

Human CellExp LIF, human recombinant protein
LIF, CDF, DIA, HILDA, MLPLI
Catalog # PBV10892r**Specification**

Human CellExp LIF, human recombinant protein - Product infoPrimary Accession
Calculated MW[P15018](#)
Calculated MW of 19.9 kDa with Gly-Pro at the N- terminus. The predicted N-terminus is Ser 23. DTT-reduced Protein migrates as 35-45 kDa. KDa**Human CellExp LIF, human recombinant protein - Additional Info**Gene ID
Gene Symbol
Other Names
LIF, CDF, DIA, HILDA, MLPLI**3976**
LIFGene Source
Source
Assay&Purity
Assay2&Purity2
Recombinant
Target/Specificity
LIF**Human**
HEK 293 cells
SDS-PAGE; ≥95%
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, human 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, human recombinant protein - Images

Human CellExp LIF, human 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, human recombinant protein - References

Moreau J.-F., et al. Nature 336:690-692(1988).
Lowe D.G., et al. DNA 8:351-359(1989).
Brandenberger R., et al. Nat. Biotechnol. 22:707-716(2004).
Stahl J., et al. J. Biol. Chem. 265:8833-8841(1990).
Ota T., et al. Nat. Genet. 36:40-45(2004).