

Datasheet for ABIN6700228

LIF Protein



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1 Image

Overview

Quantity:	5 µg
Target:	LIF
Origin:	Mouse
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Purpose:	Mouse Leukemia Inhibitory Factor Recombinant Protein (Animal Free)
Purification:	Mouse Leukemia Inhibitory Factor is produced with no animal-derived raw products, animal free equipment and animal free protocols. Purity was determined to be greater than 98% as determined by reducing and non-reducing SDS-PAGE.
Purity:	98,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is determined by its ability to inhibit proliferation of M1 cells and is typically less than 0.03 ng/mL.

Target Details

Target:	LIF
Alternative Name:	Lif (LIF Products)
Background:	Synonyms: Differentiation-stimulating factor (D factor), Leukocyte Inhibitory Factor Background: Mouse Leukemia Inhibitory Factor (LIF) is member of the IL-6 family and is made

Target Details

by a variety of tissues. LIF signals through receptors gp190 (LIFR) and gp130 to activate STAT3 which ultimately promotes mouse embryonic stem cell self-renewal and pluripotency of long term cultures. This activity is similar to that attributed to FGF-basic (FGF-2) for human embryonic stem cells. Recombinant mouse LIF is a non-glycosylated protein, containing 181 amino acids, with a molecular weight of 20 kDa.

UniProt:	P09056
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:	Other: User Optimized Application_Note: Leukemia Inhibitory Factor Recombinant Protein has been tested by biological activity and is suitable as a control for polyclonal or monoclonal anti-Leukemia Inhibitory Factor in immunological assays.
Comment:	Suggested_Applications: Cellular Assay Other_Performance_Data:
Restrictions:	For Research Use only

Handling

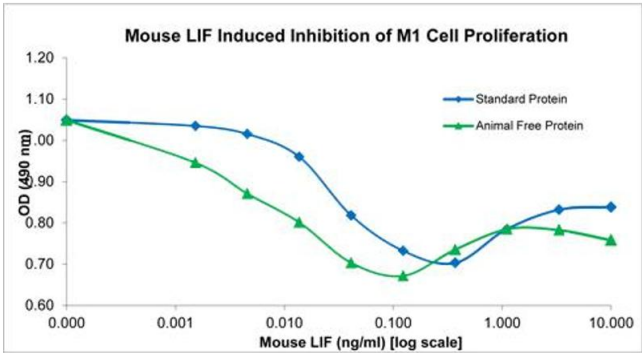
Format:	Lyophilized
Reconstitution:	Reconstitution_Buffer: 0.01M acetic acid Reconstitution_Volume: 5 µL (5-50 µL)
Concentration:	0.1 mg/mL
Buffer:	Buffer: 0.1 % Trifluoroacetic acid Stabilizer: None
Preservative:	Without preservative
Storage:	-20 °C
Storage Comment:	Store vial at -20° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each

Handling

opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.

Expiry Date: 6 months

Images



SDS-PAGE

Image 1. SDS-PAGE of Mouse Leukemia Inhibitory Factor Recombinant Protein (Animal Free) Bioactivity of Mouse Leukemia Inhibitory Factor Recombinant Protein. M1 cells were cultured with 0 to 10 ng/mL AF Mouse LIF. Cell viability was measured after 5 days and the linear portion of the curve was used to calculate the ED50. The ED50 of Mouse LIF is 0.004- 0.006 ng/mL.