

**DATASHEET**  
Version 20181206**IFN- $\gamma$ , Rat (CHO-expressed)****Cat. No.:** Z02982-50**Size:** 50.0 ug**Synonyms:** Immune Interferon, 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 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 SFYLRLEVL KDNQAISNNI SVIESHLITN  
00081 FFSNSKAKKD AFMSIAKFEV NNPQIQHKAV NELIRVIHQL  
00121 SPESSLRKRK RSRC

**Source:** CHO**Species:** Rat**Biological Activity:** ED<sub>50</sub> < 2.5 ng/ml, measured by cytotoxicity assay using WEHI-279 cells, corresponding to a specific activity of > 4×10<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 or PBS at 100 µg/ml.**Purity:** > 95% as analyzed by SDS-PAGE and HPLC.**Endotoxin Level:** < 0.2 EU/µg, 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.