## For Research Use Only

## Recombinant Pig IFN-gamma protein (rFc Tag)



Catalog Number: Eg4538

**Basic Information** 

Species: Pig

Purity: >90 %, SDS-PAGE

Tag: rFc Tag

**Technical Specifications** 

Purity: >90 %, SDS-PAGE

**Endotoxin Level:** 

<0.1 EU/ µ g protein, LAL method

HEK293-derived Pig IFN-gamma protein Gln24-Lys166 (Accession# P17803) with a rabbit IgG Fc tag at the Cterminus.

GeneID:

396991

**Accession:** P17803

**Predicted Molecular Mass:** 

43.1 kDa

SDS-PAGE

20 kDa, 30-35 kDa and 45-52 kDa, reducing (R) conditions

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

**Biological Activity** 

Not tested

Storage and Shipping

Storage:

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

Until expiry date, -20% to -80% as lyophilized proteins. 3 months, -20% to -80% 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** 

Interferon gamma (IFN  $\gamma$  ) is a type II interferon that confers immunity to bacterial, viral and protozoan infections. In its active form, IFN  $\gamma$  is a glycosylated, non-covalently linked homodimer of 29-32 kDa subunits. It is produced by a number of immune cell types, including natural killer cells, natural killer T cells and effector lymphocyte T cells, in response to antigenic and inflammatory stimuli. The IFN- $\gamma$  dimer binds to its cognate receptor, which has two subunits: IFN- $\gamma$  R1, the ligand binding chain (  $\alpha$  chain), and IFN- $\gamma$  R2, the signal transducing chain (  $\beta$  chain). Binding to the receptor activates the JAK/STAT pathway, which in turn activates IFN- $\gamma$  responsive genes. While IFN  $\gamma$  can inhibit viral replication, it also acts as an immunomodulator and immunostimulator by increasing the surface expression of class I MHC proteins.

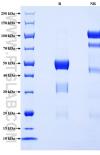
References

1.Billiau A. et al. (2009) Cytokine Growth Factor Rev. 20(2):97-113. 2.Tau G. et al. (1999) Allergy. 54(12):1233-51. 3.Ding H. et al. (2022) Biomed Pharmacother. 155:113683. 4.Cordeiro PAS. et al. (2022) Rev Inst Med Trop Sao Paulo. 64:e64.

**Synonyms** 

IFNG, Interferon gamma

## **Selected Validation Data**



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