

# Antibodies to Human Leukocyte Cell Surface Markers

Cells of the immune system continually survey their environment via cell surface receptor-ligand interactions. Subsequent to such interactions, information is transmitted from the cell surface to the nucleus via the signal transduction process. Antibodies to CD receptors are important tools for elucidating the role of cell surface receptors in the immune response. Inflammatory

disease, tumorigenesis, and metastasis involve a host of cell adhesive and signaling interactions. Thus, antibodies specific for the adhesion molecules are useful tools for delineating the role of cell surface molecules in various disease states. Antibodies to CD antigens and their various conjugates offered by CALBIOCHEM® are suitable for flow cytometry, immunohistochemistry, and immunoprecipitation.

Antibody	Purified <sup>1</sup>	Biotin <sup>1</sup>	Fluorescein <sup>2</sup>	Phycoerythrin <sup>2</sup>
<b>Anti-CD3, Human (Mouse Monoclonal)</b> . Recognizes the ε-chain of the CD3 complex expressed on greater than 95% of the circulating human peripheral T cells. Ref.: Beverly, P.C.L., and Collard, R.E. 1981. <i>Eur. J. Immunol.</i> <b>11</b> , 329.	<b>217570</b>	<b>217571</b>	<b>217572</b>	<b>217573</b>
<b>Anti-CD4, Human (Mouse Monoclonal)</b> . Recognizes the domain 1 region of CD4. Ref.: Healey, D., et al. 1990. <i>J. Exp. Med.</i> <b>172</b> , 1233.	<b>217575</b>	<b>217576</b>	<b>217577</b>	<b>217578</b>
<b>Anti-CD8, Human (Mouse Monoclonal)</b> . Recognizes CD8 (33 kDa) present on about 30% of the circulating human peripheral T cells. Ref.: Fischer, A., et al. 1983. <i>Immunol.</i> <b>48</b> , 177.	<b>217580</b>	<b>217581</b>	<b>217582</b>	<b>217583</b>
<b>Anti-CD11a, Human (Mouse Monoclonal)</b> . Recognizes the ~180 kDa I domain of the α <sub>L</sub> integrin subunit. This antibody also blocks binding of ICAM-1 and ICAM-3 to LFA-1 at 5 - 10 μg/ml. Ref.: Holness, C.L., et al. 1995. <i>J. Biol. Chem.</i> <b>270</b> , 877; Landis, R.C., et al. 1994. <i>J. Cell. Biol.</i> <b>126</b> , 529; Dransfield, I., and Hogg, N. 1989. <i>EMBO J.</i> <b>12</b> , 3759.	<b>217640</b>	—	<b>217641</b>	—
<b>Anti-CD11b, Human (Mouse Monoclonal)</b> . Recognizes the 165 kDa α <sub>M</sub> integrin subunit. It blocks homotypic neutrophil and fMLP-induced monocyte aggregation. Ref.: Petty, H.R., and Todd, R.F. 1993. <i>J. Leuk. Biol.</i> <b>54</b> , 492; Moynes, B.L., et al. 1988. <i>J. Clin. Invest.</i> <b>82</b> , 640; Mathotra, I.V., et al. 1986. <i>Eur. J. Immunol.</i> <b>16</b> , 1117.	<b>217642</b>	—	<b>217643</b>	—
<b>Anti-CD11c, Human (Mouse Monoclonal)</b> . Recognizes the 150 kDa α <sub>X</sub> integrin subunit. Ref.: Patarroyo, M. 1994. <i>Immunobiol.</i> <b>191</b> , 474; Stackler, S.A., and Springer, T.A. 1991. <i>J. Immunol.</i> <b>146</b> , 648; Hogg, N., et al. 1986. <i>Eur. J. Immunol.</i> <b>16</b> , 240.	<b>217644</b>	—	<b>217645</b>	—
<b>Anti-CD15, Human (Mouse Monoclonal)</b> . Reacts with the terminal pentasaccharide lacto-N-fucopentaose III (Lewis x epitope). This antibody can activate normal monocytes and inhibits neutrophil chemotaxis. Ref.: Kerr, M.A., and Stocks, S.C. 1992. <i>Histochem. J.</i> <b>24</b> , 811.	<b>217646</b>	—	<b>217647</b>	—
