Brilliant Violet 570™ anti-mouse CD62L Antibody

Catalog# / Size	104433 / 125 µL
Clone	MEL-14
Regulatory Status	RUO
Other Names	L-selectin, LECAM-1, Ly-22, LAM-1, MEL-14
Isotype	Rat IgG2a, κ
Description	CD62L is a 74-95 kD glycoprotein also known as L-selectin, LECAM-1, Ly-22, LAM-1, and MEL-14. It is a member of the selectin family and is expressed on the majority of B and naïve T cells, a subset of memory T cells, monocytes, granulocytes, most thymocytes, and a subset of NK cells. CD62L is important in lymphocyte homing to high endothelial venules (HEV) in peripheral lymph nodes and leukocyte "rolling" on activated endothelium. CD62L also contributes to neutrophil emigration at inflammatory sites. CD62L is rapidly shed from lymphocytes and neutrophils upon cellular activation and the expression levels of CD62L (in conjunction with other markers) have been used to distinguish naïve, effector, and memory T cells. CD62L has been reported to interact with CD34, GlyCAM-1, and MAdCAM-1.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	C3H/eb mouse B lymphoma 38C-13
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 570™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze.**
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Brilliant Violet 570™ excites at 405 nm and emits at 570 nm. The bandpass filter 585/42 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 570™ is a trademark of Sirigen Group Ltd. Learn more about Brilliant Violet™. This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.
Excitation Laser	Violet Laser (405 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation[1-3],

complement-dependent cytotoxicity[4], *in vivo* and *in vitro* blocking of adhesion[1-3,5], and immunohistochemical staining of acetone-fixed frozen sections and zinc-fixed paraffin-embedded sections[6]. The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. Nos. 104457-104462).

Application References

(PubMed link indicates BioLegend citation)

1. Gallatin WM, *et al.* 1983. *Nature* 304:30. (IP, Block)
2. Siegelman MH, *et al.* 1990. *Cell* 61:611. (IP, Block)
3. Lewinsohn DM, *et al.* 1987. *J. Immunol.* 138:4313. (IP, Block)
4. Iwabuchi K, *et al.* 1991. *Immunobiology* 182:161. (CMCD)
5. Pizcueta P, *et al.* 1994. *Am. J. Pathol.* 145:461.
6. Reichert RA, *et al.* 1986. *J. Immunol.* 136:3535. (IHC, FC)
7. Olver S, *et al.* 2006. *Cancer Res.* 66:571.
8. Fukushima A, *et al.* 2006. *Invest. Ophthalmol. Vis. Sci.* 47:657. PubMed
9. Benson MJ, *et al.* 2007. *J. Exp. Med.* doi:10.1084/jem.20070719. (FC) PubMed
10. Chappaz S, *et al.* 2007. *Blood* doi:10.1182/blood-2007-02-074245. (FC) PubMed
11. Lee JW, *et al.* 2006. *Nature Immunol.* 8:181.
12. Shigeta A, et al. 2008. *Blood* 112:4915 (FC) PubMed
13. de Vries VC, *et al.* 2009. *Am. J. Transplant.* 9:2270 PubMed

Product Citations

1. Nguyen T, *et al.* 2017. Clin Transl Immunology. 10.1038/cti.2017.4. PubMed
2. Dikiy S, *et al.* 2021. Immunity. 54(5):931-946.e11. PubMed
3. Ponzetta A, *et al.* 2020. Cell. 178(2):346-360.e24.. PubMed
4. Dallari S, *et al.* 2021. Cell Host Microbe. 29(6):1014-1029.e8. PubMed
5. Natale CA, *et al.* 2018. Elife. 7. PubMed
6. Pai CS, *et al.* 2020. Immunity. 50(2):477-492. PubMed

RRID AB_10900262 (BioLegend Cat. No. 104433)

Antigen Details

Structure	Selectin, 95 kD (neutrophils) or 74 kD (lymphocytes)
Distribution	Subsets of B and T cells, monocytes, granulocytes, subset of NK cells
Function	Lymphocyte homing to HEV, rolling on activated endothelium
Ligand/Receptor	CD34, GlyCAM-1, MAdCAM-1
Cell Type	B cells, Granulocytes, Monocytes, Neutrophils, NK cells, T cells, Tregs
Biology Area	Cell Adhesion, Cell Biology, Costimulatory Molecules, Immunology, Innate Immunity
Molecular Family	Adhesion Molecules, CD Molecules

Antigen References

1. Barclay AN, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Kishimoto TK, *et al.* 1990. *P. Natl. Acad. Sci. USA* 87:2244.
3. Tedder TF, *et al.* 1995. *J. Exp. Med.* 181:2259.

Gene ID 20343

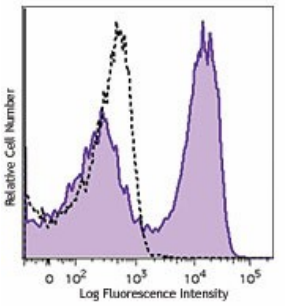
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

APC anti-mouse CD62L, Biotin anti-mouse CD62L, FITC anti-mouse CD62L, PE anti-mouse CD62L, PE/Cyanine5 anti-mouse CD62L, Purified anti-mouse CD62L, PE/Cyanine7 anti-mouse CD62L, Alexa Fluor® 488 anti-mouse CD62L, Alexa Fluor® 647 anti-mouse CD62L, Pacific Blue™ anti-mouse CD62L, Alexa Fluor® 700 anti-mouse CD62L, APC/Cyanine7 anti-mouse CD62L, PerCP/Cyanine5.5 anti-mouse CD62L, PerCP anti-mouse CD62L, Brilliant Violet 421™ anti-mouse CD62L, Brilliant Violet 570™ anti-mouse CD62L, Brilliant Violet 605™ anti-mouse CD62L, Brilliant Violet 510™ anti-mouse CD62L, Purified anti-mouse CD62L (Maxpar® Ready), Brilliant Violet 711™ anti-mouse CD62L, Brilliant Violet 785™ anti-mouse CD62L, PE/Dazzle™ 594 anti-mouse CD62L, APC/Fire™ 750 anti-mouse CD62L, TotalSeq™-A0112 anti-mouse CD62L, Brilliant Violet 650™ anti-mouse CD62L, TotalSeq™-C0112 anti-mouse CD62L, Ultra-LEAF™ Purified anti-mouse CD62L, KIRAVIA Blue 520™ anti-mouse CD62L, TotalSeq™-B0112 anti-mouse CD62L

Product Data



C57BL/6 mouse bone marrow cells were stained with CD62L (clone MEL-14) Brilliant Violet 570™ (filled histogram) or rat IgG2a, κ Brilliant Violet 570™ isotype control (open histogram). Data shown was gated on total cell population.

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