulant pathway Initiates blood clotting Angiotensin converting enzyme Cell adhesion Cell adhesion | Myeloid DC; endo cells Mono; endo cells Stem cell subsets; endo cells Endo progenitors; activated T cells; FDC |
| CD138 CD139 CD140 CD141 CD142 CD143 CD144 CD146 CD147 | 27362, 34164 35664 48204, 49310 27396, 6980 35807 11709, 33318, 11739, 11738 33321, 7047 33300, 25435, | breast cancer cells B cells, mono, gran, FDC, eryth Fib, mesenchymal cells, plt, glial cells, chondrocytes Mono, neu, plt, endo cells Mono, epi, astrocytes, Schwann cells, endo cells Endo, epi cells, DC, neuronal cells, activated mac Endo cells, stem cell subset Endo cells, melanoma, | survival Activation of protein C and initiation of protein C anti-coagulant pathway Initiates blood clotting Angiotensin converting enzyme Cell adhesion | Myeloid DC; endo cells Mono; endo cells Stem cell subsets; endo cells Endo progenitors; activated T |
| CD138 CD139 CD140 CD141 CD142 CD143 CD144 CD146 CD147 CD148 | 27362, 34164 35664 48204, 49310 27396, 6980 35807 11709, 33318, 11739, 11738 33321, 7047 33300, 25435, 24577 34044, 23876, 21898, 666 10639 33314, 42814, | breast cancer cells B cells, mono, gran, FDC, eryth Fib, mesenchymal cells, plt, glial cells, chondrocytes Mono, neu, plt, endo cells Mono, epi, astrocytes, Schwann cells, endo cells Endo, epi cells, DC, neuronal cells, activated mac Endo cells, stem cell subset Endo cells, melanoma, FCD, activated T cells Lk, eryth, plt, endo cells Gran, mono, DC, plt, B cells, T cells T cells (up regulated on | survival Activation of protein C and initiation of protein C anti-coagulant pathway Initiates blood clotting Angiotensin converting enzyme Cell adhesion Cell adhesion; T cell activation | Myeloid DC; endo cells Mono; endo cells Stem cell subsets; endo cells Endo progenitors; activated T cells; FDC Eryth; plt; mono; endo cells Hematopoeitic progenitors; T cells |
| CD137 CD138 CD139 CD140 CD141 CD142 CD143 CD144 CD146 CD147 CD148 CD150 | 27362, 34164 35664 48204, 49310 27396, 6980 35807 11709, 33318, 11739, 11738 33321, 7047 33300, 25435, 24577 34044, 23876, 21898, 666 10639 | breast cancer cells B cells, mono, gran, FDC, eryth Fib, mesenchymal cells, plt, glial cells, chondrocytes Mono, neu, plt, endo cells Mono, epi, astrocytes, Schwann cells, endo cells Endo, epi cells, DC, neuronal cells, activated mac Endo cells, stem cell subset Endo cells, melanoma, FCD, activated T cells Lk, eryth, plt, endo cells Gran, mono, DC, plt, B cells, T cells | survival Activation of protein C and initiation of protein C anti-coagulant pathway Initiates blood clotting Angiotensin converting enzyme Cell adhesion Cell adhesion Cell adhesion; T cell activation Tyrosine phosphatase; cell growth and differentiation | Myeloid DC; endo cells Mono; endo cells Stem cell subsets; endo cells Endo progenitors; activated T cells; FDC Eryth; plt; mono; endo cells |

| CD Antiger CD152 CD153 | 33967, 33319, 49319, 19792 36434 | Activated T cells, activated B cells Activated T cells, activated mac, activated neu, | Negative regulation of T cell activation Costimulation of T cell activation; ligand for CD30 | Activated T cells; endo cells Activated T cells |
|------------------------------|--|---|---|---|
| CD154 | 24934, 27408, | activated B cells Activated T cells, activated | Costimulation; ligand for CD40 | Activated CD4+ T cells; Baso |
| CD155 CD156a | 24966, 47204 3142 38981 | plt, activated mono Mono, mac Mono, gran | Cell migration and adhesion; polio virus infection Cell adhesion | Monocyte and mac Monocyte and mac; gran |
