Datasheet for ABIN6239785

LIF Protein (AA 2-201) (His tag)

2 Images

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Overview

Quantity:	50 µg
Target:	LIF
Protein Characteristics:	AA 2-201
Origin:	Human
Source:	Escherichia coli (E. coli)
Biological Activity:	Active
Purification tag / Conjugate:	This LIF protein is labelled with His tag.
Application:	Activity Assay (AcA), Cell Culture (CC)

Product Details

Characteristics:	Tag location: N-terminal His Tag
Purity:	> 95 %
Biological Activity Comment:	Leukemia inhibitory factor (LIF) is an interleukin 6 class cytokine that affects cell growth by inhibiting differentiation. When LIF levels drop, the cells differentiate. LIF derives its name from its ability to induce the terminal differentiation of myeloid leukemic cells, thus preventing their continued growth. Other properties attributed to the cytokine include: the growth promotion and cell differentiation of different types of target cells, influence on bone metabolism, cachexia, neural development, embryogenesis and inflammation. LIF has been shown to stimulate the proliferation of TF-1 cells. To test this effect, TF-1 cells were seeded into triplicate wells of 96-well plates at a density of 1x104 cells/well and incubated for 72h in the presence or absence of various concentrations of LIF at 37°C. The growth of cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10µL of

Product Details

	CCK-8 solution was added to each well of the plate, then measure the absorbance at 450nm using a microplate reader after incubating the plate for 1-4 hours at 37 °C. Cell proliferation of TF-1 cells after incubation with SCF for 72h observed by inverted microscope was shown in Figure 1.

Target Details

Target:	LIF
Abstract:	LIF Products
Background:	Alternative Names: CDF, D-FACTOR, HILDA, MLPLI, Cholinergic Differentiation Factor, Differentiation-Stimulating Factor, Melanoma-Derived LPL Inhibitor, Emfilermin
Molecular Weight:	26kDa
UniProt:	P15018
Pathways:	JAK-STAT Signaling, Positive Regulation of Peptide Hormone Secretion, Negative Regulation of Hormone Secretion, Stem Cell Maintenance, Growth Factor Binding

Application Details

Application Notes:	Isoelectric Point: 9.5
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	20 mM Tris, 150 mM NaCl, pH 8.0, containing 1 mM EDTA, 1 mM DTT, 0.01 % SKL, 5 % Trehalose and Proclin300.
Preservative:	Dithiothreitol (DTT), Other preservative, ProClin
Precaution of Use:	This product contains ProClin and Dithiothreitol (DTT): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

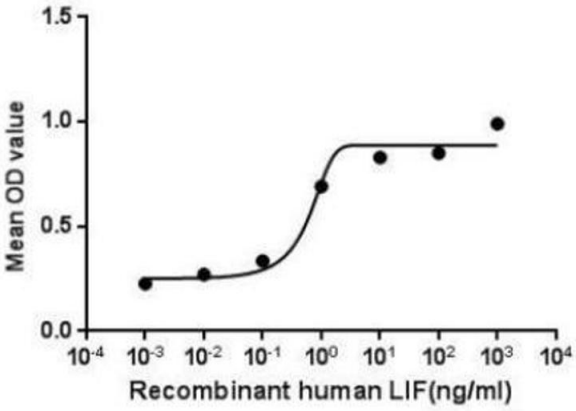

Figure 2. The dose-effect curve of LIF.

Image 1. The dose-effect curve of LIF was shown in Figure 2. It was obvious that it significantly promoted cell proliferation of TF-1 cells. The ED50 for this effect is typically 0.05 to 1.67ng/mL

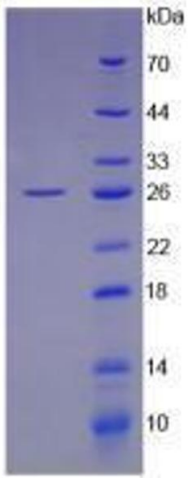

Image 2.