

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)
Source	Monoclonal Rat IgG _{2A} Clone # 188520
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse IL-11 Gly23-Leu199 Accession # P47873
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Interleukin-11 is a pleiotropic cytokine that was originally detected in the conditioned medium of an IL-1 α -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 cells. Many of the biological effects described for IL-11 overlap those for IL-6. *In vitro*, IL-11 can synergize with IL-3, IL-4 and SCF to shorten the G₀ period of early hematopoietic progenitors. IL-11 also enhances the IL-3-dependent megakaryocyte colony formation. IL-11 has been found to stimulate the T cell dependent development of specific immunoglobulin-secreting B cells. IL-11, in the presence of IL-3 or SCF, has also been shown to stimulate erythropoiesis. Among 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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.