

Synonym

 $IL13RA1,CD213A1,IL-13Ra,NR4,RP13-128O4.2,IL13R\alpha1$

Source

Human IL-13 R alpha 1 Protein, His Tag(IL1-H5224) is expressed from human 293 cells (HEK293). It contains AA Gly 22 - Thr 343 (Accession # NP 001551.1).

Predicted N-terminus: Gly 22

Molecular Characterization

IL-13RA1(Gly 22 - Thr 343) NP_001551.1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 37.7 kDa. The protein migrates as 45-65 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from $0.22~\mu m$ filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

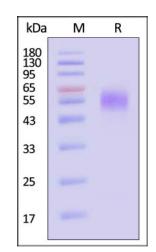
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

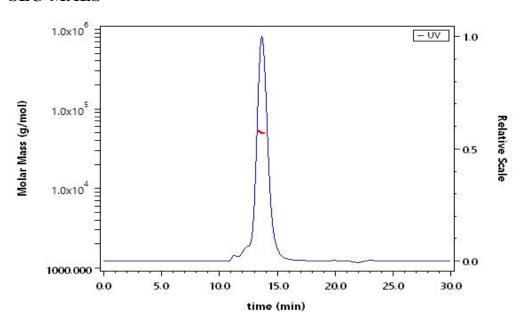
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human IL-13 R alpha 1 Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

SEC-MALS



The purity of Human IL-13 R alpha 1 Protein, His Tag (Cat. No. IL1-H5224) is more than 85% and the molecular weight of this protein is around 45-60 kDa verified by SEC-MALS.

Report

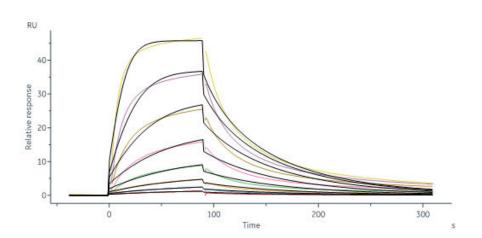
Bioactivity-SPR



Human IL-13 R alpha 1 Protein, His Tag (MALS & SPR verified)

Catalog # IL1-H5224





Human IL-13 R alpha 1 Protein, His Tag (Cat. No. IL1-H5224) immobilized on CM5 Chip can bind Human IL-13 Protein, His Tag with an affinity constant of 46.2 nM as determined in a SPR assay (Biacore 8K) (QC tested).

Background

Interleukin 13 receptor, alpha 1 is also known as IL13RA1, NR4 and CD213A1 (cluster of differentiation 213A1), The IL13 Rα1 cDNA encodes a 427 amino acid (aa) residue precursor protein with a putative 21 aa residue signal peptide, a 324 aa residue extracellular domain, a 23 aa residue transmembrane region and a 59 aa residue cytoplasmic tail. Human and mouseIL13Rα1 share 76% aa sequence identity. IL13RA1 is a subunit of the interleukin 13 receptor. This subunit forms a receptor complex with IL4 receptor alpha, a subunit shared by IL13 and IL4 receptors. This subunit serves as a primary IL13-binding subunit of the IL13 receptor, and may also be a component of IL4 receptors. This protein has been shown to bind tyrosine kinase TYK2, and thus may mediate the signaling processes that lead to the activation of JAK1, STAT3 and STAT6 induced by IL13 and IL4.