

**Recombinant Murine Leukemia Inhibitory Factor  
(rMuLIF)  
Catalog Number: 123-07**

<b>Description</b>	Leukemia Inhibitory Factor (LIF) is a lymphoid factor which promotes long-term maintenance of embryonic stem cells by suppressing spontaneous differentiation. LIF has a number of other activities including cholinergic neuron differentiation, control of stem cell pluripotency, bone and fat metabolism, mitogenesis of certain factor dependent cell lines and promotion of megakaryocyte production <i>in vivo</i> .
<b>Synonyms</b>	D-FACTOR, differentiation-stimulating factor
<b>AA Sequence</b>	MSPLPITPVN ATCAIRHPCH GNLMNQIKNQ LAQLNGSANA LFISSYYTAQG EPPFNNVEKL CAPNMTDFPS FHGNGTEKTK LVELYRMVAY LSASLTNITR DQKVLNPTAV SLQVKLNATI DVMRGLLSNV LCRLCNKYRV GHVDVPPVPD HSDKEAFQRK KLG CQLLGT Y KQVISVVVQA F
<b>Source</b>	<i>Escherichia coli</i>
<b>Molecular Weight</b>	Approximately 20 kDa, a single non-glycosylated polypeptide chain containing 181 amino acids.
<b>Purity</b>	>98% by SDS-PAGE and HPLC analyses.
<b>Biological Activity</b>	Activity determined by its ability to induce differentiation of murine M1 myeloid leukemic cells. Minimum detectable concentration in assay is 0.5ng/mL, corresponding to specific activity > 1 x 10 <sup>8</sup> units/ mg.
<b>Physical Appearance</b>	White lyophilized powder.
<b>Formulation</b>	Lyophilized from a 0.2µm filtered concentrated (1mg/ml) solution in 20mM PB, pH 7.4, with 0.02% TWEEN 20.
<b>Endotoxin</b>	< 1EU/µg of growth factor as determined by LAL method.
<b>Reconstitution</b>	Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.
<b>Storage</b>	Store at -20°C after receiving. Upon reconstitution, store at 2-8°C for up to one week. For maximal stability, aliquot and store at -20°C. Avoid repeated freeze/ thaw cycles.
<b>Usage</b>	This product is for research use only. It is not approved for use in humans, animals, or <i>in vitro</i> diagnostic procedures.