

Recombinant Human Interferon gamma

Catalog Number	Size
AG120-20	20µg
AG120-100	100µg

Specifications and Use

Description	Recombinant human IFN- γ produced in E. coli. is a non-covalent Dimer non-glycosylated, containing 140 amino acids, and having a molecular mass of approximately 16.5kDa.
Source	E. coli.
Molecular Mass	Approximately 16.5kDa.
Purity	$\geq 97\%$, as determined by SDS-PAGE and HPLC method.
Endotoxin Level	$\leq 1\text{EU}/\mu\text{g}$, determined by the LAL method.
Biological Activity	Bioactivity is detected using WISH cell (a heteroploid human amnion cell line). The specific activity shall be not less than 2.0×10^7 IU/mg of protein.
Formulation	Lyophilized from a 0.2µm filtered solution in 20mM Phosphate buffer.
Reconstitution	It is recommended that sterile ddH ₂ O containing at least 0.1% human serum albumin or bovine serum albumin be added to the vial to prepare a stock solution of not less than 10µg/ml of the cytokine.
Storage	Lyophilized samples are stable for greater than six months from date of receipt at -20°C to -70°C. The reconstituted samples can be stored under sterile conditions at 2- 8°C for one month or at -20°C to -70°C for three months without detectable loss of activity. Avoid repeated freeze-thaw cycles.

Human Interferon gamma

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. IFN- γ exerts its biological activities by binding to specific cell surface receptors with high-affinity binding sites. The IFN- γ receptor is present on almost all cell types except mature erythrocytes and has been cloned and characterized. The IFN- γ receptor is structurally related to the recently cloned IL-10 receptor.

FOR RESEARCH USE ONLY