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#72934**Mouse LIF Recombinant Protein**

20 µg


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MW (kDa):	UniProt ID:	Entrez-Gene Id:
20	#P09056	16878
<b>Background</b>	Leukemia Inhibitory Factor (LIF) is a 20 kDa pleiotropic factor belonging to the IL-6 superfamily of cytokines (1). LIF is expressed in a number of tissues and cell types. The LIF receptor is a heterodimer comprised of LIF-R (gp190) and gp130, a common signal transducer for IL-6-type cytokines (1). Depending on cell type and context, LIF/LIF-R can activate Erk, PI3K, and Jak1/Stat1/3 pathways (1,2). LIF has a diverse array of biological activities. Murine embryonic stem cells are dependent on LIF for pluripotency and self-renewal <i>in vitro</i> (1). Exercise-induced LIF secretion in muscle induces myoblast proliferation, suggesting that LIF may play a role in exercise-induced muscle hypertrophy (2). LIF also negatively regulates Th2 and Th17 cell differentiation (3,4).	
<b>Endotoxin</b>	Endotoxin levels are less than or equal to 1 EU / 1 µg mLIF.	
<b>Purity</b>	A greater than or equal to 95% purity was determined by SDS-PAGE.	
<b>Source / Purification</b>	Recombinant mouse LIF was expressed in <i>E. coli</i> and is supplied in a lyophilized form.	
<b>Bioactivity</b>	The bioactivity of recombinant mouse LIF was determined by measuring the production of IL-6 from M1 cells. The ED <sub>50</sub> of each lot is less than or equal to 1 ng/mL.	
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Mathieu, M.E. et al. (2012) <i>Stem Cell Rev Rep</i> 8, 1-15.</li> <li>2. Broholm, C. and Pedersen, B.K. (2010) <i>Exerc Immunol Rev</i> 16, 77-85.</li> <li>3. Cao, W. et al. (2011) <i>Immunity</i> 35, 273-84.</li> <li>4. Ullah, U. et al. (2012) <i>Sci Rep</i> 2, 464.</li> </ol>	

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