

# Human IL-4 Protein

Cat. No. IL4-HM401

## Description

<b>Source</b>	Recombinant Human IL-4 is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains His25-Ser153.
<b>Accession</b>	P05112
<b>Molecular Weight</b>	The protein has a predicted MW of 17.8 kDa. Due to glycosylation, the protein migrates to 23-25 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE

## Formulation and Storage

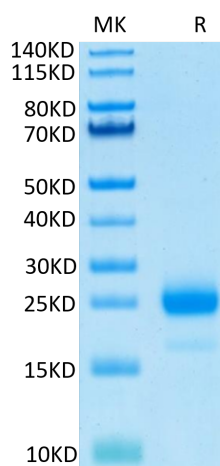
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Interleukin-4, also known as IL4, is a secreted protein which belongs to the IL-4 / IL-13 family. Interleukin-4 / IL4 has many biological roles, including the stimulation of activated B-cell and T-cell proliferation. In the presence of IL-4 and IL-13, cytokines that are produced in a Th-2 type response, particularly during allergy and parasitic infections, macrophages become differentially activated, And this cytokine is a ligand for interleukin 4 receptor. .

## Assay Data

### Tris-Bis PAGE

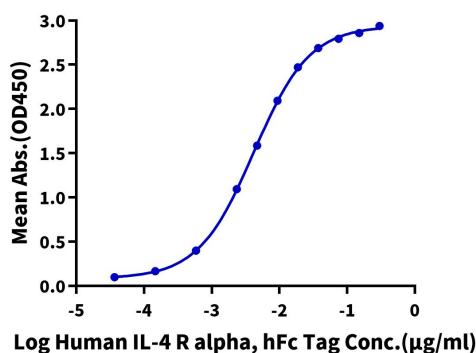


Human IL-4 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

#### Human IL-4, His Tag ELISA

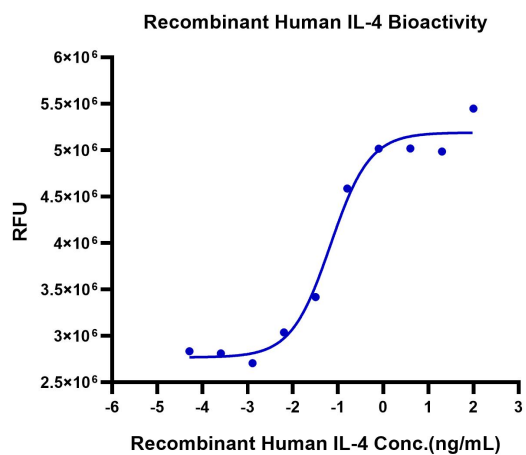
0.1 $\mu\text{g}$  Human IL-4, His Tag Per Well



Immobilized Human IL-4 at 1 $\mu\text{g}/\text{ml}$  (100 $\mu\text{l}$ /well) on the plate. Dose response curve for Human IL-4 R alpha, hFc Tag with the EC50 of 4.2ng/ml determined by ELISA (QC Test).

Assay Data

Cell Based Assay



Measured in a cell proliferation assay using TF1 human erythroleukemic cells. The ED50 for this effect is <0.2 ng/mL.