

Datasheet for ABIN2017997

Interferon gamma Protein (IFNG)**2** Images[Go to Product page](#)

Overview

Quantity:	100 µg
Target:	Interferon gamma (IFNG)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active

Product Details

Characteristics:	ED50<0.05 ng/mL, measured by cytotoxicity assay using HT-29 cells. Gln24-Gln166 (accession number:P01579). Expression construct with an N-terminal Met.
Purity:	> 95 % as analyzed by reducing SDS-PAGE.
Endotoxin Level:	< 1 EU/µg, determined by LAL method.

Target Details

Target:	Interferon gamma (IFNG)
Alternative Name:	Interferon-gamma (IFN-Gamma) (IFNG Products)
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-γR1 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-

Target Details

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.

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

Molecular Weight:	17kDa, observed by reducing SDS-PAGE
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Pathways:	Interferon-gamma Pathway , Cellular Response to Molecule of Bacterial Origin , Regulation of Leukocyte Mediated Immunity , Positive Regulation of Immune Effector Process , Production of Molecular Mediator of Immune Response , ER-Nucleus Signaling , Regulation of Carbohydrate Metabolic Process , Protein targeting to Nucleus , Autophagy
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Application Details

Restrictions:	For Research Use only
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Handling

Format:	Lyophilized
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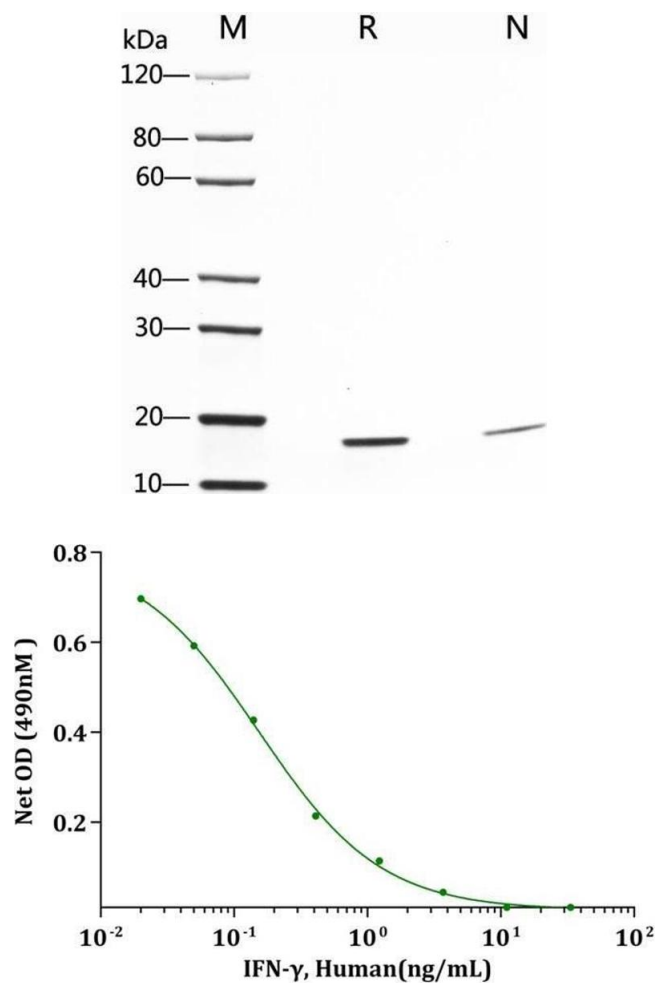
Reconstitution:	Reconstituted in ddH ₂ O or PBS at 100 μ g/mL.
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Buffer:	Lyophilized after extensive dialysis against PBS.
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Storage:	-80 °C
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Storage Comment:	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.
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Expiry Date:	6 months
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SDS-PAGE

Image 1. 2 µg of IFN-γ, Human was resolved with SDS-PAGE under reducing (R) and non-reducing (N) conditions and visualized by Coomassie Blue staining.

Activity Assay

Image 2. IFN-γ, Human induced cytotoxicity of HT-29 (HTB-38) cells. The ED50 for this effect is 0.035ng/mL.