## **Recombinant Human LIF Protein (His Tag)**

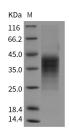
Catalog Number: PKSH031991



Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Synonyms	Leukemia Inhibitory Factor;LIF;Differentiation-Stimulating Factor;D Factor;Melanoma-Derived LPL Inhibitor;MLPLI;Emfilermin;LIF;HILDA;CDF;DIA
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Phe202
Accession	P15018
Calculated Molecular Weight	21.2 kDa
Observed molecular weight	35-42 kDa
Tag	C-His
Bioactivity	Measured by its ability to inhibit the proliferation of M1 mouse myeloid leukemia cells. The ED50 for this effect is typically 0.2-1 ng/ml.
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per $\mu$ g of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.
Data	

Data



> 95 % as determined by reducing SDS-PAGE.

## Background

Leukemia inhibitory factor (LIF) is a pleiotropic glycoprotein belonging to the IL-6 family of cytokines. It's involved in growth promotion and cell differentiation of different types of target cells; influence on bone metabolism; cachexia; neural development; embryogenesis and inflammation. LIF has potent proinflammatory property; being the inducer of the acute phase protein synthesis and affecting the cell recruitment into the area of damage or inflammation. LIF is also one

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Catalog Number: PKSH031991



of the cytokines that are capable to regulate the differentiation of embryonic stem cells; hematopoietic and neuronal cells. LIF binds to the specific LIF receptor (LIFR- $\alpha$ ) which forms a heterodimer with a specific subunit common to all members of that family of receptors; the GP130 signal transducing subunit. This leads to activation of the JAK/STAT and MAPK cascades. Due to its polyfunctional activities; LIF is involved in the pathogenic events and development of many diseases of various origin.

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine
Toll-free: 1-888-852-8623 Tel: 1-832-243-6086
Web: www.elabscience.com Email: techsupport@elabscience.com