

Canine IFN- γ Antibody Pair Set

Catalog No.	E-KAB-0398	Applications	ELISA
Synonyms	IFNG;IFG;IFI;Type II Interferon		

Kit components & Storage

Title	Specifications	Storage
Canine IFN- γ Capture Antibody	1 vial, 100 μ g	Store at -20°C for one year. Avoid freeze/thaw cycles.
Canine IFN- γ Detection Antibody (Biotin)	1 vial, 50 μ L	Store at -20°C for one year. Avoid freeze/thaw cycles.

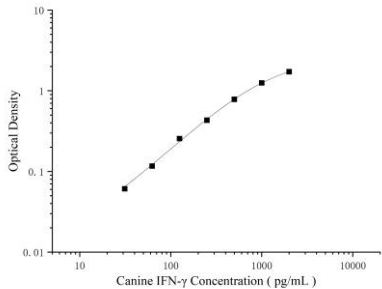
Note: Centrifuge before opening to ensure complete recovery of vial contents.

Product Information

Items		Characteristic (E-KAB-0398)	
		Canine IFN- γ Capture Antibody	Canine IFN- γ Detection Antibody (Biotin)
Immunogen Information	Immunogen	Recombinant Canine IFN- γ protien	Recombinant Canine IFN- γ protien
	Swissprot	P42161	
Product details	Reactivity	Canine	Canine
	Host	Mouse	Mouse
	Conjugation	Unconjugated	Biotin
	Concentration	0.5 mg/mL	/
	Buffer	PBS with 0.04% Proclin 300; 50% glycerol; pH 7.5	PBS with 0.04% Proclin 300; 1% protective protein; 50% glycerol; pH 7.5
	Purify	Protein A or G	Protein A or G
	Specificity	Detects Canine IFN- γ in ELISAs.	

Applications

Canine IFN- γ Sandwich ELISA Assay:

	Recommended Concentration/Dilution	Reagent	Images
ELISA Capture	0.5-4 $\mu\text{g/mL}$	Canine IFN- γ Capture Antibody	 <p>The graph is a log-log plot. The x-axis is labeled 'Canine IFN-γ Concentration (pg/mL)' and ranges from 10 to 10000. The y-axis is labeled 'Optical Density' and ranges from 0.01 to 10. The data points form a smooth, upward-sloping curve, indicating a positive correlation between the concentration of Canine IFN-γ and the optical density.</p>
ELISA Detection	1:1000-1:10000	Canine IFN- γ Detection Antibody (Biotin)	

Note: This standard curve is only for demonstration purposes. A standard curve should be generated for each assay!

Background

Type II interferon produced by immune cells such as T-cells and NK cells that plays crucial roles in antimicrobial , antiviral , and antitumor responses by activating effector immune cells and enhancing antigen presentation. Primarily signals through the JAK-STAT pathway after interaction with its receptor IFNGR1 to affect gene regulation. Upon IFNG binding , IFNGR1 intracellular domain opens out to allow association of downstream signaling components JAK2 , JAK1 and STAT1 , leading to STAT1 activation , nuclear translocation and transcription of IFNG-regulated genes. Many of the induced genes are transcription factors such as IRF1 that are able to further drive regulation of a next wave of transcription. Plays a role in class I antigen presentation pathway by inducing a replacement of catalytic proteasome subunits with immunoproteasome subunits. In turn , increases the quantity , quality , and repertoire of peptides for class I MHC loading. Increases the efficiency of peptide generation also by inducing the express