

Brilliant Violet 711™ anti-mouse CD68 Antibody

Catalog# / Size	137029 / 50 µg
Clone	FA-11
Regulatory Status	RUO
Other Names	Macrosialin
Isotype	Rat IgG2a
Description	Mouse CD68, also known as macrosialin, is an 85-115 kD member of the lysosomal-associated membrane protein (LAMP) family. It is a heavily glycosylated and predominantly intracellular protein, mainly in late endosomes. Macrosialin is the murine homolog to the human macrophage glycoprotein CD68. It is expressed on tissue macrophages, Langerhans cells and at low levels on dendritic cells. Lamp proteins may have functions relating to cell-cell interaction or cell-ligand interaction. The biological function of CD68 is not completely understood.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Purified Con A receptor glycoproteins from the P815 cell line
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	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	FC - Quality tested
Recommended Usage	<p>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 ≤ 0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>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.</p> <p>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 (for relevant formats) applications include: immunoprecipitation ^{1, 2} , Western Blot ^{1, 2} , immunohistochemical staining of frozen sections ² and paraformaldehyde-fixed paraffin-embedded sections ³ , and spatial biology (IBEX) ^{9, 10} .
Application References	

(PubMed link indicates BioLegend citation)

1. Silva RP, et al. 1999. *Biochem. J.* 338:687. (IP, WB)
2. Rabinowitz SS, et al. 1991. *J. Exp. Med.* 174:827. (IP, WB, IHC)
3. Wu J, et al. 2008. *P. Natl. Acad. Sci. USA* 105:16934. (IHC)
4. Kayama H, et al. 2012. *PNAS.* 109:5010. [PubMed](#)
5. Park S, et al. 2013. *Biomaterials.* 34:598. [PubMed](#)
6. Guiducci C, et al. 2013. *J Exp Med.* 210:2903. [PubMed](#)
7. McKinstry SU, et al. 2014. *J Neurosci.* 34:9455. [PubMed](#)
8. Li X, et al. 2015. *J Am Heart Assoc.* 6:4. [PubMed](#)
9. Radtke AJ, et al. 2020. *Proc Natl Acad Sci U S A.* 117:33455-65. (SB) [PubMed](#)
10. Radtke AJ, et al. 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

Product Citations

1. Di Campli MP, et al. 2020. *Eur Respir J.* . [PubMed](#)

RRID

AB_2783098 (BioLegend Cat. No. 137029)

Antigen Details

Structure	A member of the lysosomal-associated membrane protein (lamp) family.
Distribution	Expressed on tissue macrophages, Langerhans cells, and at low levels on dendritic cells.
Function	Involved in cell-cell interaction or cell-ligand interaction, still not completely understood.
Cell Type	Antigen-presenting cells, Dendritic cells, Langerhans cells, Leukocytes, Macrophages
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers
Molecular Family	Adhesion Molecules, CD Molecules, Innate Immune Signaling
Antigen References	<ol style="list-style-type: none">1. Ramprasad MP, et al. 1996. <i>Proc. Natl. Acad. Sci. USA</i> 93:14833.2. Smith MJ, et al. 1987. <i>J. Cell. Sci.</i> 87:113.
Gene ID	12514

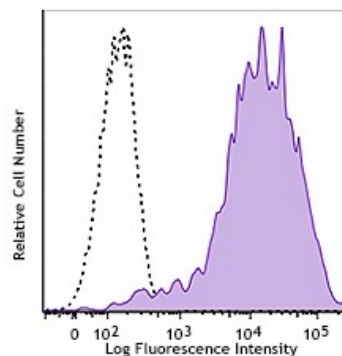
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-mouse CD68, Alexa Fluor® 647 anti-mouse CD68, FITC anti-mouse CD68, APC anti-mouse CD68, PerCP/Cyanine5.5 anti-mouse CD68, Alexa Fluor® 488 anti-mouse CD68, PE anti-mouse CD68, PE/Cyanine7 anti-mouse CD68, Brilliant Violet 421™ anti-mouse CD68, Alexa Fluor® 594 anti-mouse CD68, APC/Cyanine7 anti-mouse CD68, Brilliant Violet 605™ anti-mouse CD68, Brilliant Violet 711™ anti-mouse CD68, Alexa Fluor® 700 anti-mouse CD68, Pacific Blue™ anti-mouse CD68, TotalSeq™-A0560 anti-mouse CD68, TotalSeq™-C0560 anti-mouse CD68, Brilliant Violet 785™ anti-mouse CD68, TotalSeq™-B0560 anti-mouse CD68, Spark YG™ 570 anti-mouse CD68, APC/Fire™ 750 anti-mouse CD68

Product Data



Thioglycolate-elicited BALB/c macrophages were fixed, permeabilized, and then stained with CD68 (clone FA-11) Brilliant Violet 711™ (filled histogram) or rat IgG2a, κ Brilliant Violet 711™ isotype control (open histogram).

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