

Fc-Epsilon RI-Alpha Recombinant Protein | Fc-Epsilon recombinant protein

Recombinant Human Fc-Epsilon RI-Alpha, HEK

CATALOG #
AAA38075

HOST
HEK293

PRODUCT SYNONYMS

Fc-Epsilon RI-Alpha; Recombinant Human Fc-Epsilon RI-Alpha; HEK; Fc-Epsilon RI-Alpha Human Recombinant; FCER1A; FCER1A Human; FCERIA; FCERA; Fc epsilon receptor 1a; Fcepsilon RI-alpha; Fc epsilon RI alpha chain; FcERI; High affinity immunoglobulin epsilon receptor subunit alpha isoform1; IgE Fc receptor subunit alpha; FCE1A.; Fc-Epsilon recombinant protein

PRODUCT SPECIFICATIONS

Host	HEK293
Purity/Purification	Greater than 90% as determined by SDS-PAGE.
Form/Format	Sterile Filtered colorless solution. FCER1A protein solution (1mg/ml) containing 10% Glycerol and Phosphate-Buffered Saline (pH 7.4).
Sequence	VPQKPKVSLN PPWNRIFKGE NVTLCNGNN FFEVSSTKWF HNGSLSEETN SSLNIVNAKF EDSGEYKCQH QQVNESEPVY LEVFSDWLLL QASAEVVM EG QPLFLRCHGW RNWDVYKVIY YKDGEALKYW YENHNISITN ATVEDSGTYY CTGKVVQLDY ESEPLNITVI KAPREKYWLQ HHHHHH
Biological Activity	The ED50 range ≤ 0.01 ug/ml and is measured by its binding ability in a functional ELISA with Human IgE.
Preparation and Storage	Store at 4 degree C if entire vial will be used within 2-4 weeks. Store, frozen at -20 degree C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

ADDITIONAL INFORMATION

Related Product Information for Fc-Epsilon recombinant protein	FCER1A Human Recombinant produced in HEK293 Cells is a single, glycosylated polypeptide chain containing 186 amino acids (26-205aa) and having a molecular mass of 21.8kDa. FCER1A is fused to a 6 His-tag at C-terminus & purified by proprietary chromatographic techniques. The FCER1A gene encodes the alpha subunit of the high-affinity immunoglobulin E (IgE) receptor, known as FCER1A. This receptor is primarily expressed on mast cells and basophils, and its activation plays a pivotal role in allergic and inflammatory responses. This research aims to explore the significance of FCER1A and its potential implications in allergic disorders and immune-mediated diseases. By investigating the functions and regulation of FCER1A, we can gain insights into its role in immune responses and identify potential therapeutic targets. The FCER1A receptor is responsible for the binding of IgE antibodies, initiating a cascade of signaling events upon allergen exposure. Crosslinking of IgE-bound FCER1A leads to the release of various inflammatory mediators, such as histamine, cytokines, and leukotrienes, which contribute to the clinical manifestations of allergic reactions. Understanding the molecular mechanisms underlying FCER1A activation and downstream signaling is crucial for comprehending allergic diseases. In addition to its role in allergies, FCER1A has been implicated in immune-mediated inflammatory diseases, including asthma, atopic dermatitis, and autoimmune conditions. Dysregulation of FCER1A expression and signaling pathways can lead to exaggerated immune responses and chronic inflammation. Investigating the genetic and epigenetic factors influencing FCER1A expression and the interplay between FCER1A and other immune molecules can provide valuable insights into disease pathogenesis. This research will delve into the molecular mechanisms governing FCER1A expression, activation, and downstream signaling pathways. The paper will explore the regulatory effects of FCER1A on mast cell and basophil activation, the release of inflammatory mediators, and the recruitment of other immune cells. Additionally, it will examine the impact of FCER1A dysregulation in allergic and immune-mediated diseases and discuss the potential of FCER1A as a therapeutic target for intervention. The study will also investigate the test and prognostic value of FCER1A in various allergic and immune disorders. Understanding the expression patterns and alterations of FCER1A in different diseases and patient populations may aid in disease stratification, treatment selection, and monitoring of treatment response. By unraveling the molecular mechanisms underlying FCER1A's functions in allergic and inflammatory responses, this research aims to contribute to our understanding of immune-mediated diseases. Furthermore, it highlights the potential of FCER1A as a target for therapeutic interventions and emphasizes the need for further investigations to develop novel treatments and improve patient outcomes.
Product Categories/Family for Fc-Epsilon recombinant protein	RECOMBINANT & NATURAL PROTEINS

NCBI AND UNIPROT INFORMATION

NCBI GI #	119865
NCBI GeneID	2205
UniProt Accession #	P12319
Molecular Weight	30kDa
NCBI Official Full Name	High affinity immunoglobulin epsilon receptor subunit alpha
NCBI Official Synonym Full Names	Fc fragment of IgE, high affinity I, receptor for; alpha polypeptide
NCBI Official Symbol	FCER1A
NCBI Official Synonym Symbols	FCE1A; FcERI
NCBI Protein Information	high affinity immunoglobulin epsilon receptor subunit alpha; Fc-epsilon RI-alpha; Fc epsilon RI alpha-chain; i g E Fc receptor subunit alpha; Fc IgE receptor, alpha polypeptide; high affinity immunoglobulin epsilon receptor alpha-subunit; immunoglobulin E r
UniProt Protein Name	High affinity immunoglobulin epsilon receptor subunit alpha
UniProt Gene Name	FCER1A
UniProt Synonym Gene Names	FCE1A; FcERI
UniProt Entry Name	FCERA_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/fcer1a-recombinant-protein-hek293/38075>