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Product Data Sheet

Biotin anti-mouse F4/80

Catalog # / Size: 123105 / 50 µg
123106 / 500 µg

Clone: BM8

Isotype: Rat IgG2a, κ

Immunogen: Murine macrophages

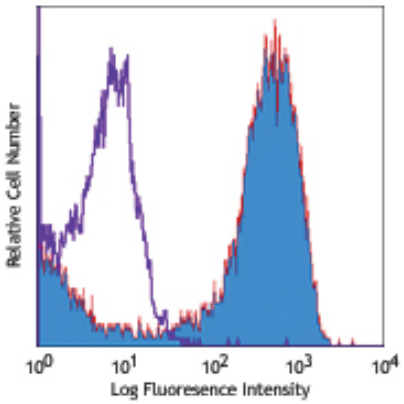
Reactivity: Mouse

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

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.**



Thioglycolate-elicited Balb/c mouse peritoneal macrophages stained with biotinylated BM8, followed by Sav-PE

Applications:

Applications: FC - *Quality tested*
IHC - *Reported in the literature*

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 million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

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

Application References:
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. Leukocyte Biol.* 83:1354. PubMed
4. 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:
1. Austy JM and Gordon S. 1981. *Eur. J. Immunol.* 11:805.
2. Hume DA, *et al.* 1983. *J. Exp. Med.* 158:1522.
3. Ruedl C, *et al.* 1996. *Eur. J. Immunol.* 26:1801.
4. McKnight AJ, *et al.* 1996. *J. Biol. Chem.* 271:486.
5. Lin HH, *et al.* 2005. *J. Exp. Med.* 201:1615.

Related Products:

Product	Clone	Application
APC Streptavidin		FC, ICFC
APC/Cy7 Streptavidin		FC, ICFC
FITC Streptavidin		FC, ICFC
HRP Streptavidin		ELISA, ELISPOT, IHC, WB
PE Streptavidin		FC, ICFC
PE/Cy5 Streptavidin		FC, ICFC
PE/Cy7 Streptavidin		FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
Biotin Rat IgG2a, κ Isotype Ctrl	RTK2758	FC, ICFC
TruStain fcX™ (anti-mouse CD16/32)	93	FC

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