

## PerCP/Cyanine5.5 anti-human CD68 Antibody

<b>Catalog# / Size</b>	333813 / 25 tests 333814 / 100 tests
<b>Clone</b>	Y1/82A
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	VI MR23
<b>Other Names</b>	Macrosialin
<b>Isotype</b>	Mouse IgG2b, κ
<b>Description</b>	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

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<b>Verified Reactivity</b>	Human
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with PerCP/Cyanine5.5 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">ICFC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">intracellular immunofluorescent staining with flow cytometric analysis</a> . 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.  * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
<b>Excitation Laser</b>	Blue Laser (488 nm)
<b>Application Notes</b>	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.
<b>Additional Product Notes</b>	BioLegend is in the process of converting the name PerCP/Cy5.5 to PerCP/Cyanine5.5. The dye molecule remains the same, so you should expect the same quality and performance from our PerCP/Cyanine5.5 products. Contact <a href="#">Technical Service</a> if you have any questions.
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Doussis IA, <i>et al.</i> 1993. <i>J. Clin. Pathol.</i> 46:334.</li> <li>2. Davey FR, <i>et al.</i> 1988. <i>J. Clin. Pathol.</i> 41:753.</li> <li>3. Bushway ME, <i>et al.</i> 2014. <i>Biol Reprod.</i> 90(5): 110. (IF) <a href="#">PubMed</a></li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>Product Citations</b>	<ol style="list-style-type: none"> <li>1. Hohmann MS, <i>et al.</i> 2021. <i>JCI Insight.</i> 6: <a href="#">PubMed</a></li> <li>2. Zhang Y, <i>et al.</i> 2020. <i>Oncol Lett.</i> 1.053472222. <a href="#">PubMed</a></li> <li>3. Khoonrit P, <i>et al.</i> 2020. <i>PLoS One.</i> 15:e0238509. <a href="#">PubMed</a></li> </ol>

4. Mehta AK, *et al.* 2021. *Nat Cancer*. 2:66. [PubMed](#)
5. Bayik D, *et al.* 2020. *Cancer Discov*. 1.256944444. [PubMed](#)
6. Wu X, *et al.* 2018. *J Immunol Methods*. 455:71. [PubMed](#)

**RRID** AB\_10681723 (BioLegend Cat. No. 333813)  
 AB\_10683171 (BioLegend Cat. No. 333814)

## Antigen Details

<b>Structure</b>	Sialomucin family, 110 kD
<b>Distribution</b>	Monocytes/macrophages, dendritic cells, granulocytes, subset of hematopoietic progenitors, $\gamma/\delta$ T cells, NK cells, LAK cells, subset of B cells, fibroblasts, endothelial cells
<b>Cell Type</b>	B cells, Dendritic cells, Endothelial cells, Fibroblasts, Granulocytes, Hematopoietic stem and progenitors, Macrophages, Monocytes, T cells
<b>Biology Area</b>	Cell Biology, Immunology, Neuroscience, Neuroscience Cell Markers
<b>Molecular Family</b>	CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Holness CL and Simmons DL. 1993. <i>Blood</i> 81:1607.</li> <li>2. Gottfried E, <i>et al.</i> 2008. <i>Scand. J. Immunol.</i> 67:453.</li> <li>3. Hameed A, <i>et al.</i> 1994. <i>Hum. Pathol.</i> 25:872.</li> </ol>
<b>Gene ID</b>	<a href="#">968</a>

## Related Protocols

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

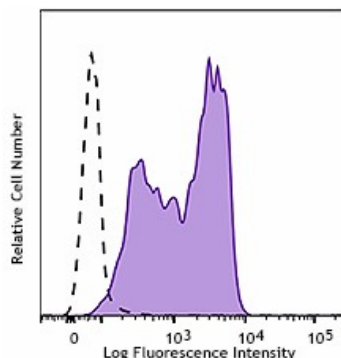
[Cell Surface Flow Cytometry Staining Protocol](#)

[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, permeabilized and intracellularly stained with anti-human CD68 (clone Y1/82A) PerCP/Cyanine5.5 (filled histogram) or mouse IgG2b,  $\kappa$  PerCP/Cyanine5.5 isotype control (open histogram). Data shown was gated on the monocyte population.

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