

Recombinant Mouse IL36G Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51796

Size: 10ug, 100ug

Protein Name: Interleukin-36 gamma (Interleukin-1 family member 9) (IL-1F9)

Synonym: Il36g, Il1f9

UniProt ID: Q8R460

UniProt Link: www.uniprot.org/uniprotkb/Q8R460/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 164 AA

Molecular Weight: 19 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MFSKHPFSTHISGRETPDFGEVFDLDQQVWIFRNQALVTVPRSHRVTPVSVTILPCKYPESLEQDKGI
AIYLGIQNPDKCLFCKEVNGHPTLLKKEEKILDLYHHPEPMKPFLFYHTRTGGTSTFESVAFPGHYIAS
SKTGNPIFLTSSKGEYYNINFNLDIKS

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 gamma (Interleukin-1 family member 9) (IL-1F9) 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: Functions as an agonist of NF-kappa B activation through the orphan IL-1-receptor-related protein 2/IL1RL2. 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 (By similarity). 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. May play a role in pro-inflammatory responses during particular neutrophilic airway inflammation. May be involved in the innate immune response to fungal pathogens. Induces the production of pro-inflammatory cytokines in bone marrow-derived dendritic cells (BMDCs), including IL-12, IL-1 beta, IL-6, TNF and IL-23. Involved in dendritic cell maturation by stimulating the surface expression of CD80, CD86 and MHC class II. Induces the production of IFN-gamma, IL-4 and IL-17 by cultured CD4(+) T-cells and splenocytes.

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.