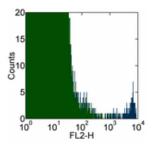


Anti-Human Fc epsilon Receptor I alpha (FceR1) Purified

Catalog Number: 14-5899

Also Known As:FceRI-a, FceRI-alpha, FceRI alpha, high affinity IgE receptor

RUO: For Research Use Only



Staining of normal human peripheral blood cells with Mouse IgG2b κ Isotype Control Purified (cat. 14-4732) (green histogram) or Anti-Human Fc epsilon Receptor I a (Fc ϵ R1) Purified (blue histogram) followed by Anti-Mouse IgG Biotin (cat. 13-4013) and Streptavidin PE (cat. 12-4317). Cells in the lymphocyte gate were used for analysis.

Product Information

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

Purified

REF Catalog Number: 14-5899 Clone: AER-37 (CRA1) Concentration: 0.5 mg/ml Host/Isotype: Mouse IgG2b, κ Formulation: aqueous buffer, 0.09% sodium azide, may contain

carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C.

Batch Code: Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

Description

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

Applications Reported

The AER-37 (CRA1) antibody has been reported for use in flow cytometric analysis. It has been reported to not block IgE binding.

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 1 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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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.

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

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.

Related Products

11-4011 Anti-Mouse IgG FITC

11-4317 Streptavidin FITC

12-4317 Streptavidin PE

13-4013 Anti-Mouse IgG Biotin (Polyclonal)

14-4732 Mouse IgG2b K Isotype Control Purified

17-4317 Streptavidin APC

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