

**DATASHEET**  
Version 20181206**IFN- $\gamma$ , Mouse****Cat. No.:** Z02916-1**Size:** 1.0 mg**Synonyms:** Type II interferon, T cell interferon, MAF, IFNG, IFG, IFI**Description:**

Sharing 41% sequence identity with human Interferon gamma (hIFN- $\gamma$ ), mouse IFN gamma (mIFN- $\gamma$ ) is a macrophage-activating factor. The active form of IFN- $\gamma$  is an antiparallel dimer that 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.

Recombinant mouse IFN gamma (rmIFN- $\gamma$ ) produced in *E. coli* is a non-glycosylated polypeptide chain of 134 amino acids. A fully biologically active molecule, rmIFN- $\gamma$  has a molecular mass of 15 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary refolding and chromatographic techniques at GenScript.

**Amino Acid Sequence:**

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00001 MHGTVIESLE SLNNYFNSSG IDVEEKSFL DIWRNWQKDG
00041 DMKILQSQII SFYLRLEVL KDNQAISNNI SVIESHLITT
00081 FFSNSKAKKD AFMSIAKFEV NNPQVQRQAF NELIRVVHQL
00121 LPESSLRKRK RSRK
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**Source:** *E. coli***Species:** Mouse**Biological Activity:** ED<sub>50</sub> < 0.15 ng/ml, measured by cytotoxicity assay using WEHI-279 cells.**Molecular Weight:** 15 kDa, observed by reducing SDS-PAGE.**Formulation:** Lyophilized after extensive dialysis against PBS.**Reconstitution:** Reconstituted in ddH<sub>2</sub>O or PBS at 100  $\mu$ g/ml.**Purity:** > 95% as analyzed by reducing SDS-PAGE.**Endotoxin Level:** < 1 EU/ $\mu$ g, determined by LAL method.**Storage:** Lyophilized recombinant mouse IFN gamma (rmIFN- $\gamma$ ) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rmIFN- $\gamma$  should be stable up to 1 week at 4°C or up to 2 months at -20°C.