

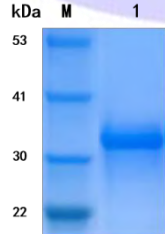


Human Interferon gamma (IFN γ) Protein, Recombinant

I. For sale

Product name	Catalog #	Size
Human Interferon gamma (IFN γ) Protein, Recombinant	P01I0001	10ug
		50ug
		100ug
		1mg

II. Product Description

Other Names	IFG; IFI; IMD69
Protein & NCBI Number	P01579, NM_000619.3
Host	E.coli
Express Region	1-166aa
Protein Length	Total length of the protein (including Tag)
Protein Sequence	MKYTSYILAFQLCIVLGS LGCYCQDPYVKEAENLK KYFNAGHSD VADNGTLFLGILKNWKEESDRKIMQSQIVSFYFKLFKNFKDDQSIQKSVETIKEDMNV KFFNSNKKKRDDFEKLTNYSVTDLNVQRKAIHELIQVMAELSPA AKTGKRKRSQMLFR GRRASQ
Molecular Weight	about 19.3kDa
Fusion Tag	6 \times His-SUMO (N-terminus)
Purity	\geq 95% SDS-PAGE
Physical Property	liquid or lyophilized powder
Reconstitution	Storage solution: We recommend using PBS or a suitable solvent according to the experimental requirements to prepare 1mg/mL storage solution, aliquot and store at -20 °C. Working solution: According to the experimental requirement, dilute Storage solution. The working solution can be stored at 4°C for 2-3 weeks after dilution.
Storage & Stability	The shelf life of liquid form is 6 months stored at -20 °C /-80 °C. The shelf life of lyophilized form is 12 months stored at -20 °C /-80 °C.
Applications	Antibody preparation, immunoassay (ELISA, WB), subcellular localization and interaction protein identification, etc.
Lead Time	5 to 10 business days; 2 to 3 days for stock products
Figure. SDS-PAGE	 <p>Bis-Tris (MOPS) SDS-PAGE</p>

III. Storage and Transportation



Product is stable for up to twelve months from date of receipt under sterile conditions at -20°C to -80°C . For optimal storage the lyophilized powder and protein stock solution should be aliquoted, and avoid freeze-thaw cycles.

IV. Background

IFNG gene encodes a soluble cytokine that is a member of the type II interferon class. The active protein is a homodimer that binds to the interferon gamma receptor which triggers a cellular response to viral and microbial infections. It has the functions of anti-virus, affecting cell growth and differentiation, anti-tumor, anti parasite and immune regulation.

Interferon- γ (interferon-gamma, IFN- γ) It is a cytokine mainly secreted by activated T cells and NK cells under the stimulation of mitogen and specific antigen. It is also a soluble glycoprotein, heat-resistant and acid, which is unstable at $\text{pH} = 2$. IFN- γ It can not only affect the cellular functions including anti-virus, anti swelling, cancer cell growth and differentiation, but also play an important role in immune regulation, such as promoting the synthesis of rRNA, promoting the expression of class I and class II histocompatibility antigens, and regulating the functional activity of homologous K cells, NK cells and macrophages. IFN- γ It also has antiviral activity, which is lower than type I, but it has strong immune regulation and anti cell proliferation, so it is also called immune interferon.

V. References

1. Bromberg J F, Horvath C M, Wen Z, et al. Transcriptionally active Stat1 is required for the antiproliferative effects of both interferon alpha and interferon gamma. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93(15):7673-8.