Recombinant Protein Technical Manual

Recombinant Human LIF Protein (His Tag)(Active)

RPES1092

Product Data:

Product SKU: RPES1092

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: P15018

Protein Information:

Molecular Mass: 21.2 kDa

AP Molecular Mass: 35-42 kDa

Tag: C-His

Bio-activity: Measured by its ability to inhibit the proliferation of M1 mouse myeloid leukemia cells. The ED50 for this effect is typically 0.2 ng/ml.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: Leukemia Inhibitory Factor; LIF; Differentiation-Stimulating Factor; D Factor; Melanoma-Derived LPL Inhibitor; MLPLI; Emfilermin; LIF; HILDA;CDF;DIA

Immunogen Information:

Sequence: Met 1-Phe202

Background:

Leukemia inhibitory factor (LIF) is a pleiotropic glycoprotein belonging to the IL-6 family of cytokines. It's involved in growth promotion and cell differentiation of different types of target cells, influence on bone metabolism, cachexia, neural development, embryogenesis and inflammation. LIF has potent proinflammatory property, being the inducer of the acute phase protein synthesis and affecting the cell recruitment into the area of damage or inflammation. LIF is also one of the cytokines that are capable to regulate the differentiation of embryonic stem cells, hematopoietic and neuronal cells. LIF binds to the specific LIF receptor (LIFR-α) which forms a heterodimer with a specific subunit common to all members of that family of receptors, the GP130 signal transducing subunit. This leads to activation of the JAK/STAT and MAPK cascades. Due to its polyfunctional activities, LIF is involved in the pathogenic events and development of many diseases of various origin.