

Synonym

FCER1A,FCE1A,FcERI

Source

Cynomolgus Fc epsilon RI alpha, Fc Tag(FCA-C5255) is expressed from human 293 cells (HEK293). It contains AA Val 29 - Lys 204 (Accession # [A0A7N9DA09-1](#)).

Predicted N-terminus: Val 29

Molecular Characterization

FCER1A(Val 29 - Lys 204) A0A7N9DA09-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 46.9 kDa. The protein migrates as 60-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

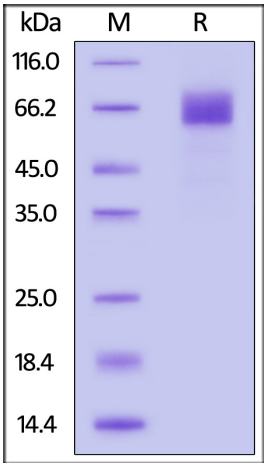
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

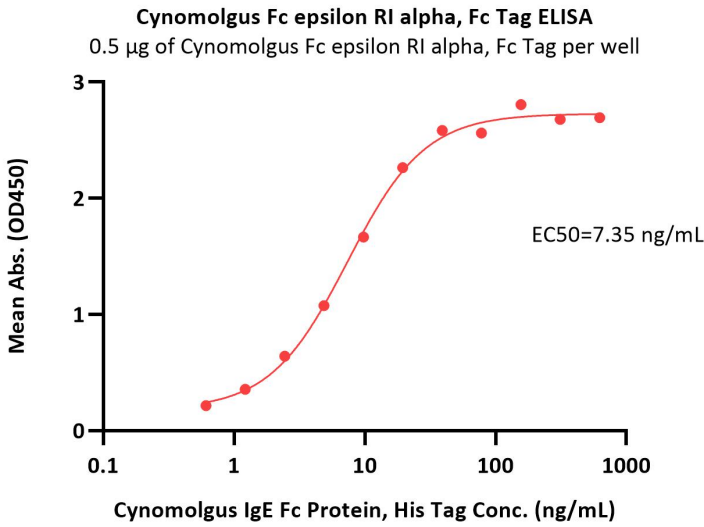
SDS-PAGE



Cynomolgus Fc epsilon RI alpha, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

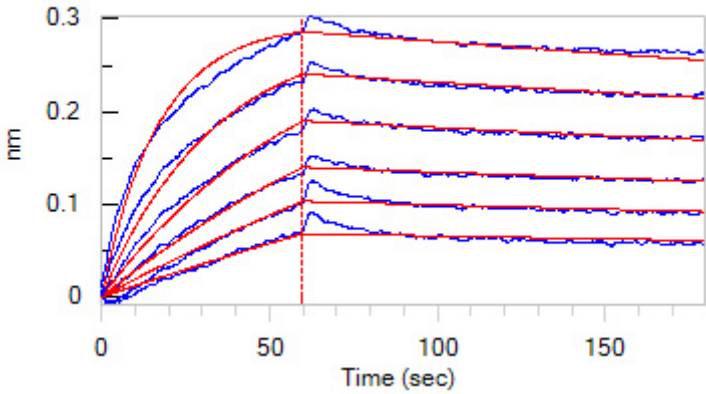
Bioactivity-ELISA





Immobilized Cynomolgus Fc epsilon RI alpha, Fc Tag (Cat. No. FCA-C5255) at 5 µg/mL (100 µL/well) can bind Cynomolgus IgE Fc Protein, His Tag (Cat. No. IGE-C52H3) with a linear range of 0.6-20 ng/mL (Routinely tested).

Bioactivity-BLI



Loaded Cynomolgus Fc epsilon RI alpha, Fc Tag (Cat. No. FCA-C5255) on AHC Biosensor, can bind Immunoglobulin E, Human Plasma with an affinity constant of 1.65 nM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).

Background

High affinity immunoglobulin epsilon receptor subunit alpha (FCER1A) is also known as Fc-epsilon RI-alpha (FcERI), IgE Fc receptor subunit alpha, FCE1A. FCER1A contains two Ig-like (immunoglobulin-like) domains. FCER1A binds to the Fc region of immunoglobulins epsilon and is a high affinity receptor. FCER1A is responsible for initiating the allergic response, which 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. FCER1A 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.

