

## 32-1583: LIF Yeast Recombinant Protein

**Alternative Name :** CDF,HILDA,D-FACTOR,Differentiation- stimulating factor,Melanoma-derived LPL inhibitor,MLPLI,Emfilermin,Leukemia inhibitory factor,LIF,DIA.

### Description

Source : Pichia pastoris. LIF Human Recombinant produced in yeast is a single, glycosylated polypeptide chain containing 180 amino acids and having a molecular mass of 58.5 kDa. The LIF is purified by proprietary chromatographic techniques. Leukemia Inhibitory Factor also called LIF is a lymphoid factor that promotes long-term maintenance of embryonic stem cells by suppressing spontaneous differentiation. Leukemia Inhibitory Factor has several functions such as cholinergic neuron differentiation, control of stem cell pluripotency, bone & fat metabolism, mitogenesis of factor dependent cell lines & promotion of megakaryocyte production in vivo. Human and mouse LIF exhibit a 78% identity in its amino acid sequence.

### Product Info

**Amount :** 25 µg  
**Purification :** Greater than 98.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.  
**Content :** The protein was lyophilized from a 0.2µm filtered PBS.  
**Storage condition :** Lyophilized LIF although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution LIF should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.  
**Amino Acid :** S P L P I T P V N A T C A I R H P C H N N L M N Q I R S Q L A Q L N G S A N A L F I L Y Y T A Q G E P  
F P N N L D K L C G P N V T D F P P F H A N G T E K A K L V E L Y R I V V Y L G T S L G N I T R D Q K  
I L N P S A L S L H S K L N A T A D I L R G L L S N V L C R L C S K Y H V G H V D V T Y G P D T S G K  
D V F Q K K K L G C Q L L G K Y K Q I I A V L A Q A F.

### Application Note

It is recommended to reconstitute the lyophilized LIF in sterile 18M-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions. The biological activity of recombinant human LIF was measured by the ability to induce differentiation of murine M1 myeloid leukemic cells. The minimal detectable concentration of human LIF in this assay is <0.05 ng/mL. The specific activity is > 1 x 10<sup>8</sup> units/mg.