

Human Interferon gamma (IFN γ) Protein, Recombinant

1. For Sale

Product Name	Catalog #	Size
Human Interferon gamma (IFN γ) Protein, Recombinant	P01I0345P-T2	10ug
		50ug
		500ug
		1mg

2. Product Description

Other Names	IFG; IFI; IMD69
Protein & NCBI Number	P01579, NM_000619.3
Host	E.coli
Express Region	Met1-Gln166
Protein Sequence	MKYTSYILAFQLCIVL GSLGCYCQDPYVKEAENLKKYFNAGHSD VADNGTFLGILKNWKEESDRKIMQSQIVSFYFRLFKNFKDDQSIQKS VETIK EDMVNVKFFNSNKKRDDFEKLTNYSVTDLNVQRKAIHELIQVMAELSPA AK TGKRKR SQMLFR GRRASQ
Molecular Weight	The protein consists of 292 amino acids (including the fusion tag), with a predicted molecular weight of 33.7 kDa, which matches the actual molecular weight.
Fusion Tag	6 \times His-SUMO (N-terminus)
Purity	\geq 95% SDS-PAGE
Physical Property	Liquid
Components	0.01M PBS+20% glycerol, sterile solution.
Storage & Stability	After aliquoting, the stability of the samples can be maintained for up to 6 months at -20°C to -80°C, avoiding repeated freeze-thaw cycles.
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 style="text-align: center;">kDa M 1</p>  <p>53 41 30 22</p> <p style="text-align: center;">Bis-Tris (MOPS) SDS-PAGE</p>

3. Storage and Transportation



Transport at 2-8°C, product is stable for up to twelve months from date of receipt under sterile conditions at -20°C to -80°C.

4. Notes

This product is for research use only. Please wear laboratory attire and disposable gloves when handling.

5. 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 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.

6. References

- 1) 杨生海,殷宏,刘永生,张杰.干扰素- γ 研究进展.生物技术通报,2010(08):29-34.
- 2) 张海玲,闫喜军.干扰素研究进展.动物医学进展,2008(04):81-84.
- 3) 李江凌. 成华猪 γ -干扰素基因克隆及表达效应研究.四川大学,2002.
- 4) 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.
- 5) 叶智钊,黎敏英,邓树轩.干扰素研究进展.畜牧与饲料科学,2009,30(02):9-10.