


Human LIF Protein

Cat #: PRP1232

Size: 5 µg/20 µg/100 µg/1 mg

Product Information

	Product Name: Human LIF Protein		
REF	Catalog Number: PRP1232	LOT	Lot Number: Refer to product label
	Purity: > 98 % as determined by SDS-PAGE		
	Storage: Store at -20°C		Preparation method: E.coli
	Shipping: The product is shipped at ambient temperature.		

Background: Leukemia Inhibitory Factor (LIF) belongs to the IL-6 superfamily of cytokines. LIF is expressed in a number of tissues and cell types. The LIF receptor is a heterodimer comprised of LIF-R (gp190) and gp130, a common signal transducer for IL-6-type cytokines. Depending on cell type and context, LIF/LIF-R can activate Erk, PI3K, and Jak1/Stat1/3 pathways. LIF has a diverse array of biological activities. Murine embryonic stem cells are dependent on LIF for pluripotency and self-renewal in vitro. Exercise- induced LIF secretion in muscle induces myoblast proliferation, suggesting that LIF may play a role in exercise-induced muscle hypertrophy. LIF also negatively regulates Th2 and Th17 cell differentiation.

Sequence: Amino acid sequence derived from Human LIF (Ser23-Phe202) (P15018-1) was expressed.

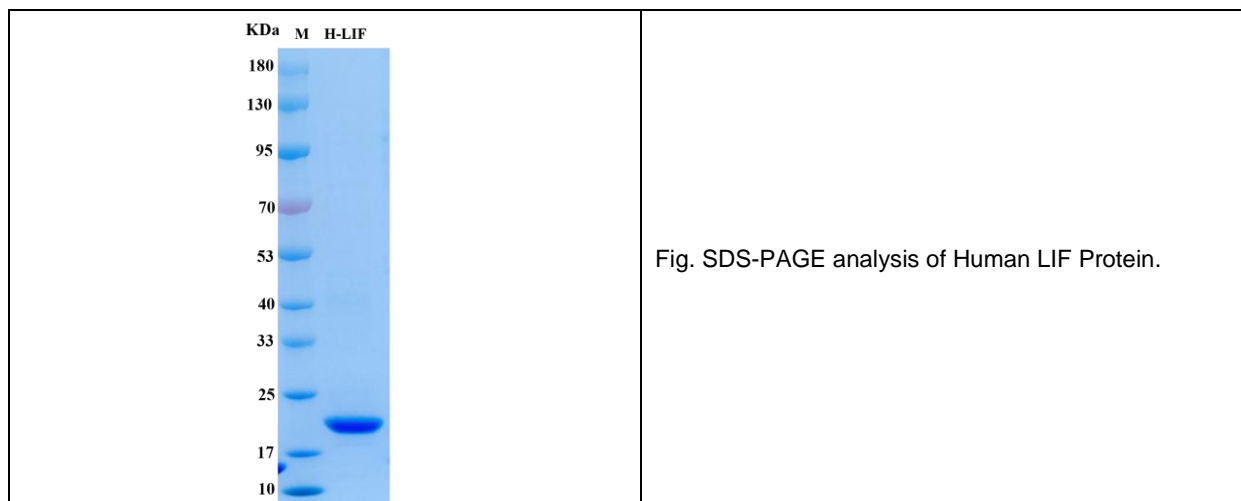
Protein length: The recombinant Human LIF Protein consists of 180 amino acids and predicts a molecular mass of 22.1 kDa.

Endotoxin: <0.1 EU per µg of the protein by the LAL method.

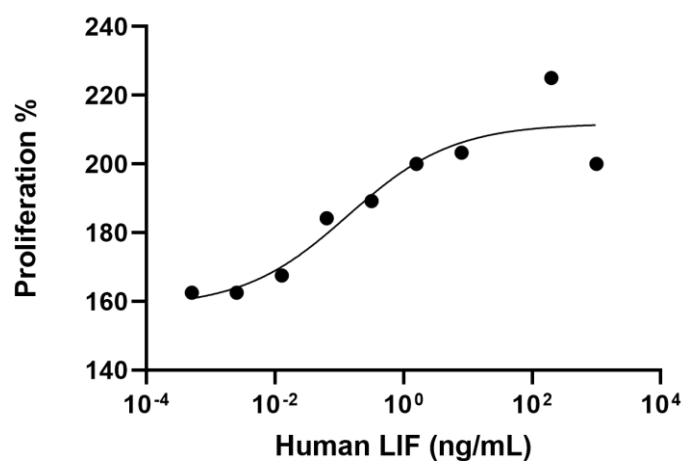
Formulation: Lyophilized from sterile 20 mM Tris, 150 mM NaCl, pH 7.4.

Storage Instructions: Lyophilized protein product should be stored desiccated below -20°C. Upon reconstitution, the protein should be stored at 4°C between 2-7 days and for future use below -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized protein using the buffer we provided not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.



Biological Activity: Measured in a cell proliferation assay using TF -1. The ED₅₀ for this effect is typically 0.137 ng/mL. The specific activity of recombinant Human LIF is approximately $>7.30 \times 10^6$ IU/mg.



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