

IFN-gamma elisa kit

Rat IFN-gamma ELISA KIT

CATALOG #
AAA267261

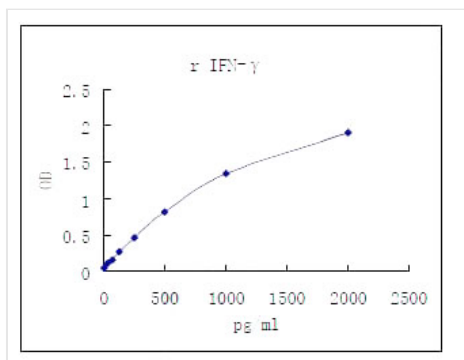
PRODUCT SYNONYMS

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

PRODUCT SPECIFICATIONS

Specificity	This assay recognizes both natural and recombinant mouse 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.
Sequence Length	187
Samples	Cell Culture Supernates, Serum, And Plasma
Assay Type	Quantitative Sandwich
Detection Range	15.6 pg/ml-1000 pg/ml
Sensitivity	7pg/mL.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for IFN-gamma 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 human leukocytes stimulated by PHA (1). Produced by Tlymphocytes and natural killer (NK) cells, IFN-gamma ?is now known to be both an inhibitor of viral replication and a regulator of numerous immunological functions. Human IFN-gamma?is reported to be active only on human and non-human primate cells (5). The biochemistry and biological activities of the interferons have been extensively reviewed (2-9). Mouse IFN-gamma encodes a 155 amino acid (aa) residue precursor protein with a hydrophobic signal peptide that is cleaved to generate the 133 aa residue mature protein (10). In solution, IFN-gamma has been shown to exist as a non-covalently associated homodimer with topological similarity to IL-10. Mouse IFN-gamma shows approximately 40% aa sequence identity to human IFN-gamma and there is no cross-reactivity across species (11,12). 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-gamma?(15-18). Functionally, IFN-gamma ?produces a variety of effects. Produced by CD8+, NK, gd, and TH1 T helper cells, IFN-gamma ?has documented antiviral, antiprotazoal and immunomodulatory effects on cell proliferation and apoptosis, as well as the stimulation and repression of a variety of genes (19-22) he antiprotazoal activity of IFN-gamma ?against Toxoplasma and Chlamydia is believed to result from indoleamine 2,3-dioxygenase activity, an enzyme induced by IFN-gamma ?(23). The immunomodulatory effects of IFN-gamma? are extensive and diverse. In monocyte/macrophages, the activities of IFN-gamma?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?has been shown to upregulate ICAM-1, but not E-Selectin or VCAM-1, expression on endothelial cells.

NCBI AND UNIPROT INFORMATION

NCBI GI #	910749419
NCBI GeneID	101693741
NCBI Accession #	NP_001297101.2
NCBI GenBank Nucleotide #	NM_001310172.2
Molecular Weight	19,613 Da
NCBI Official Full Name	interferon gamma
NCBI Official Symbol	IFNG
NCBI Official Synonym Symbols	IFI; IFN-g; IFNgamma; TCRalpha; IFN-gamma
NCBI Protein Information	interferon gamma
UniProt Protein Name	Interferon gamma
UniProt Gene Name	IFNG
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.