



# Goat anti Cotton Rat IFNG polyclonal antibody [Biotin] (CABT-L132)

This product is for research use only and is not intended for diagnostic use.

# PRODUCT INFORMATION

Specificity	Detects cotton rat IFN-gamma in ELISAs and Western blots. In sandwich immunoassays, less than 0.3% cross-reactivity with recombinant human (rh) IFN-gamma, recombinant mouse (rm) IFN-gamma, recombinant rat (rr) IFN-gamma, recombinant porcine (rp) IFN-gamma, recombinant canine IFN-gamma, and recombinant feline (rfe) IFN-gamma is observed.
Target	IFN-gamma
Immunogen	E. coli-derived recombinant cotton rat IFN-gamma, His21-Ile170, Accession #Q9QXX2
Isotype	IgG
Source/Host	Goat
Species Reactivity	Cotton Rat
Purification	Antigen Affinity-purified
Conjugate	Biotin
Applications	ELISA(Det), WB
Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Format	Lyophilized
Size	50 μg
Buffer	PBS with BSA
Preservative	None

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Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

Ship

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

### BACKGROUND

#### Introduction

Interferon-gamma (IFN-gamma), also known as type II or immune interferon, exerts a wide range of immunoregulatory activities and is considered to be the prototype proinflammatory cytokine. Mature cotton rat IFN-gamma exists as a noncovalently linked homodimer of 20-25 kDa variably glycosylated subunits. It shares 43%-50% amino acid sequence identity with bovine, canine, equine, feline, human, mouse, rat, rhesus, and porcine IFN-gamma. IFNgamma dimers bind to IFN-gamma RI (alpha subunits) which then interact with IFN-gamma RII (beta subunits) to form the functional receptor complex of two alpha and two beta subunits. Inclusion of IFN-gamma RII increases the binding affinity for ligand and the efficiency of signal transduction. IFN-gamma is produced by a variety of immune cells under inflammatory conditions, notably by T cells and NK cells. It plays a key role in host defense by promoting the development and activation of Th1 cells, chemoattraction and activation of monocytes and macrophages, upregulation of antigen presentation molecules, and immunoglobulin class switching in B cells. It also exhibits antiviral, antiproliferative, and apoptotic effects. In addition, IFN-gamma functions as an anti-inflammatory mediator by promoting the development of regulatory T cells and inhibiting Th17 cell differentiation. The pleiotropic effects of IFN-gamma contribute to the development of multiple aspects of atherosclerosis.

**Keywords** 

IFG;IFI;IFNG;IFNgamma;IFN-gamma;Immune interferon;interferon gamma;interferon; gamma

## **GENE INFORMATION**

**UniProt ID** 

Q9QXX2