

# Human IL-11 Protein

Cat. No. IL1-HM111

## Description

<b>Source</b>	Recombinant Human IL-11 Protein is expressed from HEK293 with His tag at the N-Terminus It contains Pro22-Leu199.
<b>Accession</b>	P20809-1
<b>Molecular Weight</b>	The protein has a predicted MW of 20.24 kDa. Due to glycosylation, the protein migrates to 21-25 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1 EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	>95% as determined by Bis-Tris PAGE >95% as determined by HPLC

## Formulation and Storage

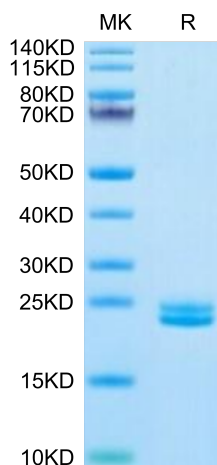
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. 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 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

Abstract Interleukin-11 (IL-11) is a pleiotropic cytokine that belongs to gp130 family. IL-11 and its receptor, IL-11Ra, are expressed in human cancers, human cancer cells expressed a functional IL-11Ra subunit, which triggered signal transduction either by exogenous recombinant human IL-11 or by autocrine production of IL-11 in cells cultured under hypoxic conditions.

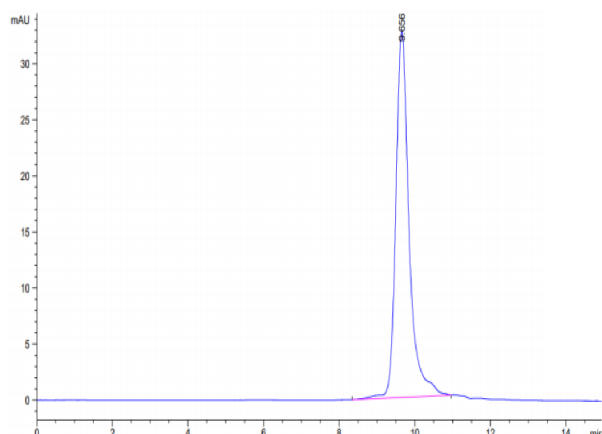
## Assay Data

### Bis-Tris PAGE



Human IL-11 on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC



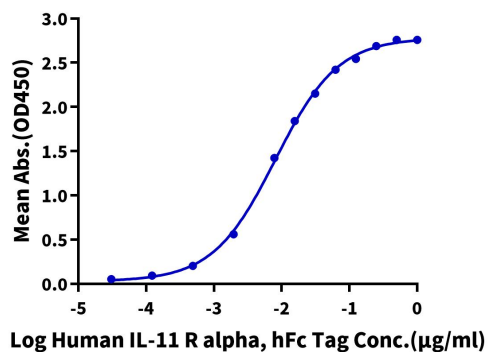
The purity of Human IL-11 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

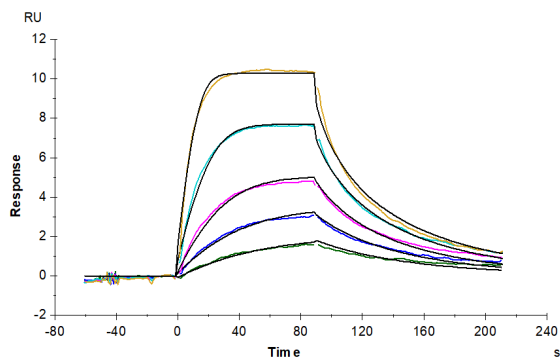
**Human IL-11, His Tag ELISA**

0.2µg Human IL-11, His Tag Per Well



Immobilized Human IL-11, His Tag at 2 µg/ml (100 µl/Well) on the plate. Dose response curve for Human IL-11 R alpha, hFc Tag with the EC50 of 8.1 ng/ml determined by ELISA (QC Test).

SPR Data



Human IL-11R alpha, His Tag immobilized on CM5 Chip can bind Human IL-11, His Tag with an affinity constant of 1.86 nM as determined in SPR assay (Biacore T200).