

For Research Use Only

# Recombinant Rat IFN-gamma protein (His Tag)



Catalog Number: Eg0400

## Basic Information

**Species:**  
Rat

**EC50:**  
6-22 ng/mL

**Purity:**  
>95 %, SDS-PAGE

**Tag:**  
His Tag

## Technical Specifications

**Purity:**  
>95 %, SDS-PAGE

**Endotoxin Level:**  
<0.1 EU/  $\mu$ g protein, LAL method

**Source:**  
HEK293-derived Rat IFN-gamma protein Gln23-Cys156 (Accession# P01581) with a His tag at the C-terminus.

**GeneID:**  
25712

**Accession:**  
P01581

**Predicted Molecular Mass:**  
18 kDa

**SDS-PAGE:**  
22-32 kDa, reducing (R) conditions

**Formulation:**  
Lyophilized from 0.22  $\mu$ m filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

## Biological Activity

Immobilized Rat IFN-gamma (His tag) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Rat IFN-gamma R1 (hFc tag) with a linear range of 6-22 ng/mL.

## Storage and Shipping

### Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

### Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

## Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

## Background

The IFNs were originally discovered as agents that interfere with viral replication. Initially, they were classified by the secreting cell type but are now classified into type I and type II according to receptor specificity and sequence homology. Interferon gamma (Ifng) is a soluble cytokine that is the only member of the type II class of interferons. It is secreted by Th1 cells, cytotoxic T cells and NK cells. The cytokine is associated with antiviral, immunoregulatory and anti-tumor properties and is a potent activator of macrophages. It plays crucial roles in pathogen clearance. Aberrant Ifng expression is associated with a number of autoinflammatory and autoimmune diseases. It has been identified in many studies as a biomarker for pleural tuberculosis (TB). Mutations in this gene are associated with aplastic anemia.

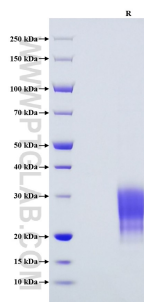
## References

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2. Gray PW. et al. (1982) Nature. 298 : 859-63.
3. Bullens, D. M. et al.(2001) Int. Immunol. 13: 181-191.
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5. Chegou NN. et al.(2012)PLoS One.7(6):e38501
6. Torok-Storb B. et al. (Blood) 69:629-33.

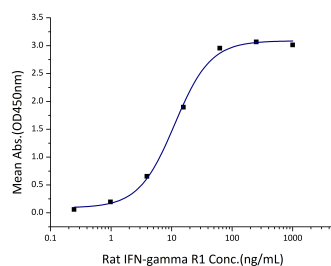
## Synonyms

IFN Gamma, Ifng, IFN-gamma, interferon gamma, IFN  $\gamma$

## Selected Validation Data



Purity of Recombinant Rat IFN-gamma was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) conditions and stained using Coomassie blue.



Immobilized Rat IFN-gamma (His tag) at 1  $\mu$ g/mL (100  $\mu$  L/well) can bind Rat IFN-gamma R1 (C-hFc tag) with a linear range of 6-22 ng/mL