| CD156b | 39162 | Lph, mono, gran, DC, endo cells, epi cells | Cleaves transmembrane form of TNF-III and TGF-III to generate soluble forms | |
| CD156c CD157 | 1997 | Articular chondrocytes, lk, brain, tumor cells Gran, mono, B cell progenitors, endo cells, T | Metalloprotease activity; cell-cell and cell-matrix interaction ADP-ribosyl-cyclic ADP-ribose hydrolase activities; pre B cell growth | Mono; neu; endo cells |
| CD158 | 21564, 27954, 21566, 14825 | cell subset Most NK cells, T cell subset | Most CD158 subtypes inhibit NK cell cytotoxicity; other subtypes activate NK cell cytotoxicity | |
| CD159a | 24983 | NK cells, some T cell subset | Negative regulation of NK cell activation | |
| CD159c CD161 | 21651, 25905, 22516, 23624 | NK cells, CD8+T cells Most NK cells , NK-T cells, memory T cells, thy | Activates NK cell cytotoxicity NK cell mediated cytotoxicity; induces immature thy proliferation | NK cells; T cells (with CD4+ suppressor/inducer T cells; with CD8+ cytotoxic/suppressor T cells |
| CD162 | 19794, 19793 | Mono, gran, most T cells, stem cells | Adhesion; lk rolling | Mono Mono |
| CD163 CD165 | 15676, 17051 3276 | Mono, mac Lph subset, mono, | Endocytosis Important for adhesion of thy to thymic | Monocyte and mac Cortical thy |
| CD166 | 33404, 53442 | immature thy, plt, epi cells Activated T and B cells, NK cells, mono, epi cells, fib, neurons, mesenchymal | epi cells. Adhesion; T cell activation | Activated B and T cells; stromal cells; endo cells; neuronals |
| CD167 | 37838 | stem / progenitor cells Epi cells, DC. Inducible | Collagen receptor | |
| CD169 | 18619 | expression in Ik Mono, T cell subset, thy subset, activated lph | Hyaluronic acid receptor; cell adhesion | Mac |
| CD170 CD171 | 38582 24345 | mac, neu, DC T cell subset, B cell subset, | Adhesion Adhesion | Mac; neu Mono |
| CD172 | 34076, 34059, | DC, mono, neurons Mono, gran, DC, brain, | Adhesion | Potential stem cell marker; DC |
| CD173 | 33987, 53721 33404 | stem cells Eryth (human only), stem | H antigen: Is a precursor to the A and B | Potential stem cell marker; eryth; |
| CD174 | 3359 | cell subset, plt Stem cell subset, eryth, epi cells | blood group antigens (humans only). Blood Group Lewis y antigen | Potential stem cell marker |
| CD175s | 54464 | Erythroblasts, endo cells, epi cells | Binds CD22, Siglec-3-5 and 6; implicated in the induction of metastasis and invasiveness of tumors. Overexpressed in several carcinomas and is associated | |
| CD176 | 44859 | Stem cell subset, epi cells | with poor prognosis. Thomsen Friedenreich antigen: acts | Pan Carcinomas |
| 00.7= | 0/010 211 | No. 5 | as an oncofoetal antigen, with low expression in normal adult tissues but increasing to fetal levels of expression in hyperplasia or malignancy. | |
| CD177 CD178 | 26013, 33332, 8090 16105, 27409, | Neu, Baso, NK cells, T cell subset, mono, endo cells Activated T cells, DC, | Fas Ligand: Apoptosis induction | Activated T cells |
| CD178 CD179a | 18340 17245 | tumor cells, testis Pro and early pre-B cells | Early B cell differentiation | |
| CD180 | 33329, 21328, 17233, 45429 | B cell subset, mono, DC | LPS recognition and signaling; B cell activation | Mono; DC |
| CD181 | 38989, 38991, 8042, 10400 | Neu, baso, NK cells, T cell subset, mono, endo cells | CXCR1: neutrophil chemotaxis and activation. neoangiogenesis; hematopojesis | Neu |
| CD182 | 38998, 39007, 10401 | Neu, baso, NK cells, T cell subset, mono, endo cells | hematopoiesis CXCR2: neutrophil chemotaxis and activation; Neoangiogenesis; | Gran |
| CD183 | 10401 | T cell subset, B cells, | hematopoiesis CXCR3: T cell chemotaxis | Activated T cells |
| CD184 | 7199 | NK cells, mono, mac, proliferating endo cells T cell subset, B cells, DC, | CXCR4: Cell migration; hemotopoietic | Mono |
| CD184 CD185 | 10405 | mono, endo cells B cells, T cell subset, | progenitor cell homing; HIV-1 cell entry CXCR5: Cell migration | Cerebellar neurons |
| CD186 | | cerebellar neurons Th1 cells, B cell subset, NK | CXCR6: T cell recruitment; HIV-1 | |
| CD191 | | Cell subset Mono, mac, lph, DC, stem cells | coreceptor CCR1: Leukocyte chemotaxis | Potential stem cell marker; mono |
| CD192 | 32144 | Mono, B cells, activated T cells, DC | CCR2: Leukocyte chemotaxis; HIV- coreceptor | Mono; Baso; endo cells |
| CD193 | 21342, 16581, 16231 | Eos, Baso, T cell subset, DC, microglia | CCR3: Leukocycte chemotazis; HIV-1 coreceptor | Baso; DC; microglia |
| CD195 CD196 | 11466, 11465, 32048 10398 | Mono, T cell subset Memory T cells, B cells, DC, | CCR5: Lymphocyte chemotaxis; HIV infection CCR6: Cell migration; HIV coreceptor | Mono |
| CD190 CD197 | 25790, 36432, | Langerhans T cell subset, DC | CCR7: T lymphocyte adhesion; thy | Helper/inducer T cells |
| CD198 | 32361 | Mono, T cell subset, DC, HUVEC cells | regulation Cell migration; HIV 1 coreceptor | Mono |
| CD199 | 33364 , 33365, | Thy, intraepi lph, melanoma cells Thy, B cells, activated | Cell migration; HIV 1 co-receptor Down-regulatory signal for myeloid cell | Thy |
| CD201 | 33363, 33734 15604 | T cells, endo cells, keratinocyte subset Endo cell subset | function Protein C activation | |
| CD202b CD204 | 27852, 24859 | Endo cells, Stem cell subset Mac in cortical and | Angiogenesis LKL uptake; host defense | Mac |
| -2. | | medullary regions (thymus), lymph nodes, alveoli, Kupffer cells (liver), mono. Widely expressed by mac | | |
| CD205 | 33367, 33368, 24042 | lineage cells in the spleen DC, thymic epi cells | Endocytosis; enhances antigen presentation | DC |
| CD206 | 8919, 8918 | Mac, mono, inflammatory dendritic epidermal cells | presentation Endocytosis | Monocyte and mac; DC |
| CD207 | | Langerhans, DC | Facilitates antigen recognition and uptake | DC |
| CD209 | 37220 | DCsubset | Antigen endocytosis and degradation; attachment of some viruses (including HIV) | DC |
| CD210 | 33405, 21478, 10778 | T cells, B cells, NK cells | IL-10 receptor | Monocyte and mac |
| CD213a1 CD213a2 CD218a | 3772 34931, 27414 | B cells, mono, endo cells B cells, mono Th1 cells, B cell subset, | IL-13 receptor IL-13 receptor Signal transduction through binding | Mono |
| | 17040 4 7 050 | NK cells, moncytes, gran, endo cells | to IL-18 | |
| CD218B CD220 | 47269, 47258 | NK cells, T cell subset, mono, endo cells Lk, fib, endo cells, epi cells | Signal transduction Insulin receptor | |
| CD221 | 8093 | Lk, some non- hematopoietic cells | Signaling; cell proliferation and differentiation | |
| CD222 CD223 | 8093 41346, 41332 | Lph, mono, gran, fib Activated T cells, activated | Cell adhesion; migration Negative regulation of T cell expansion | Eryth; activated T cells |
| CD226 | 33335, 33337, 33393, 24041 | NK cells T cells, NK cells, mono, plt | and homeostasis Activation of T cells or NK cytotoxicity | Mono |
| CD227 CD229 | 45167 33400, 51847, | Epi cells, stem cell suset, lymphocyte subset, mono T cells, B cells, thy | Cell adhesion and signaling Lph differentiation | |
| CD230 | 33399, 33398 51666 | Heamatopoietic and non hematopoietic cells | Prevents apoptosis | |
| CD231 | | hematopoietic cells T-ALL cells, neurons | May be involved in cell proliferation and cell motility | Neuronals; Leukaemias - expressed in acute myelocytic leukemia cells of some patients |
