

FCER1A Antibody

Purified Mouse Monoclonal Antibody Catalog # AO2285a

Specification

FCER1A Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**

WB, FC, E <u>P12319</u> Human Mouse Monoclonal IgG1 29.6kDa KDa

The immunoglobulin epsilon receptor (IgE receptor) is the initiator of the allergic response. When two or more high-affinity IgE receptors are brought together by allergen-bound IgE molecules, mediators such as histamine that are responsible for allergy symptoms are released. This receptor is comprised of an alpha subunit, a beta subunit, and two gamma subunits. The protein encoded by this gene represents the alpha subunit.

Immunogen Purified recombinant fragment of human FCER1A (AA: 42-103) expressed in E. Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

FCER1A Antibody - 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

Dilution WB~~1/500 - 1/2000 FC~~1/200 - 1/400 E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions FCER1A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

FCER1A Antibody - 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.

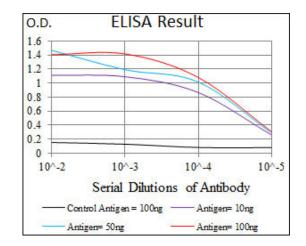
Cellular Location Cell membrane; Single-pass type I membrane protein

Tissue Location Expressed in eosinophils.

FCER1A Antibody - Protocols

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

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



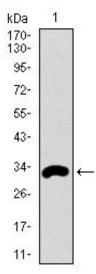


Figure 1: Western blot analysis using FCER1A mAb against human FCER1A recombinant protein. (Expected MW is 32.5 kDa)

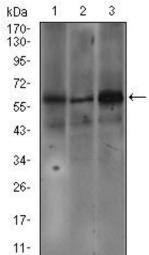


Figure 2: Western blot analysis using FCER1A mouse mAb against SW620 (1), A549 (2), and A431 (3) cell lysate.

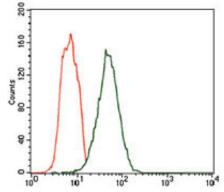


Figure 3: Flow cytometric analysis of HEK293 cells using FCER1A mouse mAb (green) and negative control (red).

FCER1A Antibody - References

1.Hum Immunol. 2012 Mar;73(3):301-5. 2.Mol Immunol. 2011 Apr;48(8):979-80.

