

Active Recombinant Human LIF Protein

Cat. No. LIF-206H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant Human LIF Protein without tag was expressed in E. coli.
Species	Human
Source	E.coli
Description	Leukemia inhibitory factor (LIF) is a member of the interleukin 6 (IL-6) family that is made by a variety of adult and embryonic tissues. LIF signals through the glycoprotein 130 (gp130)/LIF receptor (LIFR) heterodimer to activate STAT3 and MAPK signaling. LIF functions during hematopoietic differentiation, neuronal cell differentiation, kidney development, and inflammatory processes. Human LIF may also be an important factor during human embryonic stem cell (hESC) self-renewal, pluripotency, and embryonic implantation.
Bio-activity	TF-1 cell proliferation, ≤ 200 pg/mL; $\geq 5.0 \times 10^6$ units/mg
Molecular Mass	Monomer, 19.8 kDa (181 aa)
AA Sequence	MSPLPITPVNATCAIRHPCHNNLMNQIRSQLAQLNGSANALFILYYTAQGEPFPNNLD KLCGPNVTDFFPPFHANGTEKAKLVELYRIVVYLGTS LGNITRDQKILNPSALSLSLSKL NATADILRGLLSNVLCRLCSKYHVGHVDTVYGPDTSGKDV FQKKKLGCQLLGKYKQI IAVLAQAF
Endotoxin	≤ 1 EUs/ μ g, Kinetic LAL

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Purity	≥95%, Reducing and Non-Reducing SDS PAGE
Stability	12 months from date of receipt when stored at -20 to -80 centigrade as supplied. 1 month when stored at 4 centigrade after reconstituting as directed. 3 months when stored at -20 to -80 centigrade after reconstituting as directed.
Storage	Storage Prior to Reconstitution: -20 centigrade
Storage Buffer	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
Reconstitution	Sterile 10 mM acetic acid at 0.1 mg/mL
Shipping	Room temperature
Instructions	Centrifuge vial before opening. Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80 centigrade and avoid repeat freeze thaws.

GENE INFORMATION

Gene Name	LIF leukemia inhibitory factor [Homo sapiens (human)]
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;

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Gene ID	3976
mRNA Refseq	NM_001257135
Protein Refseq	NP_001244064
MIM	159540
UniProt ID	P15018

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