

# FceR1 alpha Monoclonal Antibody (MAR-1), PerCP-eFluor™ 710, 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), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	MAR-1
Conjugate	PerCP-eFluor™ 710
Excitation/Emission Max	482/708 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_2573801

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.06 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 MC/9 cell line (a mouse mast cell line). This can be used at less than or equal to 0.06 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 10^5 to 10^8 cells /test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

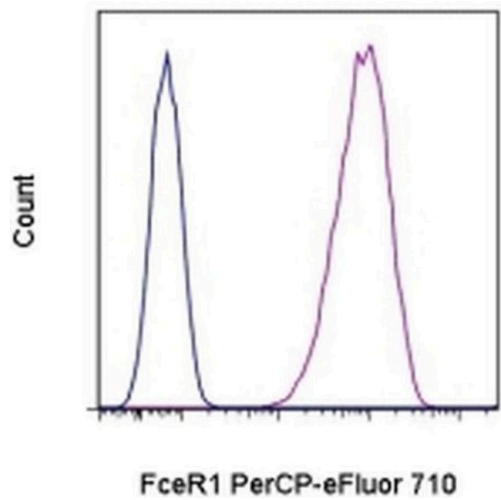
PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 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: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

**Product Images For FceR1 alpha Monoclonal Antibody (MAR-1), PerCP-eFluor™ 710, eBioscience™**



**FceR1 alpha Antibody (46-5898-82) in Flow**  
Staining of MC/9 cell line (a mouse mast cell line) with 0.03 µg of Armenian Hamster IgG Isotype Control PerCP-eFluor® 710 (Product # 46-4888-82) (blue histogram) or 0.03 µg of Anti-Mouse Fc epsilon Receptor I alpha (FceR1) PerCP-eFluor® 710 (purple histogram). Total viable cells, as determined by Fixable Viability Dye eFluor® 780 (Product # 65-0865-14), were used for analysis.

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## 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 FceR1 alpha monoclonal antibody (Product # 46-5898-82) 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 FceR1 alpha monoclonal antibody (Product # 46-5898-82) 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

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