

Recombinant Human IL3RA Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP50533

Size: 10ug, 100ug

Protein Name: Interleukin-3 receptor subunit alpha (IL-3 receptor subunit alpha) (IL-3R subunit alpha) (IL-3R-alpha) (IL-3RA) (CD antigen CD123)

Synonym: IL3RA, IL3R

UniProt ID: P26951

UniProt Link: www.uniprot.org/uniprotkb/P26951/entry

Species Source: Human

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 378 AA

Molecular Weight: 43 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MVLLWLTLIIALPCLLQTKEDPNPPITNLRMKAKAQQLTWDLNRNVTDIECVKDADYSMPAVNNSY
CQFGAISLCEVTNYTVRVANPPFSTWILFPENSGKPWAGAENLTCWIHDVDFLSCSWAVGPGAPAD
VQYDLYLNVANRRQQYECLHYKTDAGQTRIGCRFDDISRLSSGSQSSHILVRGRSAAFGIPCTDKFV
VFSQIEILTPPNMTAKCNKTHSFMHWKMRSFNRKFRYELQIQKRMQPVITEQVRDRTSFQLLNPGT
YTVQIRARERVYEFLSAWSTPQRFECDEEGANTRAWRTSLIIALGTLLALVCVFVICRRYLVMQRL
FPRIPHKDPIGDSFQNDKLVVWEAGKAGLEECLVTEVQVVQKT

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-3 receptor subunit alpha (IL-3 receptor subunit alpha) (IL-3R subunit alpha) (IL-3R-alpha) (IL-3RA) (CD antigen CD123) 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: Cell surface receptor for IL3 expressed on hematopoietic progenitor cells, monocytes and B-lymphocytes that controls the production and differentiation of hematopoietic progenitor cells into lineage-restricted cells (PubMed:10527461). Ligand stimulation rapidly induces heterodimerization with IL3RB, phosphorylation and enzyme activity of effector proteins such as JAK2 and PI3K that play a role in signaling cell proliferation and differentiation. Activation of JAK2 leads to STAT5-mediated transcriptional program (By similarity).

Subcellular Localization: Cell membrane ; Single-pass type I membrane protein.

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.