

FcεR1 alpha Monoclonal Antibody (MAR-1), Super Bright™ 600, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), Super Bright™ 600, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	MAR-1
Conjugate	Super Bright™ 600
Excitation/Emission Max	414/601 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4°C, store in dark, DO NOT FREEZE!
RRID	AB_2762778

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.25 µg/test	6 Publications
Immunoprecipitation (IP)	-	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: The MAR-1 antibody has been reported for use in flow cytometric analysis.

Applications Tested: The 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 0.25 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.

Super Bright 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend using a 610/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

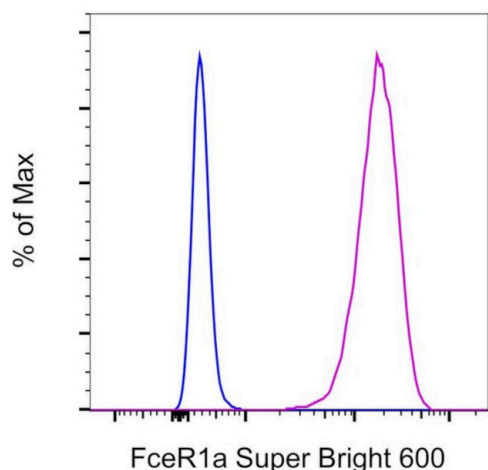
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

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 fluorochrome performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 600 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For FceR1 alpha Monoclonal Antibody (MAR-1), Super Bright™ 600, eBioscience™



FceR1 alpha Antibody (63-5898-80) in Flow

MC/9 cells (a mouse mast cell line) were stained with Armenian Hamster IgG Isotype Control, Super Bright 600 (Product # 63-4888-82) (blue histogram) or Fc epsilon Receptor I alpha (FceR1) Monoclonal Antibody, Super Bright 600 (purple histogram). Total viable cells were used for analysis.

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

7 References

Flow Cytometry (6)

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 # 63-5898-82) 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 # 63-5898-82) 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](#)

Immunoprecipitation (1)

Frontiers in immunology

Positive and Negative Regulatory Roles of C-Terminal Src Kinase (CSK) in FcRI-Mediated Mast Cell Activation, Independent of the Transmembrane Adaptor PAG/CSK-Binding Protein.

Year
2019

"Published figure using FcεR1 alpha monoclonal antibody (Product # 63-5898-82) in Immunoprecipitation"

Authors: Potuckova L,Draberova L,Halova I,Paulenda T,Draber P

More applications with references on thermofisher.com

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