Brilliant Violet 711™ anti-human CD58 (LFA-3) Antibody

Catalog# / Size	330939 / 25 tests 330940 / 100 tests
Clone	TS2/9
Regulatory Status	RUO
Other Names	Lymphocyte function-associated antigen 3, LFA-3
Isotype	Mouse IgG1, κ
Description	CD58, also known as lymphocyte function-associated antigen 3 (LFA-3) is a 45-70 kD cell surface protein that is a member of the immunoglobulin superfamily. Alternative splicing of CD58 gives rise to transmembrane and glycosylphosphatidylinositol (GPI)-anchored forms on cell surface. CD58 is expressed on both hematopoietic and non-hematopoietic cells including B cells, T cells, monocytes, erythrocytes, endothelial cells, epithelial cells, and fibroblasts. High levels are observed on memory T cells and dendritic cells. CD58 expressed on antigen presenting cells and target cells enhances T cell recognition via the binding of it's cognate ligand, CD2, on the T cell surface.

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Baboon, Cynomolgus, Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human cytolytic T cells
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 711™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool).
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 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 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 711™ 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 include: immunoprecipitation[1], inhibition of cytolytic activity[1], augment of IL-1 release by TE cells[2]
Application References **(PubMed link indicates BioLegend citation)**	1. Sanchez-Madrid F, *et al.* 1982. *Proc. Nati Acad. Sci.* USA. 79:7489 2. Le PT, *et al.* 1990. *J. Immunol.* 144:4541
RRID	AB_3720518 (BioLegend Cat. No. 330939)

Antigen Details

Structure	Immunoglobulin superfamily member, 45-70 kD cell surface protein. Alternative splicing gives rise to transmembrane and glycosylphosphatidylinositol (GPI)-anchored form on cell surface.
Distribution	Expressed on both hematopoietic and non-hematopoietic cells including B cells, T cells, monocytes, erythrocytes, endothelial cells, epithelial cells, and fibroblasts. High levels are observed on memory T cells and dendritic cells.
Function	Mediates adhesion between various cell types (target cells and cytotoxic cells, APC and T cells, thymocytes and thymic epithelia).
Ligand/Receptor	CD2
Cell Type	B cells, Dendritic cells
Biology Area	Cell Adhesion, Cell Biology, Costimulatory Molecules, Immunology
Molecular Family	CD Molecules
Antigen References	1. Springer TA, *et al.* 1987. *Annu. Rev. Immunol.* 5:223. 2. Dustin ML, *et al.* 1987. *Nature* 329:846. 3. Arulanandam AR, *et al.* 1994. *J. Exp. Med.* 180:1861. 4. Sanders ME, *et al.* 1988. *J. Immunol.* 140:1401.
Gene ID	965

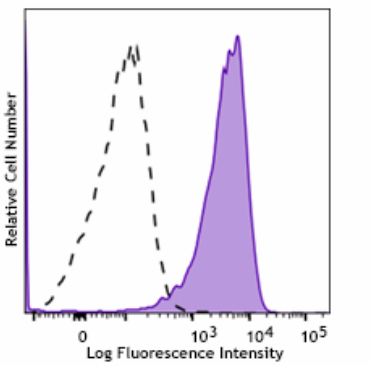
Related Protocols

- Cell Surface Flow Cytometry Staining Protocol

Other Formats

PE anti-human CD58, TotalSeq™-D0174 anti-human CD58 (LFA-3), PE/Cyanine7 anti-human CD58 (LFA-3), PerCP/Cyanine5.5 anti-human CD58 (LFA-3), APC anti-human CD58 (LFA-3), Alexa Fluor® 488 anti-human CD58 (LFA-3) Antibody, Spark PLUS UV395™ anti-human CD58 (LFA-3) Antibody, Brilliant Violet 711™ anti-human CD58 (LFA-3) Antibody, Ultra-LEAF™ Purified anti-human CD58 (LFA-3), TotalSeq™-C0174 anti-human CD58 (LFA-3), TotalSeq™-B0174 anti-human CD58 (LFA-3), Purified anti-human CD58 (LFA-3), PE anti-human CD58 (LFA-3), PE/Cyanine5 anti-human CD58 (LFA-3), Brilliant Violet 421™ anti-human CD58 (LFA-3) Antibody, GMP PE anti-human CD58, TotalSeq™-A0174 anti-human CD58 (LFA-3)

Product Data



Human peripheral blood lymphocytes were stained with anti-human CD58 (clone TS2/9) Brilliant Violet 711™ (filled histogram) or mouse IgG1, κ Brilliant Violet 711™ isotype control (open histogram).

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587