

Biotin anti-mouse FcεR1α

Catalog # / Size: 1271520 / 500 µg
1271515 / 50 µg

Clone: MAR-1

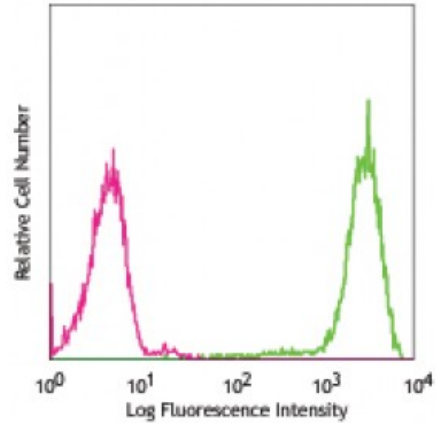
Isotype: Hamster IgG

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5



Mouse mast cell line MC/9 stained with biotinylated MAR-1, followed by Sav-PE

Applications:

Applications: Flow Cytometry, Immunohistochemistry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for relevant formats of this clone) include: depletion², immunohistochemistry of frozen sections (OCT embedded²).

- Application References:**
1. Obata K, *et al.* 2007. *Blood* 110:913 (FC)
 2. Sokol CL, *et al.* 2008. *Nat. Immunol.* 9:310 (FC, Deplete, IHC)
 3. Chen J, *et al.* 2009. *J. Biol. Chem.* 284:5763 (FC)

Description: FcεR1α is a transmembrane protein belonging to the Ig superfamily. FcεR1α forms a tetrameric complex with one β and two γ-subunits. The FcεR1 complex plays an important role in triggering IgE-mediated allergic reactions. It is abundantly expressed on mast and basophils and up-regulated by the presence of IgE. Following stimulation via FcεR1α, mast cells and basophils release bioactive chemical mediators such as histamine, resulting in the initiation of allergic reactions. Cross linking of the high-affinity receptor for IgE on tissue mast cells triggers immediate hypersensitivity with local symptoms. The MAR-1 monoclonal antibody reacts with the FcεR1α subunit.

- Antigen References:**
1. Arinobu Y, *et al.* 2005. *P. Natl. Acad. Sci. USA* 102:18105.
 2. Yamaguchi M, *et al.* 2001. *Int. Immunol.* 13:843.