

### 30-2937: Anti-Human Fc epsilon RIa Monoclonal Antibody (Clone: AER-37 [CRA1])

|                           |                           |
|---------------------------|---------------------------|
| <b>Clonality :</b>        | Monoclonal                |
| <b>Clone Name :</b>       | AER-37 [CRA1]             |
| <b>Application :</b>      | IHC-Fr, ICC, FACS         |
| <b>Reactivity :</b>       | Human, Non-Human Primates |
| <b>Gene :</b>             | FCER1A                    |
| <b>Gene ID :</b>          | 2205                      |
| <b>Uniprot ID :</b>       | P12319                    |
| <b>Format :</b>           | Purified                  |
| <b>Alternative Name :</b> | FcεR1α, FCER1A            |
| <b>Isotype :</b>          | Mouse IgG2b kappa         |

#### Description

**Specificity:** The mouse monoclonal antibody AER-37 [CRA1] recognizes an extracellular epitope of the high-affinity IgE receptor I alpha subunit (Fc epsilon RIa).

**Background:** FcεRIα serves as the IgE Fc-binding subunit of the high-affinity IgE receptor, expressed on the surface of mast cells and basophils. It associates with one beta and two gamma subunits that contain ITAM sequences in their intracellular domains, that function as docking sites in the process of signalosome forming after FcεRI triggering. Attached IgE gives to the receptor specificity for particular antigens which are target of the type I allergen sensitivity or hypersensitivity reaction, and prolongs stability of the receptor on the cell surface. Under physiological conditions this system protects the body against helminths and other parasites and venom toxins, but when dysregulated, it can lead to undesired allergic reactions and anaphylactic shock.

#### Product Info

|                            |  |
|----------------------------|--|
| <b>Amount :</b>            | 0.1 mg   |
| <b>Purification :</b>      | Purified by protein-A affinity chromatography.   |
| <b>Content :</b>           | Concentration: 1 mg/ml<br>Formulation: Phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide |
| <b>Storage condition :</b> | Store at 2-8°C. Do not freeze.   |

#### Application Note

Flow cytometry: Recommended dilution: 1-5 µg/ml.

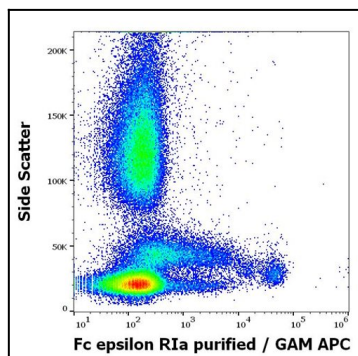


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human Fc epsilon RIa (AER-37 [CRA1]) purified antibody (concentration in sample 5 µg/ml) GAM APC.

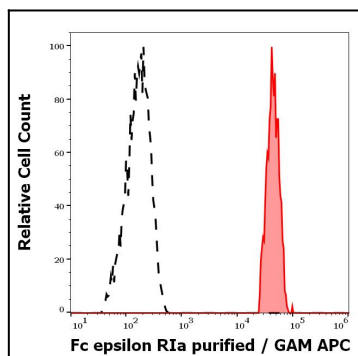


Figure 2: Separation of human Fc epsilon RIa positive events (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human Fc epsilon RIa (AER-37 [CRA1]) purified antibody (concentration in sample 5 µg/ml) GAM APC.