

Product Data Sheet

Inhibitors • Screening Libraries • Proteins

LIFR Protein, Rat (HEK293, His)

Cat. No.:	HY-P75907
Synonyms:	Leukemia inhibitory factor receptor; LIF-R; CD118
Species:	Rat
Source:	HEK293
Accession:	G3V7K2 (M1-S829)
Gene ID:	81680
Molecular Weight:	Approximately 116 kDa

PROPERTIES	
Biological Activity	 Measured by its binding ability in a functional ELISA. Immobilized Mouse LIF hFc at 2 μg/mL (100 μl/well) can bind Rat LIFR His, the EC₅₀ of Rat LIFR His is 300-700 ng/mL. Measured by its ability to inhibit the recombinant human LIF mediated inhibition in the M1 mouse myeloid leukemia cells. The ED₅₀ for this effect is typically 5-40 ng/mL in the presence of 2 ng/mL recombinant human LIF.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 μm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu\text{g}/\text{mL}$ in ddH2O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

The LIFR Protein is a significant member of the type I cytokine receptor family, specifically categorized within the Type 2 subfamily, highlighting its essential role in mediating cellular responses to various cytokines. As part of this receptor family, LIFR likely shares conserved structural and functional features with related receptors, emphasizing its involvement in transducing signals from specific type I cytokines. The classification within the type I cytokine receptor family underscores its specific designation within the broader context of cell signaling, providing insights into its unique contributions to processes such as cell differentiation and immune regulation. The study of LIFR contributes to our understanding of its role in physiological processes, offering potential applications in therapeutic interventions for conditions related to cell differentiation and immune response modulation. Further exploration of LIFR's role holds promise for enhancing our knowledge of its contributions to both normal cellular function and pathological conditions.

Caution: Product has not been fully validated for medical applications. For research use only.

 Tel: 609-228-6898
 Fax: 609-228-5909
 E-mail: tech@MedChemExpress.com

 Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA