

Recombinant Human IFN- γ Protein

Size / Cat.No.: 200 μ g / GMP-TL105-0200

Product Name

Generic Name	Recombinant Human IFN- γ Protein
Synonym	Interferon-gamma, Interferon- γ

Product Information

Protein sequence	Recombinant Human IFN- γ (AAH70256) is expressed from HEK293 cells with His tag at the C-Terminus.
Expression Host	HEK293 cells
QC Testing Purity	> 90 % as determined by SDS-PAGE.
Activity	Assay of its ability to inhibit the proliferation of HT-29 cells, the corresponding specific activity $\geq 1 \times 10^7$ IU/mg.
Endotoxin	< 0.1 EU per μ g of the protein as determined by the LAL method.
Molecular Mass	The recombinant human IFN- γ predicts a molecular mass of 17.6 kD.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 6 % mannitol are added as protectants before lyophilization.
Stability & Storage	Lyophilized preparation can be stored at -20 °C. 6 months at -20 °C under sterile conditions after reconstitution. 12 months at -80 °C under sterile conditions after reconstitution. Recommend to aliquot the protein into smaller quantities after reconstituting with water for injection, normal saline or PBS. Avoid repeated freeze-thaw cycles.

Background

IFN- γ is produced primarily by T cells and natural killer cells activated by antigens, mitogens, or homologous antigens. Interferon has a strong immunomodulatory function, which can enhance the function of antigen presenting cells, accelerate the clearance of immune complexes and improve the function of phagocytosis of foreign bodies, have a bidirectional regulatory function on lymphocytes, improve antibody-dependent cytotoxic reaction, and enhance the expression of HLA-II antigens in some immune active cells. It has a strong inhibitory effect on the activation, proliferation and secretion of extracellular matrix of hepatic stellate cells (HSC), and can inhibit collagen synthesis and promote collagen degradation. Suitable for the production of cell therapy products.

References

1. Wang Y, Dai H, Li H, Lv HY, Wang T, Fu XB, and Han WD (2011) Growth of Human Colorectal Cancer SW1116 Cells Is Inhibited by Cytokine-Induced Killer Cells. *Clinical and Developmental Immunology* 2011 (1740-2522):6214142.
2. Sangiolo D, Mesiano G, F Carnevale-Schianca, W Piacibello, M Aglietta and A Cignetti (2009) Cytokine induced killer cells as adoptive immunotherapy strategy to augment graft versus tumor after hematopoietic cell transplantation. *Expert Opin. Biol. Ther.* 9(7):831-840.

Product Use

For research and manufacturing use