Brilliant Violet 421™ anti-mouse CD63 Antibody

Catalog# / Size	143929 / 50 µg
Clone	NVG-2
Regulatory Status	RUO
Other Names	LIMP, LAMP-3, gp55, melanoma-associated antigen, ME491
Isotype	Rat IgG2a, κ
Description	CD63, also known as LIMP, LAMP-3, gp55, and melanoma-associated antigen (ME491), is a member of the tetraspanin superfamily (TM4SF) that constitutes a main component of the lysosomal membrane. It is expressed on activated platelets, monocyte/macrophages, endothelium, fibroblasts, osteoblasts, and smooth muscle cells. CD63 may be involved in platelet activation and is thought to function as a transmembrane adaptor protein. CD63 has been shown to associate with CD9, CD81, VLA-3, and VLA-6. In mice, there are two CD63 gene loci, of which only one is functional. CD63 deficient mice are viable, and there is no alteration in the population of immune cells. A recent report shows that CD63-deficient mice exhibit a significant reduction in both leukocyte rolling and recruitment in a peritonitis model.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Intestinal lamina propria light-density cells (enriched with eosinophils)
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 421™ under optimal conditions.
Concentration	0.2 mg/mL
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 FC - Verified
Recommended Usage	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 ≤ 1.0 µg per million cells in 100 µL volume. For flow cytometric staining, the suggested use of this reagent is ≤ 1.0 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ 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: Western blotting[1] and immunofluorescence[1].

Application References **(PubMed link indicates BioLegend citation)**	1. Verjan Garcia N, *et al.* 2011. *J. Immunol.* 187:2268. (WB, IF)
RRID	AB_3683163 (BioLegend Cat. No. 143929)

Antigen Details

Structure	Tetraspan transmembrane superfamily (TM4SF), type III lysosomal glycoprotein, 53 kD
Distribution	Activated platelets, monocytes, macrophages, endothelium, fibroblasts, osteoclasts, and smooth muscle cells
Function	Platelet activation
Interaction	CD9, CD81, VLA-3, and VLA-6
Cell Type	Endothelial cells, Fibroblasts, Macrophages, Monocytes, Osteoclasts, Platelets
Biology Area	Immunology, Innate Immunity
Molecular Family	CD Molecules
Antigen References	1. Azorsa DO, *et al.* 1991. *Blood* 78:280. 2. Kishimoto T, *et al.* 1997. Leukocyte Typing V1. Oxford University Press New York. 3. Hildreth JE, *et al.* 1991. *Blood* 77:121.
Gene ID	12512

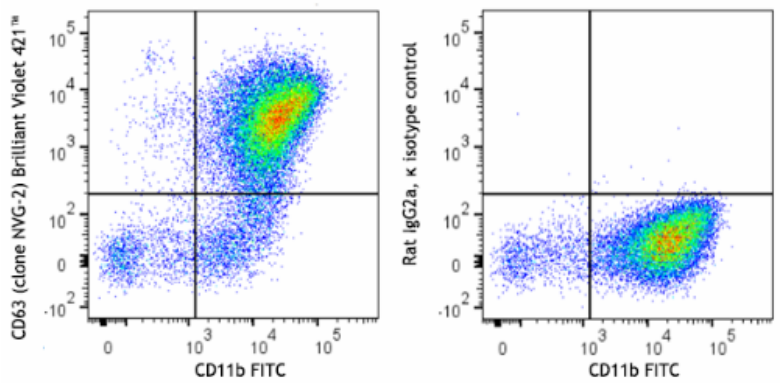
Related Protocols

- Cell Surface Flow Cytometry Staining Protocol
- Intracellular Flow Cytometry Staining Protocol

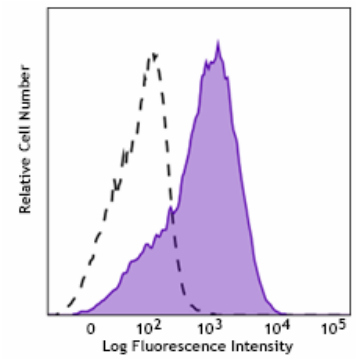
Other Formats

Purified anti-mouse CD63, PE anti-mouse CD63, APC anti-mouse CD63, APC/Cyanine7 anti-mouse CD63, PE/Dazzle™ 594 anti-mouse CD63, PE/Cyanine7 anti-mouse CD63, PerCP/Cyanine5.5 anti-mouse CD63, TotalSeq™-A0559 anti-mouse CD63, FITC anti-mouse CD63, Biotin anti-mouse CD63, Alexa Fluor® 647 anti-mouse CD63, Alexa Fluor® 700 anti-mouse CD63, TotalSeq™-C0559 anti-mouse CD63, TotalSeq™-B0559 anti-mouse CD63, Brilliant Violet 421™ anti-mouse CD63

Product Data



Thioglycolate-elicited BALB/c mouse peritoneal macrophages were fixed, permeabilized and intracellularly stained with anti-mouse CD11b (clone M1/70) FITC and anti-mouse CD63 (clone NVG-2) Brilliant Violet 421™ (left) or rat IgG2a, κ Brilliant Violet 421™ isotype control (right).



Mouse endothelial cells, bEnd.3, were stained with anti-mouse CD63 (clone NVG-2) Brilliant Violet 421™ (filled histogram) or rat IgG2a, κ Brilliant Violet 421™ isotype control (open histogram).

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