Human IL-13 Protein

Cat. No. IL1-HE013



Description	
Source	Recombinant Human IL-13 Protein is expressed from E.coli without tag.
	It contains Gly21-Asn132.
Accession	AAK53823
Molecular Weight	The protein has a predicted MW of 12.34 kDa same as 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

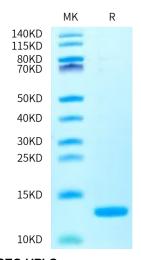
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt80°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).

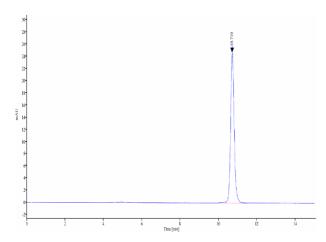
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



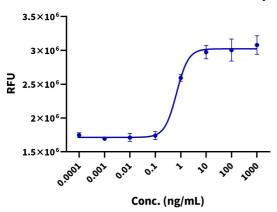
The purity of Human IL-13 is greater than 95% as determined by SEC-HPLC.

KAGTUS

Assay Data

Cell Based Assay

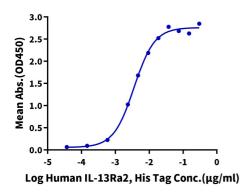
Recombinant Human IL-13 Bioactivity



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

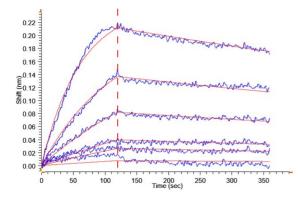
ELISA Data

Human IL-13, No Tag ELISA 0.1µg Human IL-13, No Tag Per Well



Immobilized Human IL-13, No Tag at $1\mu g/ml$ (100 μ I/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



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 (Gator® Prime).