

# 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.<br>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

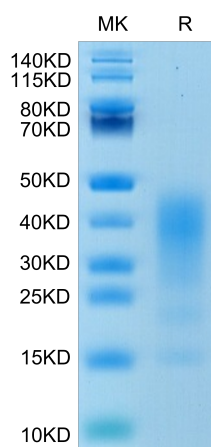
|                       |   |
|-----------------------|---|
| <b>Formulation</b>    | Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.  |
| <b>Reconstitution</b> | Centrifuge the tube before opening. Reconstituting 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

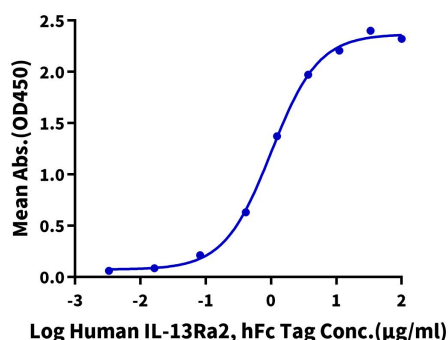
### Bis-Tris PAGE



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

### ELISA Data

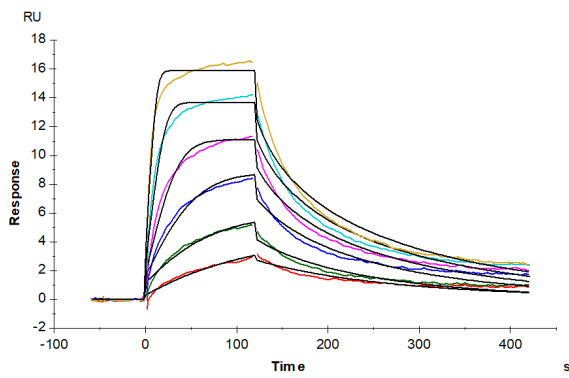
**Human IL-13, His Tag ELISA**  
0.2 $\mu\text{g}$  Human IL-13, His Tag Per Well



Immobilized Human IL-13, His Tag at 2 $\mu\text{g}/\text{ml}$  (100 $\mu\text{l}/\text{well}$ ) on the plate. Dose response curve for Human IL-13Ra2, hFc Tag with the EC50 of 1.0 $\mu\text{g}/\text{ml}$  determined by ELISA (QC Test).

Assay Data

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).