

TECHNICAL DATA SHEET

violetFluor™ 450 Anti-Mouse Fc epsilon Receptor I alpha

Catalog Number: 75-5898

PRODUCT INFORMATION

Contents: violetFluor™ 450 Anti-Mouse Fc epsilon Receptor I

Isotype: Armenian Hamster IgG

Concentration: 0.2 mg/mL

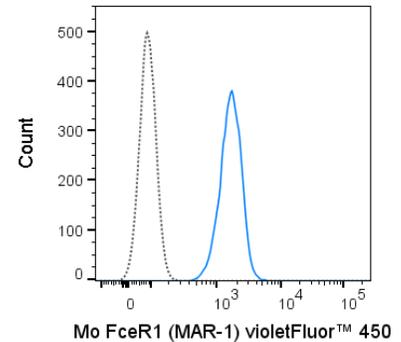
Clone: MAR-1

Reactivity: Mouse

Use By: 6 months from date of receipt

Storage Conditions: 2-8°C protected from light

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09% NaN₃, 0.1% gelatin, pH7.2



MC/9 (mouse mast cell line) cells were stained with 1 ug violetFluor™ 450 Anti-Mouse Fc epsilon Receptor I alpha (75-5898) (solid line) or 1 ug violetFluor™ 450 Armenian Hamster IgG isotype control (dashed line).

DESCRIPTION

The MAR-1 antibody reacts with the Fc epsilon Receptor I alpha chain (FceR1a), a transmembrane protein member of the Ig superfamily. This chain, together with a beta chain and two gamma chains form a tetrameric complex that supports IgE-mediated signaling and subsequent release of chemical mediators of allergy and immediate hypersensitivity. FceR1a is upregulated in the presence of IgE on those cell types which express it, such as Mast cells and Basophils. The MAR-1 antibody is widely used both in flow cytometry and for depletion of cells in vitro / in vivo.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). Please refer to the figure legend for the optimal concentration used to stain the tissue shown. We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental system.

REFERENCES

Mukai K, BenBarak MJ, Tachibana M, Nishida K, Karasuyama H, Taniuchi I, and Galli SJ. 2012. *Blood*. 120: 76-85. (Flow cytometry) Smith KA, Harcus Y, Garbi N, Hammerling GJ, MacDonald AS, and Maizels RM. 2012. *Infect. Immun.* 80: 3481-3489. (in vivo depletion) Larson D, Hubner MP, Torrero MN, Morris CP, Brankin A, Swierczewski BE, Davies SJ, Vonakis BM, and Mitre E. 2012. *J. Immunol.* 188: 4188-4199. (in vitro activation) Khoudoun M, Krishnamurthy D, Strait R, Kucuk Y, and Finkelman F. 2011. *J. Immunol.* 186: 151.4. (in vitro depletion)

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

For Research Use Only.

Not for use in diagnostic or therapeutic procedures. Not for resale. Not for distribution without written consent. Tonbo Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Tonbo Biosciences, Tonbo Biosciences Logo and all other trademarks are the property of Tonbo Biotechnologies Corporation. © 2013 Tonbo Biosciences.