

# Rat Interferon gamma protein, His tag (active)

**Cat. No. GTX00340-pro**

**Applications** Functional Assay

**Species** Rat

**Package**

10 µg

## Applications

### Application Note

Interferon gamma (IFN-γ) is a dimerized soluble cytokine that is the only member of the type II class of interferons. The importance of IFN-γ in the immune system stems in part from its ability to inhibit viral replication directly, and most importantly from its immunostimulatory and immunomodulatory effects. It has been reported that IFN-γ promotes production of inducible Nitric Oxide Synthase (iNOS) in macrophages as an important activator. After stimulated with IFN-γ, morphological changes will occur in murine macrophage cell line (Raw 264. 7 cells), and inducible nitric-oxide synthase (iNOS) in the cells will increase. Raw 264. 7 cells were incubated in DMEM with IFN-γ (10 ng/ml) for 24h, then cells were observed by inverted microscope.

**Observed MW (kDa)** 16 kDa.

## Properties

**Form** Lyophilized powder

**Buffer** Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.

**Preservative** ProClin 300

**Storage** For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.

**Region/Sequence** N-terminal His-Tag; Gln23~Cys156 (NP\_620235.1)

**Expression System** E. coli

**Purity** > 95%

**Endotoxin** < 1 EU/µg

**Conjugation** Unconjugated

**Note** For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.



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## DATA IMAGES



### GTx00340-pro Functional Assay Image

Activation effect of GTx00340-pro Rat Interferon gamma protein (active).

(A) Unstimulated Raw 264.7 cells cultured in DMEM.

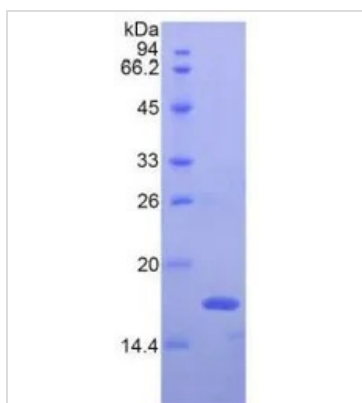
(B) Raw 264.7 cells cultured in DMEM, stimulated with IFN gamma.

ELISA detection of iNOS expression from RAW 264.7 cells stimulated by IFN $\gamma$ .

Sample (cell lysates of Raw 264.7 cells)	O.D. value	Corrected	Concentration of iNOS (ng/ml)
unstimulated	0.37	0.28	3.66
stimulated with IFN- $\gamma$ (10ng/ml)	3.31	3.22	40.97

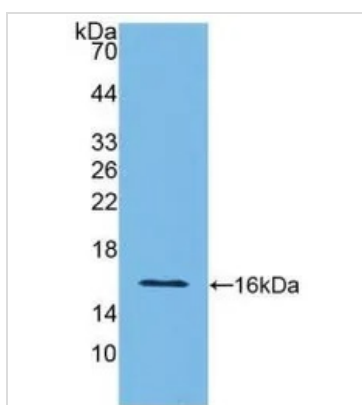
### GTx00340-pro Functional Assay Image

ELISA detection of secreted iNOS expression from RAW 264.7 cells stimulated by GTx00340-pro Rat Interferon gamma protein (active) at 10 ng/ml for 24hrs.



### GTx00340-pro Image

SDS-PAGE analysis of GTx00340-pro Rat Interferon gamma protein (active).



### GTx00340-pro Image

WB analysis of GTx00340-pro Rat Interferon gamma protein (active).



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