

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



Scientists Helping Scientists™ | WWW.STEMCELL.COM

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

FOR GLOBAL CONTACT DETAILS VISIT OUR WEBSITE

Antibodies

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

Catalog #60109FI	500 µg	0.5 mg/mL
#60109FI.1	100 µg	0.5 mg/mL
#60109FI.2	25 µg	0.5 mg/mL

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, MAAdCAM-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 together 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, LAM-1, LECAM-1, Leu-8, Leukocyte adhesion molecule 1, Leukocyte-endothelial cell adhesion molecule 1, Ly-22, MEL-14, PIn 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:	FITC

Applications

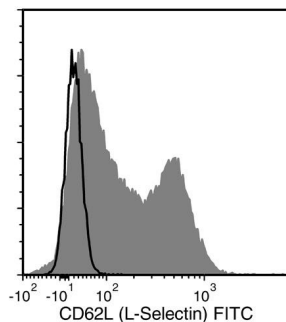
Verified:	FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse Naïve CD4+ T Cell Isolation Kit (Catalog #19765), EasySep™ Mouse Pan-Naïve T Cell Isolation Kit (Catalog #19848), and EasySep™ Mouse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

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.1% gelatin
Purification:	The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry the suggested use of this antibody is ≤ 0.25 µg per 1 x 10 ⁶ cells in 100 µL. 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, FITC (filled histogram) or Rat IgG2a, kappa Isotype Control Antibody, Clone RTK2758, FITC (Catalog #60076FI) (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 or contact us at techsupport@stemcell.com.

References

- Lu X et al. (2015) Alkylating agent melphalan augments the efficacy of adoptive immunotherapy using tumor-specific CD4+ T cells. *J Immunol* 194(4): 2011–21. (FC)
- 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)
- Furuya Y et al. (2014) Asthma increases susceptibility to heterologous but not homologous secondary influenza. *J Virol* 88(16): 9166–81. (FC)
- 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)
- Seeling M et al. (2013) Inflammatory monocytes and Fc γ 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)
- Wang JX et al. (2012) Ly6G ligation blocks recruitment of neutrophils via a β 2-integrin- dependent mechanism. *Blood* 120(7): 1489–98. (FC)
- 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)
- 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)
- Raffler N A et al. (2005) L-selectin in inflammation, infection and immunity. *Drug Discov Today Ther Strateg* 2(3): 213–20. (FC)
- 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)
- 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)
- Reichert RA et al. (1986) Ontogeny of lymphocyte homing receptor expression in the mouse thymus. *J Immunol* 136(10): 3535–42. (FC, IHC)
- Gallatin WM et al. (1983) A cell-surface molecule involved in organ-specific homing of lymphocytes. *Nature* 304(5921): 30–4. (FA/Blocking, FC, ICC, IF, IP)

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2017 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists, and EasySep are trademarks of STEMCELL Technologies Canada Inc. All other trademarks are the property of their respective holders. Alexa Fluor® is a registered trademark of Life Technologies Corporation. This product is licensed for internal research use only and its sale is expressly conditioned on the buyer not using it for manufacturing, performing a service, or medical test, or otherwise generating revenue. For use other than research, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.