

## 32-20393: Animal-Free Recombinant Human LIF(Discontinued)

**Reactivity :** Mouse

**Alternative Name :** Leukemia Inhibitory Factor, Differentiation-stimulating factor, D factor, Melanoma-derived LPL inhibitor (MLPLI), Interleukin 6 family cytokine

### Description

#### Source:E.coli

LIF is a pleiotrophic factor produced by multiple cell types, including T cells, myelomonocytic lineages, fibroblasts, liver, heart and melanoma. LIF promotes long-term maintenance of embryonic stem cells by suppressing spontaneous differentiation. Other activities include the stimulation of acute phase protein synthesis by hepatocytes, stimulation of differentiation of cholinergic nerves, and suppression of adipogenesis by inhibiting the lipoprotein lipase in adipocytes. While human LIF is active on mouse cells and is widely used in the maintenance of murine ESC to prevent spontaneous differentiation, mouse LIF is not active on human cells due to its inability to bind to the human LIF receptor. Recombinant Human LIF is a 19.7 kDa protein containing 180 amino acid residues, including three disulfide bonds.

### Product Info

**Amount :** 5 µg / 25 µg

**Purification :** Purity:>= 98% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** SPLPITPVNA TCAIRHPCHN NLMNQIRSQL AQLNGSANAL FILYYTAQGE PFPNNLDKLC GPNVTDFPPF  
HANGTEKAKL VELYRIVVYL GTSLGNITRD QKILNPSALS LHSKLNATAD ILRGLLSNVL CRLCSKYHVG  
HVDVTYGPDT SGKDVQKKK LGCQLLGKYK QIIAVLAQAF

### Application Note

Determined by its ability to stimulate the proliferation of human TF-1 cells. The expected ED<sub>50</sub> is <=0.1 ng/ml, corresponding to a specific activity of >= 1 x 10<sup>7</sup> units/mg.