

Product Information

Contents: Phycoerythrin (PE) anti-human FcεRIα (FcεRI-α, high affinity IgE receptor)

Catalog Number: 12-5899

Sizes: 25 tests, 100 tests

Formulation: Phosphate buffer pH 7.2, 150 mM NaCl, 0.09% NaN₃, 0.2% BSA

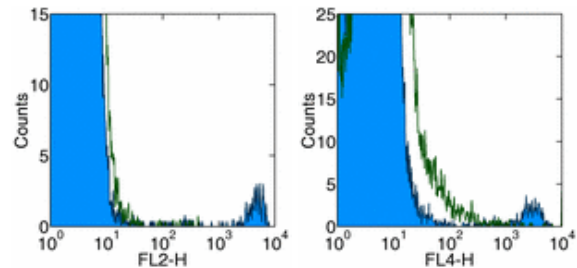
Storage Conditions: Store at 4°C.

DO NOT FREEZE.

LIGHT-SENSITIVE MATERIAL.

Clone: AER-37 (CRA1)

Isotype: Mouse IgG2b, κ



Surface staining of normal human peripheral blood cells with anti-human FcεRI 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 FcεRI alpha (FcεRIα, FcεRI-a, FcεRI-alpha, high affinity IgE receptor) | 488 | 575 | FC |
| 13-5899 | Biotin anti-human FcεRI alpha (FcεRIα, FcεRI-a, FcεRI-alpha, high affinity IgE receptor) | N/A | N/A | FC |
| 14-5899 | Affinity Purified anti-human FcεRI alpha (FcεRIα, FcεRI-a, FcεRI-alpha, high affinity IgE receptor) | N/A | N/A | FC |
| 17-5899 | Allophycocyanin (APC) anti-human FcεRI alpha (FcεRIα, FcεRI-a, FcεRI-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. The AER-37 (CRA1) antibody has been reported for use in flow cytometric analysis. AER-37 has been reported to not block IgE binding.

Applications Tested

The AER-37 (CRA1) antibody has been pre-titrated and tested by flow cytometric analysis of peripheral blood leukocytes. This can be used at 20 μl per 100 μl blood (or per 1 million cells in 100 μl total staining volume).

Related Products

Cat. 12-4732 PE Mouse IgG2b Isotype Control

Cat. 13-5899 Biotin anti-human FcεRI alpha (FcεRIα, FcεRI-a, FcεRI-alpha, high affinity IgE receptor) (clone AER-37 (CRA1))

Cat. 14-5899 Affinity Purified anti-human FcεRI alpha (FcεRIα, FcεRI-a, FcεRI-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 (FcεRI) 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 (FcεRI) 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(ε)RI alpha-chain distal promoter. *J Immunol* 170(7):3732-8.

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