

## PerCP/Fire™ 806 anti-mouse F4/80 Antibody

<b>Catalog# / Size</b>	123181 / 25 µg 123182 / 100 µg
<b>Clone</b>	BM8
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	EMR1, Ly71
<b>Isotype</b>	Rat IgG2a, κ
<b>Description</b>	F4/80, also known as EMR1 or Ly71, is a 160 kD glycoprotein of the epidermal growth factor (EGF)-transmembrane 7 (TM7) family. F4/80 has been widely used as a murine macrophage marker. It is expressed on a majority of tissue macrophages, including macrophages in the lung, gut, peritoneal cavity, thymus, and red pulp of the spleen, Kupffer cells, Langerhans cells, microglia, and certain dendritic cells. It is not expressed on macrophages located in the T cell areas of the spleen, lymph node, or Peyer's patch. The biological ligand of F4/80 has not been identified, but it has been reported that F4/80 is required for the induction of CD8 <sup>+</sup> T cells-mediated peripheral tolerance.

### Product Details

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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	Murine macrophages
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PerCP/Fire™ 806 under optimal conditions.
<b>Concentration</b>	0.2 mg/mL
<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="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.  * PerCP/Fire™ 806 has a maximum excitation of 478 nm and a maximum emission of 806 nm.
<b>Excitation Laser</b>	Blue Laser (488 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections <sup>1,2</sup> and formalin-fixed paraffin-embedded sections <sup>6,7</sup> , Western blotting, and spatial biology (IBEX) <sup>12,13</sup> .

## Application References

(PubMed link indicates  
BioLegend citation)

1. Schaller E, *et al.* 2002. *Mol. Cell. Biol.* 22:8035. (IHC)
2. Stevceva L, *et al.* 2001. *BMC Clin Pathol.* 1:3. (IHC)
3. Kobayashi M, *et al.* 2008. *J. Leukoc. Biol.* 83:1354. [PubMed](#)
4. Poeckel D, *et al.* 2009. *J. Biol Chem.* 284:21077. [PubMed](#)
5. Glass AM, *et al.* 2013. *J. Immunol.* 190:4830. [PubMed](#)
6. Koehm S, *et al.* 2007. *J. Allergy Clin. Immunol.* 120:570. (IHC)
7. Rankin AL, *et al.* 2010. *J. Immunol.* 184:1526. (IHC)
8. Sasi SP, *et al.* 2014. *J Biol Chem.* 289:14178. [PubMed](#)
9. Thakus VS, *et al.* 2014. *Toxicol Lett.* 230:322. [PubMed](#)
10. Watson NB, *et al.* 2015. *J Immunol.* 194:2796. [PubMed](#)
11. Hirakawa H, *et al.* 2015. *PLoS One.* 10:119360. [PubMed](#)
12. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci U S A.* 117:33455-65. (SB) [PubMed](#)

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## Antigen Details

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<b>Structure</b>	EGF-TM7 family member, 160 kD glycoprotein
<b>Distribution</b>	Majority of tissue macrophages including peritoneal macrophages, macrophages in lung, gut, thymus and red pulp of spleen, Kupffer cells, Langerhans cells, bone marrow stromal cells, and a subset of dendritic cells
<b>Function</b>	Induction of immunological tolerance
<b>Cell Type</b>	Dendritic cells, Langerhans cells, Macrophages, Tregs
<b>Biology Area</b>	Cell Biology, Immunology, Innate Immunity, Neuroinflammation, Neuroscience
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Austy JM and Gordon S. 1981. <i>Eur. J. Immunol.</i> 11:805.</li><li>2. Hume DA, <i>et al.</i> 1983. <i>J. Exp. Med.</i> 158:1522.</li><li>3. Ruedl C, <i>et al.</i> 1996. <i>Eur. J. Immunol.</i> 26:1801.</li><li>4. McKnight AJ, <i>et al.</i> 1996. <i>J. Biol. Chem.</i> 271:486.</li><li>5. Lin HH, <i>et al.</i> 2005. <i>J. Exp. Med.</i> 201:1615.</li></ol>
<b>Gene ID</b>	<a href="#">13733</a>

## Related Protocols

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- [Cell Surface Flow Cytometry Staining Protocol](#)

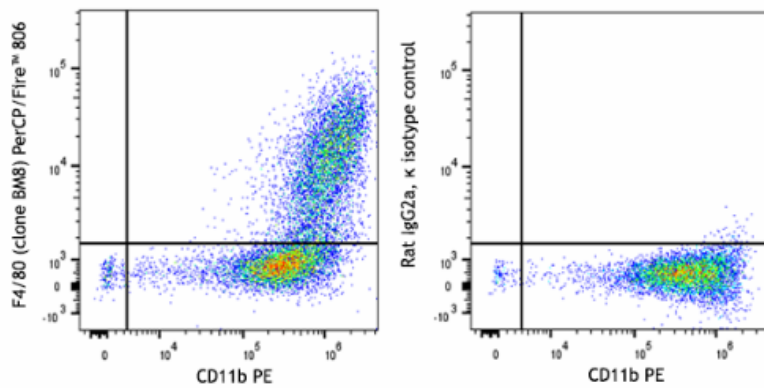
## Other Formats

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Brilliant Violet 605™ anti-mouse F4/80, Purified anti-mouse F4/80, Biotin anti-mouse F4/80, FITC anti-mouse F4/80, PE anti-mouse F4/80, PE/Cyanine5 anti-mouse F4/80, PE/Cyanine7 anti-mouse F4/80, APC anti-mouse F4/80, APC/Cyanine7 anti-mouse F4/80, Alexa Fluor® 488 anti-mouse F4/80, Alexa Fluor® 647 anti-mouse F4/80, Pacific Blue™ anti-mouse F4/80, PerCP anti-mouse F4/80, PerCP/Cyanine5.5 anti-mouse F4/80, Alexa Fluor® 700 anti-mouse F4/80, Brilliant Violet 421™ anti-mouse F4/80, Brilliant Violet 510™ anti-mouse F4/80, Alexa Fluor® 594 anti-mouse F4/80, Brilliant Violet 785™ anti-mouse F4/80, Purified anti-mouse F4/80 (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse F4/80, Brilliant Violet 650™ anti-mouse F4/80, Brilliant Violet 711™ anti-mouse F4/80, APC/Fire™ 750 anti-mouse F4/80, TotalSeq™-A0114 anti-mouse F4/80, TotalSeq™-B0114 anti-mouse F4/80, TotalSeq™-C0114 anti-mouse F4/80, Spark YG™ 570 anti-mouse F4/80, KIRAVIA Blue 520™ anti-mouse F4/80, Ultra-LEAF™ Purified anti-mouse F4/80, APC/Fire™ 810 anti-mouse F4/80, Spark NIR™ 685 anti-mouse F4/80, Spark Blue™ 550 anti-mouse F4/80, Brilliant Violet 570™ anti-mouse F4/80, Brilliant Violet 750™ anti-mouse F4/80, PE/Fire™ 810 anti-mouse F4/80, Spark Red™ 718 anti-mouse F4/80 (Flexi-Fluor™), Spark Blue™ 574 anti-mouse F4/80 (Flexi-Fluor™), PE/Fire™ 640 anti-mouse F4/80, PerCP/Fire™ 806 anti-mouse F4/80

## Product Data

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Thioglycolate-elicited BALB/c mouse peritoneal macrophages were stained with anti-mouse/human CD11b (clone M1/70) PE and anti-mouse F4/80 (clone BM8) PerCP/Fire™ 806 (left) or rat IgG2a, κ PerCP/Fire™ 806 isotype control (right).

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Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587