

# FceR1 alpha Monoclonal Antibody (AER-37 (CRA1)), Super Bright™ 780, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG2b, kappa
Recommended Isotype Control	Mouse IgG2b kappa Isotype Control (eBMG2b), Super Bright™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	AER-37 (CRA1)
Conjugate	Super Bright™ 780
Excitation/Emission Max	413/780 nm
Form	Liquid
Concentration	5 µL/Test
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_2802479

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	1 Publication

## Product Specific Information

**Description:** The AER-37 monoclonal antibody reacts with the Fc epsilon RI alpha subunit, an IgE-binding subunit lacking signal-transducing ability. Fc epsilon RI alpha is expressed on mast and basophil cells and is upregulated 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 AER-37 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This AER-37 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (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.

Super Bright 780 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 780 nm. We recommend using a 780/60 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

In some experiments, we have observed that compensation values for Super Bright 780-conjugated antibodies are higher in the violet 450/50 channel when using UltraComp eBeads microspheres (Product # 01-2222-42) as compared to single-color stained cells. In such circumstances, we would recommend setting compensation with cells. We have also observed this in some experiments using AbC Total Antibody Compensation beads (Product # A10497).

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.

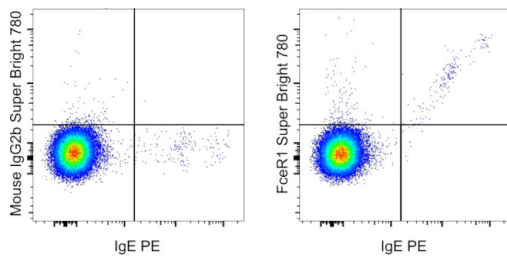
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) 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: 405 nm; Emission: 780 nm; Laser: Violet Laser

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

## Product Images For FcεR1 alpha Monoclonal Antibody (AER-37 (CRA1)), Super Bright™ 780, eBioscience™



### FcεR1 alpha Antibody (78-5899-42) in Flow

Normal human peripheral blood cells were stained with IgE Monoclonal Antibody, PE (Product # 12-6986-42) and Mouse IgG2b kappa Isotype Control, Super Bright 780 (Product # 78-4732-82) (left) or FcεR1 alpha Monoclonal Antibody, Super Bright 780 (right). Cells in the lymphocyte gate were used for analysis (note: basophils reside in FSC/SSC position of lymphocytes).

## 1 Reference

### Flow Cytometry (1)

Diagnostics (Basel, Switzerland)

#### The Humanised NPY-mRFP RBL Reporter Cell Line Is a Fast and Inexpensive Tool for Detection of Allergen-Specific IgE in Human Sera.

"Published figure using FcεR1 alpha monoclonal antibody (Product # 78-5899-42) in Flow Cytometry"

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