

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant IFN- γ , Human

Catalog Number: BK0080-50 μ g

Source: Escherichia coli.

Quantity: 50 μ g

Description:

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. Recombinant human Interferon gamma (rhIFN- γ) produced in E.coli is a non-glycosylated polypeptide chain of 144 amino acids. A fully biologically active molecule, rhIFN- γ has a molecular mass of 17 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary refolding and chromatographic techniques at GenScript.

Molecular Weight:

17kDa, observed by reducing SDS-PAGE.

Purity:

> 95% as analyzed by reducing SDS-PAGE.

Biological Activity:

ED₅₀ < 0.05 ng/ml, measured by cytotoxicity assay using HT-29 cells.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

MQDPYVKEAENLKKYF-
NAGHSDVADNGTLFLGILKNWKEES-
DRKIMQSQIVSFYF-
KLFKNFKDDQSIQKSVETIKEDMNVKFFNSNKK
KRDDFEKLTNYSVTDLNVQRKAI-
HELIQVMAELSPA AKTGKRKR SQMLFRGRRASQ

Endotoxin:

< 1 EU/ μ g, determined by LAL

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μ g/ml.

Storage:

Lyophilized recombinant human Interferon gamma (rhIFN- γ) remains stable up to 6 months at -80° C from date of receipt. Upon reconstitution, rhIFN- γ should be stable up to 1 week at 4° C or up to 2 months at -20° C.

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. For research use only.