

## Human LIF Protein

Cat. No. LIF-HM001

KACATUS

### Description

Source	Recombinant Human LIF Protein is expressed from HEK293 without tag.
	It contains Ser23-Phe202.
Accession	P15018-1
Molecular Weight	The protein has a predicted MW of 19.7 kDa. Due to glycosylation, the protein migrates to 40-55 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE
	> 95% as determined by HPLC

### Formulation and Storage

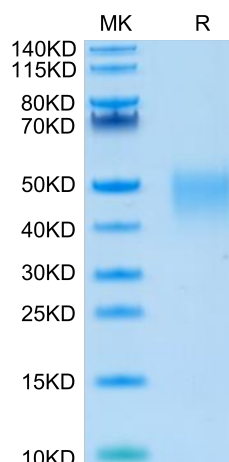
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 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

Leukemia inhibitory factor (LIF) has played a vital role in a series of reproductive events, including follicle growth, embryo growth and differentiation. However, it is unclear whether the level of LIF in embryo culture medium can be used as a marker for clinical pregnancy.

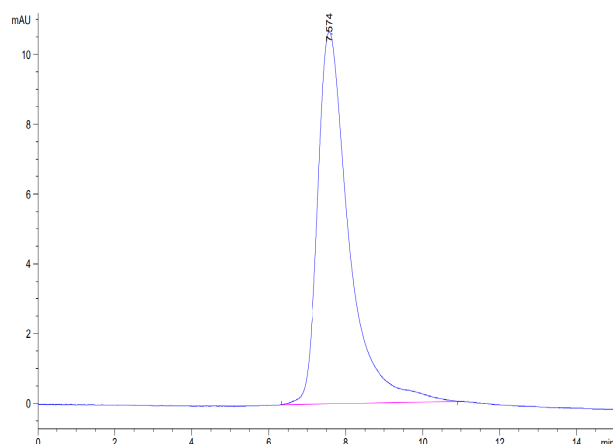
### Assay Data

#### Bis-Tris PAGE



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

#### SEC-HPLC



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

Human LIF Protein

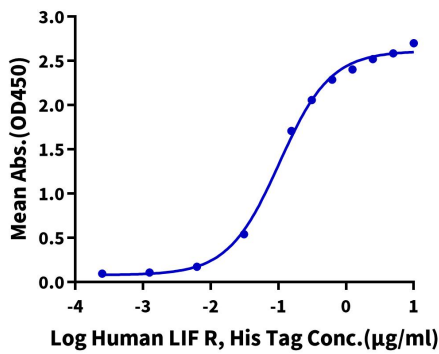
Cat. No. LIF-HM001



Assay Data

ELISA Data

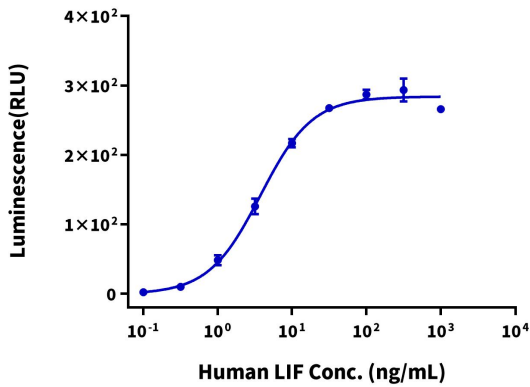
**Human LIF, No Tag ELISA**  
0.2µg Human LIF, No Tag Per Well



Immobilized Human LIF at 2µg/ml (100µl/Well) on the plate. Dose response curve for Human LIF R, hFc Tag with the EC50 of 0.10µg/ml determined by ELISA (QC Test).

Cell Based Assay

**Recombinant Human LIF Bioactivity**



Determined by its dose-dependent ability to induce reporter gene in 293T-STAT3-Luc2 reporter cells. The ED50 for this effect is 0.2-2 ng/mL.