

Recombinant Protein Technical Manual Recombinant Mouse FcERI/FCER1A Protein (Fc Tag)

RPES3711

Product Data:

Product SKU: RPES3711 **Size:** 50μg

Species: Mouse Expression host: HEK293 Cells

Uniprot: P20489

Protein Information:

Molecular Mass: 48 kDa

AP Molecular Mass: 63 kDa

Tag: C-Fc

Bio-activity:

Purity: > 85 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g}$ of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Fce1a;fcepsilonri;FcERI;Fcr-5

Immunogen Information:

Sequence: Met1-Gln204

Background:

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.