

**Anti-Mouse CD62L (L-Selectin)  
Antibody, Clone MEL-14**



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## Antibodies

Rat monoclonal IgG2a antibody  
against mouse CD62L (L-selectin),  
unconjugated

Catalog #60109  
#60109.1

500 µg 0.5 mg/mL  
100 µg 0.5 mg/mL

FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.

## Product Description

The MEL-14 antibody reacts with murine CD62L (L-Selectin or LECAM-1), an ~74 - 95 kDa single-chain type I glycoprotein expressed on the surface of a majority of leukocytes. CD62L is a member of the selectin protein family and mediates leukocyte-endothelial cell interactions through its association with ligands such as CD34, glyCAM-1, MAdCAM-1 and PSGL-1. It functions to facilitate lymphocyte rolling on the vascular endothelium, trafficking of lymphocytes to the lymph nodes, and homing of lymphocytes and neutrophils to sites of inflammation. CD62L is also involved in activation-induced neutrophil aggregation. Murine CD62L is expressed on most thymocytes, the highest expression levels being found on subsets of immunocompetent or dividing progenitor cells, as well as on neutrophils, eosinophils, monocytes, and subsets of B, T and NK cells. CD62L is rapidly cleaved and shed from lymphocytes and neutrophils upon cellular activation. Thus, the MEL-14 antibody may be used in concert with antibodies to other cell surface markers to distinguish naïve, memory and effector T cells, based on differences in the expression level of CD62L. The MEL-14 antibody has been shown to block migration of lymphocytes to lymph nodes and to inhibit leukocyte rolling.

|                      |                                                                                                                                                                             |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Target Antigen Name: | CD62L (L-selectin)                                                                                                                                                          |
| Alternative Names:   | CD62 ligand, L-selectin, Leu-8, Leukocyte adhesion molecule 1 (LAM-1), Leukocyte-endothelial cell adhesion molecule 1 (LECAM-1), Ly-22, MEL-14, P1n homing receptor (PLNHR) |
| Gene ID:             | 20343                                                                                                                                                                       |
| Species Reactivity:  | Mouse                                                                                                                                                                       |
| Host Species:        | Rat (F344)                                                                                                                                                                  |
| Clonality:           | Monoclonal                                                                                                                                                                  |
| Clone:               | MEL-14                                                                                                                                                                      |
| Isotype:             | IgG2a, kappa                                                                                                                                                                |
| Immunogen:           | 38C-13 B cell lymphoma derived from a C3H/eb mouse                                                                                                                          |
| Conjugate:           | Unconjugated                                                                                                                                                                |

## Applications

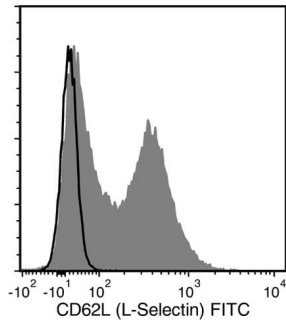
|                       |                                                                                                                                                                                                                                                                                                                   |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Verified:             | FC                                                                                                                                                                                                                                                                                                                |
| Reported:             | CyTOF®, FA, FC, ICC, IF, IHC, IP                                                                                                                                                                                                                                                                                  |
| Special Applications: | This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse Naïve CD4+ T Cell Isolation Kit (Catalog #19765), EasySep™ Mouse Pan-Naïve T Cell Isolation Kit (Catalog #19848) and EasySep™ Mouse Naïve CD8+ T Cell Isolation Kit (Catalog #19858). |

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; WB: Western blotting

## Properties

|                        |                                                                                                                                                                                                                  |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Formulation:           | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide                                                                                                                                               |
| Purification:          | The antibody was purified by affinity chromatography.                                                                                                                                                            |
| Stability and Storage: | Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact <a href="mailto:techsupport@stemcell.com">techsupport@stemcell.com</a> .                                 |
| Directions for Use:    | For flow cytometry the suggested use of this antibody is ≤ 0.25 µg per 1 x 10 <sup>6</sup> cells in 100 µL volume. It is recommended that the antibody be titrated for optimal performance for each application. |

## Data



Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD62L (L-Selectin) Antibody, Clone MEL-14, followed by a mouse anti-rat IgG2a antibody, FITC (filled histogram), or a rat IgG2a, kappa isotype control antibody followed by a mouse anti-rat IgG2a antibody, FITC (solid line histogram).

## Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at [www.stemcell.com/antibodies](http://www.stemcell.com/antibodies) or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

1. Lu X et al. (2015) Alkylating agent melphalan augments the efficacy of adoptive immunotherapy using tumor-specific CD4<sup>+</sup> T cells. *J Immunol* 194(4): 2011–21. (FC)
2. Cowan JE et al. (2014) Differential requirement for CCR4 and CCR7 during the development of innate and adaptive  $\alpha\beta$  T cells in the adult thymus. *J Immunol* 193(3): 1204–12. (FC)
3. Furuya Y et al. (2014) Asthma increases susceptibility to heterologous but not homologous secondary influenza. *J Virol* 88(16): 9166–81. (FC)
4. Nagaoka M et al. (2014) Antigen signal strength during priming determines effector CD4 T cell function and antigen sensitivity during influenza virus challenge. *J Immunol* 193(6): 2812–20. (FC)
5. Seeling M et al. (2013) Inflammatory monocytes and Fc $\gamma$  receptor IV on osteoclasts are critical for bone destruction during inflammatory arthritis in mice. *Proc Natl Acad Sci USA* 110(26): 10729–34. (FACS, FC)
6. Wang JX et al. (2012) Ly6G ligation blocks recruitment of neutrophils via a  $\beta$ 2-integrin- dependent mechanism. *Blood* 120(7): 1489–98. (FC)
7. Hirose M et al. (2011) Binding of L-selectin to its vascular and extravascular ligands is differentially regulated by pH. *Biochem Biophys Res Commun* 414(2): 437–42. (FA/Blocking, FC)
8. Benson MJ et al. (2007) All-trans retinoic acid mediates enhanced T reg cell growth, differentiation, and gut homing in the face of high levels of co-stimulation. *J Exp Med* 204(8): 1765–74. (FC)
9. Raffler N A et al. (2005) L-selectin in inflammation, infection and immunity. *Drug Discov Today Ther Strateg* 2(3): 213–20. (FC)
10. Kishimoto TK et al. (1989) Neutrophil Mac-1 and MEL-14 adhesion proteins inversely regulated by chemotactic factors. *Science* 245(4923): 1238–41 (FA/Blocking, FC, IF, IHC)
11. Lewinsohn DM et al. (1987) Leukocyte-endothelial cell recognition: evidence of a common molecular mechanism shared by neutrophils, lymphocytes, and other leukocytes. *J Immunol* 138(12): 4313–21. (FA/Blocking, FACS, FC, IP)
12. Reichert RA et al. (1986) Ontogeny of lymphocyte homing receptor expression in the mouse thymus. *J Immunol* 136(10): 3535–42. (FC, IHC)
13. Gallatin WM et al. (1983) A cell-surface molecule involved in organ-specific homing of lymphocytes. *Nature* 304(5921): 30–34. (FA/Blocking, FC, ICC, IF, IP)

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