<b>Anti-CD16, Human (Mouse Monoclonal)</b> . Blocks binding of complexed IgG to CD16. Immunogen used was human polymorphonuclear leukocytes.	<b>217650</b>	—	<b>217652</b>	<b>217654</b>
<b>Anti-CD18, Human (Mouse Monoclonal)</b> . Recognizes the 95 kDa CD18 molecule, also known as β <sub>2</sub> integrin. Blocks binding of ICAM-1 and ICAM-3 to LFA-1.	<b>217660</b>	—	—	<b>217664</b>
<b>Anti-CD19, Human (Mouse Monoclonal)</b> . Recognizes the 95 kDa CD19 molecule. This antibody induces adhesion of B cells.	<b>217665</b>	—	<b>217667</b>	—
<b>Anti-CD20, Human (Mouse Monoclonal)</b> . Recognizes the 33/37 kDa CD20 molecule. Inhibits β cells differentiation and induces Ig secretion.	<b>217670</b>	—	<b>217672</b>	—
<b>Anti-CD27 (65-80), Human (Rabbit)</b> . Recognizes the 29 kDa CD27 protein. Reacts with canine, human, monkey, mouse, ovine, porcine, rabbit, and rat CD27. Ref.: Sugita, K., et al. 1993. <i>Immunology</i> <b>80</b> , 217; Camerini, D., et al. 1991. <i>J. Immunol.</i> <b>147</b> , 3165.	<b>217584</b>	—	—	—
<b>Anti-CD29, Human (Mouse Monoclonal)</b> . This antibody recognizes the β <sub>1</sub> integrin subunit.	<b>217648</b>	—	<b>217649</b>	—
<b>Anti-CD34, Human (Mouse Monoclonal)</b> . Recognizes a class 2 epitope of the 110 kDa CD34 molecule.	<b>217750</b>	—	<b>217752</b>	—
<b>Anti-CD40 (258-277), Human (Rabbit)</b> . Recognizes the 44 kDa CD40 protein. Reacts with human, monkey, mouse, and rat CD40. Ref.: Grant, P.A., et al. 1996. <i>EMBO J.</i> <b>15</b> , 6691; Grewal, I.S., et al. 1996. <i>Science</i> <b>273</b> , 1864; Lagresle, C., et al. 1996. <i>J. Exp. Med.</i> <b>183</b> , 1377.	<b>217584</b>	—	—	—
<b>Anti-CD40, Human (Mouse Monoclonal)</b> . Recognizes CD40 (44 kDa) that plays an important role in B cell activation. Ref.: Law, C.L., et al. 1990. <i>Leukemia</i> <b>4</b> , 732.	<b>217590</b>	<b>217591</b>	<b>217592</b>	<b>217593</b>
<b>Anti-CD40L (gp39), Human (Mouse Monoclonal)</b> . Immunoprecipitates CD40L (gp39, 36 kDa). Will stain activated CD3+ human PBL and will functionally block MLR, sgp39-induced B cell proliferation and T cell-dependent B cell differentiation.	<b>217595</b>	<b>217596</b>	<b>217597</b>	<b>217598</b>
<b>Anti-CD44v3, Human (Rabbit)</b> . Reacts specifically with human CD44v3 (~200 kDa). Excellent marker for the study of tumor progression and metastasis. Ref.: Dall, P., et al. 1994. <i>Cancer Res.</i> <b>54</b> , 3337; Arch, R., et al. 1992. <i>Science</i> <b>257</b> , 682; Screaton, G.R., et al. 1992. <i>Proc. Natl. Acad. Sci. USA</i> <b>89</b> , 12160.	<b>217599</b>	—	—	—
<b>Anti-CD44v6, Human (Rabbit)</b> . Reacts specifically with human CD44v6 (~200 - 250 kDa). Excellent marker for the study of tumor progression and metastasis. Ref.: Dall, P., et al. 1994. <i>Cancer Res.</i> <b>54</b> , 3337; Arch, R., et al. 1992. <i>Science</i> <b>257</b> , 682; Screaton, G.R., et al. 1992. <i>Proc. Natl. Acad. Sci. USA</i> <b>89</b> , 12160.	<b>217604</b>	—	—	—

\* Catalog numbers are indicated by bold type.

