Mouse IL-4R alpha Alexa Fluor® 750-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF530S
100 µg

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse IL-4 Rα in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human (rh) IL-4 R, rhIL-9 R, rhIL-13 Rα1, and recombinant mouse IL-13 Rα2 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse IL-4 Rα
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 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.*

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	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 4 is a pleiotropic cytokine produced primarily by activated T cells, mast cells and basophils. The diverse biological effects of IL-4 on a variety of cell types are mediated by the binding of IL-4 to specific cell surface receptors. As is the case with many other cytokines, the functional high-affinity receptor for IL-4 is a complex consisting of a ligand binding subunit (α chain) and a second subunit (β chain) that can modulate the ligand binding affinity of the receptor complex. It has been shown that in certain cell types, the gamma chain of the IL-2 receptor is a functional component (β chain) of the IL-4 receptor complex.

cDNA clones for the ligand binding chain (IL-4 R) of both the mouse and human high affinity IL-4 receptors have been isolated. The human or mouse IL-4R is an approximately 140 kDa transmembrane protein containing an extracellular domain, a transmembrane domain, and a large cytoplasmic domain that is essential for IL-4 signal transduction. In addition to the cDNA clone encoding the full-length transmembrane protein, a second cDNA clone that arises from alternate splicing and that encodes a soluble secreted form of IL-4 R has been isolated from mouse cells, but not yet from human sources. A naturally-occurring soluble form of the IL-4 R has also been identified in mouse biological fluids and murine cell culture supernatants.

Native or recombinant murine soluble IL-4 R, as well as recombinant human soluble IL-4 R, can bind IL-4 with the same affinity as the membrane bound IL-4 R. Soluble IL-4 R is a competitive inhibitor of IL-4 and has been shown to neutralize effectively many IL-4-mediated responses both *in vivo* and *in vitro*.

PRODUCT SPECIFIC NOTICES

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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