abcam

ab242258

violetFluor™ 450 Anti-F4/80 antibody [BM8.1]

Anti-F4/80 antibody [BM8.1] conjugated to violetFluor™ 450 - suitable for flow cytometry, and reacts with mouse samples. Clone [BM8.1] is a rat monoclonal antibody cited in 25 publications.

Design your panel with our interactive flow cytometry panel builder. Click here.

Key facts

Isotype	IgG2b
Host species	Rat
Conjugation	violetFluor™ 450
Excitation/Emission	Ex: 405nm, Em: 450nm
Storage buffer	pH: 7.2 Preservative: 0.09% Sodium azide Constituents: 0.87% Sodium chloride, 0.12% Sodium dihydrogen phosphate, 0.1% Gelatin
Form	Liquid
Clonality	Monoclonal
Clone number	BM8.1
Purification technique	Affinity purification
Light chain type	kappa
Concentration	0.2 - 1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from TCS.

Reactivity data

Flow Cyt

Tested

Species	Mouse
Dilution info	-
Notes	We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental system.

Target data

See full target information ADGRE1

Function	Orphan receptor involved in cell adhesion and probably in cell-cell interactions specifically involving cells of the immune system. May play a role in regulatory T-cells (Treg) development.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Store in the dark

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	F4/80 also known as Emr1 (Epidermal growth factor module-containing mucin-like hormone receptor 1) is a well-characterized surface protein with a mass of approximately 160 kDa. This protein is recognized as a marker for murine macrophages. F4/80 is heavily expressed on cells of the monocyte and macrophage lineage particularly in tissue-resident macrophages found in organs like the liver spleen and lung. Its expression is vital for identifying macrophages in various types of immunological studies including F4/80 staining and macrophage marker analysis.
Biological function summary	F4/80 plays a role in modulating the immune response by interacting with other cell surface molecules. While not part of a larger protein complex F4/80 influences macrophage functions such as phagocytosis and cytokine production. Its expression contributes to the regulation of tissue homeostasis and inflammation. The protein is critical in maintaining the macrophage population required for reliable immune surveillance and response to pathogens.

Pathways	F4/80 is an integral part of the immunological and inflammatory signaling pathways. It interacts with TLRs (Toll-like receptors) and other cell surface molecules that sense microbial components therefore helping in the initiation of innate immune responses. F4/80 is connected to proteins like cytokine receptors which play roles in mediating and resolving inflammatory signals important for maintaining balanced immune activity.
Associated diseases and disorders	F4/80 is associated with conditions like chronic inflammation and autoimmune disorders. Its expression levels can often correlate with disease state impacting diseases such as rheumatoid arthritis and liver fibrosis. In these conditions F4/80 interacts with proteins like TNF-alpha and IL-1beta which are involved in inflammatory processes. Understanding F4/80's role can help uncover therapeutic targets aimed at modulating macrophage functions to treat these disorders effectively.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

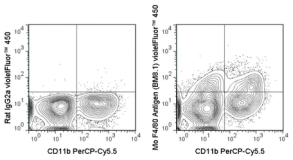
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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Terms & Conditions.

1 product image



Flow Cytometry - violetFluor™ 450 Anti-F4/80 antibody [BM8.1] (ab242258)

F4/80 Flow Cytometry staining using rat Anti-F4/80 antibody

Flow Cytometric analysis of C57Bl/6 bone marrow cells staining F4/80 using PerCP-Cy5.5 Anti-Mouse CD11b and 0.5 µg ab242258 (right panel) or 0.5 µg violet- Fluor™ 450 Rat IgG2b isotype control (left panel).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.