

Brilliant Violet 421™ anti-human CD68 Antibody

Catalog# / Size	333827 / 25 tests 333828 / 100 tests
Clone	Y1/82A
Regulatory Status	RUO
Workshop	VI MR23
Other Names	Macrosialin
Isotype	Mouse IgG2b, κ
Description	CD68 is a 110 kD glycoprotein, also known as macrosialin, belonging to the sialomucin family. It is closely related to the family of acidic, highly glycosylated lysosomal-associated membrane proteins (LAMPs). CD68 is predominately expressed in cytoplasmic granules of monocytes/macrophages, dendritic cells, and granulocytes. It is one of the useful myeloid cell markers. Further studies have shown that CD68 is also expressed by a subset of hematopoietic progenitors, γδ T cells, NK cells, LAK cells, subset of B cells, fibroblasts, and endothelial cells. The biological function of CD68 is still unknown.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
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	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	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.</p> <p>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.</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 application: immunohistochemical staining of frozen tissue sections. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue.
Application References	<ol style="list-style-type: none">1. Doussis IA, <i>et al.</i> 1993. <i>J. Clin. Pathol.</i> 46:334.2. Davey FR, <i>et al.</i> 1988. <i>J. Clin. Pathol.</i> 41:753.
(PubMed link indicates	

BioLegend citation) 3. Bushway ME, *et al.* 2014. *Biol Reprod.* 90(5): 110. (IF) [PubMed](#)

Product Citations

1. Sefik E, *et al.* 2021. *Nat Biotechnol.* . [PubMed](#)
2. Wu Y, *et al.* 2022. *J Cancer Res Clin Oncol.* . [PubMed](#)

RRID AB_2800881 (BioLegend Cat. No. 333827)
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Antigen Details

Structure Sialomucin family, 110 kD

Distribution Monocytes/macrophages, dendritic cells, granulocytes, subset of hematopoietic progenitors, γ/δ T cells, NK cells, LAK cells, subset of B cells, fibroblasts, endothelial cells

Cell Type B cells, Dendritic cells, Endothelial cells, Fibroblasts, Granulocytes, Hematopoietic stem and progenitors, Macrophages, Monocytes, T cells

Biology Area Cell Biology, Immunology, Neuroscience, Neuroscience Cell Markers

Molecular Family CD Molecules

Antigen References

1. Holness CL and Simmons DL. 1993. *Blood* 81:1607.
2. Gottfried E, *et al.* 2008. *Scand. J. Immunol.* 67:453.
3. Hameed A, *et al.* 1994. *Hum. Pathol.* 25:872.

Gene ID [968](#)

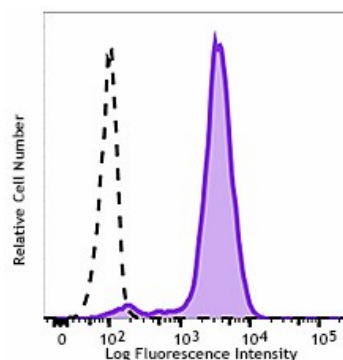
Related Protocols

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

PerCP/Cyanine5.5 anti-human CD68, Purified anti-human CD68, Biotin anti-human CD68, FITC anti-human CD68, PE anti-human CD68, APC anti-human CD68, Alexa Fluor® 488 anti-human CD68, PE/Cyanine7 anti-human CD68, Alexa Fluor® 647 anti-human CD68, APC/Cyanine7 anti-human CD68, APC/Fire™ 750 anti-human CD68, Brilliant Violet 785™ anti-human CD68, Brilliant Violet 421™ anti-human CD68, TotalSeq™-B0234 anti-human CD68

Product Data



Human peripheral blood monocytes were fixed, permeabilized, and intracellularly stained with CD68 (clone Y1/82A) Brilliant Violet 421™ (filled histogram) or Brilliant Violet 421™ mouse IgG2b, κ isotype control (open histogram).

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