

# Human IL-13 Protein, Ultra Low Endotoxin

Cat. No. IL1-HE013-UL

## Description

<b>Source</b>	Recombinant Human IL-13 Protein is expressed from E.coli without tag. It contains Gly21-Asn132.
<b>Accession</b>	AAK53823
<b>Molecular Weight</b>	The protein has a predicted MW of 12.34 kDa same as Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

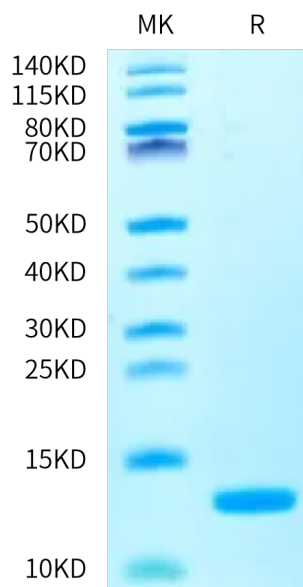
<b>Formulation</b>	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</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

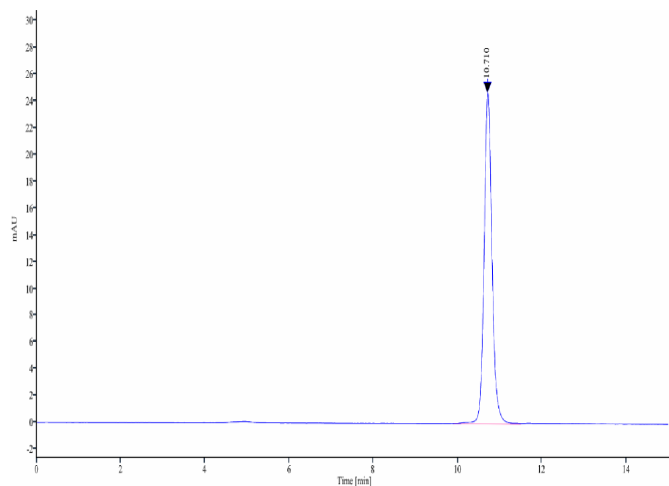
### Bis-Tris PAGE



Human IL-13 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

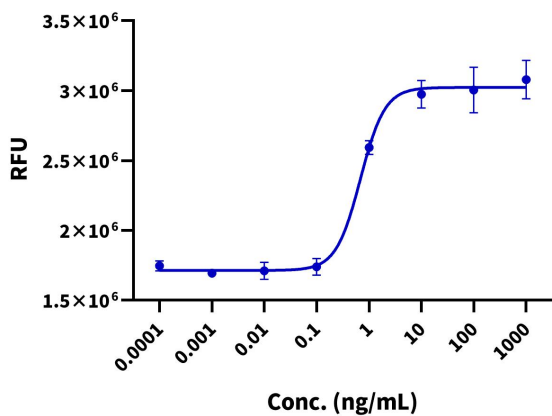
Assay Data



The purity of Human IL-13 is greater than 95% as determined by SEC-HPLC.

Cell Based Assay

Recombinant Human IL-13 Bioactivity

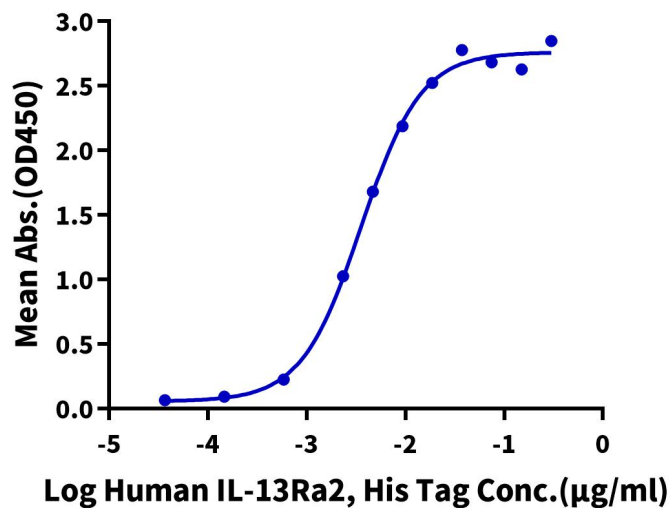


Measured in a cell proliferation assay using TF1 human erythroleukemic cells. The ED50 for this effect is typically 0.5-3 ng/mL.

ELISA Data

Human IL-13, No Tag ELISA

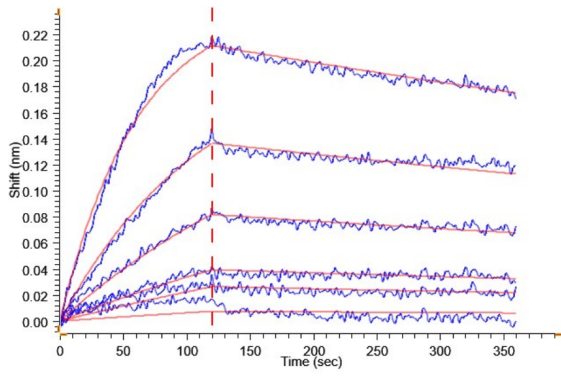
0.1µg Human IL-13, No Tag Per Well



Immobilized Human IL-13, No Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Human IL-13Ra2, His Tag with the EC50 of 3.6ng/ml determined by ELISA.

BLI Data

Assay Data



Loaded Human IL-13Ra2, His Tag on Anti-His-Biosensor can bind Human IL-13, No Tag with an affinity constant of 0.63 nM as determined in BLI assay .