



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 



## Leukemia Inhibitory Factor, mouse recombinant (rmLIF)

**Catalog No:** 97247  
**Lot No:** XXXXX  
**Source:** *E. coli*  
**Synonyms:** CDF, HILDA, D-FACTOR, Differentiation- stimulating factor, Melanoma-derived LPL inhibitor, MLPLI, Emfilermin, Leukemia inhibitory factor, LIF, DIA

### Background

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.

### Description

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. Leukemia Inhibitory Factor (LIF) is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

### Formulation

Leukemia Inhibitory Factor (LIF) was lyophilized from a concentrated (1 mg/ml) sterile solution containing 20 mM phosphate buffer pH 7.4 and 0.02% Tween-20.

### Solubility

It is recommended to reconstitute the lyophilized LIF in sterile water not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

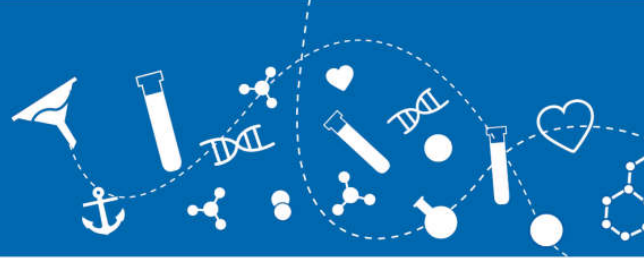
Lyophilized Leukemia Inhibitory Factor (LIF), although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Leukemia Inhibitory Factor (LIF) should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

### Purity

Greater than 95.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

### Amino Acid Sequence

MSPLPITPVN ATCAIRHPCH GNLMNQIKNQ LAQLNGSANA LFISYYTAQG EFPFNNVEKL CAPNMTDFPS FHGNGTEKTK  
LVLEYRMVAY LSASLTNITR DQKVLNPTAV SLQVKLNATI DVMRGLLSNV LCRLCNKYRV GHVDVPPVPD HSDKEAFQRK  
KLGCCQLLGTY KQVISVVVQA F



**Activity**

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.

**Usage**

**This product is offered by Biomol for research purposes only. Not for diagnostic purposes or human use. It may not be resold or used to manufacture commercial products without written approval of Biomol GmbH.**