

Rev03
Update: Dec,14,2021

DATASHEET

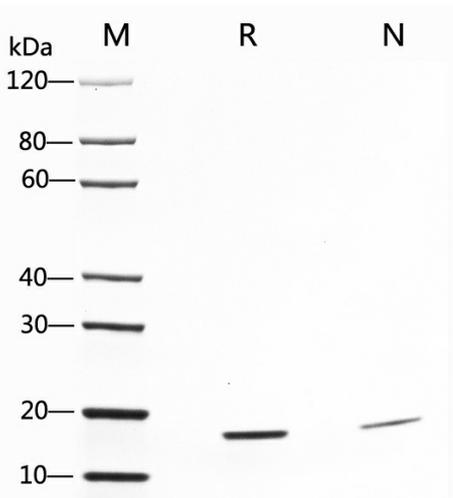
IFN- γ , Human

Cat. No.: Z02915

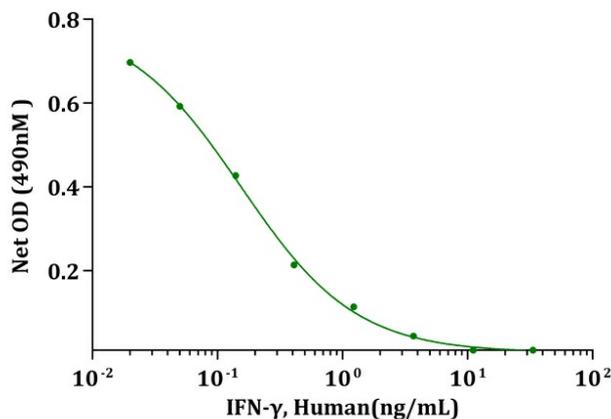
Product Introduction

Species	Human
Protein Construction	Expressed with an N-terminal Met. IFN-γ (Gln24-Gln166) Accession # P01579
Purity	> 95% as analyzed by SDS-PAGE
Endotoxin Level	< 1 EU/ μ g of protein by gel clotting method
Biological Activity	ED ₅₀ < 0.05 ng/ml, measured by cytotoxicity assay using HT - 29 cells.
Expression System	E. coli
Apparent Molecular Weight	~17 kDa, on SDS-PAGE under reducing conditions.
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μ g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Examples



2 μ g of IFN- γ , Human (Cat. No. Z02915) was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie Blue staining.



Biological Activity

IFN-gamma, Human (Cat. No. Z02915) induced cytotoxicity of HT-29 (HTB-38) cells. The ED₅₀ for this effect is less than 0.05ng/mL.

Background

Target Background : Human Interferon gamma (hIFN- γ) is a macrophage - activating factor and the lone member of Interferon type II. The active form of IFN- γ is an antiparallel dimer that interacts with the receptor IFN- γ R1 and sets off IFN- γ /JAK/STAT pathway. IFN- γ signaling does diverse biological functions primarily related to host defense and immune regulation, including antiviral and antibacterial defense, apoptosis, inflammation, and innate and acquired immunity. While IFN- γ -induced inflammatory cascade summons a variety of immune - related cell types, such as macrophages, natural killer (NK) cells and cytotoxic T lymphocytes (CTLs), IFN- γ is also implicated in resistance to NK cell and CTL responses and in immune escape in a variety of cancers.

Synonyms : Immune Interferon; type II interferon; T cell interferon; MAF; IFNG; IFG; IFI; IFN-gamma

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.