Mouse IL-11 Antibody
Monoclonal Rat IgG2A Clone # 188520
Catalog Number: MAB418

DESCRIPTION
Species Reactivity Mouse
Specificity Detects mouse IL-11 in direct ELISAs and Western blots. In direct ELISAs and Western blots, 10-20% cross-reactivity with recombinant human (rh) IL-11 is observed and no cross-reactivity with recombinant rat CNTF, recombinant mouse (rm) IL-6, rmLIF, rmOSM, rmCT-1, or rmCLC is observed.
Source Monoclonal Rat IgG2A Clone # 188520
Purification Protein A or G purified from hybridoma culture supernatant
Immunogen E. coli-derived recombinant mouse IL-11 Gly23-Leu199
Accession # P47873

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>
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<tr>
<td>Western Blot</td>
<td>1 μg/mL Recombinant Mouse IL-11 (Catalog # 418-ML)</td>
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<tr>
<td>Neutralization</td>
<td>Measured by its ability to neutralize IL-11-induced proliferation in the T11 mouse plasmacytoma cell line. Nordan, R. P. et al. (1987) J. Immunol. 139:813. The Neutralization Dose (ND₅₀) is typically 0.5-2.0 μg/mL in the presence of 0.75 ng/mL Recombinant Mouse IL-11.</td>
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DATA

Neutralization

Cell Proliferation Induced by IL-11 and Neutralization by Mouse IL-11 Antibody. Recombinant Mouse IL-11 (Catalog # 418-ML) stimulates proliferation in the T11 mouse plasmacytoma cell line in a dose-dependent manner (orange line). Proliferation elicited by Recombinant Mouse IL-11 (0.75 ng/mL) is neutralized (green line) by increasing concentrations of Rat Anti-Mouse IL-11 Monoclonal Antibody (Catalog # MAB418). The ND₅₀ is typically 0.5-2.0 μg/mL.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.5 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 supplied 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
Interleukin-11 is a pleiotropic cytokine that was originally detected in the conditioned medium of an IL-1α-stimulated primate bone marrow stromal cell line (PU-34) as a mitogen for the IL-6-responsive murine plasmacytoma cell line T1165. IL-11 was also independently discovered as an adipogenesis inhibitory factor (AGIF). The mouse IL-11 cDNA encodes a 199 amino acid precursor polypeptide with a 22 amino acid hydrophobic signal that is processed proteolytically to generate the 177 amino acid mature protein. IL-11 contains no cysteine residues or potential glycosylation sites. IL-11 has multiple effects on both hematopoietic and nonhematopoietic cell populations, IL-11, like IL-6 and LIF, can stimulate the synthesis of hepatic acute-phase proteins. Consistent with the in vitro functions of IL-11, in vivo administration of human IL-11 in normal mice was found to enhance the generation of Ig producing cells and platelets, and to increase the cycling rates of bone marrow-derived CFU-GM, BFU-E, and CFU-GEMM progenitors. IL-11 exerts its biological activities through binding to a specific high-affinity receptor complex consisting of an IL-11 receptor alpha chain and gp130.

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