

## Product datasheet for TP728364M

#### OriGene Technologies, Inc.

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### **Recombinant LIF, Mouse**

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant LIF, Mouse

Species: Mouse Expression Host: E. coli

**Expression cDNA Clone** 

or AA Sequence:

SPLPITPVNATCAIRHPCHGNLMNQIKNQLAQLNGSANALFISYYTAQGEPFPNNVEKLCAPNMTDFPSF HGNGTEKTKLVELYRMVAYLSASLTNITRDQKVLNPTAVSLQVKLNATIDVMRGLLSNVLCRLCNKYRVGH

VDVPPVPDHSDKEAFQRKKLGCQLLGTYKQVISVVVQAF with polyhistidine tag at the N-terminus.

Tag: His Tag (N-term)

**Predicted MW:** The protein has a calculated MW of 20.68 kDa. The protein migrates as 17-25 kDa under

reducing condition (SDS-PAGE analysis).

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

**Buffer:** The protein was lyophilized from a 0.2 μm filtered solution containing 1X PBS, pH 7.4.

**Bioactivity:** Measure by its ability to induce IL-6 secretion in M1 cells. The ED<sub>50</sub> for this effect is <0.5

ng/mL. The specific activity of recombinant mouse LIF is  $> 2 \times 10^6$  IU/mg.

**Endotoxin:**  $< 0.1 \text{ EU per 1} \mu \text{g of the protein by the LAL method.}$ 

**Reconstitution Method:** Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the

lyophilized protein in sterile  $H_2O$  to a concentration not less than 100  $\mu$ g/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved.

Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

Applications: Cell culture

Storage: Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to

8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -

20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

UniProt ID: P09056

Synonyms: leukemia inhibitory factor, Differentiation-stimulating factor, D factor, Melanoma-derived LPL

inhibitor (MLPLI), Interleukin 6 family cytokine

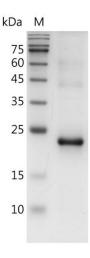




#### **Summary:**

Leukemia inhibitory factor (LIF) is a pleiotropic glycoprotein, belonging to the IL-6 receptor family. Mouse LIF shares 79% sequence homology with human LIF. LIF is a 19.7 kDa protein containing 202 amino acid which high expression in human liver, bone, uterus, kidney and the central nervous system. LIF is a inducer of differentiation in M1 leukaemia cells, osteoblasts and glia. Not only stimulates proliferation of DA1 cells inhibit proliferation of corticotrophs and promote cell survival in some cell types but also induces apoptosis in others.

# **Product images:**



SDS- PAGE analysis of recombinant mouse LIF