| CD233 CD234 | 48194, 48195, 48196, 40821 | Eryth, kidney cells Eryth, endo cells, epi cells, neurons, cerebellum | Anion exchanger Chemokine decoy receptor | |
| CD235 | 48196, 40821 51531, 42762, 6397 | Eryth | Glycophorin A: Provides the cell with a large mucin like surface which may provide a barrier to cell fusion; | Eryth |
| CD236 | 6398 | Eryth, stem cell subset | minimizing aggregation between red blood cells in the circulation Important role in regulating the stability | Stem cell subsets; eryth |
| CD238 | | Eryth, hematopoietic | of red cells Endothelin 3 conversion enzyme | Eryth Eryth |
| CD239 CD240 | 24147 | progenitors Eryth, fib Eryth | Eryth differentiation and trafficking | Eryth Eryth |
| CD240 CD243 | 3364 | Stem cells, drug resistant tumor cells | Influences uptake, tissue distribution and elimination of P-glycoprotein | Pluripotent stem cells |
| CD244 | 51857, 54251 | NK cells, T cell subset, Baso, mono | transported toxins and drugs NK cell activation; NK cell -T cell interaction | NK cells |
| CD247 | 25616, 11505, 33395, 33772, | T cells, NK cells | Component of CD3/TCR complex; antigen recognition an signal | |
| | 11281 24981, 25200, | Epi cells, endo cells | transduction Converts angiotensin II to angiotensin III | |
| CD249 | 25009, 36837 | | | |
| CD252 | 7434 | DC, activated B cells, endo cells, mast cells | Costimulation | DC; activated B cells |
| | | | Costimulation Apoptosis: TRAIL or Apo 2L initiates apoptosis of tumor cells by binding to either of its receptors, DR4 or DR5 | DC; activated B cells Apoptosis studies; activated B and T cells |

| CD Antigen | | Cellular expression | Functions TWEAK: Induce greateric via multiple | Reported markers of* |
|----------------------|---|--|--|---|
| CD255 | 21139, 21129, 21127 | Widely expressed. High expression in heart placenta, lung, muscle, kidney, pancreas, and | TWEAK: Induce apoptosis via multiple pathways in cell type specific manner; promotes proliferation and migration of endo cells as a regulator of | |
| CD256 | 10688 | kidney, pancreas, and HUVEC Lk, pancreatic cells, colon | of endo cells as a regulator of angiogenesis T cell and B cell proliferation | |
| CD256 CD257 | 16082, 12381, 16081 | Activated mono, DC | T cell and B cell growth and development | |
| CD258 | 17716, 40819 | Activated T cells, activated mono | · · · · · · · · · · · · · · · · · · · | DC; activated T cells |
| CD261 | 34399, 18360, 8414 | Activated T cells | TRAIL/Death receptor; induces apoptosis | |
| CD263 | 46861, 18346, 1674 | Low expression in most cells. Negative in most tumor cells | Inhibits trail induced apoptosis | |
| CD264 | 18350, 18349, 2019 | Low expression in most cells. Negative in most | Inhibits trail induced apoptosis | |
| CD265 CD266 | 45092, 13918 21359 | tumor cells DC, activated mono Endo cells, epi cells, | Receptor for TRANCE Regulates apoptosis and proliferation | DC |
| CD266 CD267 | 39124, 39006, | keratinocytes B cells, myeloma cells | Inhibits B cell proliferation | Activated T cells |
| CD268 | 16230 38977, 38985, | B cells, T cell subset | B cell survival and maturation; T cell | Activated B cells |
| CD269 | 16582, 16232 17323 21103, 21159, | B cells, plasma cells | activation Plasma cell survival Co-stimulation: inhibition | Plasma cells DC |
| CD273 CD274 | 21103, 21159, 21107 28753 | DC, activated mono T cells, B cells, NK cells, DC, | Co-stimulation; inhibition Co-stimulation; inhibition | DC |
| CD275 | 48567, 3774 | mac, epi cells Acivated mono, mac, DC | Costimulation | DC; plasma cells; activated B cells |
| CD278 | 38319 | Activated T cells, thy subset | T cell development | Activated T cells |
