

**Recombinant Mouse Leukemia Inhibitory Factor
(rmLIF)
Catalog Number: 123-07**

Description	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 in vivo.
Synonyms	D-FACTOR, differentiation-stimulating factor
AA Sequence	MSPLPITPVN ATCAIRHPCH GNLMNQIKNQ LAQLNGSANA LFISSYYTAQG EPFPNNVEKL CAPNMTDFPS FHGNGTEKTK LVELYRMVAY LSASLTNITR DQKVLNPTAV SLQVKLNATI DVMRGLLSNV LCRLCNKYRV GHVDVPPVPD HSDKEAFQRK KLG CQLLGT Y KQVISVVVQA F
Source	<i>Escherichia coli</i>
Molecular Weight	Approximately 20 kDa, a single non-glycosylated polypeptide chain containing 181 amino acids.
Purity	>98% by SDS-PAGE and HPLC analyses.
Biological Activity	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 ⁸ units/ mg.
Physical Appearance	White lyophilized powder.
Formulation	Lyophilized from a 0.2µm filtered concentrated (1mg/ml) solution in 20mM PB, pH 7.4, with 0.02% TWEEN 20.
Endotoxin	< 1EU/µg of growth factor as determined by LAL method.
Reconstitution	Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.
Storage	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.
Usage	This product is for research use only. It is not approved for use in humans, animals, or <i>in vitro</i> diagnostic procedures.