

## 32-1581: mLIF Recombinant Protein

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

### Description

Source : Escherichia Coli. Leukemia Inhibitory Factor (LIF) Murine Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 181 amino acids and having a molecular mass of 20 kDa. The Leukemia Inhibitory Factor (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 95.0% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.  
**Content :** Leukemia Inhibitory Factor (LIF) was lyophilized from a concentrated (1mg/ml) sterile solution containing 20mM Phosphate buffer pH-7.4 and 0.02% Tween-20.  
**Storage condition :** Lyophilized Leukemia Inhibitory Factor (LIF) although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Leukemia Inhibitory Factor (LIF) should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

### Application Note

It is recommended to reconstitute the lyophilized Leukemia Inhibitory Factor (LIF) in sterile water not less than 100µg/ml, which can then be further diluted to other aqueous solutions. Activity of murine LIF was determined by the M1 cell differentiation assay which was found to be < 0.01 ng/ml, corresponding to a specific activity of 100,000,000 IU/mg.A standard of 50 Units is defined as the concentration of mouse LIF in 1.0 mL of tissue culture medium that induces the differentiation of 50% of M1 colonies.