

FITC anti-human CD68 Antibody

Catalog# / Size	333805 / 25 tests 333806 / 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, γ/δ 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 FITC 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	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 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood.
Excitation Laser	Blue Laser (488 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. 3. Bushway ME, <i>et al.</i> 2014. <i>Biol Reprod.</i> 90(5): 110. (IF) PubMed
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> 1. Gao R, <i>et al.</i> 2021. <i>iScience.</i> 24:103133. PubMed 2. Rao G, <i>et al.</i> 2013. <i>Clin Cancer Res.</i> 19:785. PubMed 3. Li Y, <i>et al.</i> 2021. <i>Nat Commun.</i> 12:87. PubMed 4. Chauhan A, <i>et al.</i> 2020. <i>Nat Commun.</i> 11:1939. PubMed 5. Wang HC, <i>et al.</i> 2022. <i>J Biomed Sci.</i> 29:99. PubMed 6. Zhang S, <i>et al.</i> 2020. <i>Front Immunol.</i> 1.757638889. PubMed 7. Malekghasemi S, <i>et al.</i> 2020. <i>Cell Biol Int.</i> 44:2031. PubMed 8. Huang Y, <i>et al.</i> 2022. <i>Front Immunol.</i> 13:993788. PubMed 9. Gautam S, <i>et al.</i> 2016. <i>J Biol Chem.</i> 291: 14356 - 14362. PubMed

10. Nakano H, *et al.* 2018. *Arthritis Res Ther.* 20:124. [PubMed](#)
11. Fujisaka Y, *et al.* 2018. *Oncol Lett.* 15:509. [PubMed](#)
12. Xu P, *et al.* 2020. *Cancer Immunol Res.* 8:1193. [PubMed](#)
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17. Ishii N, *et al.* 2014. *J Immunol.* 193:5118. [PubMed](#)
18. Wu L, *et al.* 2020. *Cancer Immunol Res.* 710:8. [PubMed](#)
19. Wang R, *et al.* 2019. *EBioMedicine.* 40:118. [PubMed](#)

RRID AB_1089055 (BioLegend Cat. No. 333805)
 AB_1089054 (BioLegend Cat. No. 333806)

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	<ol style="list-style-type: none"> 1. Holness CL and Simmons DL. 1993. <i>Blood</i> 81:1607. 2. Gottfried E, <i>et al.</i> 2008. <i>Scand. J. Immunol.</i> 67:453. 3. Hameed A, <i>et al.</i> 1994. <i>Hum. Pathol.</i> 25:872.
Gene ID	968

Related Protocols

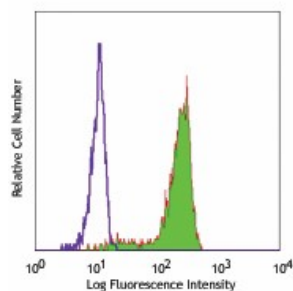
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[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 intracellularly stained with Y1/82A FITC

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