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Antibody	Purified <sup>1</sup>	Biotin <sup>1</sup>	Fluorescein <sup>2</sup>	Phycoerythrin <sup>2</sup>
<b>Anti-CD44v7, Human (Rabbit)</b> . Reacts specifically with human CD44v7 (~200 kDa). Excellent marker for the study of tumor progression and metastasis. Ref.: Dall, P., et al. 1994. <i>Cancer Res.</i> <b>54</b> , 3337; Arch, R., et al. 1992. <i>Science</i> <b>257</b> , 682; Screaton, G.R., et al. 1992. <i>Proc. Natl. Acad. Sci. USA</i> <b>89</b> , 12160.	<b>217609</b>	—	—	—
<b>Anti-CD49b, Human (Mouse Monoclonal)</b> . This antibody recognizes the $\alpha 2$ integrin subunit. Ref.: Tenchini, M.L., et al. 1993. <i>Cell Adhesion and Comm.</i> <b>1</b> , 55.	<b>217655</b>	—	<b>217656</b>	—
<b>Anti-CD49d (VLA-4), Human (Mouse Monoclonal)</b> . Recognizes CD49d that, in association with CD29, mediates cell-cell adhesion through binding to VCAM-1.	<b>217600</b>	<b>217601</b>	<b>217602</b>	<b>217603</b>
<b>Anti-CD49f, Human (Mouse Monoclonal)</b> . Recognizes the approximate 150 kDa $\alpha 6$ integrin. Ref.: Berditchevski, F., et al. 1995. <i>J. Biol. Chem.</i> <b>270</b> , 17784; Liebert, M., et al. 1993. <i>Hybridoma</i> <b>12</b> , 67.	<b>217657</b>	—	<b>217658</b>	—
<b>Anti-CD50, Human (Mouse Monoclonal)</b> . Recognizes the 130 kDa D1 domain of ICAM-3. Ref.: Bossy, D., et al. 1995. <i>Eur. J. Immunol.</i> <b>25</b> , 459; Holness, C.L., et al. 1995. <i>J. Biol. Chem.</i> <b>270</b> , 877.	<b>217673</b>	—	<b>217674</b>	—
<b>Anti-CD51, Human (Mouse Monoclonal)</b> . Recognizes the 160 kDa $\alpha 5$ integrin. Ref.: Hynes, R.O. 1992. <i>Cell</i> <b>69</b> , 11.	<b>217675</b>	—	<b>217676</b>	—
<b>Anti-CD54 (ICAM-1), Human (Mouse Monoclonal)</b> . Recognizes the 90 kDa D2 domain of CD54 and inhibits CD54 binding to LFA-1. Ref.: Reilly, P.L., et al. 1995. <i>J. Immunol.</i> <b>155</b> , 529; Berendt, A.R., et al. 1992. <i>Cell</i> <b>68</b> , 71.	<b>217677</b>	—	<b>217678</b>	—
<b>Anti-CD54 (ICAM-1), Human (Mouse Monoclonal)</b> . Recognizes the D-1 domain of ICAM-1 (CD54). Ref.: Berendt, A.R., et al. 1992. <i>Cell</i> <b>68</b> , 71.	<b>217605</b>	<b>217606</b>	<b>217607</b>	<b>217608</b>
<b>Anti-CD55, Human (Mouse Monoclonal)</b> . Recognizes the 70 kDa CD55 molecule. Ref.: Palmer, D.G., et al. 1985. <i>Clin. Exp. Immunol.</i> <b>59</b> , 529.	<b>217679</b>	—	<b>217680</b>	—
<b>Anti-CD60, Human (Mouse Monoclonal)</b> . Recognizes sialylated CD60 molecules which are expressed most strongly on cells in autoimmune lesions and are involved in T cell activation. Ref.: Higgs, J.B., et al. 1988. <i>J. Immunol.</i> <b>140</b> , 3758.	<b>217610</b>	<b>217611</b>	<b>217612</b>	—
<b>Anti-CD62E (ELAM-1), Human (Mouse Monoclonal)</b> . Recognizes the CD62E molecule, also known as ELAM-1 or E-Selectin, that is involved in leukocyte adhesion to endothelial cells. Ref.: Wellicome, S.M., et al. 1990. <i>J. Immunol.</i> <b>144</b> , 2558.	<b>217615</b>	<b>217616</b>	<b>217617</b>	—
<b>Anti-CD62E (ELAM-1), Human (Mouse Monoclonal)</b> . Recognizes the lectin domain of CD62E and blocks the function of this selectin. Ref.: Tu, L., et al. 1996. <i>J. Immunol.</i> <b>157</b> , 3995; Kogan, T.P., et al. 1995. <i>J. Biol. Chem.</i> <b>270</b> , 14047.	<b>217681</b>	—	<b>217682</b>	—
<b>Anti-CD62L, Human (Mouse Monoclonal)</b> . Recognizes the lectin binding domain of CD62L. It also blocks CD62L function and induces the expression of $\beta 1$ and $\beta 2$ integrins. Ref.: Steeber, D.A., et al. 1997. <i>J. Immunol.</i> <b>159</b> , 952; Springer, T.A. 1995. <i>Annu. Rev. Physiol.</i> <b>57</b> , 827.	<b>217683</b>	—	<b>217684</b>	—
<b>Anti-CD64, Human (Mouse Monoclonal)</b> . Recognizes CD64 (FcR1 receptor, 72 kDa) and blocks immunoglobulin binding. Ref.: Dougherty, G.J., et al. 1987. <i>Eur. J. Immunol.</i> <b>17</b> , 1453.	<b>217620</b>	—	<b>217622</b>	<b>217623</b>
<b>Anti-CD69, Human (Mouse Monoclonal)</b> . Recognizes the 60 kDa CD69 molecule. Immunogen used was IL-2-activated human NK cells.	<b>217850</b>	—	<b>217852</b>	—
<b>Anti-CD80 (B7-1), Human (Mouse Monoclonal)</b> . Recognizes CD80 that is expressed on activated B cells. Blocks binding of CD80 to CD28 and CTLA-4 molecules. Ref.: Young, J.W., et al. 1992. <i>J. Clin. Invest.</i> <b>90</b> , 229; Yokochi, T., et al. 1982. <i>J. Immunol.</i> <b>128</b> , 823.	<b>217625</b>	<b>217626</b>	<b>217627</b>	—
<b>Anti-CD86 (B7-2), Human (Mouse Monoclonal)</b> . Recognizes CD86 (B7-2) molecule which binds to CD28 and CTLA-4. Ref.: Caux, C., et al. 1994. <i>J. Exp. Med.</i> <b>180</b> , 1841.	<b>217630</b>	<b>217631</b>	<b>217632</b>	<b>217633</b>
<b>Anti-CD94, Human (Mouse Monoclonal)</b> . Recognizes the 70 kDa CD94 molecule. Inhibits IL-2 dependent proliferation of NK cells.	<b>217950</b>	—	—	—
<b>Anti-CD104, Human (Mouse Monoclonal)</b> . Recognizes the ~205 kDa CD104 molecule. It partially blocks laminin binding. Ref.: Mainiero, F., et al. 1995. <i>EMBO J.</i> <b>14</b> , 4470; Van Waes, C., et al. 1991. <i>Cancer Res.</i> <b>51</b> , 2395; Kimmel, K.A. and Carey, T.E. 1986. <i>Cancer Res.</i> <b>46</b> , 3614.	<b>217686</b>	—	<b>217687</b>	—
<b>Anti-CD106 (VCAM-1), Human (Mouse Monoclonal)</b> . Recognizes VCAM-1 (CD106) which is involved in leukocyte adhesion. Ref.: Thornhill, M.H., and Haskard, D.O. 1991. <i>J. Immunol.</i> <b>146</b> , 592.	<b>217635</b>	<b>217636</b>	<b>217637</b>	—
<b>Anti-CD117, Human (Mouse Monoclonal)</b> . Recognizes the 150 kDa CD117 molecule.	<b>218150</b>	—	—	—
<b>Anti-CD165, Human (Mouse Monoclonal)</b> . Recognizes the 37 kDa CD165 molecule and blocks its function. Ref.: Bruggers, C.S., et al. 1995. <i>J. Immunol.</i> <b>154</b> , 2012.	<b>217688</b>	—	<b>217689</b>	—

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