

**Human CellExp LIF, mouse recombinant protein**  
**LIF, CDF, DIA, HILDA, MLPLI**  
**Catalog # PBV10893r****Specification**

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**Human CellExp LIF, mouse recombinant protein - Product info**Primary Accession  
Calculated MW[P09056](#)**Calculated MW of 20.7 kDa with no tags.**  
**The predicted N-terminus is Ser 24.**  
**DTT-reduced Protein migrates as 33-45**  
**kDa due to different glycosylation. KDa****Human CellExp LIF, mouse recombinant protein - Additional Info**Gene ID  
Gene Symbol  
**Other Names**  
LIF, CDF, DIA, HILDA, MLPLI**16878**  
**LIF**Gene Source  
Source  
Assay&Purity  
Assay2&Purity2  
Recombinant  
**Target/Specificity**  
LIF**Mouse**  
**HEK 293 cells**  
**SDS-PAGE; ≥92%**  
**N/A;**  
**Yes****Application Notes**

Centrifuge the vial prior to opening. Reconstitute in sterile deionized water to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.

**Format**

Lyophilized powder

**Storage**

-20°C; Sterile filtered through a 0.22 micron filter. Lyophilized from 1 x PBS, pH 7.4. Generally 5-8% Mannitol or trehalose is added as a protectant before lyophilization.

**Human CellExp LIF, mouse recombinant protein - 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](#)

#### **Human CellExp LIF, mouse recombinant protein - Images**

#### **Human CellExp LIF, mouse recombinant protein - Background**

Leukemia inhibitory factor, or LIF, an interleukin 6 class cytokine, is a protein in cells that affects cell growth and development. 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. Removal of LIF pushes stem cells toward differentiation, but they retain their proliferative potential or pluripotency. Therefore LIF is used in mouse embryonic stem cell culture. It is necessary to maintain the stem cells in an undifferentiated state, however genetic manipulation of embryonic stem cells allows for LIF independent growth, notably overexpression of the gene Nanog. LIF is not required for culture of human embryonic stem cells.

#### **Human CellExp LIF, mouse recombinant protein - References**

Gough N.M., et al. Nucleic Acids Res. 16:9857-9857(1988).  
Stahl J., et al. J. Biol. Chem. 265:8833-8841(1990).  
Teuscher C., et al. J. Immunol. 163:2262-2266(1999).  
Gearing D.P., et al. EMBO J. 6:3995-4002(1987).  
Gough N.M., et al. Blood Cells 14:431-442(1988).