Human IL-13 Protein

Cat. No. IL1-HM213

Description

Source	Recombinant Human IL-13 Protein is expressed from HEK293 with hFc (IgG1) tag at the N-Terminus.
	It contains Gly21-Asn132.
Accession	AAK53823
Molecular Weight	The protein has a predicted MW of 39.6 kDa. Due to glycosylation, the protein migrates to 50-70 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 1 EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

Formulation and Storage

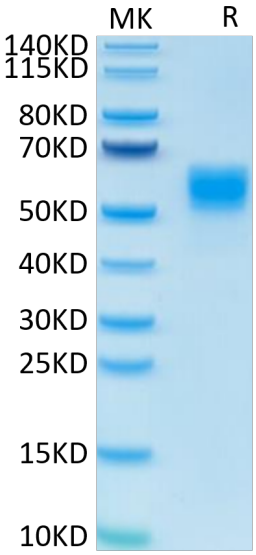
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for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

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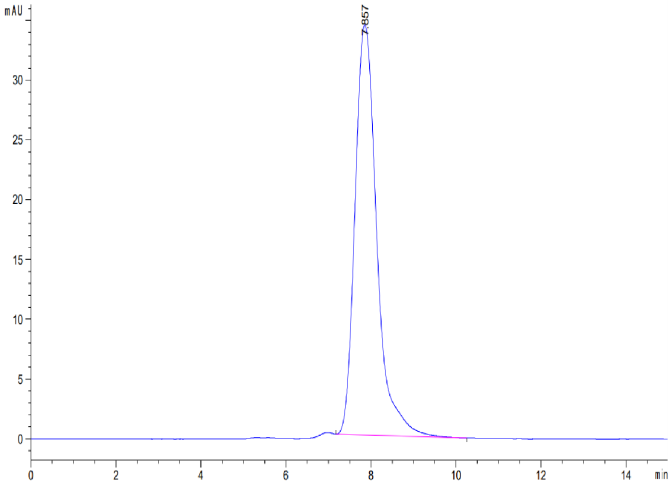
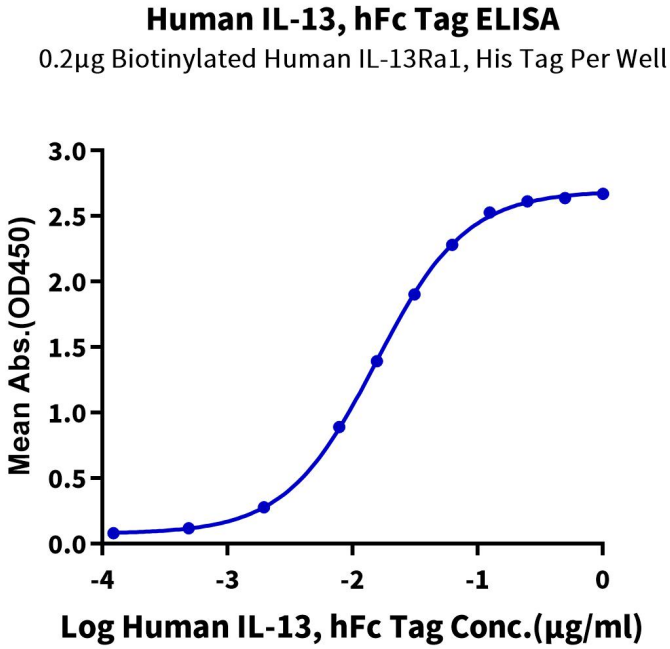
Assay Data



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

ELISA Data



Immobilized Biotinylated Human IL-13Ra1, His Tag at 2 μg/ml (100 μl/well) on the streptavidin precoated plate (5 μg/ml). Dose response curve for Human IL-13, hFc Tag with the EC50 of 15.4 ng/ml determined by ELISA (QC Test).

ELISA Data

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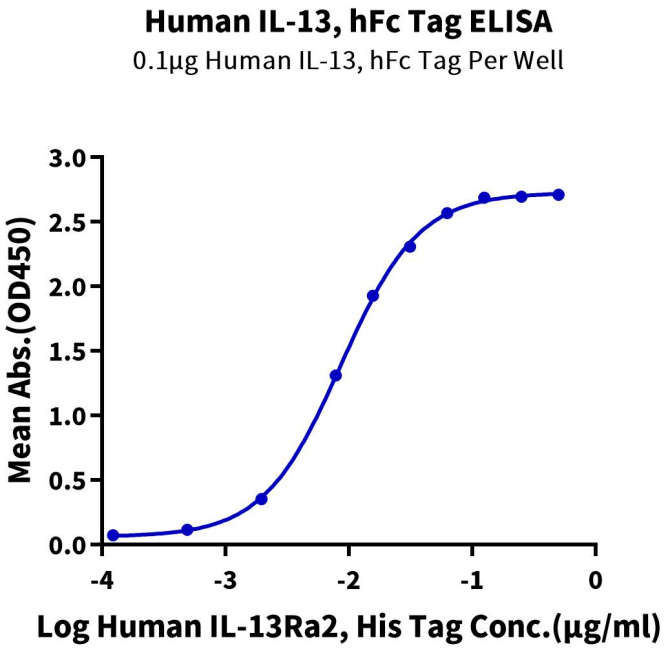
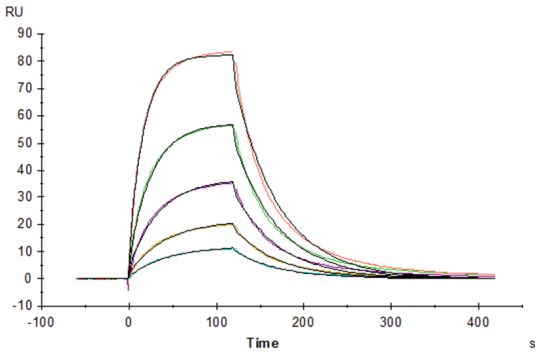
Assay Data



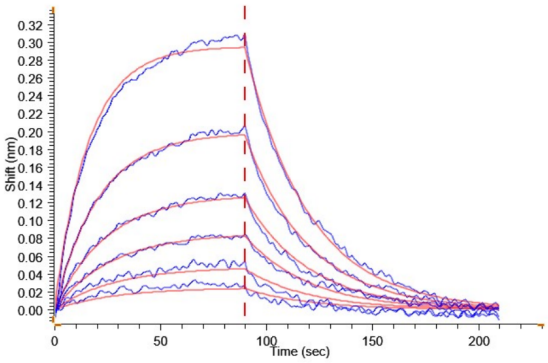
Immobilized Human IL-13, hFc Tag at 1 μg/ml (100 μl/well) on the plate. Dose response curve for Human IL-13Ra2, His Tag with the EC50 of 7.1 ng/ml determined by ELISA.

SPR Data



Human IL-13, hFc Tag captured on CM5 Chip via Protein A can bind Human IL-13Ra1, His Tag with an affinity constant of 0.399 μM as determined in SPR assay (Biacore T200).

BLI Data



Loaded Human IL-13, hFc Tag on ProA-Biosensor can bind Human IL-13Ra1, His Tag with an affinity constant of 1.15 μM as determined in BLI assay .

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