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LIF
Recombinant Human Leukemia Inhibitory Factor (His Tag)

Catalog No.	CRH725A-His CRH725B-His	**Quantity:**	20 µg 100 µg

Alternate Names: Leukemia inhibitory factor, LIF, Differentiation-stimulating factor, D factor, Melanoma-derived LPL inhibitor, MLPLI, Emfilermin

Description: Leukemia inhibitory factor (LIF) is a pleiotropic glycoprotein belonging to the IL-6 family of cytokines. LIF is involved in growth promotion and cell differentiation of different types of target cells, influence on bone metabolism, cachexia, neural development, embryogenesis and inflammation. LIF has potent proinflammatory property, being the inducer of the acute phase protein synthesis and affecting the 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 GP13 signal transducing subunit. This leads to activation of the JAK/STAT and MAPK cascades. Due to its polyfunctional activities, LIF is involved in the pathogenic events and many diseases of different origins.

UniProt ID: P15018

Protein Construction: A DNA sequence encoding the human LIF (Met1-Phe202) with a C-terminal polyhistidine tag was expressed.

Source: HEK293 Cells

Formulation: Lyophilized from sterile PBS, pH 7.4.
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization.

Molecular Weight: The rhLIF comprises 191 aa with a predicted MW of 21.2 kDa and migrates at ~35-42 kDa in SDS-PAGE under reducing conditions.

Purity: > 95 % as determined by SDS-PAGE.

Endotoxin Level: < 1.0 EU per µg protein as determined by the LAL method.

Biological Activity: Measured by its ability to inhibit the proliferation of M1 mouse myeloid leukemia cells. The ED50 for this effect is typically 2-15ng/mL.

Predicted N-terminal: Ser 23

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water to a concentration of 0.1 mg/mL and gently pipette the solution up and down the sides of the vial.
DO NOT VORTEX. Allow several minutes for complete reconstitution.

Storage & Stability: Stable for up to 1 year from date of receipt at -20°C to -80°C
After reconstitution, store working aliquots at -20°C to -80°C.
Avoid repeated freeze-thaw cycles.

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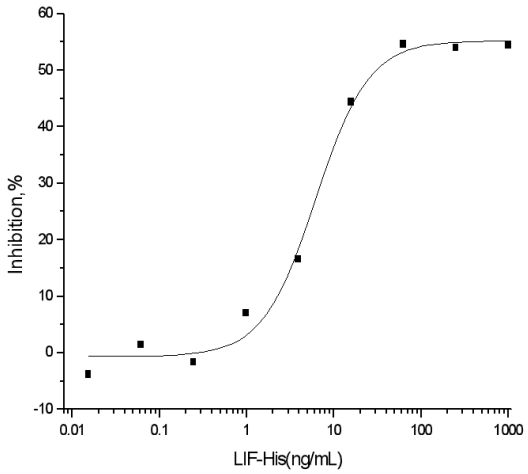
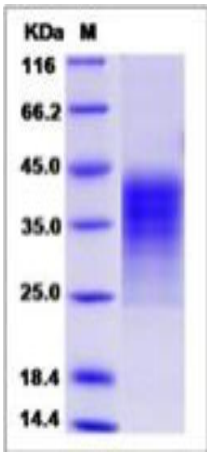


SDS-PAGE



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