

# Product Data Sheet

## Pacific Blue™ anti-mouse F4/80

**Catalog # / Size:** 123123 / 25 µg  
123124 / 100 µg

**Clone:** BM8

**Isotype:** Rat IgG2a, κ

**Immunogen:** Murine macrophages

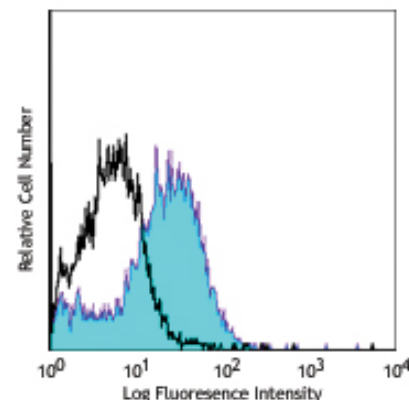
**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Thioglycollate elicited Balb/c peritoneal macrophage cells stained with Pacific Blue™ BM8

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤ 0.25 µg per 10<sup>6</sup> cells in 100 µl. It is recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

\*\* Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen sections<sup>1,2</sup> and Western blotting.

**Application References:**

- Schaller E, *et al.* 2002. *Mol. Cell. Biol.* 22:8035. (IHC)
- Steveceva L, *et al.* 2001. *BMC Clin Pathol.* 1:3. (IHC)
- Kobayashi M, *et al.* 2008. *J. Leukocyte Biol.* 83:1354. PubMed
- Poeckel D, *et al.* 2009. *J. Biol Chem.* 284:21077. PubMed

**Description:** F4/80 is a 160 kD glycoprotein. It is characterized as a member of the epidermal growth factor (EGF)-transmembrane 7 (TM7) family. F4/80, also known as EMR1 or Ly71, has been widely used as a murine macrophage marker, which is expressed on majority of tissue macrophages including peritoneal macrophages, macrophages in lung, gut, thymus and red pulp of spleen (but not on the macrophages located in T cell areas of the spleen, lymph node and Peyer's patch), Kuffer cells, Langerhans cells, bone marrow stromal cells. F4/80 has also been shown on a subset of dendritic cells. The biological ligand of F4/80 has not been identified, but it has been reported that F4/80 is required for induction of CD8 T cells-mediated peripheral tolerance.

**Antigen References:**

- Austy JM and Gordon S. 1981. *Eur. J. Immunol.* 11:805.
- Hume DA, *et al.* 1983. *J. Exp. Med.* 158:1522.
- Ruedl C, *et al.* 1996. *Eur. J. Immunol.* 26:1801.
- McKnight AJ, *et al.* 1996. *J. Biol. Chem.* 271:486.
- Lin HH, *et al.* 2005. *J. Exp. Med.* 201:1615.

### Related Products:

**Product**  
 Cell Staining Buffer  
 Pacific Blue™ Rat IgG2a, κ Isotype Ctrl  
 TruStain fcX™ (anti-mouse CD16/32)

### Clone

RTK2758  
93

### Application

FC, ICC, ICFC  
 FC, ICFC  
 FC



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