

Human IL-13 Protein

Cat. No. IL1-HM113



Description

Source	Recombinant Human IL-13 Protein is expressed from HEK293 with His tag at the C-terminus. It contains Gly21-Asn132.
Accession	AAK53823
Molecular Weight	The protein has a predicted MW of 13.95 kDa. Due to glycosylation, the protein migrates to 35-50 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

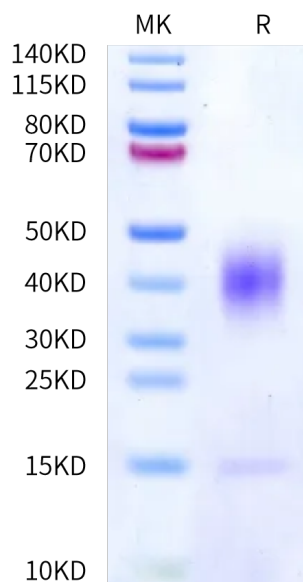
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 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

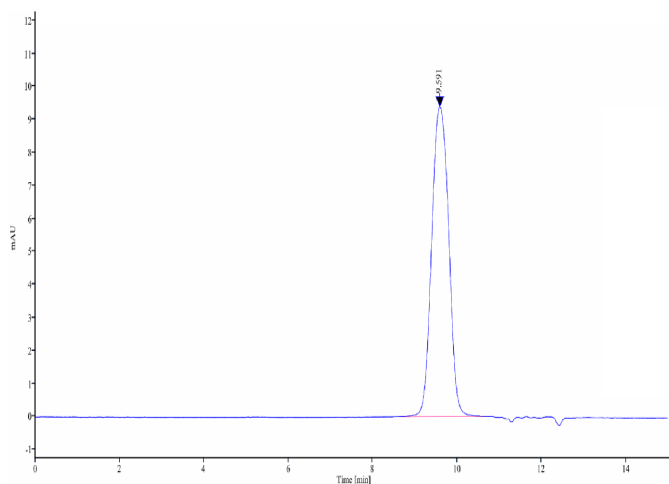
Bis-Tris PAGE



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

SEC-HPLC

Assay Data

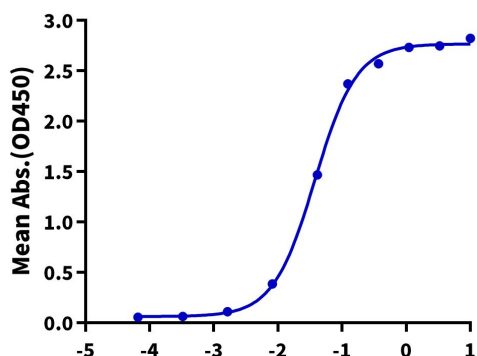


The purity of Human IL-13 is greater than 95% as determined by SEC-HPLC.

ELISA Data

Human IL-13, His Tag ELISA

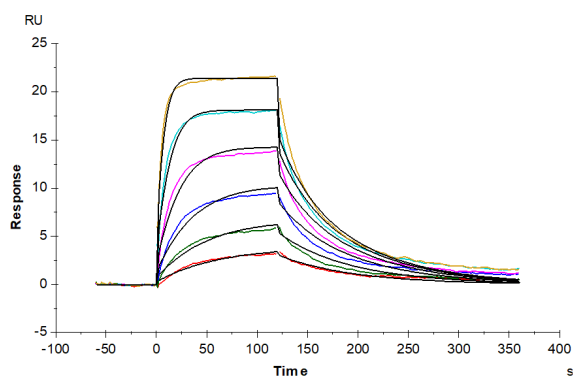
0.1µg Human IL-13, His Tag Per Well



Immobilized Human IL-13, His Tag at 1µg/ml (100µl/well) on the plate. Dose response curve for Biotinylated Human IL-13Ra2, His Avi Tag with the EC50 of 37.7ng/ml determined by ELISA.

Log Biotinylated Human IL-13Ra2, His Avi Tag Conc.(µg/ml)

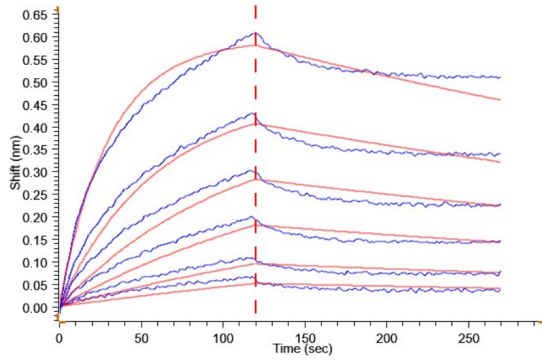
SPR Data



Human IL-13Ra1, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-13, His Tag with an affinity constant of 24.64 nM as determined in SPR assay (Biacore T200).

BLI Data

Assay Data



Loaded Human IL-13, His Tag on Anti-His-Biosensor can bind Human IL-13Ra1, hFc Tag with an affinity constant of 40.70 nM as determined in BLI assay .