| CD279 CD281 | 26209, 26211, 52587 51673 | Activated T and B cells, thy subset Mono, mac, DC, | T cell tolerance Regulates TLR2 function | Activated B and T cells Mono: neu |
| CD281 CD282 | 24996, 13553, | Mono, mac, DC, keratinocytes Mono, gran, mac, DC, | Innate immunity to gram positive | Mono; neu Mono; neu |
| | 13464, 9101, 13463 | keratinocytes | bacteria | |
| | 45093, 17264, 53424 8378, 45104, | DC, fib, epi cells Mono, mac, endo cells | Innate immunity to viruses Innate immunity to gram negative | DC; stromal cells Mono |
| CD284 CD288 | 8378, 45104, 9105, 13556 45097, 53630 | Mono, mac, endo cells Lung, peripheral blood lk | Innate immunity to gram negative bacteria TLR8: Role in pathogen recognition and | IVIOLIO |
| CD290 | 53631 | Highly expressed in spleen, | activation of innate immunity TLR10: Participates in the innate immune | |
| | 12573 | lymph node, thymus and tonsil Th2 cells, Baso, eos | response to microbial agents Regulates immune and inflammatory | Baso |
| CD294 | 120/0 | IIIZ CEIIS, BUSO, EOS | Regulates immune and inflammatory responses; induces Th2 cells, eos and basophil migration | DU3U |
| CD295 | 5593 | Hematopoieic cells, heart, liver, kidney, pancreatic | Regulates fat metabolism; regulates proliferative / anti-apooptotic T cells | |
| CD299 | 49862 | cells Endo cells in liver and lymph nodes | and hematopoietic precursors T cell trafficking; HCV and HIV infection | Endo cells (liver and lymph nodes) |
| CD304 | 18130, 16786 | DC, T cells, neurons, endo cells | Angiogenesis; Dendritic cell-T cell interaction | Plasmacytoid dentritic cells |
| CD305 | 27744 , 27755, 27743, 14826 | T cells, B cells, NK cells, DC, mono, mac | Inhibits cellular activation and inflammation | Mono |
| CD307 | 37457 | B cells Endo cells primitive stem | lg receptor; possible role in B cell activation and neoplasia | Activated B cells |
| CD309 CD312 | 10975, 2349 49922 | Endo cells, primitive stem cells Mac, activated mono, DC, | Angiogenesis Immune and inflammatory response | Endo cells Monocyte and mac; neu |
| CD312 | 35035, 39010, | hepatocytes and lung cells NK cells, T cell subset | NK activation | , |
| CD317 | 39003, 36136 14694 | Plasma cells, | Possible role in pre-B cell growth | Pro B lph; mono; DC |
| CD318 | 1377 | lymphoplasmacytoid cells, stromal cells, fib Hematopoietic stem cells, | May be involved in cell adhesion | Pluripotent stem cells; colon and |
| 10 | | epi cells | and cell matrix association; potential role in the regulation of anchorage | lung cancers - expression level is correlated with the metastatic |
| | | | versus migration or proliferation versus differentiation via its phosphorylation; possible marker for leukemia diagnosis | ability of carcinoma cells; Possible novels for leukemia diagnosis. |
| | | | and for immature hematopoietic stem cell subsets; belongs to the tetraspanin | |
| CD301 | 54252 52647 | Epi cells, endo cells, lk, | web involved in tumor progression and metastasis. Tight junction formation; regulation of | |
| CD321 | 54252, 52647 | Epi cells, endo cells, lk, plt, eryth, lung, placenta, kidney | Tight junction formation; regulation of leukocyte migration; epithelial barrier maintenance; platelet activation | |
| CD322 | 33425, 33423, 46950 | HUVEC, HEV in tonsils and heart | Tight junction formation; cell polarization; lymphocyte homing | Mono; endo cells |
| CD324 | 48194, 48195 , 48196, 1416 | Epi cells, keratinocytes, trophoblasts, plt | Cell-cell and cell-matrix adhesion; tumor suppression; cell growth and differentiation | |
