APA049Hu61 100μg
Active Interferon Gamma (IFNg)
Organism Species: Homo sapiens (Human)
Instruction manual

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

1th Edition (Apr, 2016)

[PROPERTIES]

Source: Eukaryotic expression.
Host: 293F cell
Residues: Gln24~Gln166
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: 9.7
Predicted Molecular Mass: 18.4kDa
Accurate Molecular Mass: 22&25kDa 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^{o}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.

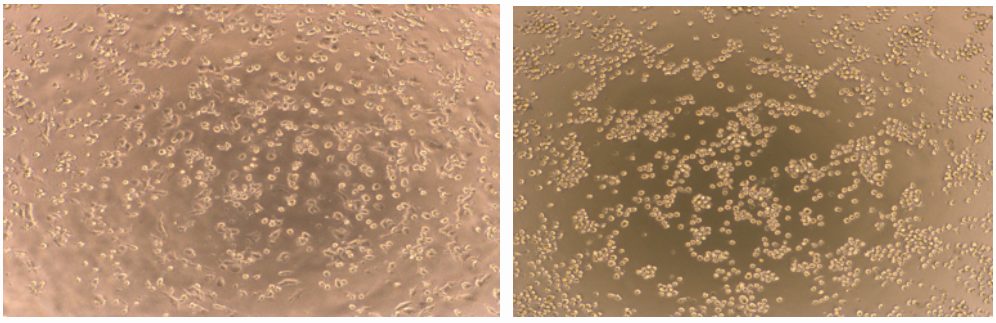
[SEQUENCE]

QDPYVKE AENLKKYFNA GHSDVADNGT LFLGILKNWK EESDRKIMQS QIVSFYFKLF KNFKDDQSIQ KSVETIKEDM NVKFFNSNKK KRDDFEKLTN YSVTDLNVQR KAIHELIQVM AELSPAAKTG KRKRSQMLFR GRRASQ

[ACTIVITY]

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. As reported, IFN γ is an important activator of human monocytic THP1 cells. Therefore,THP-1 cells were incubated in RPMI 1640 with various concentration of IFN-γ , then cells were observed by inverted microscope everyday.After stimulated with IFN-γ (5ng/ml) for 5 days, morphological changes occured in THP1 cells which displayed the shape of fusiform or polygon and were more likely to adhere.

Effect of IFN-γ on THP1 cells is shown in Figure 1.



A B

Figure 1. Effect of IFN-γ on THP1 cells.

(A) THP1 cells cultured in RPMI1640, stimulated with 2ng/mL IFN-γ for 5 days;

(B) Unstimulated THP1 cells cultured in RPMI1640 (negative control)

[IDENTIFICATION]

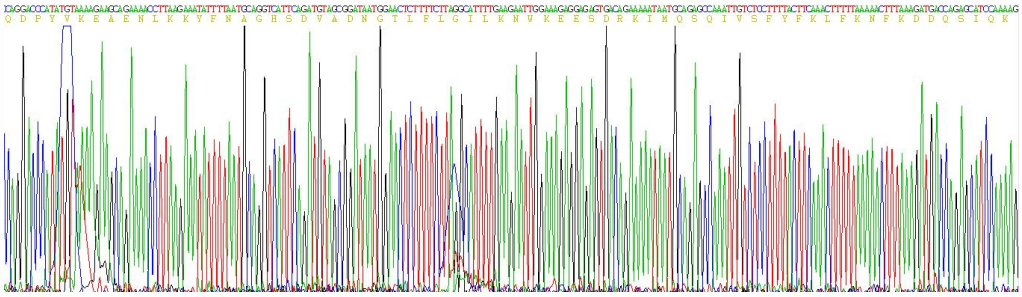


Figure 2. Gene Sequencing (extract)

Figure 3. SDS-PAGE

Sample: Active recombinant IFNg, Human

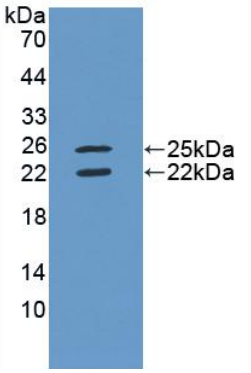


Figure 4. Western Blot

Sample: Recombinant IFNg, Human;

Antibody:Rabbit Anti-Human IFNg Ab (PAA049Hu06)