

Recombinant Human IL36B Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50530

Size: 10ug, 100ug

Protein Name: Interleukin-36 beta (FIL1 eta) (Interleukin-1 eta) (IL-1 eta) (Interleukin-1 family member 8) (IL-1F8) (Interleukin-1 homolog 2) (IL-1H2)

Synonym: IL36B, IL1F8, IL1H2

UniProt ID: Q9NZH7

UniProt Link: www.uniprot.org/uniprotkb/Q9NZH7/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 164 AA

Molecular Weight: 19 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MNPQREAAPKSYAIRDSRQMWWVLSGNSLIAAPLSRSIKPVTLHLIACRDTEFSDKEKGNMVYLGIGK
KDLCLFCAEIQGGKPTLQLKLQGSQDNIGKDTCWKLVGIIHTCINLDVRESCFMGTLDQWGIGVGRKKW
KSSFQHHHLRKKDKDFSSMRTNIGMPGRM

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Interleukin-36 beta (FIL1 eta) (Interleukin-1 eta) (IL-1 eta) (Interleukin-1 family member 8) (IL-1F8) (Interleukin-1 homolog 2) (IL-1H2) produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Cytokine that binds to and signals through the IL1RL2/IL-36R receptor which in turn activates NF-kappa-B and MAPK signaling pathways in target cells linked to a pro-inflammatory response. Part of the IL-36 signaling system that is thought to be present in epithelial barriers and to take part in local inflammatory response; similar to the IL-1 system with which it shares the coreceptor IL1RAP. Stimulates production of interleukin-6 and interleukin-8 in synovial fibroblasts, articular chondrocytes and mature adipocytes. Induces expression of a number of antimicrobial peptides including beta-defensins 4 and 103 as well as a number of matrix metalloproteases. Seems to be involved in skin inflammatory response by acting on keratinocytes, dendritic cells and indirectly on T-cells to drive tissue infiltration, cell maturation and cell proliferation. In cultured keratinocytes induces the expression of macrophage, T-cell, and neutrophil chemokines, such as CCL3, CCL4, CCL5, CCL2, CCL17, CCL22, CCL20, CCL5, CCL2, CCL17, CCL22, CXCL8, CCL20 and CXCL1, and the production of pro-inflammatory cytokines such as TNF, IL-8 and IL-6.

Subcellular Localization: Cytoplasm . Secreted . Note=The secretion is dependent on protein unfolding and facilitated by the cargo receptor TMED10; it results in protein translocation from the cytoplasm into the ERGIC (endoplasmic reticulum-Golgi intermediate compartment) followed by vesicle entry and secretion.

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.