Mouse LIF Antibody

Polyclonal Goat IgG

Catalog Number: AB-449-NA

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse LIF in direct ELISAs and Western blots. In direct ELISAs, approximately 20% cross-reactivity with recombinant human LIF is observed. Neutralizes the biological activity of recombinant mouse LIF and will also neutralize the biological activity of recombinant human LIF at a 10-fold higher IgG concentration.
Source	Polyclonal Goat IgG
Purification	Protein A or G purified
Immunogen	*E. coli*-derived recombinant mouse LIF
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.

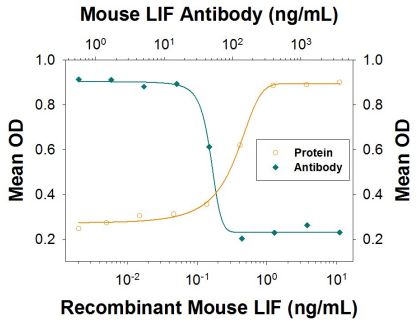
APPLICATIONS

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 Mouse LIF
Immunohistochemistry	5-15 µg/mL	See Below
Neutralization	Measured by its ability to neutralize LIF-induced IL-6 secretion in the M1 mouse myeloid leukemia cell line. The Neutralization Dose (ND_{50}) is typically 80-480 ng/mL in the presence of 3 ng/mL Recombinant Mouse LIF.	

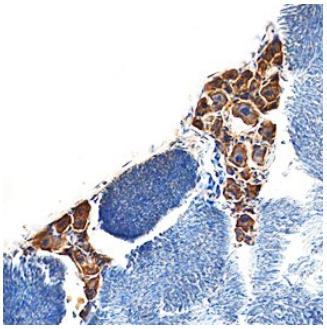
DATA

Neutralization



IL-6 Secretion Induced by LIF and Neutralization by Mouse LIF Antibody. Recombinant Mouse LIF (Catalog # 8878-LF) stimulates IL-6 secretion in the M1 mouse myeloid leukemia cell line in a dose-dependent manner (orange line) as measured by the Mouse IL-6 Quantikine ELISA (Catalog # M6000B). IL-6 secretion elicited by 3 ng/mL Recombinant Mouse LIF is neutralized (green line) by increasing concentrations of Goat Anti-Mouse LIF Polyclonal Antibody (Catalog # AB-449-NA). The ND_{50} is typically 80-480 ng/mL.

Immunohistochemistry



LIF in Mouse Trigeminal Ganglion. LIF was detected in perfusion fixed frozen sections of mouse trigeminal ganglion using Goat Anti-Mouse LIF Polyclonal Antibody (Catalog # AB-449-NA) at 15 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to sensory neurons in trigeminal ganglia. View our protocol for Chromogenic IHC Staining of Frozen Tissue Sections.

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	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 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

Leukemia inhibitory factor (LIF) was initially identified as a factor that inhibited the proliferation and induced the differentiation to macrophages of the murine myeloid leukemic cell line M1. Subsequent to its purification and molecular cloning, LIF was recognized to be a pleiotropic factor with multiple effects on both hematopoietic and non-hematopoietic cells. LIF has overlapping biological functions with OSM, IL-6, IL-11 and CNTF. All these cytokines utilize gp130 as a component in their signal transducing receptor complexes. Mouse LIF cDNA encodes a 203 amino acid residue polypeptide with a 23 amino acid signal peptide that is cleaved to yield a 180 amino acid mature mouse LIF. Native human and mouse LIF are highly glycosylated monomeric proteins. Both human and murine LIF protein sequences have multiple potential N- and O-linked glycosylation sites and six conserved cysteine residues that are involved in three intramolecular disulfide bridges.

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