

BACKGROUND

Interferon gamma, IFN- γ , 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- γ receptors and respond to IFN- γ -induced signaling by up-regulating MHC class I expression. Human IFN- γ does not show cross-reactivity with mouse.

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

Alternative Names:

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

Amino Acid Sequence:

MQDPYVKEAE NLKKYFNAGH SDVADNGTLF LGILKNWKEE
SDRKIMQSQI VSFYFKLFKN FKDDQSIQKS VETIKEDMNV
KFFNSNKKKR DDFEKLTNYS VTDLNVQRKA IHELIQVMAE
LSPAAGTKGR KRSQMLFQGR RASQ

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human IFN- γ is lyophilized from 5 mM Na₂PO₄, pH 7.2 + 50 mM NaCl.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°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 a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

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 in antiviral assays using virally infected HeLa cells is typically 0.15- 0.75 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

