

Purified anti-mouse Fc ϵ R1 α

Catalog # / Size: 1271510 / 500 μ g
1271505 / 50 μ g

Clone: MAR-1

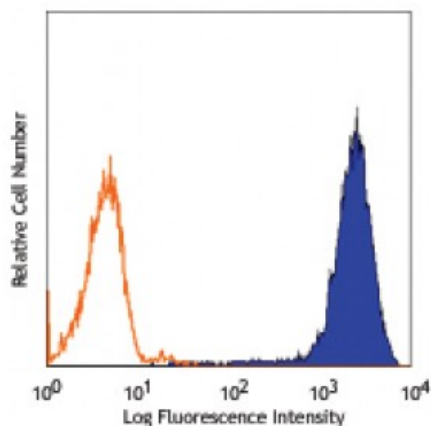
Isotype: Hamster IgG

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography.

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

Concentration: 0.5



Mouse mast cell line MC/9 stained with purified MAR-1 conjugated to 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: Fc ϵ R1 α is a transmembrane protein belonging to the Ig superfamily. Fc ϵ R1 α forms a tetrameric complex with one β and two γ -subunits. The Fc ϵ R1 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 Fc ϵ R1 α , 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 Fc ϵ R1 α 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.