

APA049Mu01 10 μ g
Active Interferon Gamma (IFN γ)
Organism Species: *Mus musculus* (Mouse)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: His23~Cys155

Tags: N-terminal His-tag

Purity: >90%

Endotoxin Level: <1.0EU per 1 μ g (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 0.01% Sarcosyl, 5% Trehalose.

Original Concentration: 1500 μ g/mL

Applications: Cell culture; Activity Assays; In vivo assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 8.8

Predicted Molecular Mass: 16.8kDa

Accurate Molecular Mass: 17kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8 $^{\circ}$ C for one month.

Aliquot and store at -80 $^{\circ}$ C for 12 months.

Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

[**SEQUENCE**]

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HGTVIESL ESLNNYFNSS GIDVEEKSLF  
LDIWRNWQKD GDMKILQSQI ISFYLRLEFEV LKDNQAISNN ISVIESHLIT  
TFFSNSKAKK DAFMSIAKFE VNNPQVQRQA FNELIRVVHQ LPESSLRKR  
KRSRC
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[**ACTIVITY**]

IFN- γ is an important activator of macrophages, it promotes production of inducible Nitric Oxide Synthase (iNOS) in macrophages. After stimulated with IFN- γ , morphological changes will occur in murine macrophage cell line (Raw 246.7 cells), and inducible nitric-oxide synthase (iNOS) in the cells will increase. Raw 246.7 cells were incubated in DMEM with IFN- γ (2ng/mL) for 24h, then cells were observed by inverted microscope and iNOS in cell lysates was detected by ELISA.

Effect of IFN- γ on morphological change of Raw 246.7 cells is shown in Figure 1.

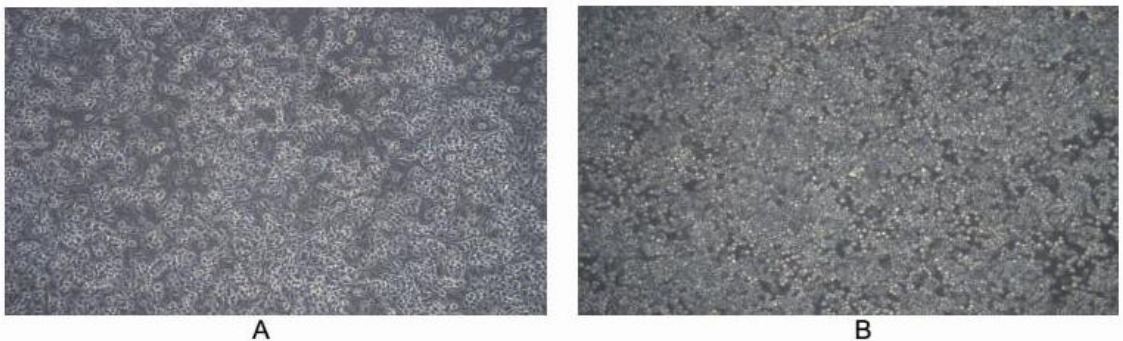


Figure 1. Morphological change of Raw 246.7 cells after stimulation of IFN γ .

(A) Raw 246.7 cells cultured in DMEM, stimulated with IFN γ ;

(B) Unstimulated Raw 246.7 cells cultured in DMEM (negative control).

Effect of IFN- γ on the expression of iNOS is shown in Table 1.

Table 1. ELISA detection of iNOS expression from RAW 246.7 cells stimulated by IFN γ

Sample (cell lysates of Raw 246.7 cells)	Concentration of iNOS (ng/mL)
Stimulated with IFN γ (2ng/mL)	16.25
Unstimulated	2.71

[IDENTIFICATION]

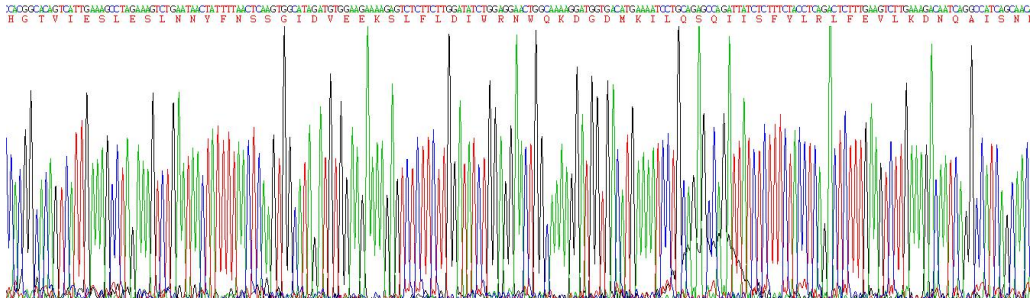


Figure 2. Gene Sequencing (extract)

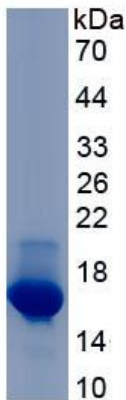


Figure 3. SDS-PAGE

Sample: Active recombinant IFN γ , Mouse

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.