

Rat IFN-g ELISA Kit | IFN-g elisa kit

Rat IFN-g ELISA KIT

CATALOG #
AAA309913

REACTIVITY
Rat

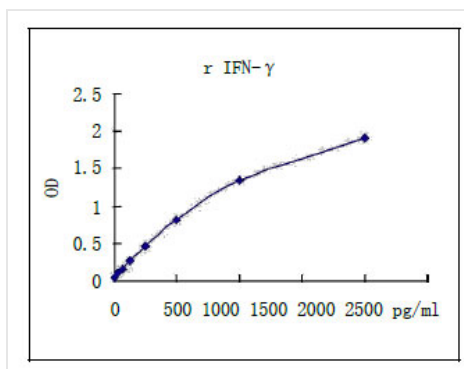
PRODUCT SYNONYMS

IFN-g; Rat IFN-g ELISA KIT; IFN-g elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay recognizes both natural and recombinant rat IFN-gamma. The factors listed below were prepared at 50ng/ml in Standard /sample Diluent and assayed for cross-reactivity and no significant cross-reactivity or interference was observed.
Assay Type	Quantitative Sandwich
Sensitivity	7pg/mL.
Preparation and Storage	Store at 4 degree C

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for IFN-g elisa kit

Principle of the Assay: This assay employs the quantitative sandwich enzyme immunoassay technique. A monoclonal antibody specific for IFN-gamma has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any IFN-gamma present is bound by the immobilized antibody. Following incubation unbound samples are removed during a wash step, and then a detection antibody specific for IFN-gamma is added to the wells and binds to the combination of capture antibody-IFN-gamma in sample. Following a wash to remove any unbound combination, and enzyme conjugate is added to the wells. Following incubation and wash steps a substrate is added. A coloured product is formed in proportion to the amount of IFN-gamma present in the sample. The reaction is terminated by addition of acid and absorbance is measured at 450nm. A standard curve is prepared from seven IFN-gamma standard dilutions and IFN-gamma sample concentration determined!!

Background/Introduction: Interferon gamma (IFN-gamma) is a multifunctional protein first observed as an antiviral activity in cultures of Sindbis virus-infected rat leukocytes stimulated by PHA (1). Produced by T lymphocytes and natural killer (NK) cells, IFN-gamma gamma is now known to be both an inhibitor of viral replication and a regulator of numerous immunological functions. Rat IFN-gammagamma is reported to be active only on rat and non-rat primate cells (5). The biochemistry and biological activities of the interferons have been extensively reviewed (2-9). Rat IFN-gamma cDNA encodes a 156 amino acid (aa) residue precursor protein with a putative 19 aa residue signal peptide that is cleaved to generate the mature protein which contains two potential N-glycosylation sites (10-12). Rat IFN-gamma shares approximately 87% and 39% amino acid sequence identity with mouse IFN-gamma and human IFN-gamma, respectively. Consistent with their degrees of shared homology, rat A receptor for IFN-gamma has been identified and its gene localized to chromosome 6 (13,14). Apparently the product of a single gene, the receptor is a single chain 90 kDa glycoprotein that shows a high degree of species-specific binding of IFN-gammagamma (15-18). Functionally, IFN-gamma gamma produces a variety of effects. Produced by CD8+, NK, gd, and TH1 T helper cells, IFN-gamma gamma has documented antiviral, antiparasitic and immunomodulatory effects on cell proliferation and apoptosis, as well as the stimulation and repression of a variety of genes (19-22) the antiparasitic activity of IFN-gamma gamma against Toxoplasma and Chlamydia is believed to result from indoleamine 2,3-dioxygenase activity, an enzyme induced by IFN-gamma gamma (23). The immunomodulatory effects of IFN-gammagamma are extensive and diverse. In monocyte/macrophages, the activities of IFN-gammagamma include: increasing the expression of class I and II MHC antigens; increasing the production of IL-1, platelet-activating factor, H₂O₂, and pterin; protection of monocytes against LAK cell-mediated lysis; downregulation of IL-8 mRNA expression that is upregulated by IL-2; and, with lipopolysaccharide, induction of NO production. Finally, IFN-gamma gamma has been shown to upregulate ICAM-1, but not E-Selectin or VCAM-1, expression on endothelial cells.

NCBI AND UNIPROT INFORMATION

NCBI GI #	83416599
Molecular Weight	19,411 Da
NCBI Official Full Name	interferon gamma
UniProt Protein Name	Interferon gamma
UniProt Gene Name	IFN-gamma
UniProt Synonym Gene Names	IFN-gamma

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/rat-elisa-kits/ifn-g/309913>