

Recombinant Human IL22 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50512

Size: 10ug, 100ug

Protein Name: Interleukin-22 (IL-22) (Cytokine Zcyto18) (IL-10-related T-cell-derived-inducible factor) (IL-TIF)

Synonym: IL22, ILTIF, ZCYTO18, UNQ3099/PRO10096

UniProt ID: Q9GZX6

UniProt Link: www.uniprot.org/uniprotkb/Q9GZX6/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 179 AA

Molecular Weight: 20 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAALQKSVSSFLMGTLATSCLLLLALLVQGGAAAPISSHCRLDKSNFQQPYITNRTFMLAKEASLADN
NTDVRLIGEKLFGVSMSERCYLMKQVLNFTLEEVLPQSDRFQPYMQEVVPFLARLSNRLSTCHIE
GDDLHIQRNVQKLKDTVKKLGESGEIKAIGELDLLFMSLRNACI

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) (Cytokine Zcyto18) (IL-10-related T-cell-derived-inducible factor) (IL-TIF) 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:17204547). 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:17204547). 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 (PubMed:10875937, PubMed:18599299). 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 (PubMed:25793261, PubMed:31311100). Promotes phosphorylation of GSK3B at 'Ser-9' and CTTN (By similarity). Promotes epithelial cell spreading (By similarity).

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.