SONY

Product Data Sheet

PE/Cy7 anti-mouse FcÎµRIα

Catalog # / Size: 1271590 / 100 µg
1271585 / 25 µg

Clone: MAR-1

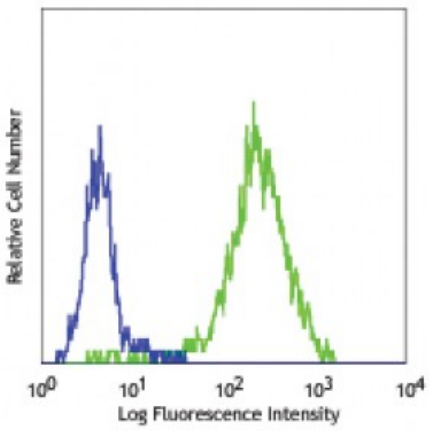
Isotype: Hamster IgG

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

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

Concentration: 0.2



Mouse mast cell line MC/9 stained with MAR-1 PE/Cy7

Applications:

Applications: Flow Cytometry

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 ≤0.5 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)
4. Wiesner DL, *et al.* 2015. *PLoS Pathog.* 11:1004701. PubMed

Description: FcεRIα is a transmembrane protein belonging to the Ig superfamily. FcεRIα forms a tetrameric complex with one β and two γ-subunits. The FcεRI 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 FcεRIα, 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 FcεRIα 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.

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