

DESCRIPTION

Species Reactivity	Mouse/Rat
Specificity	Detects mouse, rat, and cotton rat IL-10 in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human IL-10, recombinant guinea pig IL-10, recombinant viral IL-10 and recombinant canine IL-
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant rat IL-10 Ser19-Asn178 Accession # P29456
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.

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 10, also known as cytokine synthesis inhibitory factor (CSIF), is the charter member of the IL-10 family of α -helical cytokines that also includes IL-19, IL-20, IL-22, and IL-24 (1, 2). IL-10 is secreted by many activated hematopoietic cell types as well as hepatic stellate cells, keratinocytes, and placental cytotrophoblasts (2-5). Mature rat IL-10 shares 85% amino acid sequence identity with mouse and 71%-79% amino acid sequence identity with bovine, canine, equine, feline, human, ovine, and porcine IL-10. Whereas human IL-10 is active on mouse cells, mouse IL-10 does not act on human cells (6, 7). IL-10 is a 178 amino acid molecule that contains two intrachain disulfide bridges and is expressed as a 36 kDa noncovalently associated homodimer (8-10). The IL-10 dimer binds to two IL-10 R α /IL-10 R1 chains, resulting in recruitment of two IL-10 R β /IL-10R2 chains and activation of a signaling cascade involving JAK1, TYK2, and STAT3 (11). IL-10 R β does not bind IL-10 by itself but is required for signal transduction (1). IL-10 R β also associates with IL-20 R α , IL-22 R α , or IL-28 R α to form the receptor complexes for IL-22, IL-26, IL-28, and IL-29 (12-14). IL-10 is a critical molecule in the control of viral infections and allergic and autoimmune inflammation (15-17). It promotes phagocytic uptake and Th2 responses but suppresses antigen presentation and Th1 proinflammatory responses (2).

PRODUCT SPECIFIC NOTICES

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