

## 32-12224: Human Leukemia Inhibitory Factor

**Gene :** LIF  
**Gene ID :** 3976  
**Uniprot ID :** P15018  
**Alternative Name :** Leukemia inhibitory factor, Differentiation-stimulating factor, Melanoma-derived LPL inhibitor, Emfilermin

### Description

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

**Predicted MW:** Monomer, 19.8 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. Human LIF may also be an important factor during human embryonic stem cell (hESC) self-renewal, pluripotency, and embryonic implantation.

### Product Info

**Amount :** 25 µg / 100 µg  
**Purification :** Reducing and Non-Reducing SDS PAGE at  $\geq 95\%$   
**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  $-20^{\circ}\text{C}$   
**Amino Acid :** MSPLPITPVN ATCAIRHPCH NNLMNQIRSQ LAQLNGSANA LFILYYTAQG EPPNNLDKL CGPNVTDFFP  
FHANGTEKAK LVELYRIVVY LGTSLGNITR DQKILNPSAL SLHSLKNATA DILRGLLSNV LCRLCSKYHV  
GHVDVTYGPD TSGKDVFGKK KLGCQLLGKY KQIIAVLAQA F

### Application Note

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

Biological Activity was determined by TF-1 cell proliferation at  $\leq 200$  pg/mL;  $\geq 5.0 \times 10^6$  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  $-80^{\circ}\text{C}$  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.



