Recombinant Human LIF

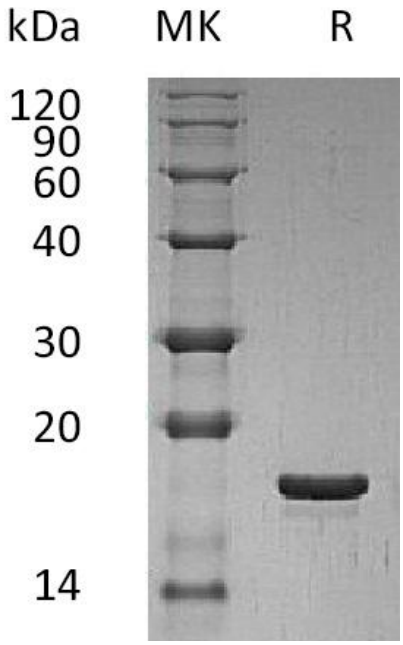
Catalog No.: RP0032

Basic Information

Information	
Source	*E.coli*
Description	Recombinant Human Leukemia Inhibitory Factor is produced by our E.coli expression system and the target gene encoding Ser23-Phe202 is expressed.
Accession	P15018
Known As	Leukemia Inhibitory Factor; LIF; Differentiation-Stimulating Factor; D Factor; Melanoma-Derived LPL Inhibitor; MLPLI; Emfilermin; LIF; HILDA
Predicted Mol Mass	19.7 KDa
Apparent Mol Mass	18 KDa, reducing conditions
Properties	
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4.
Storage	Lyophilized protein should be stored at ≤ -20°C, stable for one year after receipt. Reconstituted protein solution can be stored at 2-8°C for 2-7 days. Aliquots of reconstituted samples are stable at ≤ -20°C for 3 months.
Endotoxin	< 0.01 EU/μg as determined by LAL test.
Reconstitution	Always centrifuge tubes before opening.Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

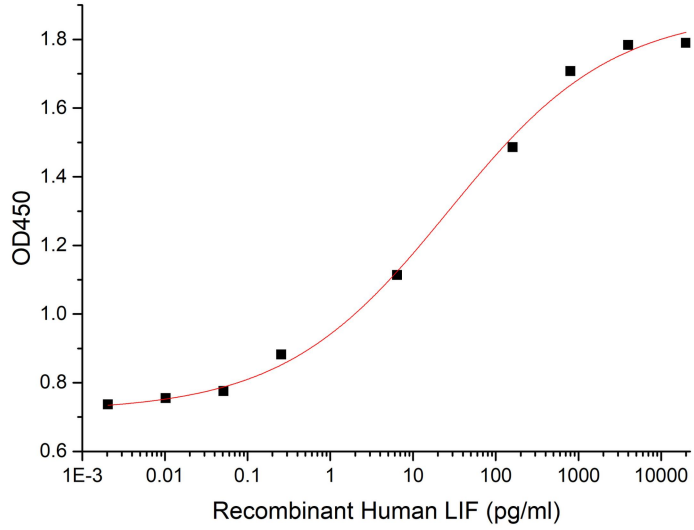
Experimental Data

Purity-SDS-PAGE



Greater than 95% as determined by reducing SDS-PAGE. (QC verified)

Bioactivity-Cell Based Assay



Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 25-150 pg/ml. (QC verified)

Background

Leukemia Inhibitory Factor (LIF) is a lymphoid factor that promotes long-term maintenance of embryonic stem cells by suppressing spontaneous differentiation. LIF has a number of other activities including cholinergic neuron differentiation, control of stem cell pluripotency, bone and fat metabolism, mitogenesis of certain factor dependent cell lines and promotion of megakaryocyte production in vivo. Human and murine mature LIF exhibit a 78% sequence identity at the amino acid level. Human LIF is equally active on human and mouse cells. Murine LIF is approximately 1000 fold less active on human cells than human LIF.