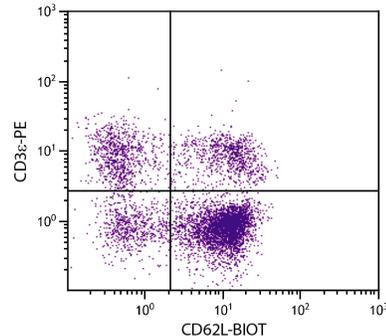




Rat Anti-Mouse CD62L

Cat. No.	Format	Size
1705-01	Purified (UNLB)	0.5 mg
1705-02	Fluorescein (FITC)	0.5 mg
1705-08	Biotin (BIOT)	0.5 mg
1705-09	R-phycoerythrin (PE)	0.1 mg
1705-09L	R-phycoerythrin (PE)	0.2 mg
1705-11	Allophycocyanin (APC)	0.1 mg
1705-13	Spectral Red® (SPRD)	0.1 mg
1705-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
1705-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	0.1 mg
1705-19	Allophycocyanin-Cyanine 7 (APC/CY7)	0.1 mg
1705-26	Pacific Blue™ (PACBLU)	0.1 mg
1705-27	Alexa Fluor® 700 (AF700)	0.1 mg
1705-30	Alexa Fluor® 488 (AF488)	0.1 mg
1705-31	Alexa Fluor® 647 (AF647)	0.1 mg



BALB/c mouse splenocytes were stained with Rat Anti-Mouse CD62L-BIOT (SB Cat. No. 1705-08) and Rat Anti-Mouse CD3 ϵ -PE (SB Cat. No. 1535-09) followed by Streptavidin-FITC (SB Cat. No. 7100-02).

Overview

Clone	MEL-14
Isotype	Rat (Fisher) IgG _{2a} K
Immunogen	C3H/eb cloned mouse B cell lymphoma 38C-13
Specificity	Mouse CD62L; Mr 74 kDa on lymphocytes and Mr 95 kDa on neutrophils
Alternate Name(s)	L-selectin, LECAM-1, LAM-1, Ly-22, Sell, Lnh, Lyam-1

Description

CD62L, also known as L-selectin, is a type I transmembrane glycoprotein with lectin-like and epidermal growth factor-like domains. It binds to sialylated oligosaccharide determinants on high endothelial venules (HEV) in peripheral lymph nodes. In the mouse, CD62L is expressed on most thymocytes and on peripheral leukocytes, including B and T lymphocytes, neutrophils, monocytes, and eosinophils. This member of the selectin family of cell adhesion molecules appears to be required for lymphocyte homing to peripheral lymph nodes and for leukocyte extravasation at sites of inflammation. Expression of CD62L on lymphocytes and neutrophils is rapidly down-regulated upon cell activation and the level of CD62L expression, along with other markers, distinguishes naive T cells from effector/memory T cells. The monoclonal antibody MEL-14 blocks *in vitro* binding of lymphocytes to peripheral lymph node HEV and inhibits *in vivo* lymphocyte extravasation into peripheral lymph nodes and the late stages of leukocyte rolling.

Applications

FC – Quality tested ^{1,4,7-10}
 IHC-FS – Reported in literature ^{2,3}
 IP – Reported in literature ^{1,4}
 Block – Reported in literature ^{1,4,6}
 Cyto – Reported in literature ⁵

Working Dilutions

Flow Cytometry	FITC, BIOT, and PACBLU conjugates	≤ 2 μg/10 ⁶ cells
	PE, APC, SPRD, PE/CY7, APC/CY7, AF488, AF647, and AF700 conjugates	≤ 0.1 μg/10 ⁶ cells

For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL

Other Applications Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD), R-phycoerythrin-Cyanine 7 (PE/CY7), and allophycocyanin-Cyanine 7 (APC/CY7) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple freeze / thaw cycles.
- The Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), Alexa Fluor® 700 (AF700), and Pacific Blue™ (PACBLU) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaN₃. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References

1. Gallatin WM, Weissman IL, Butcher EC. A cell-surface molecule involved in organ-specific homing of lymphocytes. *Nature*. 1983;304:30-4. (Immunogen, FC, IP, Block)
2. Reichert RA, Gallatin WM, Butcher EC, Weissman IL. A homing receptor-bearing cortical thymocyte subset: implications for thymus cell migration and the nature of cortisone-resistant thymocytes. *Cell*. 1984;38:89-99. (IHC-FS, FC)
3. Reichert RA, Jerabek L, Gallatin WM, Butcher EC, Weissman IL. Ontogeny of lymphocyte homing receptor expression in the mouse thymus. *J Immunol*. 1986;136:3535-42. (IHC-FS, FC)
4. Lewinsohn DM, Bargatze RF, Butcher EC. Leukocyte-endothelial cell recognition: evidence of a common molecular mechanism shared by neutrophils, lymphocytes, and other leukocytes. *J Immunol*. 1987;138:4313-21. (FC, IP, Block)
5. Seth A, Gote L, Nagarkatti M, Nagarkatti PS. T-cell-receptor-independent activation of cytolytic activity of cytotoxic T lymphocytes mediated through CD44 and gp90^{MEL-14}. *Proc Natl Acad Sci USA*. 1991;88:7877-81. (Cyto)
6. Takedachi M, Qu D, Ebisuno Y, Oohara H, Joachims ML, McGee ST, et al. CD73-generated adenosine restricts lymphocyte migration into draining lymph nodes. *J Immunol*. 2008;180:6288-96. (Block)
7. Diamant E, Keren Z, Melamed D. CD19 regulates positive selection and maturation in B lymphopoiesis: lack of CD19 imposes developmental arrest of immature B cells and consequential stimulation of receptor editing. *Blood*. 2005;105:3247-54. (FC)
8. Duchesneau P, Gallagher E, Walcheck B, Waddell TK. Up-regulation of leukocyte CXCR4 expression by sulfatide: an L-selectin-dependent pathway on CD4⁺ T cells. *Eur J Immunol*. 2007;37:2949-60. (FC)
9. Bradfield PF, Scheiermann C, Nourshargh S, Ody C, Luscinskas FW, Rainger GE, et al. JAM-C regulates unidirectional monocyte transendothelial migration in inflammation. *Blood*. 2007;110:2545-55. (FC)
10. Berge T, Grønningsæter IH, Lørvik KB, Abrahamson G, Granum S, Sundvold-Gjerstad V, et al. SH2D2A modulates T cell mediated protection to a B cell derived tumor in transgenic mice. *PLoS One*. 2012;7(10):e48239. (FC)

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