

**RECOMBINANT MOUSE IFN- $\gamma$**

**Catalog # 02746**

**100 mg per vial**

**PRODUCT DESCRIPTION:**

Interferon- $\gamma$  (IFN- $\gamma$ ), also known as Type II interferon or immune interferon, is a highly species-specific pleiotropic cytokine produced primarily by T and NK cells. IFN- $\gamma$  exerts antiviral, antiproliferative, immunoregulatory and proinflammatory activities. It induces the production of cytokines, upregulates the expression of class I and II MHC antigens, Fc receptor and leukocyte adhesion molecules. It modulates macrophage effector functions, influences isotype switching and potentiates the secretion of immunoglobulins by B cells. IFN- $\gamma$  also augments TH1 cell expansion and may be required for TH1 cell differentiation. Mature IFN- $\gamma$  exists as noncovalently-linked homodimers. Recombinant mouse IFN- $\gamma$  is a 16 kDa protein containing 134 amino acid residues.

**SOURCE:**

A DNA sequence encoding the mature mouse IFN- $\gamma$  protein lacking the N-terminal amino acid residues cys-tyr-cys was expressed in E. coli.

**PURITY:**

Greater than 97% as determined by SDS-PAGE and visualized by silver stain. Endotoxin level is less than 0.1 ng per  $\mu$ g of the cytokine, as determined by the LAL method.

**FORMULATION:**

Lyophilized from a 0.2 filtered solution in PBS and containing 50  $\mu$ g of bovine serum albumin per 1  $\mu$ g of cytokine.

**RECONSTITUTION:**

It is recommended that sterile PBS containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of no less than 5  $\mu$ g/mL of the cytokine.

**STABILITY/STORAGE:**

Lyophilized samples are stable for greater than six months at -20°C to -70°C.

Upon reconstitution, mouse IFN- $\gamma$  can be stored under sterile conditions at 2° - 4°C for one month or at -20°C to -70°C for three months without detectable loss of activity.

**Avoid repeated freezing and thawing.**

**ACTIVITY:**

Activity was determined by measuring the antiviral effect using L-929 cells infected with EMC virus and the ED<sub>50</sub> using this assay was typically 0.3-0.9 ng/mL.

**THIS REAGENT IS FOR RESEARCH USE ONLY.  
IT IS NOT TO BE ADMINISTERED TO HUMANS.**