

Recombinant Rat IL5 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52459

Size: 10ug, 100ug

Protein Name: Interleukin-5 (IL-5) (B-cell growth factor II) (BCGF-II) (Cytotoxic T-lymphocyte inducer) (Eosinophil differentiation factor) (T-cell replacing factor) (TRF)

Synonym: IL5, IL-5

UniProt ID: Q08125

UniProt Link: www.uniprot.org/uniprotkb/Q08125/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 132 AA

Molecular Weight: 15 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MRMLLCCLNVLTLSVCWAIAMEIPMSTVVKETLIQLSTHRALLTSNETMRLPVPTHKNHQLCIGEIFQGL
DILKNQTVRGGTVEILFQNLSLIKKYIDGQKEKCGEERRKTRHFLDYLQEFLGVMSTEWAMEV

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-5 (IL-5) (B-cell growth factor II) (BCGF-II) (Cytotoxic T-lymphocyte inducer) (Eosinophil differentiation factor) (T-cell replacing factor) (TRF) 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: Homodimeric cytokine expressed predominantly by T-lymphocytes and NK cells that plays an important role in the survival, differentiation, and chemotaxis of eosinophils (PubMed:10446387). Acts also on activated and resting B-cells to induce immunoglobulin production, growth, and differentiation (By similarity). Mechanistically, exerts its biological effects through a receptor composed of IL5RA subunit and the cytokine receptor common subunit beta/CSF2RB. Binding to the receptor leads to activation of various kinases including LYN, SYK and JAK2 and thereby propagates signals through the RAS-MAPK and JAK-STAT5 pathways respectively (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.