

## Purified anti-mouse FcεR1α

**Catalog # / Size:** 134301 / 50 µg  
134302 / 500 µg

**Clone:** MAR-1

**Isotype:** Armenian Hamster IgG

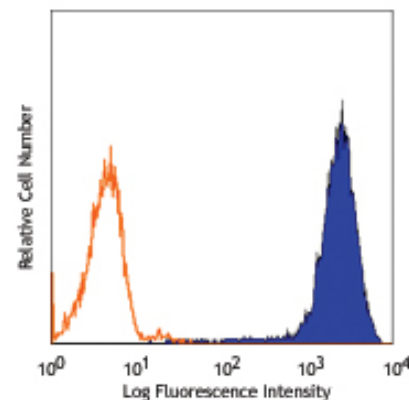
**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography.

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

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C.



Mouse mast cell line MC/9 stained with purified MAR-1 conjugated to PE

## Applications:

**Applications:** FC - *Quality tested*  
IHC - *Reported in the literature*

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is  $\leq 0.25 \mu\text{g}$  per million cells in 100 µl 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: *depletion<sup>2</sup>, immunohistochemistry of frozen sections (OCT embedded<sup>2</sup>).*

**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.

### Related Products:

**Product**  
Purified Armenian Hamster IgG Isotype Ctrl  
Cell Staining Buffer  
RBC Lysis Buffer (10X)

**Clone**  
HTK888

**Application**  
FC, ICC, ICFC, IF, IP, WB  
FC, ICC, ICFC  
FC, ICFC



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