


Human IFN- γ protein

Cat #: PRP1050

Size: 20 μ g/100 μ g/500 μ g/1mg

Product Information

	Product Name: Human IFN- γ protein		
REF	Catalog Number: PRP1050	LOT	Lot Number: Refer to product label
	Purity: > 95 % as determined by SDS-PAGE		
	Storage: Store at -20°C		Preparation method: E. coli
	Shipping: The product is shipped at ambient temperature.		

Background: IFN- γ , also known as IFNG, is a secreted protein which belongs to the type II interferon family. IFN- γ is produced predominantly by natural killer and natural killer T cells as part of the innate immune response, and by CD4 and CD8 cytotoxic T lymphocyte effector T cells once antigen-specific immunity develops. IFN- γ has antiviral, immunoregulatory, and anti-tumor properties. IFN- γ , 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 interferons. The IFN- γ monomer consists of a core of six α -helices and an extended unfolded sequence in the C-terminal region. IFN- γ is critical for innate and adaptive immunity against viral and intracellular bacterial infections and for tumor control. Aberrant IFN- γ expression is associated with a number of autoinflammatory and autoimmune diseases. The importance of IFN- γ in the immune system stems in part from its ability to inhibit viral replication directly, and most importantly from its immunostimulatory and immunomodulatory effects. IFNG also promotes NK cell activity.

Sequence: Amino acid sequence derived from Human IFN- γ protein (Gln24-Gln166)(P01579) was expressed with 6 \times His tag at the C-terminus.

Protein length: The secreted recombinant Human IFN- γ consists of 143 amino acids and has a predicted molecular mass of 17.7 kDa. with polyhistidine tag at the C-terminus.

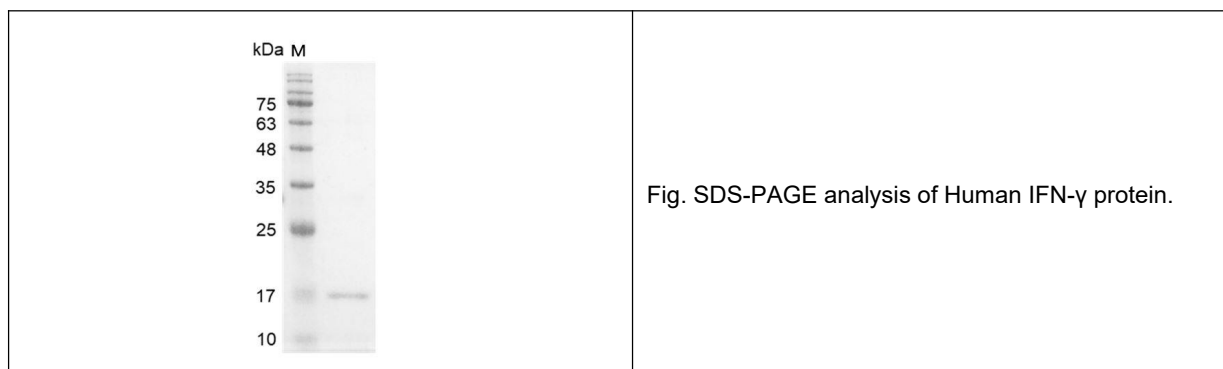
Biological Activity: Measure by its ability to induce cytotoxicity in HT29 cells. The ED₅₀ for this effect is <1 ng/mL. The specific activity of recombinant Human IFN- γ is approximately >2 x 10⁶ IU/mg.

Endotoxin: < 0.01 EU per μ g of the protein as determined by the LAL method.

Formulation: Lyophilized from sterile PBS, pH 8.0.

Storage Instructions: Lyophilized protein product should be stored desiccated below -18°C. Upon reconstitution, the protein 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 (5% HSA , 10%FBS or 0.1%BSA). Please prevent freeze-thaw cycles.

Usage notes: Always centrifuge tubes before opening. It is recommended to reconstitute the lyophilized recombinant Human IFN- γ protein to a concentration of 0.1-1 mg/mL in sterile ddH₂O, and keep at room temperature for at least 20 min to fully dissolve. Please avoid vortex vigorously.



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