

APA049Mu01 100µg
Active Interferon Gamma (IFNγ)
Organism Species: Mus musculus (Mouse)
Instruction manual

FOR IN VITRO USE AND RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1th Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: His23~Cys155

Tags: N-terminal His-tag

Purity: >95%

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

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% sarcosyl, 5% trehalose, and Proclin300.

Predicted isoelectric point: 8.8

Predicted Molecular Mass: 16.8kDa

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

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

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

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) 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°C for one month.

Aliquot and store at -80°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 LLPESLKRK
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.

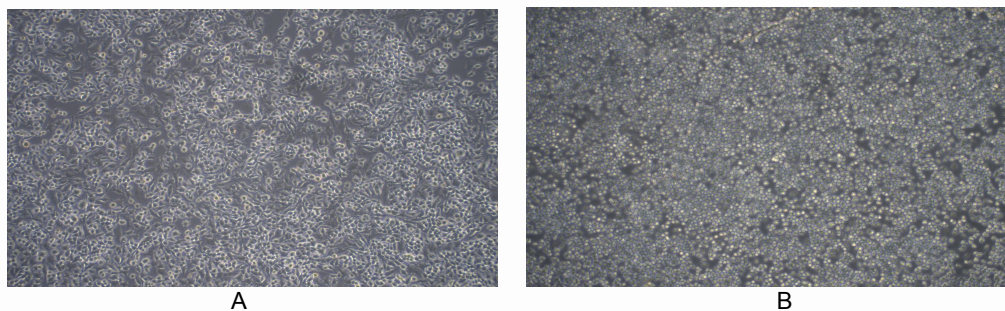


Figure 1. Morphological change of Raw 246.7 cells after stimulation of IFN γ .

(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]

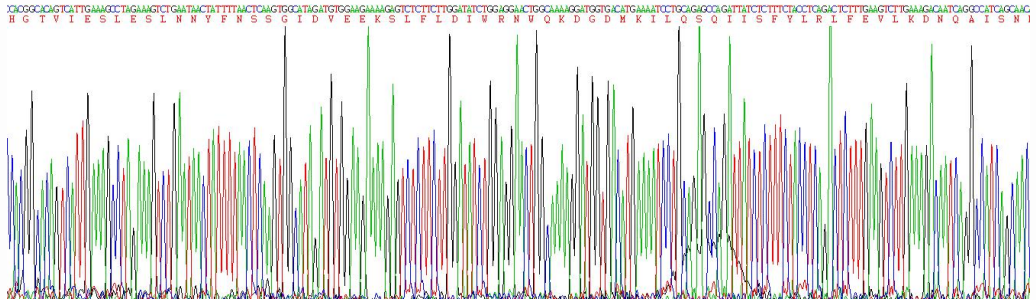


Figure 2. Gene Sequencing (extract)

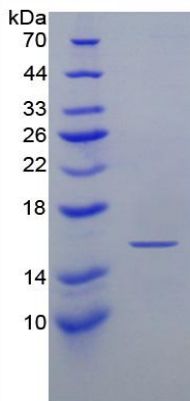
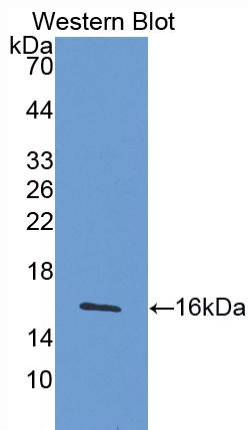


Figure 3. SDS-PAGE, Sample: Active recombinant IFN γ , Mouse



**Figure 4. Western Blot, Sample: Recombinant IFN γ , Mouse;
Antibody: Rabbit Anti-Mouse IFN γ Ab (PAA049Mu01)**