

Ifng

Recombinant Rat Interferon gamma

Catalog No.	CRR202A	Quantity:	20 µg
	CRR202B		100 µg
	CRR202C		1.0 mg

Alternate Names: IFN-gamma, Type II interferon, T cell interferon, MAF

Description: Interferon-gamma (IFN-gamma), also known as Type II interferon or immune interferon, is a cytokine produced primarily by lymphocytes and natural killer cells. The protein shares no significant homology with IFN-beta or the various IFN-alpha family proteins. Mature IFN-gamma exists as noncovalently-linked homodimers. IFN-gamma was originally characterized based on its antiviral activities. The protein also exerts antiproliferative, immunoregulatory and proinflammatory activities and is thus important in host defense mechanisms. IFN-gamma induces the production of cytokines, upregulates the expression of class I and II MHC antigens, Fc receptor and leukocyte adhesion molecules. It modulates macrophage effector functions, influences isotype switching and potentiates the secretion of immunoglobulins by B cells. IFN-gamma also augments TH1 cell expansion and may be required for TH1 cell differentiation. IFN-gamma has been shown to be a crucial player in the immune response against some intracellular pathogens, including that of Chagas disease. It has also been identified as having a role in seborrheic dermatitis.

Gene ID: 25712

UniProt ID: P01581

Source: *E. coli*

Molecular Weight: 15.6/31.2 kDa, 135/270 aa, noncovalently-linked homodimer

Formulation: Lyophilized from a sterile filtered (0.2 micron) solution containing 10 mM sodium phosphate, 100 mM NaCl, pH 7.5

Purity: ≥ 95.0% by reducing and non-reducing SDS-PAGE

Endotoxin Level: ≤ 1 EU/µg, determined by kinetic LAL analysis.

Biological Activity: This product demonstrates biological activity in a viral CPE assay using EMC virus on L929 cells, starting at 9×10^6 units/mg.

Amino Acid Sequence: MQGTLIESLE SLKNYFNSSS MDAMEGKSLLDIWRNWQKD GNTKILESQI
ISFYLRLEFEV LKDNQAISNN ISVIESHLIT NFFSNSKAKK DAFMSIAKFE VNNPQIQHKA
VNELIRVIHQ LSPESLRKR KRSRC

Reconstitution: **Centrifuge vial prior to opening.** Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilution should be made in appropriate buffered solutions.

Storage & Stability:

Store as supplied at -20°C to -80°C for up to 1 year. Upon reconstitution, prepare working aliquots and store at -20°C to -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage.

Avoid repeated freeze-thaw cycles.

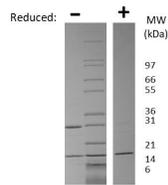
**Rat IFN-gamma Gel**

Figure: 1 ug run under (-) non-reducing conditions and (+) reducing conditions in a 4-20% Tris-Glycine gel, stained with Coomassie Blue. Rat IFN-gamma is predicted to be a noncovalently-linked homodimer with a MW of 31.2 kDa (each monomer is 15.6 kDa).

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Cell Sciences®
65 Parker Street
Unit 11
Newburyport, MA 01950

Toll Free: 888-769-1246
Phone: 978-572-1070
Fax: 978-992-0298

E-mail: info@cellsciences.com
Website: www.cellsciences.com