SONY

Product Data Sheet

Alexa Fluor® 647 anti-human FcεRIα

Catalog # / Size: 2273070 / 100 tests

Clone: AER-37 (CRA-1)

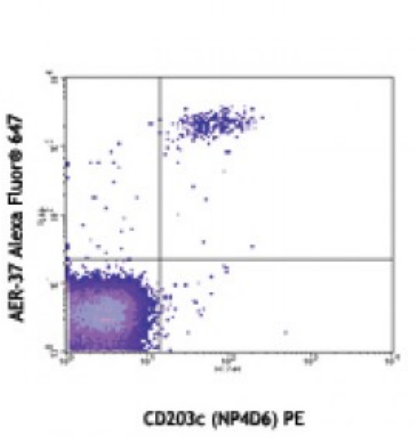
Isotype: Mouse IgG2b, κ

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human peripheral blood leukocytes stained with CD203c (NP4D6) PE and AER-37 (CRA1) Alexa Fluor® 647 (gated on lymphocyte population)

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 5 microL per million cells or 5 microL per 100 microL of whole blood. 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 633nm / 635nm.

Application Notes: Clone AER-37 (CRA-1) has been reported to bind the receptor even in the presence of IgE.4

Application References:

1. Yamaguchi M, *et al.* 1999. *J. Immunol.* 162:5455.
2. Suzukawa M, *et al.* 2005. *Int. Immunol.* 17:1249.
3. Charles N, *et al.* 2010. *Nat. Med.* 16:701. (FC) PubMed
4. Yamaguchi M, *et al.* 1999. *J. Immunol.* 162:5455.

Description: High affinity IgE receptor (FcεRI) plays a key role in IgE-mediated allergic immune response. FcεRI is a tetrameric receptor complex, which is composed of one α-subunit (FcεRIα), one β-subunit, and two γ-subunits. FcεRIα directly binds IgE with high affinity, while the β- and γ-chains are responsible for mediating intracellular signals. FcεRIα is a 50 kD transmembrane protein with Ig superfamily structure. It is primarily found on mast cells and basophils. Further studies have indicated that FcεRIα is also expressed on many inflammatory cells including cutaneuos Langerhans cells, dendritic cells, monocytes of patients with allergic disorders, platelets, bronchial epithelial cells, eosinophils produced in hypereosinophilic syndrome, and neutrophils from allergy-induced asthma patients.

Antigen References:

1. Riske F, *et al.* 1991. *J. Biol. Chem.* 266:11245
2. Gounni AS, *et al.* 2001. *FASEB J.* 15:940.
3. Maurer D, *et al.* 1996. *J. Immunol.* 157:607

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4. Maurer d, *et al.* 1994. *J. E*