

F4/80 Monoclonal Antibody (BM8), Super Bright™ 600, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 600, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	BM8
Conjugate	Super Bright™ 600
Excitation/Emission Max	414/601 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2723154

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	45 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	3 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	4 Publications
Immunocytochemistry (ICC/IF)	-	17 Publications
Flow Cytometry (Flow)	0.5 µg/test	57 Publications

Product Specific Information

Description: The BM8 monoclonal antibody reacts with mouse F4/80 antigen, an approximately 160 kDa surface receptor. It belongs to the EGF-TM7 family of proteins. As such it contains seven EGF-like domains on its extracellular N-terminus, seven transmembrane spanning sequences, and an intracellular C-terminal domain showing homology to other TM7 superfamily members. The F4/80 antigen is expressed by a majority of mature macrophages and is one of the best markers for this population of cells. However, other cell types, such as peritoneal eosinophils, Langerhans cells, and some other dendritic cell subtypes, have been reported to express this antigen as well. Expression of F4/80 commences during early myeloid development in vivo and can be upregulated on BM cells stimulated in vitro with M-CSF. Some populations of macrophages, especially in the lymphoid microenvironment, may be devoid of F4/80.

Applications Reported: This BM8 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This BM8 antibody has been tested by flow cytometric analysis of resident peritoneal macrophages. This may be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend using a 610/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

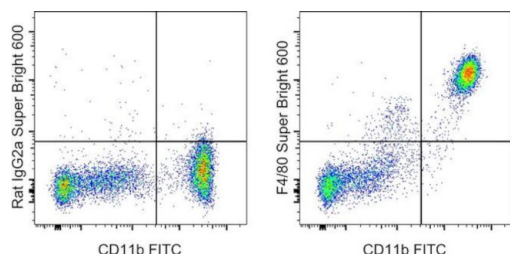
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 600 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For F4/80 Monoclonal Antibody (BM8), Super Bright™ 600, eBioscience™



F4/80 Antibody (63-4801-82) in Flow

C57BL/6 mouse resident peritoneal macrophages were stained with CD11b Monoclonal Antibody, FITC (Product # 11-0112-82) and 0.25 µg of Rat IgG2a kappa Isotype Control, Super Bright 600 (Product # 63-4321-82) (left) or 0.25 µg of F4/80 Monoclonal Antibody, Super Bright 600 (right). Total viable cells were used for analysis, as determined by 7-AAD (Product # 00-6993-50).

[View more figures on thermofisher.com](https://www.thermofisher.com)

Flow Cytometry (57)

Advanced science (Weinheim, Baden-Wurttemberg, Germany)

CD146 Associates with Gp130 to Control a Macrophage Pro-inflammatory Program That Regulates the Metabolic Response to Obesity.

"Published figure using F4/80 monoclonal antibody (Product # 63-4801-82) in Flow Cytometry"

Authors: Duan H, Jing L, Xiang J, Ju C, Wu Z, Liu J, Ma X, Chen X, Liu Z, Feng J, Yan X

Year
2022

Cell & bioscience

Phosphatase SHP1 impedes mesenchymal stromal cell immunosuppressive capacity modulated by JAK1/STAT3 and P38 signals.

"Published figure using F4/80 monoclonal antibody (Product # 63-4801-82) in Flow Cytometry"

Authors: Jiang M, Ye J, Wang X, Li N, Wang Y, Shi Y

Year
2022

[View more Flow references on thermofisher.com](#)

Immunohistochemistry (31)

International journal of molecular sciences

Modulated Electro-Hyperthermia-Induced Tumor Damage Mechanisms Revealed in Cancer Models.

"Published figure using F4/80 monoclonal antibody (Product # 63-4801-82) in Immunohistochemistry"

Authors: Krenacs T, Meggyeshazi N, Forika G, Kiss E, Hamar P, Szekely T, Vancsik T

Year
2020

Proceedings of the National Academy of Sciences of the United States of America

Neural transcription factor Pou4f1 promotes renal fibrosis via macrophage-myofibroblast transition.

"Published figure using F4/80 monoclonal antibody (Product # 63-4801-82) in Immunohistochemistry"

Authors: Tang PM, Zhang YY, Xiao J, Tang PC, Chung JY, Li J, Xue VW, Huang XR, Chong CC, Ng CF, Lee TL, To KF, Nikolic-Paterson DJ, Lan HY

Year
2020

[View more IHC references on thermofisher.com](#)

More applications with references on thermofisher.com

IHC (F) (3)

ICC/IF (17)

IHC (P) (2)

IHC (PFA) (0)

IHC (31)

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