

APC/Cyanine7 anti-mouse CD68 Antibody

Catalog# / Size	137023 / 25 µg 137024 / 100 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.
Preparation	The antibody was purified by affinity chromatography and conjugated with APC/Cyanine7 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 =0.06 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Red Laser (633 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} .
Additional Product Notes	BioLegend is in the process of converting the name APC/Cy7 to APC/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our APC/Cyanine7 products. Please contact Technical Service if you have any questions.
Application References	<ol style="list-style-type: none"> Silva RP, <i>et al.</i> 1999. <i>Biochem. J.</i> 338:687. (IP, WB) Rabinowitz SS, <i>et al.</i> 1991. <i>J. Exp. Med.</i> 174:827. (IP, WB, IHC) Wu J, <i>et al.</i> 2008. <i>P. Natl. Acad. Sci. USA</i> 105:16934. (IHC) Kayama H, <i>et al.</i> 2012. <i>PNAS.</i> 109:5010. PubMed Park S, <i>et al.</i> 2013. <i>Biomaterials.</i> 34:598. PubMed Guiducci C, <i>et al.</i> 2013. <i>J Exp Med.</i> 210:2903. PubMed McKinstry SU, <i>et al.</i> 2014. <i>J Neurosci.</i> 34:9455. PubMed Li X, <i>et al.</i> 2015. <i>J Am Heart Assoc.</i> 6:4. PubMed Radtke AJ, <i>et al.</i> 2020. <i>Proc Natl Acad Sci U S A.</i> 117:33455-65. (SB) PubMed
(PubMed link indicates BioLegend citation)	

Product Citations

1. Giorgetti E, et al. 2020. *Cell Reports.* 29(6):1539-1554.e7.. [PubMed](#)
2. Mao FY, et al. 2021. *Cell Mol Gastroenterol Hepatol.* 12:395. [PubMed](#)
3. Harb H, et al. 2021. *Immunity.* 54(6):1186-1199.e7. [PubMed](#)
4. Bayik D, et al. 2020. *Cancer Discov.* 1.256944444. [PubMed](#)
5. Otvos B, et al. 2021. *Clin Cancer Res.* 27:2038. [PubMed](#)

RRID

AB_2616812 (BioLegend Cat. No. 137023)
AB_2616813 (BioLegend Cat. No. 137024)

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	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

[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

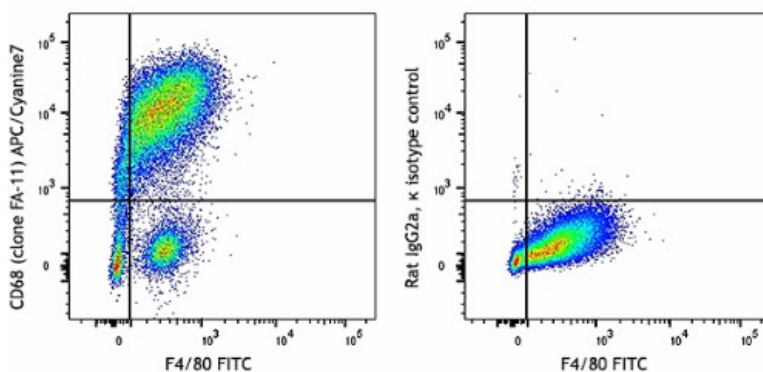
[Cell Surface Flow Cytometry Staining Protocol](#)

[Intracellular 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, then stained with F4/80 FITC and CD68 (clone FA-11) APC/Cyanine7 (left) or Rat IgG2a, κ isotype control (right).

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