

Biotin anti-human CD68 Antibody

Catalog# / Size	333804 / 100 µg
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.
Preparation	The antibody was purified by affinity chromatography, and conjugated with Biotin under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. 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 ≤0.03 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 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. Boonnak K, <i>et al.</i> 2012. <i>Vaccine.</i> 30:5603. PubMed2. Wang X, <i>et al.</i> 2020. <i>J Immunol.</i> 205:3141. PubMed3. Tanaka M, <i>et al.</i> 2012. <i>Innate Immunity.</i> 0.929166667. PubMed4. Freeman DW, <i>et al.</i> 2018. <i>Diabetes.</i> 67:2377. PubMed
RRID	AB_1089052 (BioLegend Cat. No. 333804)

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, et al. 2008. <i>Scand. J. Immunol.</i> 67:453. 3. Hameed A, et al. 1994. <i>Hum. Pathol.</i> 25:872.
Gene ID	968

Related Protocols

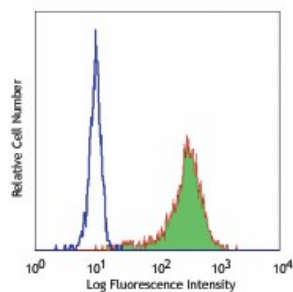
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[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 biotinylated Y1/82A, followed by Sav-PE

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