Purified anti-mouse CD68 Antibody

Catalog# / Size	137001 / 50 µg 137002 / 500 µg
Clone	FA-11
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

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.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	ICFC - *Quality tested* FC - *Validated* IP, WB, IHC-F - *Reported in the literature*
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 ≤ 0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Additional reported (for relevant formats) applications include: immunoprecipitation[1, 2], Western Blot[1, 2], and immunohistochemical staining of frozen sections[2] and paraformaldehyde-fixed paraffin-embedded sections[3].

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

Product Citations

1. Kayama H, et al. 2012. Proc Natl Acad Sci U S A. 109:5010. PubMed
2. Park S, et al. 2013. Biomaterials. 34:598. PubMed
3. Guiducci C, et al. 2013. J Exp Med. 210:2903. PubMed
4. McKinstry S, et al. 2014. J Neurosci. 34:9455. PubMed
5. Li X, et al. 2015. J Am Heart Assoc. 6:4. PubMed
6. Mori H, et al. 2015. Toxicol Pathol. 43: 883-889. PubMed
7. Gomez-Pastor R, et al. 2017. Nat Commun. 8:14405. PubMed
8. Phua T, et al. 2017. Sci Rep. 10.1038/srep44351. PubMed
9. Milasan A, et al. 2017. J Am Heart Assoc. 10.1161/JAHA.117.006892. PubMed
10. Godoy-Calderón MJ, et al. 2018. Oncotarget. 8:11370. PubMed
11. Wu Y, et al. 2019. Nat Commun. 10:58. PubMed
12. Collier AF, et al. 2018. J Pharmacol Exp Ther. 364:409. PubMed

RRID	AB_2044003 (BioLegend Cat. No. 137001) AB_2044004 (BioLegend Cat. No. 137002)

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. Proc. Natl. Acad. Sci. USA 93:14833. 2. Smith MJ, et al. 1987. J. Cell. Sci. 87:113.
Gene ID	12514

Related Protocols

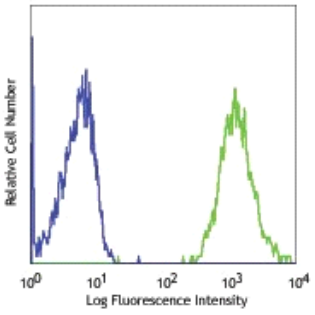
Intracellular Cytokine Staining Protocol - Video

Intracellular Flow Cytometry Staining Protocol

Other Formats

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

Product Data



Thioglycolate-elicited Balb/c peritoneal macrophages intracellularly stained with FA-11 Alexa Fluor® 647

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