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# **Recombinant Rat IFN-gamma Protein**

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Catalog No.: RP01075

Recombinant

## **Sequence Information**

**Species Gene ID Swiss Prot** Rat 25712 P01581

**Tags** C-hFc&His

**Synonyms** 

IFN-gamma;Interferon Gamma;IFNG

## **Product Information**

**Source** Purification HEK293 cells > 92% by SDS-PAGE.

#### **Endotoxin**

< 0.1 EU/ $\mu g$  of the protein by LAL method.

## Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

## Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid votex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

### **Contact**



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## **Background**

Interferon-gamma (IFN-gamma ) is a secreted protein which belongs to the type II interferon family. IFN-gamma is produced by a variety of immune cells under inflammatory conditions, notably by T cells and NK cells. IFN-gamma, in addition to having antiviral activity, has important immunoregulatory functions. Interferon-gamma is a central regulator of the immune response and signals via the Janus Activated Kinase (JAK)-Signal Transducer and Activator of Transcription (STAT) pathway.

## **Basic Information**

### **Description**

Recombinant Rat IFN-gamma Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Gln23-Cys156) of rat Interferon Gamma (Accession  $\#NP_620235.1$ ) fused with an Fc,  $6\times His$  tag at the C-terminus.

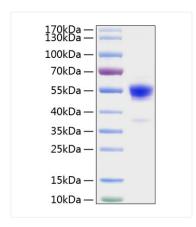
## **Bio-Activity**

1.Measured by its binding ability in a functional ELISA. Immobilized recombinant Human IFN-gamma R1 at 3  $\mu$ g/mL (100  $\mu$ L/well) can bind recombinant Rat IFNG, the EC<sub>50</sub> of Rat IFNG is 1  $\mu$ g/mL.|2.Measured by its binding ability in a functional ELISA. Immobilized recombinant Mouse IFNGR1 at 0.2  $\mu$ g/mL (100  $\mu$ L/well) can bind recombinant Rat IFNG, the EC<sub>50</sub> of Rat IFNG is 1.94 ng/mL.

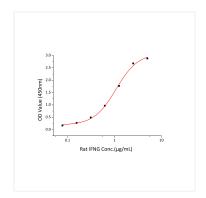
## **Storage**

Store the lyophilized protein at -20  $^{\circ}$ C to -80  $^{\circ}$ C for long term.<br/>
Shr>After reconstitution, the protein solution is stable at -20  $^{\circ}$ C for 3 months, at 2-8  $^{\circ}$ C for up to 1 week. Avoid repeated freeze/thaw cycles.

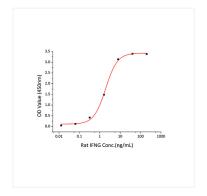
# **Validation Data**



Recombinant Rat IFN-gamma Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 50-55 kDa.



Immobilized recombinant Human IFN-gamma R1 at 3 $\mu$ g/mL (100 $\mu$ L/well) can bind recombinant Rat IFNG, the EC<sub>50</sub> of Rat IFNG is 1  $\mu$ g/mL.



Immobilized Recombinant Mouse IFNGR1 at 0.2  $\mu$ g/mL (100  $\mu$ L/well) can bind recombinant Rat IFNG, the EC<sub>50</sub> of Rat IFNG is 1.94 ng/mL.