

Active Recombinant Human LIF protein, His-tagged

Cat. No. LIF-2394H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human LIF protein(P15018)(2~201 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	2-201 aa
Form	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Leukemia Inhibitory Factor (LIF), is an interleukin 6 class cytokine that affects cell growth by inhibiting differentiation. Other properties attributed to the cytokine include: the growth promotion and cell differentiation of different types of target cells, influence on bone metabolism, cachexia, neural development, embryogenesis and inflammation. p53 regulated LIF has been shown to facilitate implantation in the mouse model and possibly in humans. To test the effect of LIF on cell proliferation, TF-1 cells were seeded into triplicate wells of 96-well plates at a density of 5,000 cells/well with 1% serum standard 1640 including various concentrations of recombinant human LIF. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10μ of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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plate for 1-4 hours at 37°C. Proliferation of TF-1 cells after incubation with LIF for 72h observed by inverted microscope was shown. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant LIF for 72h. It was obvious that LIF significantly increased cell viability of TF-1 cells.

Molecular Mass	25.4kDa
Endotoxin	<1.0EU per 1µg (determined by the LAL method).
Purity	> 95% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	LIF leukemia inhibitory factor [Homo sapiens]
Official Symbol	LIF
Synonyms	LIF; leukemia inhibitory factor; CDF; cholinergic differentiation factor; DIA; differentiation inhibitory activity; differentiation inducing factor; hepatocyte stimulating factor III; HILDA; human interleukin in DA cells; D factor; melanoma-derived LPL inhibitor; differentiation-inducing factor; hepatocyte-stimulating factor III; differentiation-stimulating factor; MLPLI;
Gene ID	3976

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mRNA Refseq	NM_001257135
Protein Refseq	NP_001244064
MIM	159540
UniProt ID	P15018

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