

# Human LIF R/CD118 Protein

Cat. No. LIF-HM10R

## Description

<b>Source</b>	Recombinant Human LIF R/CD118 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln45-Ser833.
<b>Accession</b>	P42702-1
<b>Molecular Weight</b>	The protein has a predicted MW of 90.5 kDa. Due to glycosylation, the protein migrates to 115-130 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU 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

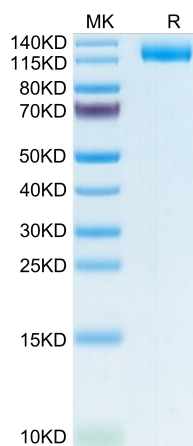
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. 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

The leukemia inhibitory factor receptor (LIF-R) subunit is a component of cell-surface receptor complexes for the multifunctional cytokines, LIF, cardiotrophin-1, ciliary neurotrophic factor, and human oncostatin M. The structure of the human LIF-R gene is similar to that of the mouse gene. The transmembrane receptor is encoded by 19 exons.

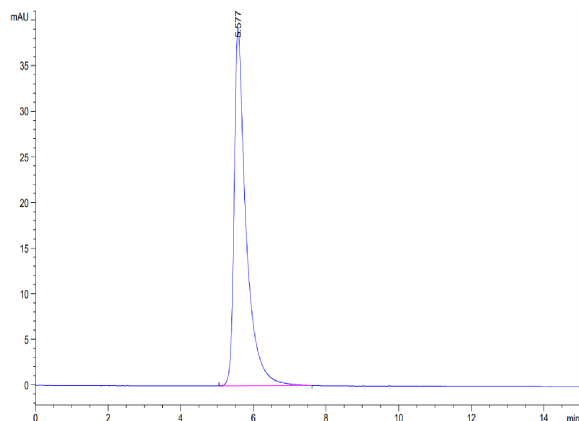
## Assay Data

### Bis-Tris PAGE



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

### SEC-HPLC



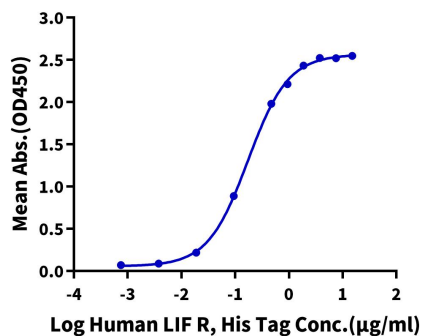
The purity of Human LIF R is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

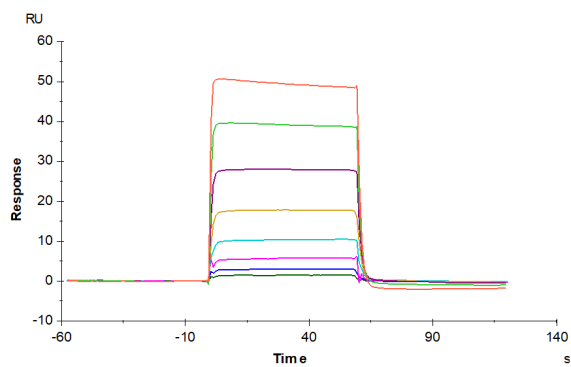
**Human LIF R, His Tag ELISA**

0.2µg Human LIF, No Tag Per Well



Immobilized Human LIF at 2µg/ml (100µl/Well) on the plate. Dose response curve for Human LIF R, His Tag with the EC50 of 0.17µg/ml determined by ELISA (QC Test).

SPR Data



Human LIF R, His Tag immobilized on CM5 Chip can bind Human Oncostatin M, His Tag with an affinity constant of 0.662 µM as determined in SPR assay (Biacore T200).