

Brilliant Violet 785™ anti-human CD107b (LAMP-2) Antibody

Catalog# / Size	354313 / 25 tests 354314 / 100 tests
Clone	H4B4
Regulatory Status	RUO
Workshop	HCDM listed
Other Names	LAMPb, LGP110
Isotype	Mouse IgG1, κ
Description	CD107b, also known as LAMP-2, is a 105 kD, highly glycosylated, type I transmembrane protein. CD107b is expressed in lysosomal/endosomal membranes in nearly all cells, and on the surface of activated platelets, activated lymphocytes and some tumor cell lines. LAMP-2 is known to have roles in cell adhesion and cellular homeostasis, including autophagocytosis and antigen presentation.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Adult human adherent spleen 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 785™ 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	ICFC - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by intracellular 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.</p> <p>Brilliant Violet 785™ excites at 405 nm and emits at 785 nm. The bandpass filter 780/60 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 785™ is a trademark of Sirigen Group Ltd. Learn more about Brilliant Violet™.</p> <p>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.</p>
Excitation Laser	Violet Laser (405 nm)

Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining of frozen glomeruli ² and immunofluorescent staining of neutrophils ^{2,3} . This antibody is specific to human LAMP-2. Positive control: Hela cells; LAMP-2 molecular weight appears to be at ~110 kDa on the gel due to high glycosylation.
Application References	1. Chen J, <i>et al.</i> 1985. <i>J. Biol. Chem.</i> 101:85. 2. Kain R, <i>et al.</i> 2008. <i>Nat. Med.</i> 14:1088. (IF, IHC) 3. Roark EA, <i>et al.</i> 2008. <i>PLoS ONE</i> 3:e3538. (IF)
(PubMed link indicates BioLegend citation)	
RRID	AB_3675077 (BioLegend Cat. No. 354313) AB_3675077 (BioLegend Cat. No. 354314)

Antigen Details

Structure	LAMP-2 is a 410 amino acid protein with a molecular mass of 45 kD.
Distribution	Lysosomal/endosomal membranes in nearly all cells; surface of activated platelets, activated lymphocytes and some tumor cell lines
Function	Adhesion, cellular homeostasis, including autophagocytosis, antigen presentation
Cell Type	B cells, Lymphocytes, Platelets
Biology Area	Cell Adhesion, Cell Biology, Cell Motility/Cytoskeleton/Structure, Immunology, Innate Immunity, Neurodegeneration, Neuroscience, Protein Trafficking and Clearance
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	1. Chen J, <i>et al.</i> 1985. <i>J. Biol. Chem.</i> 101:85. 2. Kain R, <i>et al.</i> 2008. <i>Nat. Med.</i> 14:1088. 3. Roark EA, <i>et al.</i> 2008. <i>PLoS ONE</i> 3:e3538.
Gene ID	3920

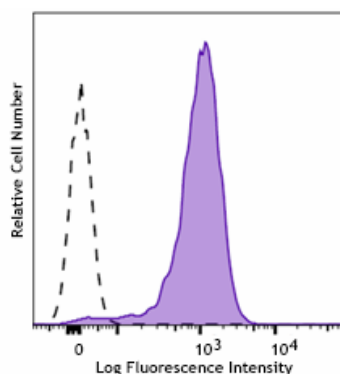
Related Protocols

- [Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

FITC anti-human CD107b (LAMP-2), PE anti-human CD107b (LAMP-2), Purified anti-human CD107b (LAMP-2), Alexa Fluor® 594 anti-human CD107b (LAMP-2), Alexa Fluor® 647 anti-human CD107b (LAMP-2), Brilliant Violet 421™ anti-human CD107b (LAMP-2), Brilliant Violet 785™ anti-human CD107b (LAMP-2), Spark Blue™ 550 anti-human CD107b (LAMP-2) (Flexi-Fluor™), Spark Blue™ 574 anti-human CD107b (LAMP-2) (Flexi-Fluor™) Antibody, Spark Red™ 718 anti-human CD107b (LAMP-2) (Flexi-Fluor™)

Product Data



Human acute myeloid leukemia cell line, KG1a, was fixed, permeabilized, then intracellularly stained with anti-human CD107b (LAMP-2) (clone H4B4) Brilliant Violet 785™ (filled histogram) or mouse IgG1, κ Brilliant Violet 785™ isotype control (open histogram).

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