



Mouse anti Canine IFNG monoclonal antibody, clone 253630 (CABT-L121)

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

PRODUCT INFORMATION

Specificity	Detects canine IFN-gamma in direct ELISAs and Western blots. In direct ELISAs, this antibody shows approximately 75% cross-reactivity with recombinant porcine IFN-gamma and no cross-reactivity with IFN-gamma from human, mouse, feline, rat, or rhesus macaque.
Target	IFN-gamma
Immunogen	E. coli-derived recombinant canine IFN-gamma, Gln24-Lys166, Accession #P42161
Isotype	IgG2B
Source/Host	Mouse
Species Reactivity	Canine
Clone	253630
Purification	Protein A or G purified from hybridoma culture supernatant
Conjugate	Unconjugated
Applications	ELISA(Cap), WB
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Format	Lyophilized; Small package size(SP): Liquid
Size	100 µg, 500 µg
Buffer	PBS with Trehalose
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. *Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

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 canine IFN-gamma exists as a noncovalently linked homodimer of 20-25 kDa variably glycosylated subunits. It shares 79%-88% amino acid sequence identity with bovine, equine, and feline IFN-gamma, 62%-73% with human, porcine, and rhesus IFN-gamma, and 40%-47% with cotton rat, mouse, and rat 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

Entrez Gene ID	403801
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UniProt ID	P42161
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