

# **Murine LIF**

Synonyms: Lif, leukemia inhibitory factor

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order #	Lot#	Expiry Date
10 µg	2805.960.010		
25 µg	2805.960.025		
50 µg	2805.960.050		
100 µg	2805.960.100		
200 µg	2805.960.200		
1 mg	2805.960.199		

Please enquire for bulk quantities and other vial sizes

#### **Description**

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. Human LIF is as active on human cells as is it is on mouse cells, though mouse LIF is about 1000 fold less active on human cells, than human LIF. Recombinant mouse LIF produced in *E.Coli* is a single, non-glycosylated, polypeptide chain containing 180 amino acids and having a molecular mass of 19.86 kDa.

• Source E. Coli

Purity ≥ 98 % (SDS-PAGE, silver stained)
Endotoxin level < 0.1 ng per μg (IEU/μg) of rm LIF</li>

#### **Biological Activity**

The ED<sub>50</sub> as determined by the M1 cell differentiation assay is in the range of 0.1 - 0.5 ng/ml.

## Reconstitution

The lyophilized LIF should be reconstituted in water to a concentration not less than 100µg/ml. This solution can be diluted into other buffered solutions or stored at -20 °C for future use.

### **Amino Acid Sequence**

SPLPITPVNA TCAIRHPCHG NLMNQIKNQL AQLNGSANAL FISYYTAQGE PFPNNVEKLC APNMTDFPSF HGNGTEKTKL VELYRMVAYL SASLTNITRD QKVLNPTAVS LQVKLNATID VMRGLLSNVL CRLCNKYRVG HVDVPPVPDH SDKEAFQRKK LGCQLLGTYK QVISVVVQAF

Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

<sup>\*</sup>The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.