

DESCRIPTION

Species Reactivity	Cotton Rat
Specificity	Detects cotton rat IFN- α in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 2% cross-reactivity with recombinant human IFN- β and recombinant cotton rat IFN- γ is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant cotton rat IFN- α Cys24-Lys190 (Cys109Tyr) Accession # AAL18816
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.

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

Interferon- α , also known as leukocyte interferon, comprises a group of related but distinct proteins that share over 95% amino acid sequence homology. They are members of the type I interferon family which share a common cell surface receptor composed of two subunits, a 100 kDa ligand-binding subunit (IFN- α R1) and a 125 kDa subunit (IFN- α R2) that is involved both in ligand-binding and signal transduction. IFN- α is expressed primarily by leukocytes upon activation by viruses, bacteria, cytokines and growth factors. IFN- α has been shown to have anti-viral and immunomodulatory activities on target cells. It can also inhibit cell proliferation as well as induce apoptosis (1, 2).

Cotton rat IFN- α 1 cDNA encodes a 189 amino acid (aa) residue precursor protein with a putative 23 aa signal sequence and a 166 aa mature protein. The protein contains five cysteines, four of which are involved in two intrachain disulfide bonds. Cotton rat IFN- α 1 shares 52%, 67%, 68% and 72% aa sequence identity to human, rat, hamster and mouse IFN- α 1, respectively.

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