

FceR1 alpha Monoclonal Antibody (MAR-1), APC-eFluor™ 780, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), APC-eFluor™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	MAR-1
Conjugate	APC-eFluor™ 780
Excitation/Emission Max	756/785 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2573990

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	13 Publications
Functional Assay (FN)	-	1 Publication

Product Specific Information

Description: The MAR-1 monoclonal antibody reacts with the Fc epsilon Receptor I alpha subunit, an IgE-binding subunit lacking signal-transducing ability. Fc epsilon RI alpha is expressed on mast and basophil cells and is up-regulated by the presence of IgE. Fc epsilon RI alpha forms a tetrameric complex with one beta and two gamma subunits. The beta and gamma subunits possess immunoreceptor tyrosine-based activation motifs (ITAM). The Fc epsilon RI complex plays an important role in triggering IgE-mediated allergic reactions.

Applications Reported: This MAR-1 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This MAR-1 antibody has been tested by flow cytometric analysis of the MC/9 cell line (a mouse mast cell line). 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 10⁵ to 10⁸ cells /test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

APC-eFluor® 780 emits at 780 nm and is excited with the Red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

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

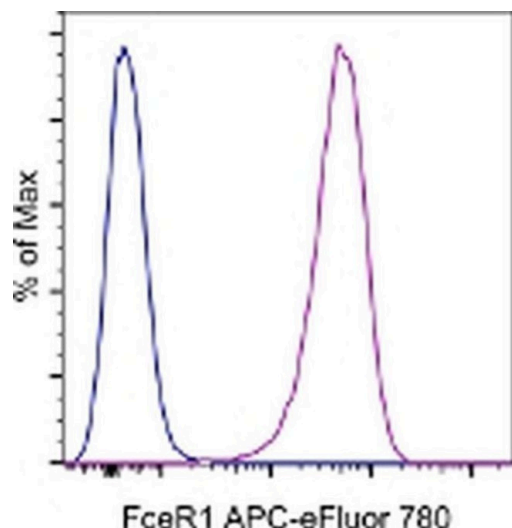
light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 μ L of cell sample + 100 μ L 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: 633-647 nm; **Emission:** 780 nm; **Laser:** Red Laser.

Filtration: 0.2 μ m post-manufacturing filtered.

Product Images For FceR1 alpha Monoclonal Antibody (MAR-1), APC-eFluor™ 780, eBioscience™



FceR1 alpha Antibody (47-5898-82) in Flow

Staining of MC/9 cells with 0.25 μ g of Armenian Hamster IgG Isotype Control APC-eFluor® 780 (Product # 47-4888-80) (blue histogram) or 0.25 μ g of Anti-Mouse Fc epsilon Receptor I alpha (FceR1) APC-eFluor® 780 (purple histogram). Total viable cells, as determined by Fixable Viability Dye eFluor® 520 (Product # 65-0867-14), were used for analysis.

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

14 References

Flow Cytometry (13)

Frontiers in immunology

NLRP3 Inflammasome Activation of Mast Cells by Estrogen *via* the Nuclear-Initiated Signaling Pathway Contributes to the Development of Endometriosis.

Year
2022

"Published figure using FcεR1 alpha monoclonal antibody (Product # 47-5898-82) in Flow Cytometry"

Authors: Guo X,Xu X,Li T,Yu Q,Wang J,Chen Y,Ding S,Zhu L,Zou G,Zhang X

The Journal of biological chemistry

SNAP23 is essential for platelet and mast cell development and required in connective tissue mast cells for anaphylaxis.

Year
2021

"Published figure using FcεR1 alpha monoclonal antibody (Product # 47-5898-82) in Flow Cytometry"

Authors: Cardenas RA,Gonzalez R,Sanchez E,Ramos MA,Cardenas EI,Rodarte AI,Alcazar-Felix RJ,Isaza A,Burns AR,Heidelberger R,Adachi R

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

Functional Assay (1)

Nature immunology

MHC class II-dependent basophil-CD4+ T cell interactions promote T(H)2 cytokine-dependent immunity.

Year
2009

Authors: Perrigoue JG,Saenz SA,Siracusa MC,Allenspach EJ,Taylor BC,Giacomin PR,Nair MG,Du Y,Zaph C,van Rooijen N,Comeau MR,Pearce EJ,Laufer TM,Artis D

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.