



Goat anti Equine IFNG polyclonal antibody [Biotin] (CABT-L136)

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

PRODUCT INFORMATION

Specificity Detects equine IFN-gamma in ELISAs and Western blots. In sandwich immunoassays, less than 20% cross-reactivity with recombinant canine IFN-gamma is observed, less than 6% cross-reactivity with recombinant bovine IFN-gamma and recombinant feline IFN-gamma is observed, and less than 0.2% cross-reactivity with recombinant human IFN-gamma, recombinant mouse IFN-gamma, recombinant rat IFN-gamma, recombinant porcine IFN-gamma, recombinant rhesus macaque IFN-gamma, and recombinant cotton rat IFN-gamma is observed.

Target	IFN-gamma
Immunogen	E. coli-derived recombinant equine IFN-gamma, Ala25-Gln166, Accession #P42160
Isotype	IgG
Source/Host	Goat
Species Reactivity	Equine
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
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 equine IFN-gamma exists as a noncovalently linked homodimer of 20-25 kDa variably glycosylated subunits. It shares 73%-82% amino acid sequence identity with bovine, canine, feline, and porcine IFN-gamma and 42%-64% with cotton rat, human, mouse, rat, and rhesus IFN-gamma. IFN-gamma 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.
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Keywords	IFG;IFI;IFNG;IFNgamma;IFN-gamma;Immune interferon;interferon gamma;interferon; gamma
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GENE INFORMATION

UniProt ID	P42160
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