Feline IL-2 Alexa Fluor® 405-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1890V
100 µg

DESCRIPTION

Species Reactivity	Feline
Specificity	Detects feline IL-2 in ELISAs and Western blots. In sandwich immunoassays, approximately 3% cross-reactivity with recombinant canine IL-2 is observed, approximately 1% cross reactivity with recombinant human IL-2 and recombinant porcine IL-2 is obser
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant feline IL-2 Ala21-Thr154 (Cys146Ser) Accession # Q07885
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.*

ELISA Capture (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
ELISA Detection (Matched Antibody Pair)	Optimal dilution of this antibody should be experimentally determined.
Neutralization	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	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-2 (IL-2) is a secreted, single chain α-helical polypeptide that has potent stimulatory activity for antigen-activated T cells. The feline IL-2 gene encodes a 154 amino acid (aa) precursor protein with a 20 aa signal peptide plus a 134 aa mature segment. There are suggestions that the mature protein may be O-glycosylated. At the aa sequence level, mature feline IL-2 is 78%, 82%, 60%, 64%, 62%, 75%, 62%, and 76% identical to mature human, canine, mouse, rat, cotton rat, porcine, goat, and equine IL-2, respectively. Mammalian cells known to express IL-2 include $CD4^+$ and $CD8^+$ T cells, visceral smooth muscle cells, eosinophils, γδ T cells, B cells and dendritic cells. The biological activity of IL-2 is mediated by IL-2 receptor complexes consisting of three distinct subunits (α, β, γ) in two combinations. The high-affinity signaling IL-2 receptor complex is a heterotrimer of the IL-2 receptor α, β, γ subunits. The intermediate signaling complex is a heterodimer of the IL-2 Rβ and γ subunits. The non-ligand binding γ subunit, referred to as the common γ subunit (γ_c), is also a subunit of the receptor complexes of IL-4, IL-7, IL-9 and IL-15. Functionally, IL-2 is best known for its autocrine and paracrine activity on T cells. On naïve $CD8^+$ T cells, high IL-2 levels can induce cell proliferation with a bias towards cytotoxicity. In the presence of low levels of IL-2, $CD8^+$ T cells preferentially undergo apoptosis with a bias towards cytokine secretion. IL-2 also seems to play a central role in the expansion and maintenance of $CD4^+$ $CD25^+$ regulatory T cells. This indicates IL-2 may be a key cytokine in the natural suppression of autoimmunity (1-9).

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.

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