### DESCRIPTION

**Species Reactivity**
Mouse

**Specificity**
Dectes mouse LIF in direct ELISAs and Western blots. In direct ELISAs and Western blots (non-reducing conditions), less than 5% cross-reactivity with recombinant human (rh) LIF is observed. In direct ELISAs, no cross-reactivity with rhCNTF, recombinant mouse (rm) G-CSF, rmIL-6, and rmOSM is observed.

**Source**
Polyclonal Goat IgG

**Purification**
Antigen Affinity-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.

*Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

---

### 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.

<table>
<thead>
<tr>
<th>Recommended Concentration</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>0.1 μg/mL Recombinant Mouse LIF</td>
</tr>
</tbody>
</table>

**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 10-60 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 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF449). The ND$_{50}$ is typically 10-60 ng/mL.

---

### PREPARATION AND STORAGE

**Reconstitution**
Reconstitute at 0.2 mg/mL in sterile PBS.

**Shipping**
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

**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 leukemia 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.