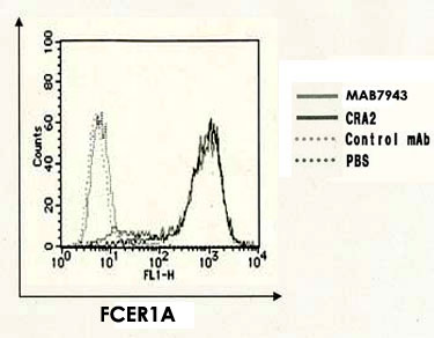
# FCER1A monoclonal antibody, clone CRA2

Catalog # MAB7946 Size 100 ug

## Applications




### Flow Cytometry

FACS analysis of Chinese hamster ovary (CHO) transfectant cells expressing FCER1A (1 X 10$^5$) with FCER1A monoclonal antibody, clone CRA1 (Cat # MAB7943) and CRA2 antibodies by Indirect-immunostaining, using FITC-labeled secondary antibody.

## Specification

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|---|---|
| **Product Description** | Mouse monoclonal antibody raised against recombinant FCER1A. |
| **Immunogen** | Recombinant protein corresponding to human FCER1A. |
| **Host** | Mouse |
| **Reactivity** | Human |
| **Form** | Liquid |
| **Isotype** | IgG1, kappa |
| **Recommend Usage** | Western Blot (1 ug/mL)<br>The optimal working dilution should be determined by the end user. |
| **Storage Buffer** | In PBS, pH 7.4 (50% glycerol) |
| **Storage Instruction** | Store at -20°C.<br>Aliquot to avoid repeated freezing and thawing. |

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## Applications

- Immunohistochemistry
- Flow Cytometry

  FACS analysis of Chinese hamster ovary (CHO) transfectant cells expressing FCER1A (1 X $10^5$) with FCER1A monoclonal antibody, clone CRA1 (Cat # MAB7943) and CRA2 antibodies by Indirect-immunostaining, using FITC-labeled secondary antibody.

- Western Blot

## Gene Info — FCER1A

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|---|---|
| **Entrez GeneID** | 2205 |
| **Gene Name** | FCER1A |
| **Gene Alias** | FCE1A, FcERI |
| **Gene Description** | Fc fragment of IgE, high affinity I, receptor for; alpha polypeptide |
| **Omim ID** | 147140 |
| **Gene Ontology** | Hyperlink |
| **Gene Summary** | The IgE receptor plays a central role in allergic disease, coupling allergen and mast cell to initiate the inflammatory and immediate hypersensitivity responses that are characteristic of disorders su ch as hay fever and asthma. The allergic response occurs when 2 or more high-affinity IgE recept ors are crosslinked via IgE molecules that in turn are bound to an allergen (antigen) molecule. A p erturbation occurs that brings about the release of histamine and proteases from the granules in t he cytoplasm of the mast cell and leads to the synthesis of prostaglandins and leukotrienes--poten t effectors of the hypersensitivity response. The IgE receptor consists of 3 subunits: alpha, beta (M IM 147138), and gamma (MIM 147139); only the alpha subunit is glycosylated.[supplied by OMIM |
| **Other Designations** | Fc IgE receptor, alpha polypeptide\|Fc epsilon RI alpha-chain\|Fc-epsilon RI-alpha\|high affinity imm unoglobulin epsilon receptor alpha-subunit\|immunoglobulin E receptor, high-affinity, of mast cells, alpha polypeptide |

## Publication Reference

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- Epitope analysis and primary structures of variable regions of anti-human FcepsilonRI monoclonal antibodies, and expression of the chimeric antibodies fused with human constant regions.

  Takai T, Yuuki T, Iwamoto-Yasue N, Okumura K, Ra C.

  Bioscience, Biotechnology, and Biochemistry 2000 Sep; 64(9):1856.

  Application: WB-Re, Recombinant protein

- The alpha subunit of the human IgE receptor (FcERI) is sufficient for high affinity IgE binding.

  Hakimi J, Seals C, Kondas JA, Pettine L, Danho W, Kochan J.

  The Journal of Biological Chemistry 1990 Dec; 265(36):22709.

- A macrophage Fc gamma receptor and the mast cell receptor for IgE share an identical subunit.

  Ra C, Jouvin MH, Blank U, Kinet JP.

  Nature 1989 Oct; 341(6244):752.

## Pathway

- Asthma
- Fc epsilon RI signaling pathway

## Disease

- Asthma
- Birth Weight
- Breast cancer
- Breast Neoplasms
- Bronchiolitis
- Cardiovascular Diseases
- Chronic Disease
- Coronary Artery Disease
- Dermatitis
- Drug Hypersensitivity

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- Eczema
- Genetic Predisposition to Disease
- Glioblastoma
- Glioma
- Glomerulonephritis
- Hypersensitivity
- Infant
- Inflammation
- Inflammatory Bowel Diseases
- Kidney Diseases
- Leukemia
- Meningeal Neoplasms
- Meningioma
- Occupational Diseases
- Periodontitis
- Respiratory Syncytial Virus Infections
- Urticaria
- Wegener Granulomatosis

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