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Technical Data Sheet

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

Catalogue Number : 84112-50

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

Product Information

Clone: MAR-1
Format/Conjugate: FITC
Concentration: 0.5 mg/mL
Reactivity: Mouse
Laser: Blue (488nm)
Peak Emission: 520nm
Peak Excitation: 494nm
Filter: 530/30
Brightness (1=dim,5=brightest): 3
Isotype: Armenian Hamster IgG
Formulation: Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, ph7.2.
Storage: Product should be kept at 2-8°C and protected from prolonged exposure to light.
Applications: FC

Description

The Mar-1 monoclonal antibody binds to the Fc ε Receptor I α subunit (FceR1a), which is a transmembrane glycoprotein from the immunoglobulin superfamily. FceR1a lacks signal-transducing ability and is expressed by mast and basophil cells.

The Fc ε Receptor I α subunit is upregulated by IgE and forms a tetramer with a beta subunit and two gamma subunits, which have ITAM (immunoreceptor tyrosine-based activation motifs). The complex formed by the four subunits has very important roles in the IgE-facilitated allergic reactions.

Preparation & Storage

The product should be stored undiluted at 4°C and should be protected from prolonged exposure to light. Do not freeze. The monoclonal antibody was purified utilizing affinity chromatography and unreacted dye was removed from the product.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. For flow cytometric staining, the suggested use of this reagent is ≤0.125 ug per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

References

1.Joncker, N. T., Fernandez, N. C., Treiner, E., Vivier, E., ; Raulet, D. H. (2009). NK cell responsiveness is tuned commensurate with the number of inhibitory receptors for self-MHC class I: the rheostat model.;The Journal of Immunology,182(8), 4572-4580.

2. Obata, K., Mukai, K., Tsujimura, Y., Ishiwata, K., Kawano, Y., Minegishi, Y., ... ; Karasuyama, H. (2007). Basophils are essential initiators of a novel type of chronic allergic inflammation.;Blood,;110(3), 913-920.

3. Arinobu, Y., Iwasaki, H., Gurish, M. F., Mizuno, S. I., Shigematsu, H., Ozawa, H., ... ; Akashi, K. (2005). Developmental checkpoints of the basophil/mast cell lineages in adult murine hematopoiesis.;Proceedings of the National Academy of Sciences of the United States of America,;102(50), 18105-18110.

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