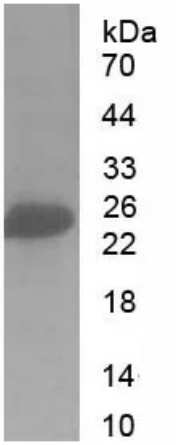
Active Leukemia Inhibitory Factor (LIF)

Catalog#:PER12158

概述（Summary）

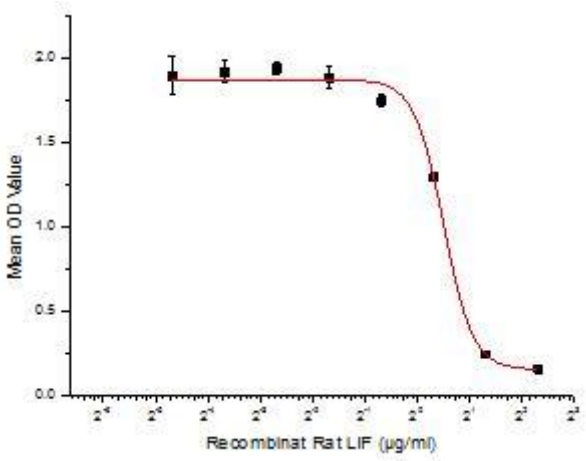
别称（Alternative Names）	CDF; D-FACTOR; HILDA; MLPLI; Cholinergic Differentiation Factor; Differentiation-Stimulating Factor; Melanoma-Derived LPL Inhibitor; Emfilermin
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Leu25-Phe202】
Accession #	P17777
表达宿主（Host）	E.coli
种属（Species）	Rattus norvegicus (Rat)
预测分子量（Predicted MW）	23.3 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	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.

电泳图（SDS-PAGE image）

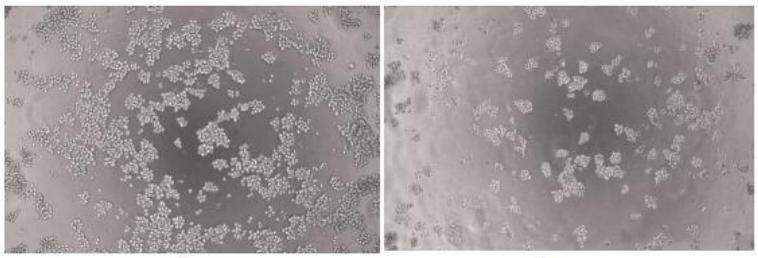


Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）



Leukemia inhibitory factor (LIF), is an interleukin 6 class cytokine that affects cell growth by inhibiting differentiation. LIF as a cytokine also has another fuction including: the growth promotion and cell differentiation of different types of target cells, influence on bone metabolism, cachexia, neural development, embryogenesis and inflammation. To evaluate the activty of recombinant rat LIF, the K562 cells were were seeded into triplicate wells of 96-well plates at a density of 5,000 cells/well with5% serum standard 1640 which contains various concentrations of recombinant rat LIF. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 µl of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 2-4 hours at 37 ℃. After incubation with LIF for72h, proliferative inhibition of K562 cells observed by inverted microscope was shown in Figure1. Cell viability was assessed by CCK-8(Cell Counting Kit-8) assay after incubation with recombinant LIF for72h. The result was shown in Figure2. It was obvious that LIF significantly inhibit cell viability of K562 cells. The ED50 is 1.44µg/ml. Figure2. Proliferative inhibition of K562 cells after stimulated with LIF.



A B

Figure 1. Proliferative inhibition of K562 cells after stimulated with LIF.

(A) Unstimulated k562cells cultured in 1640 for 72h;
(B) K562 cells cultured in 1640, stimulated with 1.25μg/ml LIF for 72h.

注意事项（Note）

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