| CD326 | 49295, 8666 , 49297, 8667 | Epi cells, some carcinomas | Binds LAIR-1 and 2 to inhibit cellular activation and inflammation | Epi cells |
| CD328 | 38573 | NK cells, T cell subset, mono, gran | Negative regulation of NK cell and T cell activity | Mono |
| CD329 | 38578 | Mono, neu, subset of NK cells, B cells, T cells, hepatocytes | Negative regulation of immune response | Mono; gran |
| CD331 | 829 | hepatocytes Widely expressed in adult and fetal tissues. Over | Limb induction; cardioskeletal, cardiomyocyte and liver development | Stromal cells |
| CD332 | 10648 | expression in breast cancer Brain, liver, prostate, | Limb induction; craniofacial | Stromal cells |
| CD333 | 10651 | kidney, lung and spinal cord Brain, kidney, brain. Testis | development Limb induction; craniofacial | Stromal cells |
| | | in adult. Small intestine in fetus | development | |
| CD334 | 49307, 49306, 5481 | Liver, kidney, lung, pancreatic cells. lph and mac | Endoderm and skeletal muscle development; cancer metastasis | Stromal cells |
| CD335 CD336 | 54002 48562, 48561, | NK cells Activated NK cells | NK cell activation NK cell activation | |
| | 48562, 48561, 25911 48565, 48564, | Activated NK cells NK cells | NK cell activation NK cell activation | |
| CD339 | 26250 7771 | Widely expressed in adult | Cell fate determination in | Stromal cells |
| CD340 | 48180, 48181 , | and fetal cells | hematopoiesis; cardiovascular development Essential component of a neuregulin- | Cancers - detectable in a |
| UU34U | 48180, 48181, 48188, 31890, 2428 | | Essential component of a neuregulin- receptor complex | proportion of breast and other adenocarconomas, |
| | | | | as well as transitional cell carcinomas. In breast cancer, expression determined by |
| | 1000 | | | immunohistochemistry is associated with poor prognosis. |
| CD344 | 12992 | Ubiquitous expression. Highly expressed in adult heart, skeletal muscle, | Frizzled 4: Receptor for Wnt proteins; may be involved in transduction and intercellular transmission of | |
| | | ovary, fetal kidney | polarity information during tissue morphogenesis; plays a critical role in | |
| CD349 | 13000 | Highly expressed in brain, | retinal angiogenesis Frizzled 9: Receptor for Wnt proteins; | |
| | | testis, eye, skeletal muscle, kidney | may be involved in transduction and intercellular transmission of polarity information during tissue morphogenesis | |
| CD350 | 12991 | Placenta, fetal kidney, | and/or in differentiated tissues Frizzled 10: Receptor for Wnt proteins; | |
| | | fetal lung, fetal brain | may be involved in transduction and intercellular transmission of polarity information during tissue morphogenesis | |
| | | | and/or in differentiated tissues | |
| | | • | | |
| | abbreviat | | | T4 |
| Abbreviation Baso | l . | Text Basophils | Abbreviation Lph | Text Lymphocytes |
| Endo | | Endothelial cells | Mac | Macrophages |
| Eos Epi | | Eosinophils Epithelial cells | MegaK Mono | Megakaryocytes Monocytes |
| Eryth ESC | | Erythrocytes Embryonic stem cells | Neu NK | Neutrophils Natural killer cells |
| FDC | | Follicular dendritic cells | Plt | Platelets |
| Fib Gran | | Fibroblasts Granulocytes | Th | Cytotoxic T Cells Helper T Cells |
| HSC Lk | | Hematopoietic stem cells Leukocytes | Thy | Thymocytes |
| Kou to | oniucali | | Vorsto voca | ppics |
| | conjugation | | Key to research to | |
| Text colour | | Conjugation Allophycocyanin | Text colour | Topic |
| | | Allophycocyanin FITC | | Immunology Stem Cells |
| | | | | |
| | | Phycoerythrin | | Neuroscience |
| | | Phycoerythrin Biotin Unconjugated | | Neuroscience Endothelial Cancer |