

Recombinant Rat IL21 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52623

Size: 10ug, 100ug

Protein Name: Interleukin-21 (IL-21)

Synonym: IL21

UniProt ID: A3QPB9

UniProt Link: www.uniprot.org/uniprotkb/A3QPB9/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 146 AA

Molecular Weight: 17 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MERTLVCLILIFLGTVAHKSSPQRPDHLLIRLRHLM DIVEQLKIYENDLDPELLTAPQDVKGQCEHEAF
ACFQKAKLKPSNTGNNKTFINDLLAQLRRRLPAKRTGNKQRHMAKCPSCDLYEKKTPKEFLERLKW
LLQKMIHQHLS

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-21 (IL-21) 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 with immunoregulatory activity. May promote the transition between innate and adaptive immunity. Induces the production of IgG(1) and IgG(3) in B-cells. Implicated in the generation and maintenance of T follicular helper (Tfh) cells and the formation of germinal-centers. Together with IL6, control the early generation of Tfh cells and are critical for an effective antibody response to acute viral infection (By similarity). May play a role in proliferation and maturation of natural killer (NK) cells in synergy with IL15. May regulate proliferation of mature B- and T-cells in response to activating stimuli. In synergy with IL15 and IL18 stimulates interferon gamma production in T-cells and NK cells (By similarity). During T-cell mediated immune response may inhibit dendritic cells (DC) activation and maturation (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.