

### Fc Epsilon RI / FcERI Antibody (clone AER-37 (CRA1)) Mouse Monoclonal Antibody Catalog # ALS13121

## Specification

# Fc Epsilon RI / FcERI Antibody (clone AER-37 (CRA1)) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW IHC <u>P12319</u> Human Mouse Monoclonal 30kDa KDa

## Fc Epsilon RI / FcERI Antibody (clone AER-37 (CRA1)) - Additional Information

Gene ID 2205

**Other Names** High affinity immunoglobulin epsilon receptor subunit alpha, Fc-epsilon RI-alpha, FcERI, IgE Fc receptor subunit alpha, FCER1A, FCE1A

**Reconstitution & Storage** Store at 4°C, avoid repeated freeze thaw cycles.

**Precautions** 

Fc Epsilon RI / FcERI Antibody (clone AER-37 (CRA1)) is for research use only and not for use in diagnostic or therapeutic procedures.

## Fc Epsilon RI / FcERI Antibody (clone AER-37 (CRA1)) - Protein Information

Name FCER1A

Synonyms FCE1A

#### Function

High-affinity receptor for immunoglobulin epsilon/IgE. Mediates IgE effector functions in myeloid cells. Upon IgE binding and antigen/allergen cross-linking initiates signaling pathways that lead to myeloid cell activation and differentiation. On mast cells, basophils and eosinophils stimulates the secretion of vasoactive amines, lipid mediators and cytokines that contribute to inflammatory response, tissue remodeling and cytotoxicity against microbes. Triggers the immediate hypersensitivity response to allergens as a host defense mechanism against helminth parasites, pathogenic bacteria and venom toxicity. When dysregulated, it can elicit harmful life-threatening allergic and anaphylactic reactions.

**Cellular Location** Cell membrane; Single-pass type I membrane protein

**Tissue Location** 



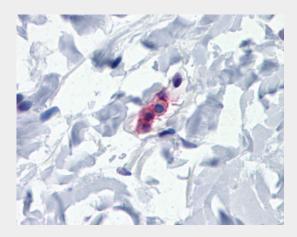
Expressed in eosinophils.

## Fc Epsilon RI / FcERI Antibody (clone AER-37 (CRA1)) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Fc Epsilon RI / FcERI Antibody (clone AER-37 (CRA1)) - Images



 $\label{eq:anti-FCER1A} \mbox{ antibody IHC of human mast cell in human small intestine.}$ 

# Fc Epsilon RI / FcERI Antibody (clone AER-37 (CRA1)) - Background

Binds to the Fc region of immunoglobulins epsilon. High affinity receptor. Responsible for initiating the allergic response. Binding of allergen to receptor-bound IgE leads to cell activation and the release of mediators (such as histamine) responsible for the manifestations of allergy. The same receptor also induces the secretion of important lymphokines.

## Fc Epsilon RI / FcERI Antibody (clone AER-37 (CRA1)) - References

Kochan J., et al. Nucleic Acids Res. 16:3584-3584(1988). Shimizu A., et al. Proc. Natl. Acad. Sci. U.S.A. 85:1907-1911(1988). Yagi S., et al. Eur. J. Biochem. 220:593-598(1994). Padlan E.A., et al. Receptor 2:129-144(1992). Garman S.C., et al. Cell 95:951-961(1998).