

# **BACKGROUND:**

Interferon gamma, IFN- $\gamma$ , is a major immune-modulating molecule produced mainly by T-cells and natural killer cells activated by antigens, mitogens or alloantigens. Most immune cells express IFN- $\gamma$  receptors and respond to IFN- $\gamma$ -induced signaling by up-regulating MHC class I expression. Human IFN- $\gamma$  does not show cross-reactivity with mouse.

Recombinant human IFN- $\gamma$  is a non-glycosylated protein, containing 144 amino acids and having a molecular mass of 16.88 kDa.

#### Cat. No.:

RP1077AF

#### **Alternate Names:**

Type II interferon, T cell interferon, Immune Interferon, MAF

# **AA Sequence:**

MQDPYVKEAE	NLKKYFNAGH	SDVADNGTLF
LGILKNWKEE	SDRKIMQSQI	VSFYFKLFKN
FKDDQSIQKS	VETIKEDMNV	KFFNSNKKKR
DDFEKLTNYS	VTDLNVQRKA	IHELIQVMAE
LSPAAKTGKR	KRSOMI FOGR	RASO

### **TECHNICAL INFO**

#### Source:

E. coli

#### **Physical Appearance:**

Sterile Filtered white lyophilized (freeze-dried) powder.

#### Formulation:

10 mM sodium phosphate, 50mM Ssodium chloride, pH 7.5

#### Stability:

Lyophilized product is very stable at  $-20^{\circ}$ C. Reconstituted material should be aliquoted and frozen at  $-20^{\circ}$ C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

## Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at 0.1 mg/mL, which can be further diluted into other aqueous solutions. Upon reconstitution, a small amount of visible precipitate can be expected. A 10% overfill has been added to the total material vialed to compensate for this loss.

#### **Protein Content and Purity determined by:**

- UV spectroscopy at 280 nm.
- RP-HPLC calibrated against a known standard.
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

#### **Endotoxin Level:**

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

# **Biological Activity:**

The activity is measured by viral CPE assay using EMC virus on A549 cells.

## **Animal Component-Free**

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.







