

DESCRIPTION

Species Reactivity	Equine
Specificity	Detects equine IL-10 in ELISAs and Western blots. In sandwich immunoassays, less than 1% cross-reactivity with recombinant canine IL-10 and recombinant porcine IL-10 is observed and less than 0.4% cross-reactivity with recombinant human IL-10, recomb
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant equine IL-10 Ser19-Asn178 Accession # Q28374
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 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 10 (IL-10), initially designated cytokine synthesis inhibitory factor (CSIF), was originally identified as a product of mouse T helper 2 (Th2) cells that inhibited the cytokine production by Th1 cells. It is a pleiotropic cytokine that regulates the immune and inflammatory responses of hematopoietic cells (1, 2). IL-10 has immunosuppressive activities and has been shown to inhibit the effector functions of monocyte/macrophage and CD4⁺ T cells. Conversely, IL-10 has immunostimulatory activities and can induce the proliferation and cytotoxic activity of CD8⁺ T cells and NK cells. IL-10 also regulates the growth and differentiation of B cells, mast cells, dendritic cells and neutrophils (1). The biological activities of IL-10 is mediated by the heteromeric IL-10 receptor complex, which is composed of the ligand-binding IL-10R α and the accessory IL-10R β subunits. Both subunits belong to the class II cytokine receptor family. IL-10R β is also utilized as a subunit in the heterodimer receptor complex for IL-22, IL-28 and IL-29. Besides IL-10, five novel cytokines (IL-19, -20, -22, -24, and -26) that share structural and limited sequence homology with IL-10 have been identified. These proteins constitute the IL-10 cytokine family (3).

Equine IL-10 cDNA encodes a 178 amino acid residue (aa) precursor protein with an 18 aa signal peptide and 160 aa mature protein that contains two potential N-linked glycosylation sites. Analogous to human IL-10, equine IL-10 likely exists as nondisulfide-linked homodimers. Equine IL-10 shares 71% and 78% aa sequence homology with mouse and human IL-10, respectively.

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