

## Interferon-gamma (IFN- $\gamma$ ), Rat

**Cat.no.** PK0058

**Product size:** 10ug 50ug 1mg

**Source:** CHO

**Species:** Rat

**Biological Activity:** ED50 < 2.5 ng/ml, measured by cytotoxicity assay using WEHI-279 cells, corresponding to a specific activity of > 4 $\times$ 10<sup>5</sup> units/mg.

**Molecular Weight:** 15-25 kDa, observed by non-reducing SDS-PAGE.

**Formulation:** Lyophilized after extensive dialysis against PBS.

**Reconstitution:** Reconstituted in ddH<sub>2</sub>O at 100  $\mu$ g/ml.

**Purity:** >95% by SDS-PAGE and HPLC analyses.

**Endotoxin Level:** <0.2 EU/ $\mu$ g, determined by LAL method.

**Storage:** Lyophilized recombinant Rat Interferon gamma (IFN- $\gamma$ ) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rrIFN- $\gamma$  should be stable up to 1 week at 4°C or up to 2 months at -20°C.

**Description:** Interferon- $\gamma$  (IFN- $\gamma$ ), also known as Type II interferon or immune 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 sets off IFN- $\gamma$ /JAK/STAT pathway. IFN- $\gamma$  signaling does diverse biological functions primarily related to host defense and immune regulation, including antiviral and antibacterial defense, apoptosis, inflammation, and innate and acquired immunity. While IFN- $\gamma$ -induced inflammatory cascade summons 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.

**Amino Acid Sequence:**

00001 QGTLIESLES LKNYFNSSSM DAMEGKSLLL DIWRNWQKDG

00041 NTKILESQII SFYLRLEFEVL KDNQAISNNI SVIESHLITN

00081 FFSNSKAKKD AFMSIAKFEV NNPQIQHKAV NELIRVIHQQL

00121 SPESSLRKRK RSRC

**Synonyms:** Interferon gamma; IFN-gamma; Immune interferon; IFNG

**Note:** For research use only, not for use in diagnostic procedure.