

## Active Recombinant Mouse Lif, His-tagged, Biotinylated

**Cat. No.** Lif-719M    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                              |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | The recombinant mouse LIF is expressed as a 202-amino acid protein consisting of Ser24 - Phe203 region of (UniProt accession #P09056) and a C-terminal His-tag. It contains 6 potential N-linked glycosylation sites.                                        |
| <b>Species</b>          | Mouse                                                                                                                                                                                                                                                        |
| <b>Source</b>           | Human Cells                                                                                                                                                                                                                                                  |
| <b>ProteinLength</b>    | 24-203 a.a.                                                                                                                                                                                                                                                  |
| <b>Form</b>             | Supplied at 0.5 mg/ml in sterile PBS pH7.4 (carrier & preservative free). The purified recombinant protein was labeled with Biotin (3-5 Biotin per molecule).                                                                                                |
| <b>Bio-activity</b>     | Stimulates TF-1 human erythroleukemic cell proliferation assay with an ED50 typically 0.05 - 0.2 ng/ml. Induce IL-6 secretion in M1 mouse myeloid leukemia cells. Supports the maintenance of embryonic stem (ES) cell pluripotency and germline competency. |
| <b>Molecular Mass</b>   | Calculated molecular mass (kDa): 22.4; Estimated by SDS-PAGE under reducing condition (kDa): 45-50 (probably due to glycosylation)                                                                                                                           |
| <b>AA Sequence</b>      | SPLPITPVNA TCAIRHPCHG NLMNQIKNQL AQLNGSANAL FISYYTAQGE<br>PFPNNVEKLC APNMTDFPSF HGNGTEKTKLVELYRMVAYL SASLTNITRD<br>QKVLNPTAVS LQVKLNATID VMRGLLSNVL CRLCNKYRVG HVDVPPVPDH<br>SDKEAFQRKKLG CQLLGTYK QVISVVVQAF GSTTENLYFQ GSTGHHHHHH HH                       |

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|                    |                                                                                                                                                                                                                                                                                                                                                     |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Endotoxin</b>   | <0.1 eu per 1 µg of purified recombinant protein determined by the lal>                                                                                                                                                                                                                                                                             |
| <b>Purity</b>      | >95% judged by SDS-PAGE under reducing condition.                                                                                                                                                                                                                                                                                                   |
| <b>Storage</b>     | The product is shipped at 4°C. Upon receipt, centrifuge the product briefly before opening the vial. It is recommended to store small aliquots at the temperature below –20°C for long-term storage and the product is stable for 3 months. The undiluted protein can be stored at 4°C for no more than 2 weeks. Avoid repeated freeze-thaw cycles. |
| <b>Conjugation</b> | Biotin                                                                                                                                                                                                                                                                                                                                              |

## GENE INFORMATION

|                        |                                                                                    |
|------------------------|------------------------------------------------------------------------------------|
| <b>Gene Name</b>       | Lif leukemia inhibitory factor [ Mus musculus ]                                    |
| <b>Official Symbol</b> | Lif                                                                                |
| <b>Synonyms</b>        | LIF; leukemia inhibitory factor; d factor; differentiation-stimulating factor;     |
| <b>Gene ID</b>         | 16878                                                                              |
| <b>mRNA Refseq</b>     | NM_001039537                                                                       |
| <b>Protein Refseq</b>  | NP_001034626                                                                       |
| <b>MIM</b>             |                                                                                    |
| <b>UniProt ID</b>      |                                                                                    |
| <b>Pathway</b>         | Adipogenesis, organism-specific biosystem; Cytokine-cytokine receptor interaction, |

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organism-specific biosystem; Cytokine-cytokine receptor interaction, conserved biosystem; ESC Pluripotency Pathways, organism-specific biosystem; Jak-STAT signaling pathway, organism-specific biosystem; Jak-STAT signaling pathway, conserved biosystem; MicroRNAs in cardiomyocyte hypertrophy, organism-specific biosystem;

**Function**

cytokine activity; cytokine activity; growth factor activity; growth factor activity; leukemia inhibitory factor receptor binding; receptor binding;

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