



# 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) 

## GFM200 Recombinant Mouse LIF

### Description

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. The application of mouse LIF to long-term culture systems promotes mouse embryonic stem cell (ESC) self-renewal and pluripotency, similar to the functional activity of FGF-2 in human ESC cell culture systems.

<b>Length</b>	181 aa
<b>Molecular Weight</b>	20 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P09056
<b>Purity</b>	≥95% determined by reducing and non-reducing SDS-PAGE

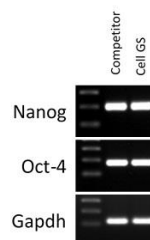
### Specifications

<b>Alternative Names</b>	Leukocyte Inhibitory Factor, leukemia inhibitory factor, cholinergic differentiation factor
<b>Biological Activity</b>	Mouse LIF is fully biologically active when compared to standard. The specific activity of the sample is approximately $1 \times 10^8$ units/mg, in which $10^6$ units are identical of 10 µg of pure protein sufficient to treat 1 L of stem cells including human embryonic stem cells, neural stem cells, hematopoietic stem cells, mesenchymal stem cells and induced pluripotent stem cells.
<b>Endotoxin Level</b>	≤1.00 EU/µg as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
<b>AA Sequence</b>	MSPLPITPVN ATCAIRHPCH GNLMNQIKNQ LAQLNGSANA LFISYYTAQG EFPFNNVEKL CAPNMTDFPS FHGNGTEKTK LVELYRMVAY LSASLTNITR DQKVLNPTAV SLQVKLNATI DVMRGLLSNV LCRLCNKYRV GHVDVPPVPD HSDKEAFQRK KLGQCQLLGTY KQVISVVVQA F

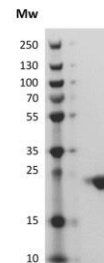
### Preparation and Storage

<b>Reconstitution</b>	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile 10 mM acetic acid at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

### Data



Expression of the two common pluripotency markers Nanog and Oct-4 in the presence of mouse LIF was assessed with RT-PCR. Gapdh is the loading control.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 µg of protein was loaded in each lane. Human MCP-1 has a predicted Mw of 8.7 kDa.