

## Active Recombinant Rat Ifng Protein (134 aa)

Cat. No. Ifng-378l Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Rat Interferon gamma (IFN- $\gamma$ ) produced in E. coli is a single non-glycosylated polypeptide chain containing 134 amino acids. A fully biologically active molecule, rrIFN- $\gamma$  has a molecular mass of 15.5 kDa analyzed by reducing SDS-PAGE and is obtained by chromatographic techniques.

**Species** Rat

**Source** E.coli

**ProteinLength** 134

**Description** Interferon gamma (IFN- $\gamma$ ), also known as Type II interferon, is a cytokine produced primarily by T-lymphocytes and natural killer cells. The active form of IFN- $\gamma$  is an antiparallel dimer that interacts with the receptor IFN- $\gamma$ R1 and activates the IFN- $\gamma$ /JAK/STAT pathway. IFN- $\gamma$  signaling promotes biological functions primarily related to antiviral and antibacterial defense, apoptosis, inflammation, and regulation of innate and acquired immune responses. While IFN- $\gamma$ -induced inflammatory cascades summon a variety of immune-related cell types, such as macrophages, natural killer (NK) cells and cytotoxic T lymphocytes (CTLs), IFN- $\gamma$  is also implicated in resistance to NK cell and CTL responses and in immune escape in a variety of cancers.

**Form** Sterile Filtered White lyophilized (freeze-dried) powder.

**Bio-activity** ED50 < 0.5 ng/mL, measured by cytotoxicity assay using WEHI-279 cells,

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

corresponding to a specific activity of  $>2 \times 10^6$  units/mg.

<b>Molecular Mass</b>	15.5 kDa, observed by reducing SDS-PAGE.
<b>AA Sequence</b>	GTLIESLES LK NYFNSSSMDAMEGKSLLLDIWRNWQKDGNTKILESQIISFYLRRLFV L KDNQAISNNISVIESHLITNFFSNSKAKKDAFMSIAKFEVNNPQIQHKAVNELIRVIHQL SPESSLRKRKRSRC
<b>Endotoxin</b>	< 0.2 EU/μg, determined by LAL method.
<b>Purity</b>	> 95% as analyzed by SDS-PAGE and HPLC.
<b>Storage</b>	Lyophilized recombinant Rat IFN-γ remains stable up to 6 months at -80 centigrade from date of receipt. Upon reconstitution, recombinant Rat IFN-γ should be stable up to 1 week at 4 centigrade or up to 2 months at -20 centigrade.
<b>Storage Buffer</b>	Lyophilized after extensive dialysis against PBS.
<b>Reconstitution</b>	Reconstituted in ddH <sub>2</sub> O or PBS at 100 μg/mL.

## GENE INFORMATION

<b>Gene Name</b>	<i>Ifng</i> interferon gamma [ <i>Rattus norvegicus</i> ]
<b>Official Symbol</b>	<i>Ifng</i>
<b>Synonyms</b>	IFNG; interferon gamma; IFN-gamma; IFNG2;
<b>Gene ID</b>	25712
<b>mRNA Refseq</b>	NM_138880

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA



**Protein Refseq** NP\_620235

**UniProt ID** P01581

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA