

## Recombinant Murine IFN- $\gamma$

**CATALOG #:** 4117-20 20  $\mu$ g  
4117-100 100  $\mu$ g  
4117-1000 1 mg

**LOT #:** \_\_\_\_\_

**SOURCE:** *E. coli*

**PURITY:** >95% by SDS-PAGE and HPLC analysis  
Endotoxin level is <0.1 ng per  $\mu$ g of IFN- $\gamma$ .

**MOL. WEIGHT:** 15.6 kDa

**FORMULATION:** Lyophilized from 10 mM Na<sub>2</sub>PO<sub>4</sub>, pH 7.0 + 25 mM NaCl

### RECONSTITUTION:

Centrifuge the vial prior to opening. Reconstitute in ddH<sub>2</sub>O to a concentration of 1 mg/ml. Further dilutions should be made into RPMI + 10% FCS and stored at 4°C for 1 week or – 20°C for future use.

### STORAGE CONDITIONS:

The lyophilized IFN- $\gamma$  is best-stored desiccated below 0°C. Reconstituted IFN- $\gamma$  should be stored at working aliquots at -20°C.

### DESCRIPTION:

IFN-gamma is an acid-labile interferon produced by CD4 and CD8 T lymphocytes as well as activated NK cells. IFN-gamma receptors are present in most immune cells, which respond to IFN-gamma signaling by increasing the surface expression of class I MHC proteins. This promotes the presentation of antigen to T-helper (CD4+) cells. IFN-gamma signaling in antigen-presenting cells and antigen-recognizing B and T lymphocytes regulate the antigen-specific phases of the immune response. Additionally, IFN-gamma stimulates a number of lymphoid cell functions including the anti-microbial and anti-tumor responses of macrophages, NK cells, and neutrophils. Recombinant murine IFN-gamma is a 15.6 kDa protein containing 134 amino acid residues.

### BIOLOGICAL ACTIVITY:

The ED<sub>50</sub> as determined by a cytopathic affect inhibition assay with murine NIH 3T3 cells challenged with VSV virus is  $\leq$  0.1 ng/ml, corresponding to a specific activity of  $\geq$  1 x 10<sup>7</sup> units/mg.

**FOR RESEARCH USE ONLY! Not to be used on humans.**

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