

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

## Product Details

Size	1 mg
Species Reactivity	Mouse
Published Species	Hamster, Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	BM8
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_469097

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	171 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	9 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	3 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	10 Publications
Immunocytochemistry (ICC/IF)	-	40 Publications
Flow Cytometry (Flow)	0.5 µg/test	182 Publications
ELISA (ELISA)	-	1 Publication
Functional Assay (FN)	Assay-Dependent	-
Control (Ctrl)	Assay-Dependent	-
Miscellaneous PubMed (Misc)	-	1 Publication

## Product Specific Information

**Description:** The BM8 monoclonal antibody reacts with mouse F4/80 antigen, an approximately 125 kDa transmembrane protein. The F4/80 antigen is expressed by a majority of mature macrophages and is the best marker for this population of cells. However, other cell types such as Langerhans cells and liver Kupffer cells have been reported to express this antigen. Expression of F4/80 commences during early myeloid development and is upregulated on all BM cells stimulated in vitro with M-CSF. It has been shown that some cytokines downregulate the expression of F4/80 resulting in lack of F4/80 antigen on a subpopulation of macrophages, especially in the lymphoid microenvironment in vivo.

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

Applications Tested: The BM8 antibody has been tested by flow cytometric analysis of mouse splenocytes and 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

Filtration: 0.2 µm post-manufacturing filtered.

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

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

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

Western Blot (1)

<b>Blood</b> <b>Induction of autophagy is essential for monocyte-macrophage differentiation.</b> "Published figure using F4/80 monoclonal antibody (Product # 16-4801-86) in Flow Cytometry" Authors: Zhang Y,Morgan MJ,Chen K,Choksi S,Liu ZG	<b>Year</b> 2012
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Immunohistochemistry (171)

<b>Nature communications</b> <b>Streptococcus agalactiae cadD alleviates metal stress and promotes intracellular survival in macrophages and ascending infection during pregnancy.</b> "Published figure using F4/80 monoclonal antibody (Product # 16-4801-86) 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	<b>Year</b> 2022
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<b>Nature communications</b> <b>Lactational delivery of Triclosan promotes non-alcoholic fatty liver disease in newborn mice.</b> "Published figure using F4/80 monoclonal antibody (Product # 16-4801-86) in Immunohistochemistry" Authors: Weber AA,Yang X,Mennillo E,Ding J,Watrous JD,Jain M,Chen S,Karin M,Tukey RH	<b>Year</b> 2022
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Immunohistochemistry (Paraffin) (9)

<b>Cell death and differentiation</b> <b>Kupffer cell receptor CLEC4F is important for the destruction of desialylated platelets in mice.</b> "Published figure using F4/80 monoclonal antibody (Product # 16-4801-86) 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	<b>Year</b> 2021
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- IHC (PFA) (3)
- IHC (F) (10)
- ICC/IF (40)
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