

**Recombinant Human LIF**  
**Catalog # PBG10271****Specification**

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**Recombinant Human LIF - Product Information****Recombinant Human LIF - Additional Information****Description**

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 M cells and is widely used in the maintenance of murine ESC to prevent spontaneous differentiation, M LIF is not active on human cells due to its inability to bind to the human LIF receptor. Recombinant human LIF is a 19.6 kDa protein containing 180 amino acids residues including three disulfide bonds.

**Biological Activity**

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.

**Authenticity**

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

**Endotoxin**

Endotoxin level is <0.1 ng/ µg of protein (<1EU/ µg).

**Protein Content**

Verified by UV Spectroscopy and/or SDS-PAGE gel.

**Storage**

-20°C

**Precautions**

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

**Recombinant Human LIF - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **Recombinant Human LIF - Images**