Recombinant Mouse LIF / Leukemia Inhibitory Factor, Animal Free & Carrier Free

Cat #: C-CYP252

Size: 5μg, 20μg, 100μg, 500μg, 1mg

Shipping: Blue Ice

Product Overview

LIF, a pleiotrophic factor, is identified in multiple cell types, including T cells, myelomonocytic lineages, fibroblasts, liver, heart and melanoma. LIF is capable of promoting long-term maintenance of embryonic stem cells by inhibiting spontaneous differentiation. In addition, LIF also have abilities including stimulation of differentiation of cholinergic nerves, the stimulation of acute phase protein synthesis by hepatocytes,and suppression of adipogenesis by supressing the lipoprotein lipase in adipocytes.

Product Information

Source: *Escherichia Coli*.

Purity: >95% as determined by SDS-PAGE. Ni-NTA chromatography.

Biological Activity: Measure by its ability to induce IL-6 secretion in M1 cells. The ED_{50} for this effect is < 0.5 ng/mL.

The specific activity of recombinant mouse LIF is > 2 x 10^6 IU/mg

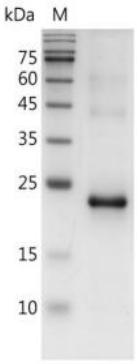
Endotoxin: <0.1EU per 1μg of the protein by the LAL method.

Amino acid sequence:

SPLPITPVNATCAIRHPCHGNLMNQIKNQLAQLNGSANALFISYYTAQGEPFPNNVEKLCAPNMTDFPSFHGNGTEKTKLVELYRMVAYLS
ASLTNITRDQKVLNPTAVSLQVKLNATIDVMRGLLSNVLCRLCNKYRVGHVDVPPVPDHSDKEAFQRKKLGCQLLGTYKQVISVVVQAF

with polyhistidine tag at the N-terminus.

Formulation: Lyophilized from a sterile filtered aqueous solution in 1X PBS, pH 7.4



SDS-PAGE analysis of recombinant mouse LIF

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.

2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H_2O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.

3. The reconstituted solution can be stored at 2-8°C for up to 1 week.

4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 μg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.