

# Human IL-13 Protein

Cat. No. IL1-HM413

## Description

<b>Source</b>	Recombinant Human IL-13 Protein is expressed from HEK293 with His tag and Avi tag at the N-Terminus. It contains Gly21-Asn132.
<b>Accession</b>	AAK53823
<b>Molecular Weight</b>	The protein has a predicted MW of 15.3 kDa. Due to glycosylation, the protein migrates to 15 kDa and 25-45 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 90% as determined by Bis-Tris PAGE

## Formulation and Storage

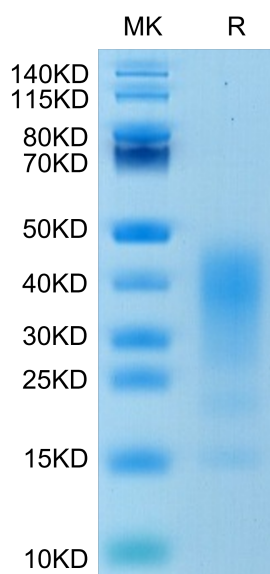
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Interleukin-13 (IL-13) is a monomeric 17 kDa immunoregulatory cytokine that plays a key role in the pathogenesis of allergy, cancer, and tissue fibrosis. It is secreted by several helper T cell subsets, NK cells, mast cells, eosinophils, basophils, and visceral smooth muscle cells. Inhibits inflammatory cytokine production. Synergizes with IL2 in regulating interferon-gamma synthesis. May be critical in regulating inflammatory and immune responses. Positively regulates IL31RA expression in macrophages (By similarity).

## Assay Data

### Bis-Tris PAGE



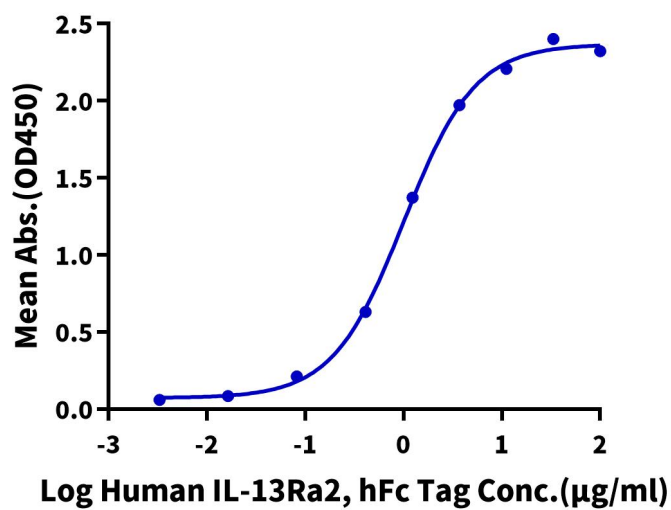
Human IL-13 on Bis-Tris PAGE under reduced condition. The purity is greater than 90%.

### ELISA Data

## Assay Data

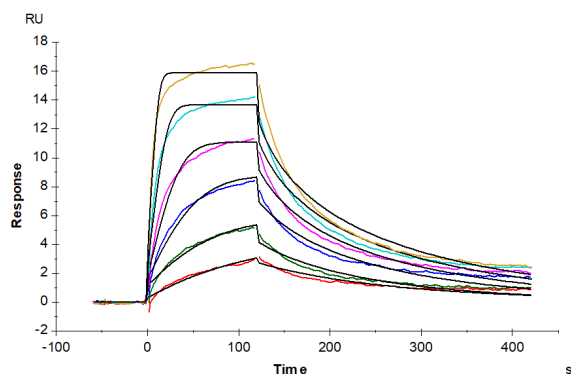
**Human IL-13, His Tag ELISA**

0.2µg Human IL-13, His Tag Per Well



Immobilized Human IL-13, His Tag at 2µg/ml (100µl/well) on the plate. Dose response curve for Human IL-13Ra2, hFc Tag with the EC50 of 1.0µg/ml determined by ELISA (QC Test).

## SPR Data



Human IL-13Ra1, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-13, His Tag with an affinity constant of 9.47 nM as determined in SPR assay (Biacore T200).