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CD68 Monoclonal Antibody (FA-11), FITC

Catalog Number MA5-16676

Product data sheet

Details	
Size	100 µg
Host/Isotope	Rat / IgG2a
Class	Monoclonal
Type	Antibody
Clone	FA-11
Immunogen	purified Con A acceptor glycoprotein from P815 cell line
Conjugate	FITC
Form	Liquid
Concentration	0.1 mg/mL
Purification	Protein G
Storage buffer	PBS with 1% BSA
Contains	0.09% sodium azide
Storage Conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles. Store in the dark.

Species Reactivity	
Species reactivity	Mouse
Published species	Mouse, Not Applicable

Tested Applications	Dilution *
Flow Cytometry (Flow)	Assay-dependent

Published Applications	
Flow Cytometry (Flow)	See 6 publications below

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

Product specific information

Membrane permeabilization is required for flow cytometry applications. For FACS analysis, use 10 µL of the suggested working dilution to label 1x10^6 cells in 100 µL. Rat anti Mouse CD68 antibody, clone FA-11 recognizes mouse macrosialin, a heavily glycosylated transmembrane protein and murine homolog of human CD68, which is classified as a unique scavenger receptor (ScR) family member, due to the presence of a lysosome associated membrane protein (LAMP)-like domain. Rat anti Mouse CD68 antibody, clone FA-11 recognizes mouse macrosialin, a heavily glycosylated transmembrane protein and murine homolog of human CD68, which is classified as a unique scavenger receptor (ScR) family member, due to the presence of a lysosome associated membrane protein (LAMP)-like domain.

Background/Target Information

CD68 (Macrosialin) is a 110 kDa integral membrane glycoprotein predominantly expressed on the intracellular lysomsomes of monocytes and macrophages and to a lesser extent by dendritic cells and peripheral blood granulocytes. Also, CD68 could play a role in phagocytic activities of tissue macrophages, both in intracellular lysosomal metabolism and extracellular cell-cell and cell-pathogen interactions. CD68 is expressed by interdigitating reticulum cells in tonsil and some histiocytic lymphoma or histiocytosis, acute myeloid leukemia (AML), and granulocytic sarcoma. Elevated expression of CD68 has been demonstrated on CD34+ cells in various human malignancies, including several Acute Myeloid Leukemia studies.

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PubMed References For CD68 Monoclonal Antibody (FA-11), FITC

6 Flow Cytometry References

Species / Dilution	Summary
Mouse / Not Cited	MA1-82739 was used in Flow Cytometry to determine the roles of different vascular and immune cells in abdominal aortic aneurysm formation and pathogenesis. Frontiers in cardiovascular medicine (2021; 8:) **"Single-Cell Transcriptome Profiles Reveal Fibrocytes as Potential Targets of Cell Therapies for Abdominal Aortic Aneurysm."** Author(s):Li B,Song X,Guo W,Hou Y,Hu H,Ge W,Fan T,Han Z,Li Z,Yang P,Gao R,Zhao H,Wang J PubMed Article URL:http://dx.doi.org/10.3389/fcvm.2021.753711
Mouse / Not Cited	MA5-16676 was used in Flow Cytometry to suggest that VX-765 can reduce neuroinflammation and improve nerve function recovery after spinal cord injury by inhibiting caspase-1/interleukin-1/interleukin-18. Neural regeneration research (2021; 16: 1836) **"VX-765 reduces neuroinflammation after spinal cord injury in mice."** Author(s):Chen J,Chen YQ,Shi YJ,Ding SQ,Shen L,Wang R,Wang QY,Zha C,Ding H,Hu JG,Lü HZ PubMed Article URL:http://dx.doi.org/10.4103/1673-5374.306096
Mouse / Not Cited	MA5-16676 was used in flow cytometry to study the expression of alveolar macrophages in male and female mice lacking surfactant protein A. Scientific reports (2022; 12:) **"The alveolar macrophage toponome of female SP-A knockout mice differs from that of males before and after SP-A1 rescue."** Author(s):Phelps DS,Chinchilli VM,Yang L,Shearer D,Weisz J,Zhang X,Floros J PubMed Article URL:http://dx.doi.org/10.1038/s41598-022-08114-2
Mouse / Not Cited	MA182739 was used in flow cytometry to model the expression patterns of chemokines and cytokines that turn into M1 /M2 macrophage activation. PLoS computational biology (2016; 12:) **"Model-Based Characterization of Inflammatory Gene Expression Patterns of Activated Macrophages."** Author(s):Rex J,Albrecht U,Ehlting C,Thomas M,Zanger UM,Sawodny O,Häussinger D,Ederer M,Feuer R,Bode JG PubMed Article URL:http://dx.doi.org/10.1371/journal.pcbi.1005018
Mouse / Not Cited	MA5-16676 was used in Flow cytometry/Cell sorting to study the effect of CRID3 on the local microenvironment and the possible role in neuroprotection following spinal cord injury. Journal of neuroinflammation (2020; 17:) **"CRID3, a blocker of apoptosis associated speck like protein containing a card, ameliorates murine spinal cord injury by improving local immune microenvironment."** Author(s):Chen YQ,Wang SN,Shi YJ,Chen J,Ding SQ,Tang J,Shen L,Wang R,Ding H,Hu JG,Lü HZ PubMed Article URL:http://dx.doi.org/10.1186/s12974-020-01937-8
Mouse / 1:5	MA1-82739 was used in flow cytometry to assess the effect of CD11b-positive (+) monocytes on Alzheimer's disease using a mouse model PloS one (2016; 10:) **"Intravenous infusion of monocytes isolated from 2-week-old mice enhances clearance of Beta-amyloid plaques in an Alzheimer mouse model."** Author(s):Hohsfield LA,Humpel C PubMed Article URL:http://dx.doi.org/10.1371/journal.pone.0121930

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