

Leukemia Inhibitory Factor Active Protein | LIF active protein

Active Leukemia Inhibitory Factor (LIF)

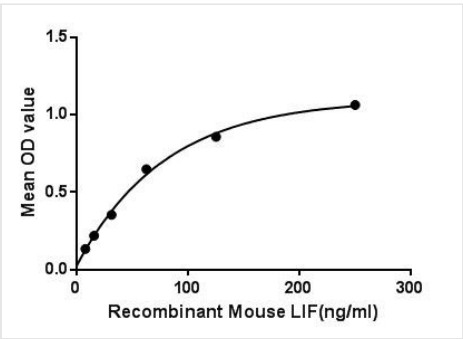
CATALOG # AAA150066	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Leukemia Inhibitory Factor; Active Leukemia Inhibitory Factor (LIF); CDF; D-FACTOR; HILDA; MLPLI; Cholinergic Differentiation Factor; Differentiation-Stimulating Factor; Melanoma-Derived LPL Inhibitor; Emfilermin; LIF active protein

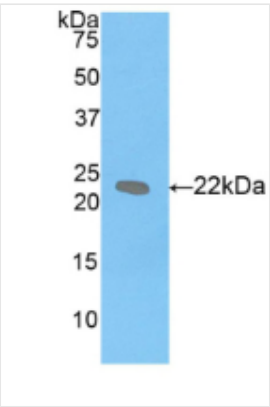
PRODUCT SPECIFICATIONS

Purity/Purification	>95%
Form/Format	Freeze-dried powder PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Sequence Positions	Pro25~Phe203
Sequence Length	158
Applicable Applications for LIF active protein	Activity Assay, Cell Culture
Species	Mouse
Tag	N-terminal His Tag
Isoelectric Point	9.1
Reconstitution	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Avoid repeated freeze/thaw cycles. Stability: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

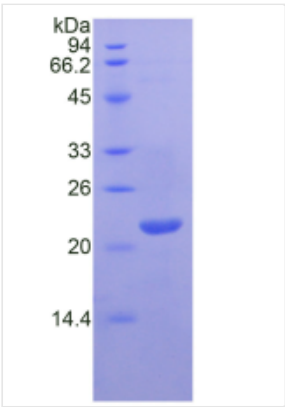


Bioactivity

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. Besides, Colony Stimulating Factor Receptor, Granulocyte (GCSFR) has been identified as an interactor of LIF, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse LIF and recombinant mouse GCSFR. Briefly, LIF were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100L were then transferred to GCSFR-coated microtiter wells and incubated for 2h at 37. Wells were washed with PBST and incubated for 1h with anti-LIF pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of LIF and GCSFR was shown in Figure 1, and this effect was in a dose dependent manner. Figure. The binding activity of LIF with GCSFR.



WB (Western Blot)
Figure. Western Blot



SDS-PAGE
Figure. SDS-PAGE

ADDITIONAL INFORMATION

Product Categories/Family for LIF active protein	Cytokine; Tumor immunity; Infection immunity; Neuro science; Bone metabolism
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NCBI AND UNIPROT INFORMATION

NCBI GI #	88014736
NCBI GeneID	16878
NCBI Accession #	NP_001034626.1
NCBI GenBank Nucleotide #	NP_001034626.1
UniProt Accession #	P09056

Molecular Weight	Predicted Molecular Mass: 21.0kDa Accurate Molecular Mass: 21kDa
NCBI Official Full Name	leukemia inhibitory factor isoform b
NCBI Official Synonym Full Names	leukemia inhibitory factor
NCBI Official Symbol	Lif
NCBI Protein Information	leukemia inhibitory factor
UniProt Protein Name	Leukemia inhibitory factor
UniProt Gene Name	Lif
UniProt Synonym Gene Names	LIF; D factor
UniProt Entry Name	LIF_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/lif-active-protein/leukemia-inhibitory-factor/150066>