

LIF

Catalog # PVGS1026

Product Information

Primary Accession P15018
Species Human

Sequence Ser23-Phe202

Purity > 95% as analyzed by SDS-PAGE

Endotoxin Level

Expression System E. coli

Formulation Lyophilized after extensive dialysis against PBS.

Reconstitution It is recommended that this vial be briefly centrifuged prior to opening to

bring the contents to the bottom. Reconstitute the lyophilized powder in

 ddH_2O up to 100 $\square g/ml$.

Storage & Stability Upon receiving, this product remains stable for up to 6 months at lower than

-70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw

cycles.

Additional Information

Gene ID 3976

Other Names Leukemia inhibitory factor, LIF, Differentiation-stimulating factor, D factor,

Melanoma-derived LPL inhibitor, MLPLI, Emfilermin, LIF, HILDA

Target Background Leukemia Inhibitory Factor (LIF) is a pleiotropic cytokine belonging to the long

four-helix bundle cytokine superfamily. LIF shares tertiary structure with several other cytokines, including Interleukin-6 (IL-6), Oncostatin M, ciliary neurotropic factor, and cardiotrophin-1, and their functions in vivo are also redundant to some extent. LIF can bind to the common receptor of IL-6 subfamily, gp130, and then recruit its own receptor LIF Receptor to form a ternary complex. The basal expression of LIF in vivo is low; and its expression is induced by pro-inflammatory factors, including lipopolysaccharide, IL-1, and IL-17, and inhibited by anti-inflammatory agents, including IL-4 and IL-13. The functions of LIF include proliferation of primordial germ cells, regulation in blastocyst implantation and early pregnancy, and maintenance of

pluripotent embryonic stem cells.

Protein Information

Name LIF

Synonyms HILDA

Function LIF has the capacity to induce terminal differentiation in leukemic cells. Its

activities include the induction of hematopoietic differentiation in normal and myeloid leukemia cells, the induction of neuronal cell differentiation, and the

stimulation of acute-phase protein synthesis in hepatocytes.

Cellular Location Secreted.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.