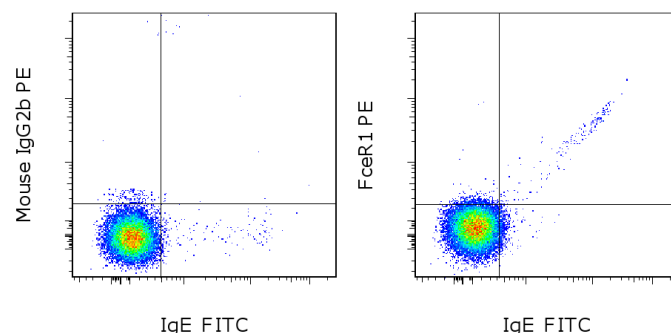


Anti-Human Fc epsilon Receptor I alpha (FceR1) PE

Catalog Number: 12-5899

Also known as: FceRI alpha, high affinity IgE receptor

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of normal human peripheral blood cells with Anti-Human IgE FITC (cat. 11-6986) and Mouse IgG2b K Isotype Control PE (cat. 12-4732) (left) or Anti-Human Fc epsilon Receptor I alpha (FceR1) PE (right). Cells in the lymphocyte gate were used for analysis (note: basophils reside in FCS/SSC position of lymphocytes).

Product Information

Contents: Anti-Human Fc epsilon Receptor I alpha (FceR1) PE

Catalog Number: 12-5899

Clone: AER-37 (CRA1)

Concentration: 5 μ L (0.25 μ g)/test

Host/Isotype: Mouse IgG2b, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material.

Batch Code: Refer to vial

Use By: Refer to vial

Contains sodium azide

REF



LOT



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 (CRA1) antibody has been reported for use in flow cytometric analysis.

Applications Tested

This AER-37 (CRA1) antibody has been pre-titrated and tested by flow cytometric analysis of peripheral blood leukocytes. This can be used at 5 μ L (0.25 μ g) per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

References

Suzukawa M, Hirai K, Ikura M, Nagase H, Komiya A, Yoshimura-Uchiyama C, Yamada H, Ra C, Ohta K, Yamamoto K, Yamaguchi M. IgE- and Fc epsilon RI-mediated migration of human basophils. *Int Immunol*. 2005 Sep;17(9):1249-55. (AER-37, FA, PubMed)

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

Yamaguchi M, Sayama K, Yano K, Lantz CS, Noben-Trauth N, Ra C, Costa JJ, Galli SJ. IgE enhances Fc epsilon receptor I expression and IgE-dependent release of histamine and lipid mediators from human umbilical cord blood-derived mast cells: synergistic effect of IL-4 and IgE on human mast cell Fc epsilon receptor I expression and mediator release. *J Immunol*. 1999 May 1;162(9):5455-65. (AER-37, FC, PubMed)

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Anti-Human Fc epsilon Receptor I alpha (FcεR1) PE

Catalog Number: 12-5899

Also known as: FcεRI alpha, high affinity IgE receptor

RUO: For Research Use Only. Not for use in diagnostic procedures.

Hasegawa S, Pawankar R, Suzuki K, Nakahata T, Furukawa S, Okumura K, Ra C. Functional expression of the high affinity receptor for IgE (FcεRI) in human platelets and its intracellular expression in human megakaryocytes. *Blood* 1999. 93(8):2543-51.

Ra C, Kuromitsu S, Hirose T, Yasuda S, Furuichi K, Okumura K. Soluble human high-affinity receptor for IgE abrogates the IgE-mediated allergic reaction. *Int Immunol.* 1993 Jan;5(1):47-54.

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

Related Products

11-6986 Anti-Human IgE FITC (Ige21)

12-4732 Mouse IgG2b K Isotype Control PE

50-0639 Anti-Human CD63 eFluor® 660 (H5C6)