

APC anti-human CD68 Antibody

Catalog# / Size	333809 / 25 tests 333810 / 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 APC 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 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.
Excitation Laser	Red Laser (633 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. Hou X, <i>et al.</i> 2020. <i>Cell Reports.</i> 28(1):172-189.e7.. PubMed 2. Wu J, <i>et al.</i> 2022. <i>Nat Commun.</i> 13:676. PubMed 3. Cao B, <i>et al.</i> 2022. <i>Nat Commun.</i> 13:6203. PubMed 4. Sun L, <i>et al.</i> 2021. <i>Cancer Cell.</i> .: PubMed 5. Patra V, <i>et al.</i> 2019. <i>Br J Dermatol.</i> N/A. PubMed 6. Rahn S, <i>et al.</i> 2019. <i>Oncotarget.</i> 1.508333333. PubMed 7. Wang X, <i>et al.</i> 2020. <i>Signal Transduct Target Ther.</i> 5:35. PubMed 8. Teng YY, <i>et al.</i> 2022. <i>Front Bioeng Biotechnol.</i> 10:902894. PubMed 9. Ma L, <i>et al.</i> 2021. <i>Clinical Cancer Research.</i> 27(6):1778-1791. PubMed

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RRID AB_10567107 (BioLegend Cat. No. 333809)
 AB_2275735 (BioLegend Cat. No. 333810)

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

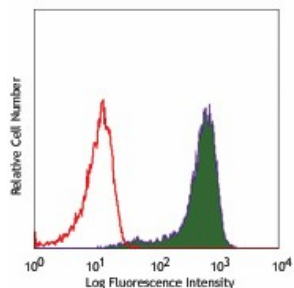
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[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 APC

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