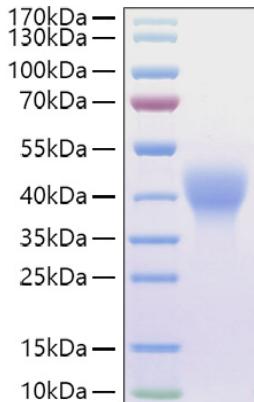


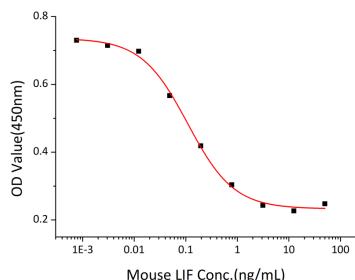
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<b>Product name:</b>	Recombinant Mouse Leukemia inhibitory factor/LIF Protein
<b>Cat number:</b>	GRF01416
<b>Size:</b>	20 ug
<b>Synonyms:</b>	LIF;CDF;DIA;HILDA;MLPLI;LIF
<b>Molecular Weight:</b>	26.5 kDa
<b>Purification:</b>	≥ 90 % as determined by SDS-PAGE.
<b>Background:</b>	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.
<b>Form:</b>	Lyophilized
<b>Storage:</b>	Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.
<b>Tags:</b>	C-His&Avi;
<b>Source:</b>	HEK293 cells
<b>Description:</b>	High quality, high purity and low endotoxin recombinant Recombinant Mouse Leukemia inhibitory factor/LIF Protein, tested reactivity in HEK293 cells and has been validated in SDS-PAGE. 100% guaranteed.
<b>Endotoxin:</b>	< 0.1 EU/ $\mu$ g of the protein by LAL method.
<b>Bio-Activity:</b>	Measured in a cell proliferation assay using TF-1 Human erythroleukemic cells. The ED 50 for this effect is 35.675-142.7 ng/mL, corresponding to a specific activity of $7 \times 10^3$ ~ $2.8 \times 10^4$ units/mg.
<b>Formulation:</b>	Lyophilized from a 0.22 $\mu$ m filtered solution of PBS, pH 7.4.
<b>Reconstitution:</b>	Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

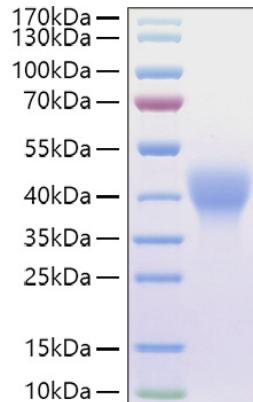
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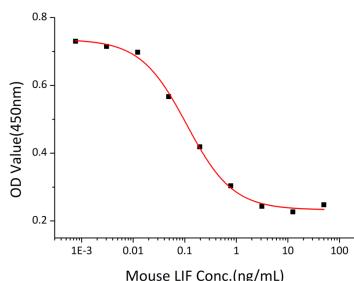
Measured by its ability to inhibit the proliferation of M1 mouse myeloid leukemia cells. The ED50 for this effect is 0.05-0.22 ng/mL, corresponding to a specific activity of  $4.58 \times 10^6$ ~ $1.83 \times 10^7$ units/mg.



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Recombinant Mouse Leukemia inhibitory factor/LIF Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.

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