

Recombinant Mouse IL24 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51844

Size: 10ug, 100ug

Protein Name: Interleukin-24 (IL-24) (IL-4-induced secreted protein) (Melanoma differentiation-associated gene 7 protein) (MDA-7) (Th2-specific cytokine FISP)

Synonym: Il24, Mda7

UniProt ID: Q925S4

UniProt Link: www.uniprot.org/uniprotkb/Q925S4/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 220 AA

Molecular Weight: 25 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MLTEPAQLFVHKKNQPPSHSSLRLHFRTLALAGALSSTQMSWGLQILPCLSLILLWNQVPGLEGQE
FRFGSCQVTGVVLPPELWEAFWTVKNTVQTQDDITSIRLLKPQVLRNVSGAESCYLEHSLKLFYLNVT
FKNYHSKIAKFKVLRFSSTLANNFIVIMSQLQPSKDNSMLPISESAHQRFLLFRRAFKQLDTEVALVKA
FGEVDILLTWMQKFYHL

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-24 (IL-24) (IL-4-induced secreted protein) (Melanoma differentiation-associated gene 7 protein) (MDA-7) (Th2-specific cytokine FISP) 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: Multifunctional cytokine mainly produced by T-cells that plays a regulatory role in immune response, tissue homeostasis, host defense, and oncogenesis (PubMed:31907348, PubMed:35148201). Possesses antiviral functions and induces the type I interferon response during influenza infection. Signals through two receptor complexes IL20RA/IL20RB or IL20RB/IL22RA1. In turn, stimulates the JAK1-STAT3 and MAPK pathways and promotes the secretion of pro-inflammatory mediators including IL8 and MMP1 (By similarity). Intracellularly, maintains endoplasmic reticulum homeostasis by restricting the eIF2alpha-CHOP pathway-mediated stress signal (PubMed:31907348). In addition, acts as a quality control mechanism for the ubiquitin proteasome system by alerting the cell to proteasome dysfunction through activation of PKR/EIF2AK2 (PubMed:35148201).; [Isoform 2]: May negatively regulate isoform 1 activity by causing its retention in the endoplasmic reticulum and increasing isoform 1 degradation by the ubiquitin proteasome pathway.

Subcellular Localization: [Isoform 1]: Secreted .; [Isoform 2]: Endoplasmic reticulum .

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.