

DESCRIPTION

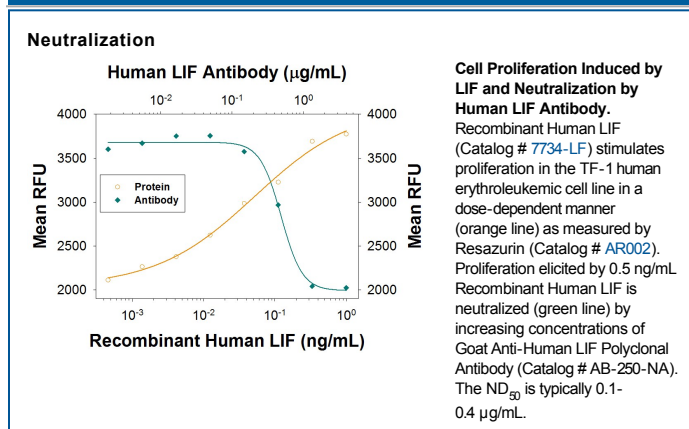
Species Reactivity	Human
Specificity	Detects human LIF in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 25% cross-reactivity with recombinant mouse LIF is observed. Neutralizes the biological activity of recombinant human LIF and will also neutralize the biological activity of recombinant mouse LIF at a 50-fold higher IgG concentration.
Source	Polyclonal Goat IgG
Purification	Protein A or G purified
Immunogen	<i>E. coli</i> -derived recombinant human LIF Ser23-Phe202 Accession # P15018
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human LIF
Neutralization	Measured by its ability to neutralize LIF-induced proliferation in the TF-1 human erythroleukemic cell line. Kitamura, T. <i>et al.</i> (1989) <i>J. Cell Physiol.</i> 140 :323. The Neutralization Dose (ND ₅₀) is typically 0.1-0.4 µg/mL in the presence of 0.5 ng/mL Recombinant Human LIF.	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 1 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

LIF (Leukemia inhibitory factor; also Differentiation-stimulating factor) is a 22 kDa (predicted) glycoprotein, member of the leukemia inhibitory factor/interleukin-6 (LIF/IL-6) family of cytokines. Natural LIF is heavily glycosylated, showing an apparent molecular weight of 32 kDa to 62 kDa, it is produced by a variety of cells including T cells, monocytes, fibroblasts, osteoblasts and mast cells. LIF induces hematopoietic differentiation in normal and myeloid leukemia cells, neuronal cell differentiation and stimulation of acute-phase protein synthesis in hepatocytes. Human LIF acts through a receptor comprising a 190 kDa LIF-binding α-chain and a 130 kDa signal-transducing β-chain (gp130), which is shared with the other members of the IL-6 family. Human and mouse LIF exhibit 78% aa sequence identity.