

RP02892LQ

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# Recombinant Human IL-13 Protein

Catalog No.: RP02892LQ

Recombinant

## Sequence Information

Species	Gene ID	Swiss Prot
HEK293	3596	P35225

### Tags

No tag

### Synonyms

IL13;IL-13;P600

## Product Information

Source	Purification
HEK293	> 95% by Tris-Bis PAGE; > 95% by SEC-HPLC

### Endotoxin

< 1 EU/μg of the protein by LAL method.

### Formulation

Supplied as a 0.22 μm filtered solution in 20mM HEPES, 150mM NaCl, 2mM CaCl<sub>2</sub>, 10% Glycerol, pH 7.5. Contact us for customized product form or formulation.

### Reconstitution

0.2 mg/mL in sterile PBS, pH7.4

## 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 (1,2). Mature human IL-13 shares approximately 58% amino acid sequence identity with mouse and rat IL-13. Despite the low homology, it exhibits cross-species activity between human, mouse, and rat (4). IL-13 suppresses the production of proinflammatory cytokines and other cytotoxic substances by macrophages, fibroblasts, and endothelial cells. On B cells, it promotes cellular activation, immunoglobulin class switching to IgE, and the up-regulation of CD23/Fc epsilon RII (1,5). IL-13 binds with low affinity to the transmembrane IL-13 R alpha 1 which then forms a signaling complex with the transmembrane IL-4 R alpha (6,7). This high affinity receptor complex also functions as the type 2 IL-4 receptor (6,7). IL-13 R alpha 2 inhibits responses to both IL-13 and IL-4. It binds IL-13 with high affinity (9, 10) and prevents IL-13 from signaling through the IL-13 R alpha 1/IL-4 R alpha complex (11,12). It also blocks signaling through IL-4-occupied IL-13 R alpha 1/IL-4 R alpha receptor complexes (12, 13). In addition, IL-13-bound IL-13 R alpha 2 can directly promote tumor cell invasiveness and the development of tissue fibrosis (14,16).

## Basic Information

### Description

Recombinant human IL-13 Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Leu25-Asn146) of human IL-13 (Accession #) fused with additional amino acid free.

### Bio-Activity

### Storage

Store at -70°C. This product is stable at ≤ -70°C for up to 1 year from the date of receipt. For optimal storage, aliquot into smaller quantities after centrifugation and store at recommended temperature. Avoid repeated freeze-thaw cycles. Avoid repeated freeze/thaw cycles.

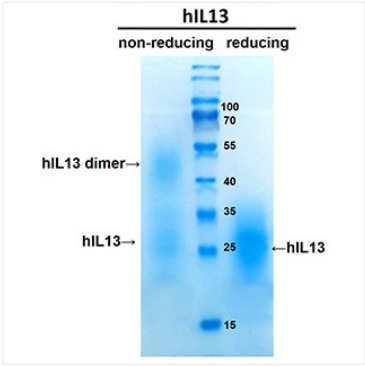
## Contact



[www.abclonal.com](http://www.abclonal.com)

\* For your safety and health, please wear a lab coat and disposable gloves when handling.

# Validation Data



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