

Recombinant Porcine Interferon gamma (rp IFNgamma)

Synonyms: Immune Interferon, type II interferon, T cell interferon, MAF.

Introduction: IFN-gamma produced by lymphocytes activated by specific antigens or mitogens. IFN-gamma, in addition to having antiviral activity, has important immunoregulatory functions. It is a potent activator of macrophages, has antiproliferative effects on transformed cells and can potentiate the antiviral and antitumor effects of the type I interferons.

Description: Recombinant porcine Interferon-gamma produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 146 amino acids and having a molecular mass of 17140 Dalton. Growth Hormone is purified by proprietary chromatographic techniques.

Source: *Escherichia Coli*.

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation: The protein was lyophilized with no additives.
The samples of 1µg contain Trehalose 5% (w/vol) for better recovery

Solubility: It is recommended to reconstitute the lyophilized IFN gamma in sterile H₂O not less than 100µg/ml which can then be further diluted to other aqueous solutions.

Stability: Lyophilized rp IFN γ although stable at room temperature for 3 weeks, should be stored desiccated below -18° C . Upon reconstitution rp IFN γ should be stored at 4° C between 2-7 days and for future use below -18° C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity: Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Amino acid sequence: The sequence of the first five N-terminal amino acids was determined and was found to be Ser-Tyr-Cys-Gln-Ala.

Biological Activity: The ED₅₀ as determined by the amount of interferon that inhibited 50% of the cytopathic effect of vesicular stomatitis virus in MDBK cells was < 0.3 ng/ml.

Protein content: Protein quantitation was carried out by two independent methods:

1. UV spectroscopy at 280 nm using the absorbency value of 0.556 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics).
2. Analysis by RP-HPLC, using a calibrated solution of IFN γ as a Reference Standard.

This material is offered for **research only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

<i>small</i>	10 µg	Cat.N°	16343533
<i>medium</i>	50 µg	Cat.N°	16343535

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