Mouse FcERI / FCER1A Protein (Fc Tag)

Catalog Number: **50935-M02H**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

FCE1A; FcERI; Fce1a; fcepsilonri; FcERI; Fcr-5

Protein Construction:

A DNA sequence encoding the mouse FCER1A (P20489) (Met1-Gln204) was expressed, fused with the Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Ala 24

Molecular Mass:

The recombinant mouse FCER1A /Fc is a disulfide-linked homodimer. The reduced monomer comprises 422 amino acids and has a predicted molecular mass of 48 kDa. The apparent molecular mass of the protein is approximately 63 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

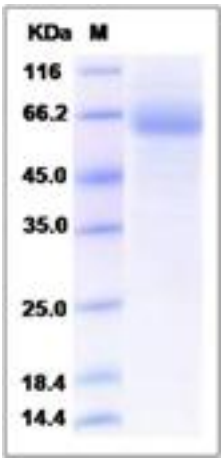
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

FcERI, also known as FCER1A, is the alpha subunit of the immunoglobulin epsilon receptor (IgE receptor). IgE receptor is a high affinity IgE receptor which 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 such as hay fever and asthma. The allergic response occurs when 2 or more IgE receptors are crosslinked via IgE molecules that in turn are bound to an allergen (antigen) molecule. A perturbation occurs that brings about the release of histamine and proteases from the granules in the cytoplasm of the mast cell and leads to the synthesis of prostaglandins and leukotrienes--potent effectors of the hypersensitivity response. IgE receptor is comprised of an alpha subunit(FcERI), a beta subunit, and two gamma subunits. FcERI is glycosylated and contains 2 Ig-like (immunoglobulin-like) domains.

References

1.Shikanai T, *et al.* (2002) Sequence variants in the FcepsilonRI alpha chain gene. J Appl Physiol. 93(1):37-41.
2.Sada K, *et al.* (2002) Regulation of FcepsilonRI-mediated degranulation by an adaptor protein 3BP2 in rat basophilic leukemia RBL-2H3 cells. Blood. 100(6):2138-44.
3.Takahashi K, *et al.* (2003) Transcriptional regulation of the human high affinity IgE receptor alpha-chain gene. Mol Immunol. 38(16-18):1193-9.