

# F4/80 Monoclonal Antibody (BM8), eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Rat, Hamster, Fish, Mouse, Human
Host/Isotope	Rat / IgG2a, kappa
Class	Monoclonal
Type	Antibody
Clone	BM8
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage Conditions	4° C
RRID	AB_467558

Applications	Tested	Dilution	Published
Immunohistochemistry (Paraffin) (IHC (P))	✓	10 µg/mL	25 Publications
Immunohistochemistry (IHC)	-		158 Publications
Flow Cytometry (Flow)	✓	0.5 µg/test	206 Publications
Immunofluorescence (IF)	-		85 Publications
Immunocytochemistry (ICC)	-		7 Publications
Immunohistochemistry (Frozen) (IHC (F))	✓	10 µg/mL	17 Publications
Western Blot (WB)	-		1 Publication
Miscellaneous PubMed (MISC)	-		4 Publications
Functional Assay (FN)	-		1 Publication

## 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:** The BM8 antibody has been reported for use in flow cytometric analysis, immunohistochemical staining of frozen tissue sections, and immunohistochemical staining of paraffin embedded tissue sections. Immunoblotting must be performed under non-reducing conditions. For immunohistochemical staining of paraffin sections, proteinase treatment is needed. It has been reported that reduction with 2-mercaptoethanol destroys the BM8 antigen.

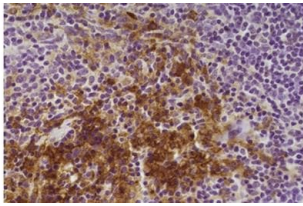
**Applications Tested:** The BM8 antibody has been tested by flow cytometric analysis of mouse spleen or bone marrow cells. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. The BM8 antibody has been tested by immunohistochemistry of formalin-fixed paraffin embedded mouse tissue using pronase treatment and can be used at less than or equal to 10 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Purity:** Greater than 90%, as determined by SDS-PAGE.

**Aggregation:** Less than 10%, as determined by HPLC.

**Filtration:** 0.2 µm post-manufacturing filtered.

### Product Images For F4/80 Monoclonal Antibody (BM8), eBioscience™



#### **F4/80 Antibody (14-4801-82) in IHC (P)**

Immunohistochemistry of formalin-fixed paraffin embedded mouse spleen using 10 µg/mL Anti-Mouse F4/80 Antigen Purified, followed by Anti-Rat IgG Biotin, Streptavidin HRP and DAB visualization. Nuclei are counterstained with hematoxylin.

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

Immunohistochemistry (Paraffin) (25)

Frontiers in microbiology

**Intestinal and Systemic Immune Responses upon Multi-drug Resistant *Pseudomonas aeruginosa* Colonization of Mice Harboring a Human Gut Microbiota.**

"Published figure using F4/80 monoclonal antibody (Product # 14-4801-82) in Immunohistochemistry"

Authors: von Klitzing E, Ekmekci I, Bereswill S, Heimesaat MM

**Species**  
Mouse  
Not Applicable

**Dilution**  
1:50  
Not Cited

**Year**  
2018

Advances in wound care

**VEGF Receptor-2 Activation Mediated by VEGF-E Limits Scar Tissue Formation Following Cutaneous Injury.**

Authors: Wise LM, Stuart GS, Real NC, Fleming SB, Mercer AA

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2018

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

Immunohistochemistry (158)

Frontiers in microbiology

**Intestinal and Systemic Immune Responses upon Multi-drug Resistant *Pseudomonas aeruginosa* Colonization of Mice Harboring a Human Gut Microbiota.**

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Mouse  
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1:50  
Not Cited

**Year**  
2018

Gut pathogens

**Toll-like receptor-4 differentially mediates intestinal and extra-intestinal immune responses upon multi-drug resistant *Pseudomonas aeruginosa* association of IL10<sup>-/-</sup> mice with chronic colitis.**

"Published figure using F4/80 monoclonal antibody (Product # 14-4801-82) in Immunohistochemistry"

Authors: Grunau A, Escher U, Kühl AA, Bereswill S, Heimesaat MM

**Species**  
Not Applicable

**Dilution**  
1:50

**Year**  
2018

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

More applications with references on thermofisher.com

Flow (206)

IF (85)

ICC (7)

IHC (F) (17)

WB (1)

MISC (4)

FN (1)

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