

Recombinant Human LIF (Leukemia Inhibitory Factor)

Product Description

- Animal-derived product free
- Available in Bulk
- High Activity

LIF^{HuXp} is a pleiotropic factor produced by numerous cell types which includes myelomonocytic lineages, T cells, fibroblasts, melanoma, liver, and heart. LIF promotes long-term maintenance of embryonic stem cells by suppressing spontaneous differentiation. Other activities include the stimulation of acute phase protein synthesis by hepatocytes, stimulation of differentiation of cholinergic nerves, and suppression of adipogenesis by inhibiting the lipoprotein lipase in adipocytes. Mature human LIF (180 aa) shares 78%, 82%, 91%, 88 and 87% aa sequence identity with mouse, rat, canine, bovine, and porcine LIF, respectively. To reduce spontaneous differentiation, LIF is typically added to stem cell culture medium.

Typical Specifications

Species	Human
Expression	HEK293 Cell Expressed
Activity	Typically ≤ 0.2 ng/mL EC ₅₀
Purity	>95%
Endotoxin	<1 EU/ μ g
Molecular Mass	33-48 kDa, glycosylated
Formulation	1x PBS

Purity Confirmation

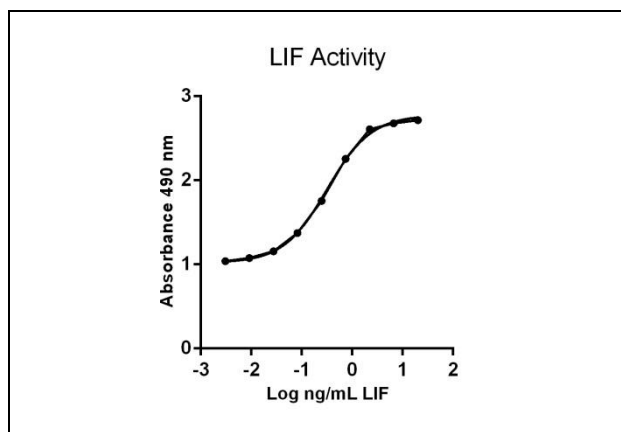
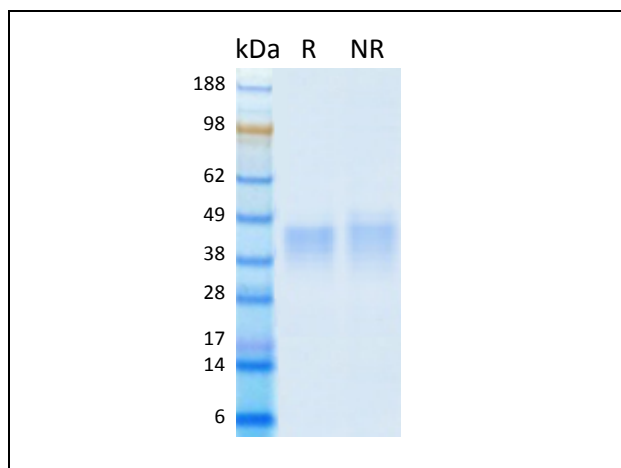
The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.

Activity Assay

The activity was determined by the dose-dependent stimulation of the proliferation of human TF-1 cells (human erythroleukemic indicator cell line).



All HumaXpress[®] HumanKine[™] are animal-component-free and Xeno-free[™]



Reconstitution Buffer

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile 1x PBS containing 0.1% endotoxin-free recombinant human serum albumin (HSA).

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