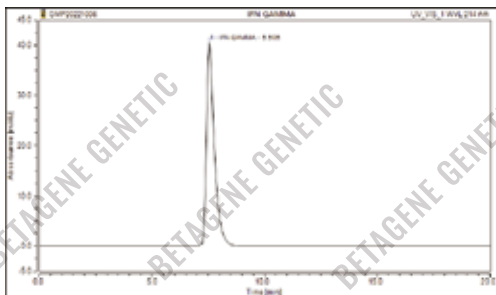


RECOMBINANT HUMAN IFN- γ TAG-FREE GMP

Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder
Gene ID	3458
Description	Interferon-gamma (IFN- γ), also known as Type II interferon or immune interferon, is a dimerized soluble cytokine that is critical for innate and adaptive immunity against viral, some bacterial and protozoal infections. It is produced primarily by CD4 and CD8 T lymphocytes as well as natural killer (NK) and natural killer T(NKT) cells. The primary role for IFN- γ is the activation of macrophages to increase phagocytosis, tumoricidal properties, and intracellular killing of pathogens. IFN- γ also increases expression of MHC antigens by macrophages and this facilitates antigen presentation to T cells.
Catalog Number	GE04.1/GE04.2
Unit Size	100 μ g/200 μ g
Source	E. coli
Molecular Weight	Approximately 16.9 kDa, 144 amino acids
AA Sequence	MQDPYVKEAENLKKYFNAGHSDVADNGTLFLGILKNWKEESDRKIMQSQIVSFYFKLFKNFKDDQSIQKSVETIKEDMNVKFFNSNKKKRDDFEKL TNYSVTDLNVQRKAIHELIQVMAELSPAAKTGKRKRSQMLFRGRRASQ
Purity (HPLC)	> 98%
Purity (SDS-PAGE)	> 98%
Biological Activity	Assay 1: The ED ₅₀ determined by a cytotoxicity assay using HT-29 cells is \leq 0.05 ng/mL, corresponding to a specific activity of $\geq 2 \times 10^7$ Units/mg. Assay 2: The ED ₅₀ as measured in anti-viral assays using human HeLa cells infected with encephalomyocarditis (EMC) virus is 0.15 - 0.80 ng/mL, corresponding to a specific activity of $\geq 1.2 \times 10^6$ Units/mg.
Host Cell DNA Residue	< 0.02 ng/ μ g of protein tested by DNA Fluorescent Staining method.
Host Cell Protein Residue	< 0.5 ng/ μ g of protein tested by ELISA.
Formulation	Lyophilized from a 0.2 μ m filtered concentrated solution in PBS, pH 7.4, with 5% Trehalose.
Sterility	Negative
Endotoxin	< 0.01EU/ μ g as determined by LAL gel-clot method.
Mycoplasma	Negative
Reconstitution	Before use this product, please read the direction below carefully. 1. This vial must be briefly centrifuged prior to opening to bring the contents to the bottom. 2. Reconstitute in a sterile aqueous buffer to an appropriate concentration. 3. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Stability & Storage	For long term storage, the product should be stored ≤ -20 °C. Please avoid repeated freeze-thaw cycles after reconstitution. 1. At least 24 months from date of receipt, ≤ -20 °C as supplied; 2. 1 month, 2 to 8 °C under sterile conditions after reconstitution; 3. 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended.

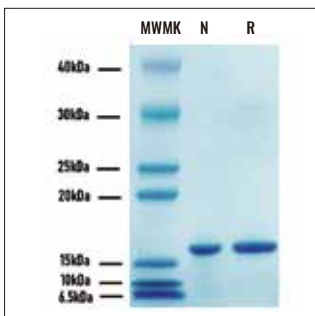


DATA



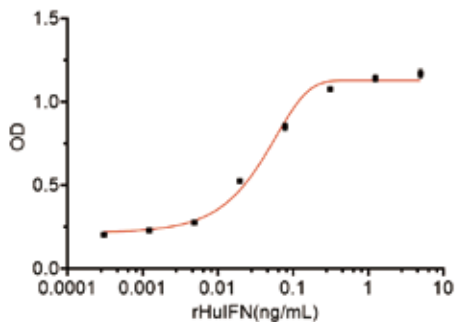
Purity of Recombinant Human IFN-γ
HPLC

HPLC analysis of Recombinant Human IFN-γ. The major peak corresponds to the calculated purity of > 98%.



Purity of Recombinant Human IFN-γ
SDS-PAGE

2 μg/lane of Recombinant Human IFN-γ was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie® Blue staining, showing R and NR bands at 17kDa.



Bioactivity of Recombinant Human IFN-γ

The ED₅₀ determined by a cytotoxicity assay using HT-29 cells is < 0.05 ng/mL, corresponding to a specific activity of ≥ 2 × 10⁷ Units/mg.

CONTENTS

Product	Cat. No.	Amount	Storage	Shelf life
Recombinant Human IFN-γ (GMP-Grade)	GE04.1 GE04.2	100μg 200μg	≤-20°C	24 months

LIMITED WARRANTY

BETAGENE™ Genetic and/or its affiliate(s) warrant their products as set forth in the BETAGENE Genetic' General Terms and Conditions of Sale. If you have any questions, please contact our staff at SALES@betagene.com.

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