

Mouse IL-9 Alexa Fluor® 594-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF409T

100 µg

DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse IL-9 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 5% cross-reactivity with human IL-9 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	S. frugiperda insect ovarian cell line Sf 21-derived recombinant mouse IL-9 Gln19-Pro144 (Predicted) Accession # P15247
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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 Shee (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

Mouse IL-9 was originally identified as a T cell-derived T cell growth factor III/P40 which could support the long term growth of certain mouse T helper clones in the absence of antigen or antigen-presenting cells. IL-9 can also prolong the *in vitro* survival of other T cell clones as well as potentiate the IL-2 dependent proliferation of mouse fetal thymocytes. However, this cytokine has no growth-stimulating activity on mouse cytolytic T cell clones or fresh T cells. In addition to its activities on T cells, mouse IL-9 also has mast cell enhancing activity (MEA) and can enhance the mIL-3- or mIL-4-dependent proliferation of mouse bone marrow-derived mast cells. Furthermore, IL-9 will synergize with erythropoietin to support erythroid colony formation *in vitro*.

The gene for mIL-9 has been mapped to mouse chromosome 13. The mouse IL-9 cDNA encodes a 144 amino acid residue precursor protein with an 18 amino acid signal peptide that is cleaved to form the mature cysteine-rich protein with a predicted molecular mass of 14 kDa. Mouse IL-9 contains four potential N-linked glycosylation sites and the native mIL-9 is a highly glycosylated protein.

Human IL-9 was independently cloned as a novel growth factor which is mitogenic for the human megakaryoblastic leukemic cell line, M07e. Human and mouse IL-9 share 56% and 67% homology at the amino acid and nucleotide levels, respectively. Although mouse IL-9 is active on human cells, human IL-9 is not active on mouse cells.

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.

Rev. 9/15/2025 Page 1 of 1

Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956

Bio-Techne®

USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449 China | info.cn@bio-techne.com TEL: 400.821.3475