

F4/80 Monoclonal Antibody (BM8), Super Bright™ 780, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	BM8
Conjugate	Super Bright™ 780
Excitation/Emission Max	413/780 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_2802477

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	48 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	3 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	4 Publications
Immunocytochemistry (ICC/IF)	-	18 Publications
Flow Cytometry (Flow)	0.5 µg/test	70 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 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

In some experiments, we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when using UltraComp eBeads microspheres (Product # 01-2222-42) as compared to single-color stained cells. In such circumstances, we would recommend setting compensation with cells. We have also observed this in some experiments using AbC Total Antibody Compensation beads (Product # A10497).

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.

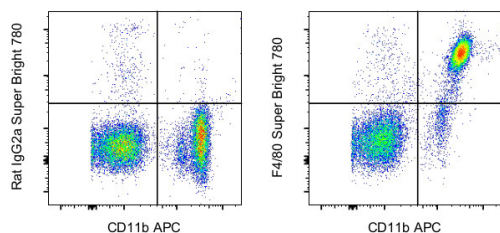
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) 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:** 780 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™ 780, eBioscience™



F4/80 Antibody (78-4801-82) in Flow

BALB/c mouse resident peritoneal macrophages were stained with CD11b Monoclonal Antibody, APC (Product # 17-0112-82) and 0.25 µg of Rat IgG2a kappa Isotype Control, Super Bright 780 (Product # 78-4321-82) (left) or 0.25 µg of F4/80 Monoclonal Antibody, Super Bright 780 (right). Cells in the large scatter population were used for analysis.

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

Immunohistochemistry (48)

Nature communications

Streptococcus agalactiae cadD alleviates metal stress and promotes intracellular survival in macrophages and ascending infection during pregnancy.

Year
2022

"Published figure using F4/80 monoclonal antibody (Product # 78-4801-82) in Immunohistochemistry"

Authors: Korir ML,Doster RS,Lu J,Guevara MA,Spicer SK,Moore RE,Francis JD,Rogers LM,Haley KP,Blackman A, Noble KN,Eastman AJ,Williams JA,Damo SM,Boyd KL,Townsend SD,Henrique Serezani C,Aronoff DM,Manning SD, Gaddy JA

Nature communications

Lactational delivery of Triclosan promotes non-alcoholic fatty liver disease in newborn mice.

Year
2022

"Published figure using F4/80 monoclonal antibody (Product # 78-4801-82) in Immunohistochemistry"

Authors: Weber AA,Yang X,Mennillo E,Ding J,Watrous JD,Jain M,Chen S,Karin M,Tukey RH

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

Immunohistochemistry (Paraffin) (3)

Cell death and differentiation

Kupffer cell receptor CLEC4F is important for the destruction of desialylated platelets in mice.

Year
2021

"Published figure using F4/80 monoclonal antibody (Product # 78-4801-82) in Immunocytochemistry"

Authors: Jiang Y,Tang Y,Hoover C,Kondo Y,Huang D,Restagno D,Shao B,Gao L,Michael McDaniel J,Zhou M,Silasi-Mansat R,McGee S,Jiang M,Bai X,Lupu F,Ruan C,Marth JD,Wu D,Han Y,Xia L

Frontiers in immunology

Murine Fecal Microbiota Transplantation Alleviates Intestinal and Systemic Immune Responses in *Campylobacter jejuni* Infected Mice Harboring a Human Gut Microbiota.

Year
2020

"Published figure using F4/80 monoclonal antibody (Product # 78-4801-82) in Immunohistochemistry (Paraffin)"

Authors: Heimesaat MM,Mrazek K,Bereswill S

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

More applications with references on thermofisher.com

IHC (PFA) (1)

IHC (F) (4)

ICC/IF (18)

Flow (70)

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