

Datasheet for ABIN2181462

LIF Protein (AA 23-202)**2** Images[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	LIF
Protein Characteristics:	AA 23-202
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Brand:	ActiveMax®
Sequence:	AA 23-202
Characteristics:	rhLIF, with Gly-Pro at the N- terminus, has a calculated MW of 19.9 kDa. The predicted N-terminus is Ser 23. The reducing (R) protein migrates as 33-45 kDa.
Purity:	>95 % as determined by SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	LIF
Alternative Name:	LIF (LIF Products)

Target Details

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.

Molecular Weight: 19.9 kDa

Pathways: [JAK-STAT Signaling](#), [Positive Regulation of Peptide Hormone Secretion](#), [Negative Regulation of Hormone Secretion](#), [Stem Cell Maintenance](#), [Growth Factor Binding](#)

Application Details

Restrictions: For Research Use only

Handling

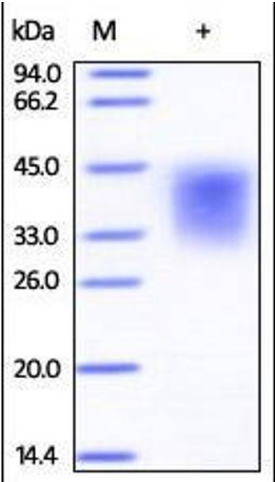
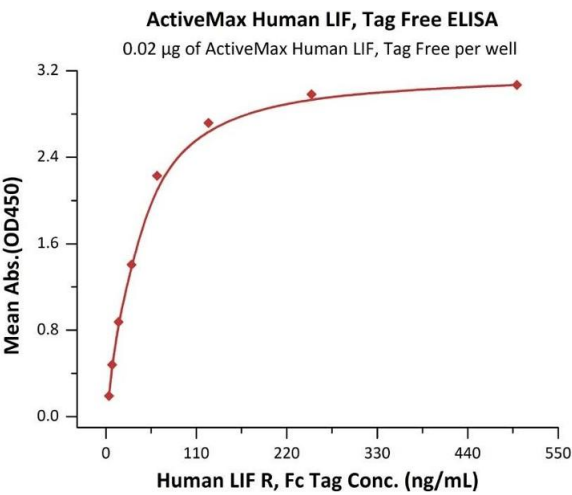
Format: Lyophilized

Buffer: PBS, pH 7.4

Handling Advice: Please avoid repeated freeze-thaw cycles.

Storage: -20 °C

Storage Comment: No activity loss was observed after storage at: In lyophilized state for 1 year (4 °C-8 °C), After reconstitution under sterile conditions for 1 month (4 °C-8 °C) or 3 months (-20 °C to -70 °C).



ELISA

Image 1. Immobilized Human LIF, Tag Free (ABIN2181462,ABIN3071723,ABIN3071724) at 0.2 µg/mL (100 µL/well) can bind Human LIF R, Fc Tag (ABIN2444162,ABIN2181467) with a linear range of 4-63 ng/mL (QC tested).

SDS-PAGE

Image 2. Human LIF on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.