

RP00089

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Recombinant Human Leukemia inhibitory factor/LIF Protein

Catalog No.: RP00089

Recombinant

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	3976	P15018

Tags

C-His

Synonyms

LIF;CDF;DIA;HILDA;MLPLI

Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

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.

Background

The protein encoded by this gene is a pleiotropic cytokine with roles in several different systems. It is involved in the induction of hematopoietic differentiation in normal and myeloid leukemia cells, induction of neuronal cell differentiation, regulator of mesenchymal to epithelial conversion during kidney development, and may also have a role in immune tolerance at the maternal-fetal interface. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene.

Basic Information

Description

Recombinant Human Leukemia inhibitory factor/LIF Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Ser23-Phe202) of human LIF (Accession #NP_002300.1) fused with a 6×His tag at the C-terminus.

Bio-Activity

Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED₅₀ for this effect is typically 0.1-0.3 ng/mL, corresponding to a specific activity of 3.33×10^6 - 1×10^7 units/mg.

Storage

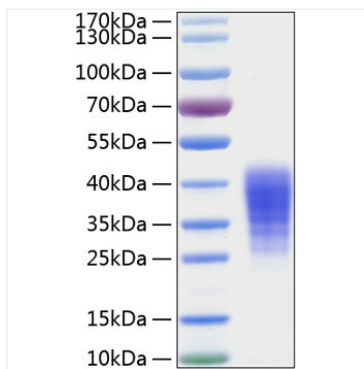
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt. After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

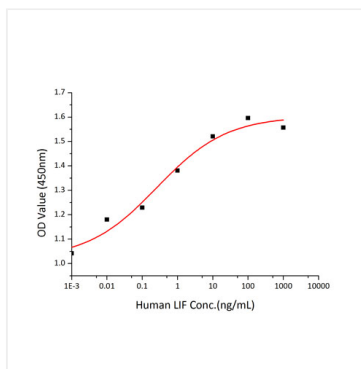


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Validation Data



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



Recombinant Human LIF stimulates cell proliferation of the TF-1 human erythroleukemic cells. The ED_{50} for this effect is typically 0.1-0.3 ng/mL, corresponding to a specific activity of $3.33 \times 10^6 - 1 \times 10^7$ units/mg.