

## Alexa Fluor® 488 anti-human CD68 Antibody

<b>Catalog# / Size</b>	333811 / 25 tests 333812 / 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

---

<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 Alexa Fluor® 488 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>	<p>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.</p> <p>* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.</p> <p>Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p><a href="#">View full statement regarding label licenses</a></p>
<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>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. Managò A, <i>et al.</i> 2019. <i>Nat Commun.</i> 10:4116. <a href="#">PubMed</a></li><li>2. McAvoy M, <i>et al.</i> 2020. <i>Front Neurol.</i> 0.905555556. <a href="#">PubMed</a></li><li>3. Ohmatsu H, <i>et al.</i> 2017. <i>Oncoimmunology.</i> 6:e1181237. <a href="#">PubMed</a></li></ol>

- Li M, *et al.* 2020. Nat Commun. 4051:11. [PubMed](#)
- Gage BK, *et al.* 2020. Cell Stem Cell. 27(2):254-269.e9. [PubMed](#)

**RRID** AB\_2074833 (BioLegend Cat. No. 333811)  
AB\_2074832 (BioLegend Cat. No. 333812)

## 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>	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.
<b>Gene ID</b>	<a href="#">968</a>

## Related Protocols

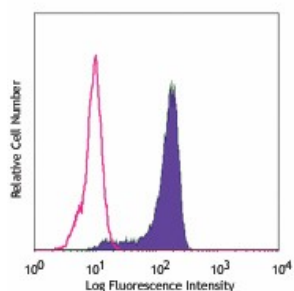
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[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 Alexa Fluor® 488

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587