

General Information

Source	<i>Escherichia coli</i>
Synonyms	Leukemia inhibitory factor; CDF; DIA; HILDA
Accession	P09056
Molecular Mass	19.9 kDa
Description	Recombinant Mouse LIF is a 19.9 kDa protein containing 180 amino acids residues, including three disulfide bonds.
Shipping	The product is shipped at 4 °C . Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Aliquot the reconstituted solution to minimize freeze-thaw cycles. Lyophilized protein should be stored at -20°C to -80°C, stable for one year after receipt. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Reconstitution	Centrifuge tubes before opening. Dissolve the lyophilized protein in distilled water. Do not mix by vortex. It is recommended to dissolve the product at a concentration of twice the specified specification.
Background	Leukemia inhibitory factor (LIF) is a 20 kDa protein that belongs to the IL-6 receptor family. It binds to a heterodimeric membrane receptor made up of a LIF-specific subunit, gp190 or LIFR, and the subunit gp130, which is shared with the other members of the IL-6 family. LIF expression has been observed in various tissues including thymus, lung, and neuronal tissue. LIF can be up-regulated by pro-inflammatory cytokines such as TNF- α and IL-17, and elevated levels of LIF have been found in cases of rheumatoid arthritis, neural injury, systemic inflammation, and tuberculosis. LIF displays diverse biological effects, but is best known for its ability to inhibit the differentiation of embryonic stem cells in mice and contribute to stem

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cell self-renewal.

Specifications

Formulation Lyophilized from sterile PBS, pH 7.4, 5% trehalose.

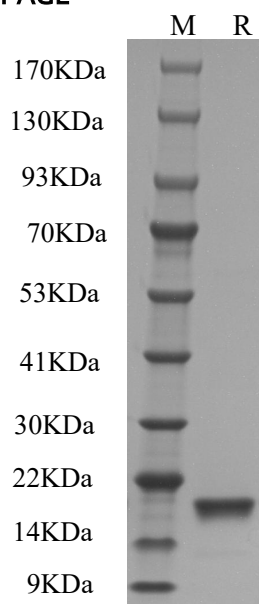
Purity ≥95% as determined by SDS-PAGE

Endotoxin <1 EU/ug

Bioactivity Immobilized Anti-Mouse LIF Antibody at 0.2 ug/mL (50 uL/well) can bind Mouse LIF with a linear range of 48.83 - 6,250 pg/mL.

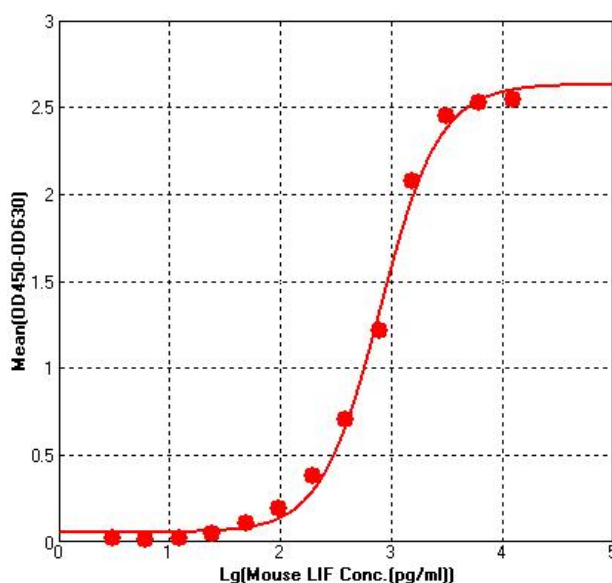
Data

SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE.

Bioactivity-ELISA



Immobilized Anti-Mouse LIF Antibody at 0.2 ug/mL (50 uL/well) can bind Mouse LIF with a linear range of 48.83 - 6,250 pg/mL. (EC50 = 0.76 ng/mL)

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