Purified anti-mouse F4/80 Antibody

Catalog# / Size	123101 / 50 µg 123102 / 500 µg
Clone	BM8
Regulatory Status	RUO
Other Names	EMR1, Ly71
Isotype	Rat IgG2a, κ
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 the 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, and 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.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Murine macrophages
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested IHC, WB - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric 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 formalin-fixed paraffin-embedded sections[6,7], Western blotting, and spatial biology (IBEX)[12,13].

Application References

(PubMed link indicates BioLegend citation)

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RRID AB_893504 (BioLegend Cat. No. 123101)

Antigen Details

Structure	EGF-TM7 family member, 160 kD glycoprotein
Distribution	Majority of tissue macrophages including peritoneal macrophages, macrophages in lung, gut, thymus and red pulp of spleen, Kuffer cells, Langerhans cells, bone marrow stromal cells, and a subset of dendritic cells
Function	Induction of immunological tolerance
Cell Type	Dendritic cells, Langerhans cells, Macrophages, Tregs
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroinflammation, Neuroscience
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.
Gene ID	13733

Related Protocols

Cell Surface Flow Cytometry Staining Protocol

Other Formats

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

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