

Recombinant Rat I11RA Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52563

Size: 10ug, 100ug

Protein Name: Interleukin-11 receptor subunit alpha (IL-11 receptor subunit alpha) (IL-11R subunit alpha) (IL-11R-alpha) (IL-11RA) [Cleaved into: Soluble interleukin-11 receptor subunit alpha (sIL-11R) (sIL-11RA) (sIL11RA)]

Synonym: Il11ra1

UniProt ID: Q99MF4

UniProt Link: www.uniprot.org/uniprotkb/Q99MF4/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 431 AA

Molecular Weight: 47 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MSSSRSGLTRVLVAVATALVSSSTPCPQAWGPPGVQYQGQGRPVMLCCPGVNAGTPVSWFRDGD
SRLLQGPD SGLGHRVLVAQVDSRDEGTYVCRTLDGVFGGMVTLKLGSPPARPEVSCQAVDYENFS
CTWSPGRVSGLPTRYLTSYRKKTLPGAESQRESPSTGPWPCPDPLEASRCVVHGAEFWSEYRIN
VTEVNPLGASTCLLDVRLQRILRPDPPQGLRVESVPGYPRRLHASWTYPASWRRQPHFLLKFRLQY
RPAQHPAWSTVEPIGLEELITDAVAGLPHAVRVSARDFLDAGTWSAWSPEAWGTPSTGPLRDEVDP
GSRGHEQKLEAAQEDSPAPPSPSLQPDPRPLDHRDPLEQVAVLASLGIFSFLGLAVGALALGLWLR
LRRSGKDGPKPGFLAPMIPGDKLPGIPNLQRTPENFS

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-11 receptor subunit alpha (IL-11 receptor subunit alpha) (IL-11R subunit alpha) (IL-11R-alpha) (IL-11RA) [Cleaved into: Soluble interleukin-11 receptor subunit alpha (sIL-11R) (sIL-11RA) (sIL11RA)] 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: Receptor for interleukin-11 (IL11). The receptor systems for IL6, LIF, OSM, CNTF, IL11 and CT1 can utilize IL6ST for initiating signal transmission. The IL11/IL11RA/IL6ST complex may be involved in the control of proliferation and/or differentiation of skeletogenic progenitor or other mesenchymal cells. Essential for the normal development of craniofacial bones and teeth. Restricts suture fusion and tooth number.; **[Soluble interleukin-11 receptor subunit alpha]:** Soluble form of IL11 receptor (sIL11RA) that acts as an agonist of IL11 activity. The IL11:sIL11RA complex binds to IL6ST/gp130 on cell surfaces and induces signaling also on cells that do not express membrane-bound IL11RA in a process called IL11 trans-signaling.

Subcellular Localization: [Interleukin-11 receptor subunit alpha]: Membrane ; Single-pass type I membrane protein .; [Soluble interleukin-11 receptor subunit alpha]: 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.