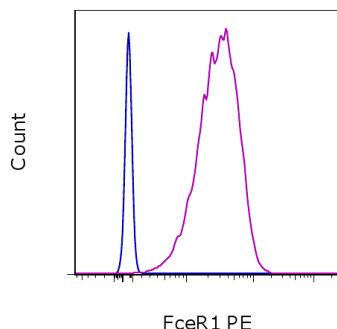


Anti-Mouse Fc epsilon Receptor I alpha (FceR1) PE

Catalog Number: 12-5898

Also known as: high affinity IgE receptor

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



Staining of MC/9 cell line (a mouse mast cell line) with 0.03 ug of Armenian Hamster IgG Isotype Control PE (cat. 12-4888) (blue histogram) or 0.03 ug of Anti-Mouse Fc epsilon Receptor I alpha (FceR1) PE (purple histogram). Total viable cells, as determined by Fixable Viability Dye eFluor® 780 (cat. 65-0865) were used for analysis.

Product Information

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

Catalog Number: 12-5898

Clone: MAR-1

Concentration: 0.2 mg/mL

Host/Isotype: Armenian Hamster IgG

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



Description

The MAR-1 monoclonal antibody reacts with the Fc epsilon Receptor I alpha subunit, an IgE-binding subunit lacking signal-transducing ability. Fc epsilon RI alpha is expressed on mast and basophil cells and is up-regulated 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

The MAR-1 antibody has been reported for use in flow cytometric analysis.

Applications Tested

The MAR-1 antibody has been tested by flow cytometric analysis of the MC/9 cell line (a mouse mast cell line). This can be used at less than or equal to 0.06 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Perrigou JG, Saenz SA, Siracusa MC, Allenspach EJ, Taylor BC, Giacomini PR, Nair MG, Du Y, Zaph C, van Rooijen N, Comeau MR, Pearce EJ, Laufer TM, Artis D. MHC class II-dependent basophil-CD4⁺ T cell interactions promote T(H)2 cytokine-dependent immunity. *Nat Immunol.* 2009 Jul;10(7):697-705. (MAR-1, FA, PubMed)

Sokol CL, Barton GM, Farr AG, Medzhitov R. A mechanism for the initiation of allergen-induced T helper type 2 responses. *Nat Immunol.* 2008 Mar;9(3):310-8. (MAR-1, FA, PubMed)

Obata K, Mukai K, Tsujimura Y, Ishiwata K, Kawano Y, Minegishi Y, Watanabe N, Karasuyama H. Basophils are essential initiators of a novel type of chronic allergic inflammation. *Blood.* 2007 Aug 1;110(3):913-20. (MAR-1, FC)

Arinobu Y, Iwasaki H, Gurish MF, Mizuno S, Shigematsu H, Ozawa H, Tenen DG, Austen KF, Akashi K. Developmental checkpoints of the basophil/mast cell lineages in adult murine hematopoiesis. *Proc Natl Acad Sci U S A.*

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A. 2005 Dec 13;102(50):18105-10. (MAR-1, FC, PubMed)

Yamaguchi M., K. Hirai, A. Komiya, M. Miyamasu, Y. Furumoto, R. Teshima, K. Ohta, Y. Morita, S. J. Galli, C. Ra, K. Yamamoto. Regulation of Mouse Mast Cell Surface Fc epsilon RI expression by dexamethasone. Int Immunol 2001. 13(7):843-51.

Related Products

12-4888 Armenian Hamster IgG Isotype Control PE (eBio299Arm)

65-0865 Fixable Viability Dye eFluor® 780