

## 32-12226: Mouse Leukemia Inhibitory Factor

**Gene :** Lif  
**Gene ID :** 16878  
**Uniprot ID :** P09056  
**Alternative Name :** Leukemia inhibitory factor, Differentiation-stimulating factor, D factor

### Description

**Source:** Genetically modified E.coli.

**Predicted MW:** Monomer, 20 kDa (181 aa)

Leukemia inhibitory factor (LIF) is a member of the interleukin 6 (IL-6) family that is made by a variety of adult and embryonic tissues. LIF signals through the glycoprotein 130 (gp130)/LIF receptor (LIFR) heterodimer to activate STAT3 and MAPK signaling. LIF functions during hematopoietic differentiation, neuronal cell differentiation, kidney development, and inflammatory processes. Mouse LIF promotes mouse embryonic stem (ES) cell self-renewal and pluripotency in long-term cell culture systems, similar to the functional activity of FGF-basic in human ES cell culture systems.

### Product Info

**Amount :** 20 µg / 100 µg  
**Purification :** Reducing and Non-Reducing SDS PAGE at >= 95%  
**Content :** Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)  
Sterile 10 mM acetic acid at 0.1 mg/mL  
**Storage condition :** Store at -20°C  
**Amino Acid :** MSPLPITPVN ATCAIRHPCH GNLMNQIKNQ LAQLNGSANA LFISYYTAQG EFPNNEVKL CAPNMTDFPS FHNGGTEKTK LVELYRMVAY LSASLTNITR DQKVLNPTAV SLQVKLNATI DVMRGLLSNV LCRLCNKYRV GHVDVPPVPD HSDKEAFQRK KLGCQLLGT Y KQVISVVVQA F

### Application Note

**Endotoxin:** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

Biological Activity was determined by IL-6 production by M1 cells at <= 1 ng/mL; >= 1.0 x 10<sup>6</sup> units/mg. Centrifuge vial before opening, Suspend the product by gently pipetting the above recommended solution down the sides of the vial. DO NOT VORTEX. Allow several minutes for complete reconstitution. For prolonged storage, dilute to working aliquots in a 0.1% BSA solution, store at -80°C and avoid repeat freeze thaws. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vial to compensate for this loss.



