

Recombinant Mouse IL22 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51929

Size: 10ug, 100ug

Protein Name: Interleukin-22 (IL-22) (IL-10-related T-cell-derived-inducible factor) (IL-TIF) (IL-TIF alpha) (Interleukin-22a) (IL-22a)

Synonym: Il22, Il22a, Iltif, Iltifa

UniProt ID: Q9JJY9

UniProt Link: www.uniprot.org/uniprotkb/Q9JJY9/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 179 AA

Molecular Weight: 20 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAVLQKSMSFSLMGTLAASCLLLIALWAQEANALPVNTRCKLEVSNFQQPYIVNRTFMLAKEASLAD
NNTDVRLIGEKLFRGVSAKDQCYLEMKQVLNFTLEDVLLPQSDRFQPYMQEVPFLTKLSNQLSSCHI
SGDDQNIQKNVRLKETVKKLGESGEIKAIGELDLLFMSLRNACV

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-22 (IL-22) (IL-10-related T-cell-derived-inducible factor) (IL-TIF) (IL-TIF alpha) (Interleukin-22a) (IL-22a) 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 plays a critical role in modulating tissue responses during inflammation (PubMed:33852830, PubMed:35525330). Plays an essential role in the regeneration of epithelial cells to maintain barrier function after injury and for the prevention of further tissue damage (PubMed:33912578). Unlike most of the cytokines, has no effect on immune cells. Signals through a heterodimeric receptor composed of two subunits, the specific receptor IL22RA1 which is present on non-immune cells in many organs and the shared subunit IL10RB. Ligation of IL22RA1 with IL22 induces activation of the tyrosine kinases JAK1 and TYK2, which in turn activates STAT3. In turn, promotes cell survival and proliferation through STAT3, ERK1/2 and PI3K/AKT pathways. Promotes phosphorylation of GSK3B at 'Ser-9' and CTTN (PubMed:24742671). Promotes epithelial cell spreading (PubMed:24742671).

Subcellular Localization: Secreted.

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.