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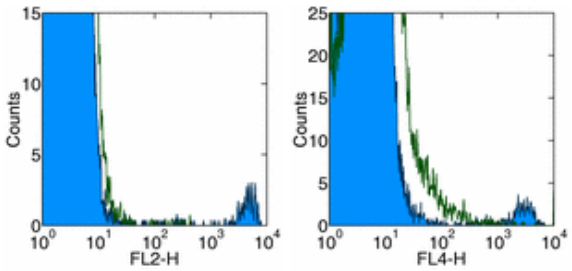
Product Information

Contents: Biotin anti-human FcεRIα (FceRI-α, high affinity IgE receptor)
Catalog Number: 13-5899
Sizes: 25 ug, 100 ug
Formulation: Phosphate buffer pH 7.2, 150 mM NaCl, 0.09% NaN_3
Storage Conditions: Store at 4°C. DO NOT FREEZE.
Clone: AER-37 (CRA1)
Isotype: Mouse IgG2b, κ



Surface staining of normal human peripheral blood cells with anti-human FceRI alpha (AER-37) PE (left), and APC (right). Appropriate isotype controls were used (open histogram). Cells in the lymphocyte population were used for analysis.

Available Formats of This Product

Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
12-5899	PE anti-human FceRI alpha (FceRIa, FceRI-a, FceRI-alpha, high affinity IgE receptor)	488	575	FC
13-5899	Biotin anti-human FceRI alpha (FceRIa, FceRI-a, FceRI-alpha, high affinity IgE receptor)	N/A	N/A	FC
14-5899	Affinity Purified anti-human FceRI alpha (FceRIa, FceRI-a, FceRI-alpha, high affinity IgE receptor)	N/A	N/A	FC
17-5899	Allophycocyanin (APC) anti-human FceRI alpha (FceRIa, FceRI-a, FceRI-alpha, high affinity IgE receptor)	633	660	FC

Description

The AER-37 monoclonal antibody reacts with the FcεRIα subunit, an IgE-binding subunit lacking signal-transducing ability. FcεRIα is expressed on mast and basophil cells and is upregulated by the presence of IgE. FcεRIα forms a tetrameric complex with one β and two γ subunits. The β and γ subunits possess immunoreceptor tyrosine-based activation motifs (ITIM). The FcεRI complex plays an important role in triggering IgE-mediated allergic reactions.

Usage

For research use only, not for diagnostic or therapeutic use. AER-37 has been reported for use in flow cytometric analysis.

Applications Tested

The AER-37 (CRA1) antibody has been tested by flow cytometric analysis of peripheral blood leukocytes. This can be used at less than or equal to 0.25 µg per million cells in a 100 µl total staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Related Products

Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)
Cat. 12-4317 Streptavidin-PE (Phycoerythrin)
Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)
Cat. 13-4732 Biotin Mouse IgG2b Isotype Control
Cat. 12-5899 PE anti-human FceRI alpha (FceRIa, FceRI-a, FceRI-alpha, high affinity IgE receptor) (clone AER-37 (CRA1))
Cat. 14-5899 Affinity Purified anti-human FceRI alpha (FceRIa, FceRI-a, FceRI-alpha, high affinity IgE receptor) (clone AER-37 (CRA1))

References

Hakimi J., C. Seals, J. A. Kondas, L. Pettine, W. Danho, J. Kochan. (1990) The Alpha Subunit of the Human IgG Receptor (FceRI) is Sufficient for High-Affinity IgE Binding. J Biol Chem 265(36):22079-81

Hasegawa S, Pawankar R, Suzuki K, Nakahata T, Furukawa S, Okumura K, Ra C. (1999) Functional expression of the high affinity receptor for IgE (FcepsilonRI) in human platelets and its' intracellular expression in human megakaryocytes. Blood 93(8):2543-51.

Hasegawa M, Nishiyama C, Nishiyama M, Akizawa Y, Takahashi K, Ito T, Furukawa S, Ra C, Okumura K, Ogawa H. (2003) Regulation of the human Fc(epsilon)RI alpha-chain distal promoter. J Immunol 170(7):3732-8.