

Recombinant Human Fc epsilon RI alpha Protein

Catalog No.: RP00246 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	2205	P12319

Tags

C-His

Synonyms

FCER1A; FCE1A; FcERI

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Endotoxin

< 0.01 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

Background

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.

Basic Information

Description

Recombinant Human Fc epsilon RI alpha Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Val26-Gln205) of human Fc epsilon RI alpha (Accession #NP_001992) fused with a 6xHis tag at the C-terminus.

Bio-Activity

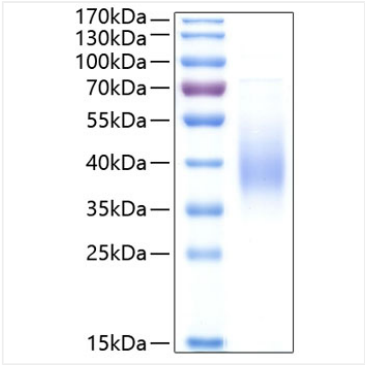
Measured by its binding ability in a functional ELISA. Immobilized FITC anti-human FcεRIα Antibody at 1 μg/mL (25 μL/well) can bind Human Fc epsilon RI alpha with a linear range of 0.46-3.15 ng/mL.

Storage

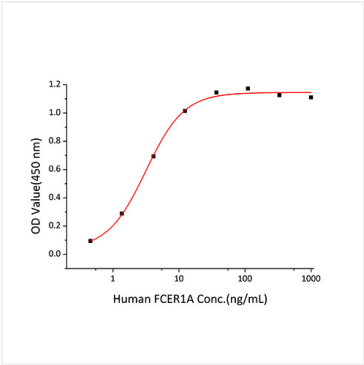
Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

Validation Data



Recombinant Human Fc epsilon RI alpha Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 38-50 kDa.



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