

PE/Cyanine7 anti-human CD68 Antibody

Catalog# / Size	333815 / 25 tests 333816 / 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 PE/Cyanine7 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) Green Laser (532 nm)/Yellow-Green Laser (561 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.
Additional Product Notes	BioLegend is in the process of converting the name PE/Cy7 to PE/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine7 products. Please contact Technical Service if you have any questions.
Application References	
(PubMed link indicates BioLegend citation)	<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
Product Citations	<ol style="list-style-type: none"> 1. Klemm F, <i>et al.</i> 2020. <i>Cell.</i> 181(7):1643-1660.e17. PubMed 2. Trujillo-Alonso V, <i>et al.</i> 2019. <i>Nat Nanotechnol.</i> 1.011111111. PubMed 3. Borowicz S, <i>et al.</i> 2021. <i>PLOS ONE.</i> 16(6):e0252197. PubMed 4. Magg T, <i>et al.</i> 2021. <i>Sci Immunol.</i> 6:. PubMed

RRID AB_2562935 (BioLegend Cat. No. 333815)
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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	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

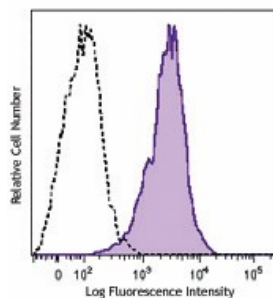
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[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 mononuclear cells were fixed and permeabilized with BioLegend Fixation Buffer (Cat. No. 420801) and Permeabilization Wash Buffer (Cat. No. 421002), and then stained with anti-human CD68 (clone Y1/82A) PE/Cyanine7 (filled histogram) or mouse IgG2b, κ PE/Cyanine7 isotype control (open histogram). Data shown was gated on the monocyte population.

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