

# Human IL-6 Protein

Cat. No. IL6-HE001

## Description

<b>Source</b>	Recombinant Human IL-6 is expressed from E.coli without tag. It contains Val30-Met212.
<b>Accession</b>	P05231
<b>Molecular Weight</b>	The protein has a predicted 20.8 kDa same as Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 90% as determined by HPLC

## Formulation and Storage

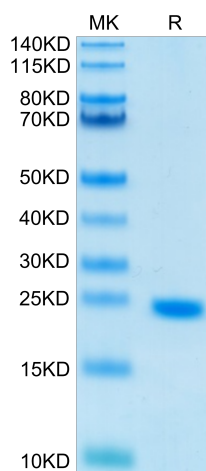
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein 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

IL-6 (Interleukin-6) is a pleiotropic cytokine that acts in the acute phase reaction, inflammation, hematopoiesis, bone metabolism, and cancer progression. Interleukin 6 has been shown to interact with interleukin-6 receptor and glycoprotein.

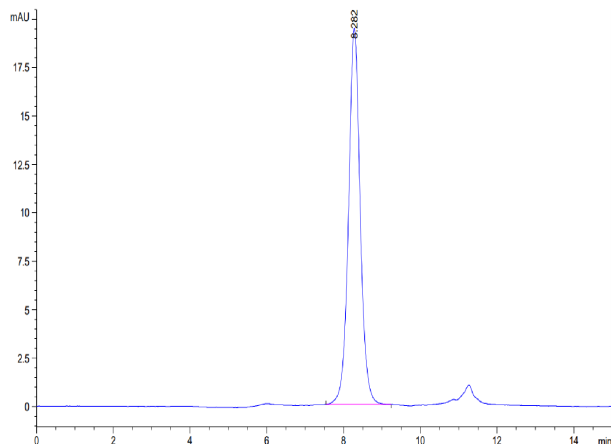
## Assay Data

### Tris-Bis PAGE



Human IL-6 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



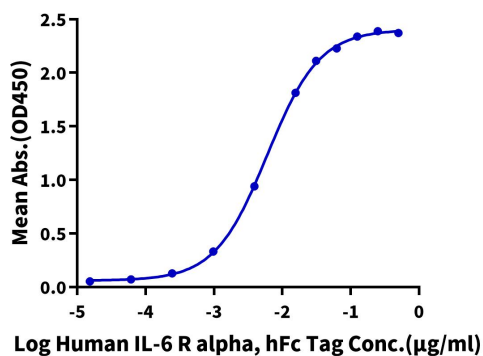
The purity of Human IL-6 is greater than 90% as determined by SEC-HPLC.

Assay Data

ELISA Data

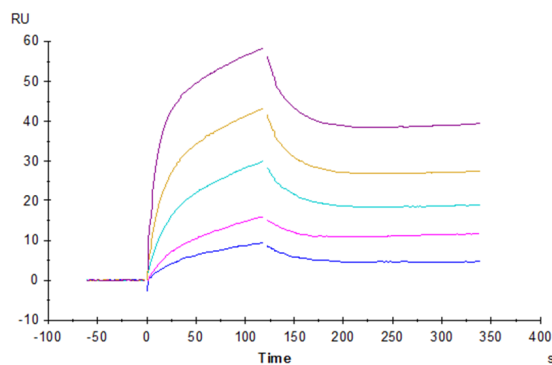
**Human IL-6, No Tag ELISA**

0.2µg Human IL-6, No Tag Per Well



Immobilized Human IL-6 at 2µg/ml (100µl/Well) on the plate. Dose response curve for Human IL-6 R alpha, hFc Tag with the EC50 6.0ng/ml determined by ELISA

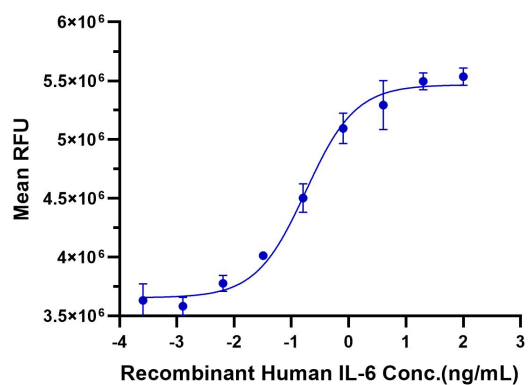
SPR Data



Human IL-6 R alpha, His Tag captured on CM5 Chip via anti-his antibody can bind Human IL-6, No Tag with an affinity constant of 0.22 nM as determined in SPR assay (Biacore T200).

Cell Based Assay

**Recombinant Human IL-6 Protein Bioactivity**



Measured in a cell proliferation assay using TF1 human erythroleukemic cells. The ED50 for this effect is 0.1 - 0.5 ng/mL (QC Test).