

GRF-10556      **Recombinant Human Interferon-Gamma**

**Size:** 100 µg

**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, and has antiproliferative effects on transformed cells and it can potentiate the antiviral and antitumor effects of the type I IFNs.

**Description:** IFN-gamma Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 144 amino acids and having a molecular mass of 17kDa. The IFN-gamma is purified by proprietary chromatographic techniques.

**Source:** Escherichia Coli.

**Physical Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

**Formulation:** The protein was lyophilized from a 0.2µm filtered concentrated solution in PBS pH 4.6

**Solubility:** It is recommended to reconstitute the lyophilized IFN-gamma in sterile distilled water or 20mM AcOH not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

**Stability:** Lyophilized Interferon gamma although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IFN-gamma 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 98.0% as determined by  
(a) Analysis by RP-HPLC.  
(b) Analysis by SDS-PAGE.

**Amino acid sequence:** MQDPYVKEAE NLKKYFNAGH SDVADNGTLF LGILKNWKEE SDRKIMQSQI  
VSFYFKLFKN FKDDQSIQKS VETIKEDMNV KFFNSNKKKR DDFEKLTNYS  
VTDLNVQRKA IHELIQVMAE LSPAAGTGKR KRSQMLFQGR RASQ.

**Biological Activity:** The specific activity as determined in a viral resistance assay is < 0.05 ng/ml, corresponding to a specific activity of 2.0 x 10,000,000 IU/mg.

**Protein content:** Protein quantitation was carried out by two independent methods:  
1. UV spectroscopy at 280 nm using the absorbency value of 0.640 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-g as a Reference Standard.

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