

IFNG

Recombinant Human IFN-gamma, GMP Grade

Catalog No.	CRI011A-GMP CRI011B-GMP	Quantity:	5 µg 100 µg
Alternate Names:	Interferon gamma, IFN-gamma, Immune interferon		
Description:	<p>Interferon-gamma (IFN-γ), also known as Type II interferon or immune interferon, is a cytokine produced primarily by T-lymphocytes and natural killer cells. The protein shares no significant homology with IFN-β or the various IFN-α family proteins. Mature IFN-γ exists as noncovalently-linked homodimers. Human IFN-γ is highly species specific and is biologically active only in human and primate cells. IFN-γ was originally characterized based on its antiviral activities. The protein also exerts antiproliferative, immunoregulatory and proinflammatory activities and is thus important in host defense mechanisms. IFN-γ induces the production of cytokines, upregulates the expression of class I and II MHC antigens, Fc receptor and leukocyte adhesion molecules. It modulates macrophage effector functions, influences isotype switching and potentiates the secretion of immunoglobulins by B cells. IFN-γ also augments TH1 cell expansion and may be required for TH1 cell differentiation.</p> <p>Manufacturing and testing of this product complies with ICH Q7 guidelines.</p>		
UniProt ID:	P01579		
Source:	<i>E. coli</i>		
Molecular Weight:	~16.9 kDa (144 aa) monomer		
Formulation:	Lyophilized from sterile-filtered PBS, 3% Trehalose, pH 5.0		
Purity:	> 98% by SDS-PAGE		
Endotoxin Level:	< 0.01EU/µg as determined by LAL method.		
Contaminants:	< 0.05% host cell protein by ELISA < 20 ng/mg host cell DNA by qPCR Mycoplasma - negative		
Biological Activity:	ED ₅₀ = 0.15-0.80 ng/ml, determined in anti-viral assay using human HeLa cells infected with encephalomyocarditis (EMC) virus.		
Specific Activity:	> 1.0 × 10 ⁷ IU/mg calibrated against rHuIFN-γ WHO International Standard (NIBSC code: 87/586).		
Amino Acid Sequence:	MQDPYVKEAE NLKKYFNAGH SDVADNGTLF LGILKNWKEE SDRKIMQSQI VSFYFKLFKN FKDDQSIQKS VETIKEDMNV KFFNSNKKKR DDFEKLTNYS VTDLNVQRKA IHELIQVMAE LSPAAGTGKR KRSQMLFRGR RASQ		
Reconstitution:	Centrifuge the vial prior to opening. Reconstitute with sterile water at 0.1-1.0 mg/ml by gently pipetting to wash down the sides of the vial to ensure full recovery of the protein into solution. Do not vortex. Allow a few minutes for complete solubilization.		



Storage & Stability:

Lyophilized vial is shipped at ambient temperature. Immediately upon receipt, store unopened vial at -20°C (manual defrost freezer) or -80°C for up to 36 months. Upon reconstitution, prepare working aliquots and store at -20°C (manual defrost freezer) or -80°C. It is recommended that a carrier protein such as 0.1% HSA or BSA is added for long term storage. For short term storage reconstituted material is stable for 4-6 weeks when stored at 2-8°C. **Avoid repeated freeze-thaw cycles.**

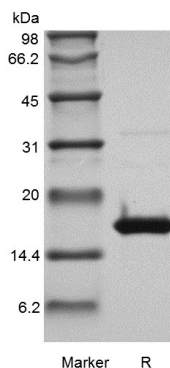
Applications:

For *ex vivo* use only. Not for injection or diagnostic procedures. The safety and efficacy of this product in diagnostic or other clinical uses has not been established.

Country of Origin:

USA

SDS-PAGE GMP Grade rhIFN-gamma
Single Prominent band at ~16.9 kDa



NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.