

# Recombinant human LIF protein

Catalog Number: ATGP3533

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

23-202aa

### UniProt No.

P15018

### NCBI Accession No.

NP\_002300

### Alternative Names

Leukemia inhibitory factor isoform1, LIF, CDF, DIA, HILDA, MLPLI

## PRODUCT SPECIFICATION

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### Molecular Weight

20.8 kDa (189aa)

### Concentration

0.25mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 90% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Measured in a cell proliferation assay using TF-1 human erythroleukemic cell. The ED50 range  $\leq$  0.5 ng/ml.

### Tag

His-Tag

### Application

SDS-PAGE, Bioactivity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

LIF, as known as leukemia inhibitory factor, is a pleiotropic glycoprotein belonging to the IL6 family of cytokines.

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This protein is involved in growth promotion and cell differentiation of different types of target cells, influence on bone metabolism, embryogenesis and inflammation. It is produced by the adrenal cortex and likely enhances its production of cortisol and aldosterone. Also, it can function as an autocrine growth factor in some pancreatic cancers, but induced differentiation in the leukemic cell line M1. Recombinant human LIF, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

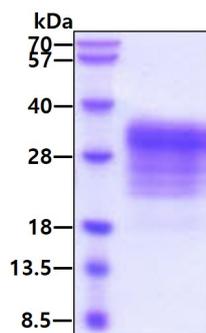
<ADP>SPLPITP VNATCAIRHP CHNNLMNQIR SQAQLNGSA NALFILYYTA QGEPFPNLD KLCGPNVDF PPFHANGTEK AKLVELYRIV VYLGTS LGNI TRDQKILNPS ALSLHSLNA TADILRGLLS NVLCRLCSKY HVGHVDTVY G PDTSGKDV FQ KKKLGCQLLG KYKQIIAVLA QAF<HHHHHH>

## General References

Kuphal S., et al, (2013) Exp. Mol. Pathol. 95:156-165.  
Liu SC., et al, (2013) J. Clin. Invest. 123:5269-5283.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain

### Biological Activity

Human LIF stimulates cell proliferation of the TF-1 human erythroleukemic cells. The ED50 range  $\leq 0.5$ ng/ml.

