## SONY

## **Product Data Sheet**

## Alexa Fluor® 488 anti-human FcεRIα

**Catalog # / Size:** 2273195 / 25 tests

2273200 / 100 tests

**Clone:** AER-37 (CRA-1) **Isotype:** Mouse IgG2b, κ

Reactivity: Human
Concentration: NULL

## **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® 488 has a maximum emission of 519 nm when it is excited at 488

nm.

Application Notes:

Clone AER-37 (CRA-1) has been reported to bind the receptor even in the

presence of IgE.4

Application References:

NULL

**Description:** 

High affinity IgE receptor (Fc $\epsilon$ RI) plays a key role in IgE-mediated allergic immune response. Fc $\epsilon$ RI is a tetrameric receptor complex, which is composed of one  $\alpha$ -subunit (Fc $\epsilon$ RI $\alpha$ ), one  $\beta$ -subunit, and two  $\gamma$ -subunits. Fc $\epsilon$ RI $\alpha$  directly binds IgE with high affinity, while the  $\beta$ - and  $\gamma$ -chains are responsible for mediating intracellular signals. Fc $\epsilon$ RI $\alpha$  is a 50 kD transmembrane protein with Ig superfamily structure. It is primarily found on mast cells and basophils. Further studies have indicated that Fc $\epsilon$ RI $\alpha$  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.