

### **Synonym**

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

#### Source

Cynomolgus IL-13 R alpha 1, His Tag(IL1-C52H8) is expressed from human 293 cells (HEK293). It contains AA Ala 25 - Thr 341 (Accession # XP 005594500.1).

Predicted N-terminus: Ala 25

## **Molecular Characterization**

IL-13RA1(Ala 25 - Thr 341) XP\_005594500.1

Poly-his

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

The protein has a calculated MW of 38.4 kDa. The protein migrates as 47-65 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

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

## **Purity**

>95% 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

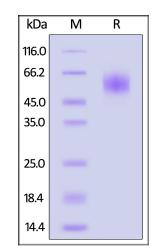
For long term storage, the product should be stored at lyophilized state at -20 $^{\circ}$ C or lower.

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**

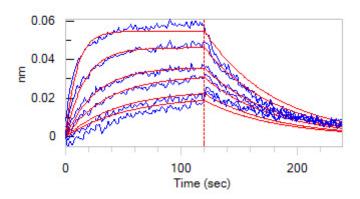


Cynomolgus IL-13 R alpha 1, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

# **Bioactivity-BLI**







Loaded Human IL-13, Fc Tag (Cat. No. IL3-H5256) on Protein A Biosensor, can bind Cynomolgus IL-13 R alpha 1, His Tag (Cat. No. IL1-C52H8) with an affinity constant of 0.739  $\mu$ M as determined in BLI assay (ForteBio Octet Red96e) (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.