

## Alexa Fluor® 647 anti-mouse FcεRIα

**Catalog # / Size:** 134309 / 25 µg  
134310 / 100 µg

**Clone:** MAR-1

**Isotype:** Armenian Hamster IgG

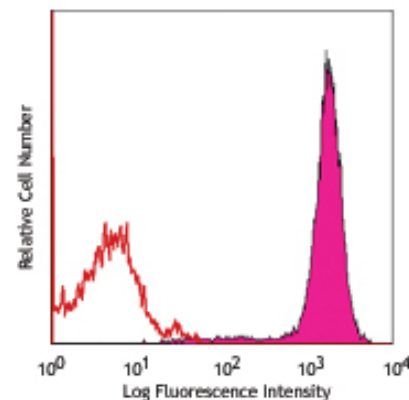
**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

**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 and protected from prolonged exposure to light. **Do not freeze.**



Mouse mast cell line MC/9 stained with MAR-1 Alexa Fluor® 647

## Applications:

**Applications:** FC - Quality tested

**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 ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

\*\* Alexa Fluor® 647 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 647 dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**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:** FcεRIα is a transmembrane protein of Ig super family member. 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. *Proc Natl Acad Sci USA.* 102(50) :18105
2. Yamaguchi M, *et al.* 2001. *Int Immunol.* 13(7):843

Related Products:	Product	Clone	Application
	Alexa Fluor® 647 Armenian Hamster IgG Isotype Ctrl	HTK888	FC, ICFC
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	TruStain fcX™ (anti-mouse CD16/32)	93	FC



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