

Active Recombinant Human LIF, Fc-tagged, Biotinylated

Cat. No. LIF-635H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	The recombinant human LIF-Fc fusion is expressed as a 419 amino acid protein consisting of Ser23 - Phe202 region of (UniProt accession #P15018) and a C-terminal Fc from human IgG1, which exists as a dimer under non-reducing conditions.
Species	Human
Source	Human Cells
Protein Length	23-202 a.a.
Form	Supplied at 0.5 mg/ml in sterile PBS pH7.4 (carrier & preservative free). The purified recombinant protein was labeled with Biotin (3-5 Biotin per molecule).
Bio-activity	Stimulates TF-1 human erythroleukemic cell proliferation assay with an ED50 typically 0.1 - 0.2 ng/ml. Induce IL-6 secretion in M1 mouse myeloid leukemia cells. Supports the maintenance of embryonic stem (ES) cell pluripotency and germline competency.
Molecular Mass	Calculated molecular mass (kDa): 46.5; Estimated by SDS-PAGE under reducing condition (kDa): 60-65 (probably due to glycosylation)
AA Sequence	SPLPITPVNATCAIRHPCHNNLMNQIRSQLAQLNGSANALFILYYTAQGEPFPNNLDK LCGPNVTDFFPFHANG TEKAKLVELYRIVVYLGTSLGNITRDQKILNPSALSLHSKLN ATADILRGLLSNVLCRLCSKYHVGHVDTVYGP DTSGKDVFQKKKLGCQLLGKYKQII AVLAQAFGSTTENLYFQGSGTGTHTCPPCPAPELLGGPSVFLFPPKPKDT LMISRTPE VTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDW

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LNGKEYKCKVS NKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVK
GFYPSDIAVEWESNGQPENNYKTTTPVL DSDGSFFLYSKLTVDKSRWQQGNVFC
SVMHEALHNHYTQKSLSLSPGK

Endotoxin

<0.1 eu="" per="" 1="" µg="" of="" purified="" recombinant="" protein=""
determined="" by="" the="" la="">

Purity

>95% judged by SDS-PAGE under reducing condition

Storage

The product is shipped at 4°C. Upon receipt, centrifuge the product briefly before opening the vial. It is recommended to store small aliquots at the temperature below –20°C for long-term storage and the product is stable for 3 months. The undiluted protein can be stored at 4°C for no more than 2 weeks. Avoid repeated freeze-thaw cycles.

Conjugation

Biotin

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
Chromosome Location	22q12.2
Pathway	Adipogenesis, organism-specific biosystem; Cytokine-cytokine receptor interaction, organism-specific biosystem; Cytokine-cytokine receptor interaction, conserved biosystem; Direct p53 effectors, organism-specific biosystem; Jak-STAT signaling pathway, organism-specific biosystem; Jak-STAT signaling pathway, conserved biosystem; MicroRNAs in cardiomyocyte hypertrophy, organism-specific biosystem;
Function	cytokine activity; growth factor activity; leukemia inhibitory factor receptor binding; leukemia inhibitory factor receptor binding; receptor binding;