Antibodies

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

Catalog #60109PE
100 µg 0.2 mg/mL

#60109PE.1 25 µg 0.2 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, 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 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, Pln 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: PE

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 PE under optimal conditions. The solution is free of unconjugated PE.
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.
Antibodies

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

Data

(A) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti-Mouse CD62L (L-Selectin) Antibody, Clone MEL-14, PE (filled histogram) or Rat IgG2a, kappa Isotype Control Antibody, Clone RTK2758, PE (Catalog #60076PE) (solid line histogram).

(B) Flow cytometry analysis of mouse splenocytes (gated on CD4+ cells) processed with EasySep™ Mouse Naïve CD4+ T Cell Isolation Kit and labeled with Anti-Mouse CD62L (L-Selectin) Antibody, Clone MEL-14, PE and an anti-mouse CD44 antibody, FITC. Labeling of the Start splenocytes prior to cell isolation is shown (C).

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

5. Seeling M et al. (2013) Inflammatory monocytes and Fcγ 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)