

LIF recombinant protein

LIF Protein, Human, Recombinant

CATALOG #
AAA257447

HOST
HEK293 Cells

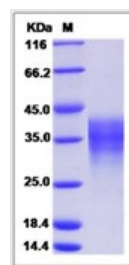
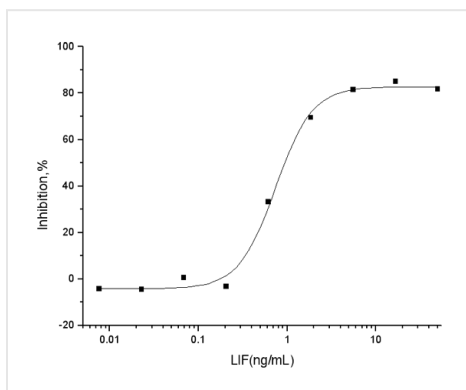
PRODUCT SYNONYMS

LIF; LIF Protein; Human; Recombinant; Human LIF Protein; leukemia inhibitory factor; CDF Protein; DIA Protein; HILDA Protein; Leukemia Inhibitory Factor Protein; MLPLI Protein; LIF recombinant protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>95 % as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.
Sequence Positions	180aa
Sequence	Met1-Phe20 2
Species	Human
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Ser23
Protein Construction	JA DNA sequence encoding the human LIF (P15018) (Met1-Phe202) was expressed
Activity	Measured by its ability to inhibit the proliferation of M1 mouse myeloid leukemia cells. The ED50 for this effect is typically 0.2-0.8ng/mL.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. Shipping: They are shipped out with blue ice pack

IMAGES



Application Data

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ADDITIONAL INFORMATION

Related Product Information for LIF recombinant protein	Leukemia inhibitory factor (LIF) is a pleiotropic glycoprotein belonging to the IL-6 family of cytokines. It is involved in growth promotion and cell differentiation of different types of target cells, influence bone metabolism, cachexia, neural development, embryogenesis, and inflammation. LIF has potent proinflammatory properties, being the inducer of the acute phase protein synthesis and affecting cell recruitment into the area of damage or inflammation. LIF is also one 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 the 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 origins.
References	Salas EM, et al. (2011) LIF, a Novel STAT5-Regulated Gene, Is Aberrantly Expressed in Myeloproliferative Neoplasms. Genes Cancer. 2 (5): 593-6.Chodorowska G, et al. (2004) Leukemia inhibitory factor (LIF) and its biological activity. Ann Univ Mariae Curie Skłodowska Med. 59 (2): 189-93.Garcia-Campana AM, et al. (2007) LIF detection of peptides and proteins in CE. Electrophoresis. 28 (1-2): 208-32.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4504991
NCBI GeneID	3976
NCBI Accession #	NP_002300.1
NCBI GenBank Nucleotide #	NM_002309.4
UniProt Accession #	P15018; Q52LZ2; B2RCW7; B5MC23
Molecular Weight	22,008 Da
NCBI Official Full Name	leukemia inhibitory factor isoform 1
NCBI Official Synonym Full Names	leukemia inhibitory factor
NCBI Official Symbol	LIF
NCBI Official Synonym Symbols	CDF; DIA; HILDA; MLPLI
NCBI Protein Information	leukemia inhibitory factor; D factor; human interleukin in DA cells; melanoma-derived LPL inhibitor; differentiation-inducing factor; hepatocyte-stimulating factor III; cholinergic differentiation factor; differentiation-stimulating factor; differentiatio
UniProt Protein Name	Leukemia inhibitory factor
UniProt Gene Name	LIF
UniProt Synonym Gene Names	HILDA; LIF; D factor; MLPLI
UniProt Entry Name	LIF_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.