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LIF Mouse

Leukemia Inhibitory Factor Mouse Recombinant
CYK0479

Product Overview

Name	LIF Mouse
Description	
Leukemia Inhibitory Factor Mouse Recombinant	
Accession (Primary)	P09056
Synonyms	
CDF, HILDA, D-FACTOR, Differentiation- stimulating factor, Melanoma-derived LPL inhibitor, MLPLI, Emfilermin, Leukemia inhibitory factor, LIF, DIA.	
Introduction	
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.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
Leukemia Inhibitory Factor (LIF) was lyophilized from a concentrated (1mg/ml) sterile solution containing 20mM Phosphate buffer pH-7.4 and 0.02% Tween-20.	
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	

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MSPLPITPVNATCAIRHPCHGNLMNQIKNQLAQLNGSANALFISYYTAQGEPFP

NNVEKLCAPNMTDFPSFHGNGTEKTKLVELYRMVAYLSASLTNITRDQKVLNP

TAVSLQVKLNATIDVMRGLLSNVLCRLCNKYRVGHVDVPPVPDHSDKEAFQR KKLGCQLLGTYKQVISVVVQAF.

Biological 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.

Solubility

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

Precautions

LIF Mouse is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P09056)