

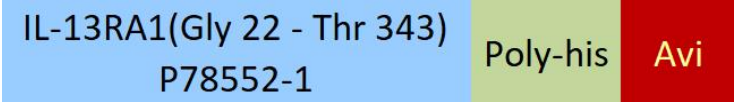
Synonym

IL13RA1,CD213A1,IL-13Ra,NR4,RP13-128O4.2,IL13Rα1

Source

Biotinylated Human IL-13 R alpha 1 Protein, His,Avitag(IL1-H82E8) is expressed from human 293 cells (HEK293). It contains AA Gly 22 - Thr 343 (Accession # [P78552-1](#)).
Predicted N-terminus: Gly 22

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 40.5 kDa. The protein migrates as 50-66 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm 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

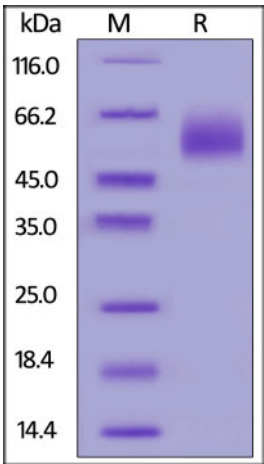
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

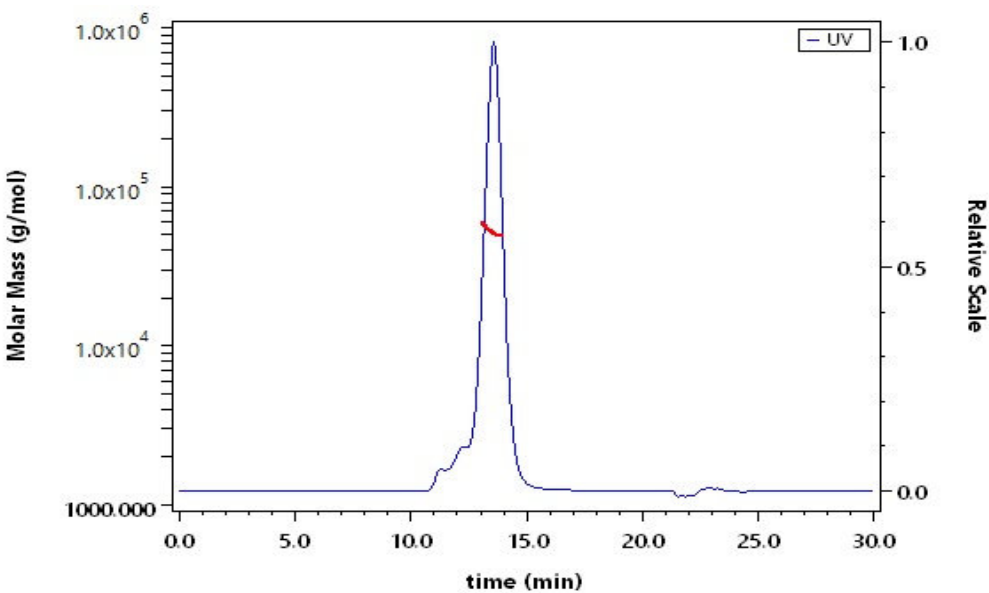
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human IL-13 R alpha 1 Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

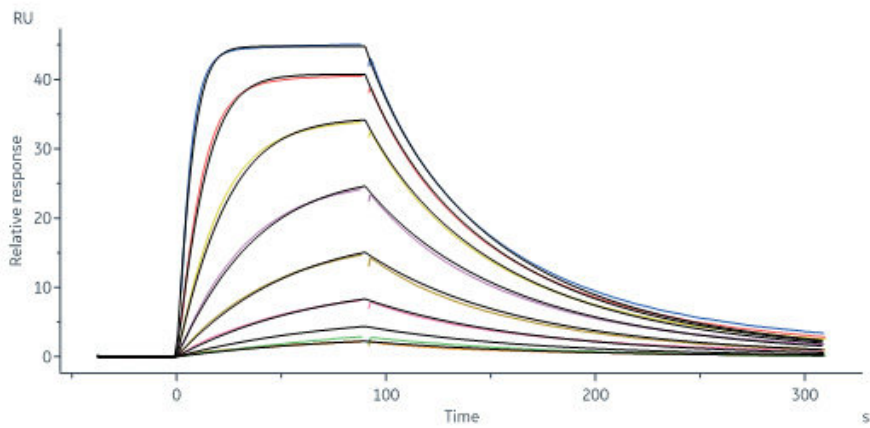


The purity of Biotinylated Human IL-13 R alpha 1 Protein, His,Avitag (Cat. No. IL1-H82E8) is more than 85% and the molecular weight of this protein is around 45-65 kDa verified by SEC-MALS.

[Report](#)

Bioactivity-SPR





Biotinylated Human IL-13 R alpha 1 Protein, His,Avitag (Cat. No. IL1-H82E8) immobilized on SA Chip can bind Human IL-13 Protein, His Tag, premium grade (Cat. No. IL3-H52H3) with an affinity constant of 13.8 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.

