

## 32-7015: Recombinant Human Leukemia Inhibitory Factor/LIF

**Gene :** LIF  
**Gene ID :** 3976  
**Uniprot ID :** P15018

### Description

Source: E.coli.  
MW :19.7kD.

Recombinant Human Leukemia Inhibitory Factor is produced by our E.coli expression system and the target gene encoding Ser23-Phe202 is expressed. Leukemia Inhibitory Factor (LIF) is a lymphoid factor that 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. Human and murine mature LIF exhibit a 78% sequence identity at the amino acid level. Human LIF is equally active on human and mouse cells. Murine LIF is approximately 1000 fold less active on human cells than human LIF.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, 0.02% Tween 20, pH 7.4.  
Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks.  
**Storage condition :** Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** MSPLPITPVNATCAIRHPCHNNLMNQIRSQLAQLNGSANALFILYYTAQGEFPNNDKLCGPNVDFPPFHANG  
TEKAKLVELYRIVVYLGTS LGNITRDQKILNPSALSLHSKLNATADILRGLLSNVLCRLCSKYHVGHVDVYGPDT  
SGKDVFQKKLGCQLLGKYKQIIAVLAQAF

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 µg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.

**Biological Activity :** ED50 is less than 0.01 ng/ml. Specific Activity of 1.0 x 10<sup>8</sup> IU/mg.