

Recombinant Mouse IL3RA Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP51349

Size: 10ug, 100ug

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

Synonym: Il3ra, Sut-1

UniProt ID: P26952

UniProt Link: www.uniprot.org/uniprotkb/P26952/entry

Species Source: Mouse

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 396 AA

Molecular Weight: 43 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAANLWLILGLLASHSSDLAAVREAPPTAVTTPIQNLHIDPAHYTLSDWPAPGADITTGAFCRKGRDIF
VWADPGLARCSFQSLSLCHVTNFTVFLGKDRAVAGSIQFPDDDDGDHEAAAQDLRCWVHEGQLSC
QWERGPKATGDVHYRMFWRDVRLGPAHNRECPHYHSLDVNTAGPAPHGGHEGCTLDLDTVLGST
PNSPDLVPQVTITVNGSGRAGPVPCMDNTVDLQRAEVLAPPTLTVECNGSEAHARWVARNRFHG
LLGYTLQVNQSSRSEPQEYNVSIPHFVWPVNAAGISFRVKSRSEVYPRKLSSWSEAWGLVCPPEVMP
VKTALVTSVATVLGAGLVAAGLLLWWRKSLLYRLCPPIRLRLPLAGEMVWWEPALEDCEVTPVTDA

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) (Interleukin-3 receptor class II alpha chain) (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 (By similarity). 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 (PubMed:10477686, PubMed:31990690). Activation of JAK2 leads to STAT5-mediated transcriptional program (PubMed:10376805).

Subcellular Localization: [Isoform 1]: Cell membrane; Single-pass type I membrane protein. Note=Expressed on the cell surface.; [Isoform 2]: Endomembrane system; Single-pass type I membrane protein. Note=Mostly distributed inside the cells, except in the nuclei and is not transported to the cell surface.

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.