

Human LIF Protein

Cat. No. LIF-HM001

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 Tris-Bis PAGE result.
Endotoxin	Less than 1EU per µg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

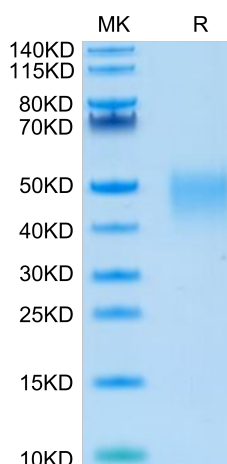
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled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

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.

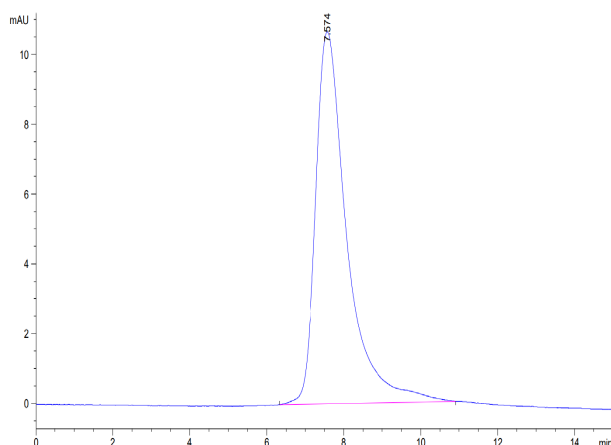
Assay Data

Tris-Bis PAGE



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

SEC-HPLC



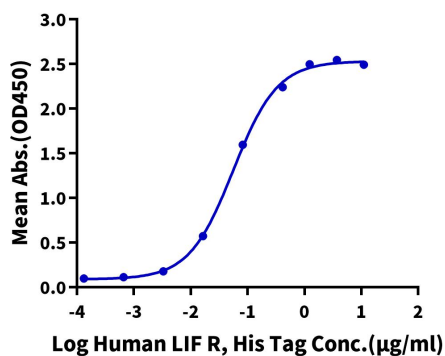
The purity of Human LIF is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human LIF, No Tag ELISA

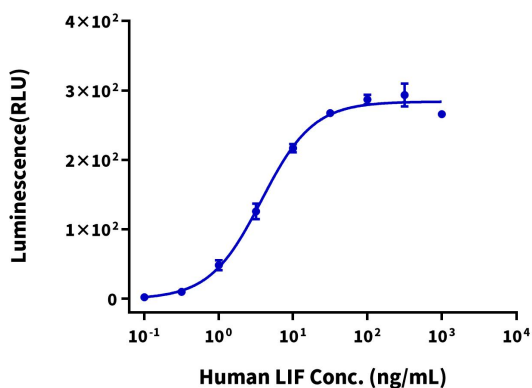
0.2µg Human LIF, No Tag Per Well



Immobilized Human LIF at 2µg/ml (100µl/Well) on the plate. Dose response curve for Human LIF R, hFc Tag with the EC50 of 55.9ng/ml determined by ELISA.

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 1-5 ng/mL.