APA049Hu61 10μg
Active Interferon Gamma (IFNg)
Organism Species: Homo sapiens (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[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: PBS, pH7.4, containing 5% Trehalose.
Original Concentration: 100μg/mL
Predicted isoelectric point: 9.7
Predicted Molecular Mass: 18.4kDa
Accurate Molecular Mass: 22&25kDa as determined by SDS-PAGE reducing conditions.
Phenomenon explanation:
The possible reasons that the actual band size differs from the predicted are as follows:
1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
2. Relative charge: The composition of amino acids may affects the charge of the protein.
3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
5. Polymerization of the target protein: Dimerization, multimerization etc.
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 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 2-8ºC for one month.

Aliquot and store at -80ºC for 12 months.

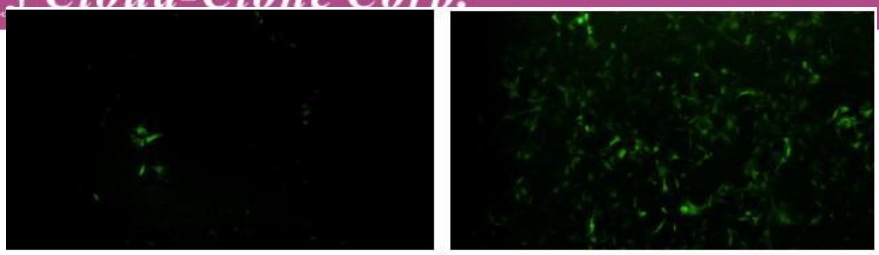
Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37ºC for 48h, and no obvious degradation and precipitation were observed.The loss rate is less than 5% within the expiration date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

[SEQUENCE]

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

[ACTIVITY]

IFN-g is a dimerized soluble cytokine that is the only member of the type II class of interferons. The importance of IFNg in the immune system stems in part from its ability to inhibit viral replication directly and most importantly from its immunostimulatory and immunomodulatory effects. The activity of recombinant human IFN-g measuerd by inhibit HIV-1-GFP lentiviral infection HUVEC cells. HUVEC cells were seeded into triplicate wells of 96-well plates at a density of 4,000 cells/well with 10% serum standard DMEM , after the cells adhesion, repalce the medium with various concentrations of recombinant human IFN-g, incubate overnight at 37 ℃ . Then suction out the DMEM medium, add lentiviral particles 100 μl to each well, incubate 24h at 37℃, change fresh 10% serum standard DMEM to the well, continuing incubate at 37 ℃ for 96h. The results observed by inverted microscope was shown in Figure1. The ED50 for this effect is 0.01 ug/ml



A B

Figure 1. HUVEC cells infect by HIV-GFP lentiviral.

(A) HUVEC cells cultured with 0.01 μg/ml recombinant human IFN-g;
(B) HUVEC cells cultured without recombinant human IFN-g

[IDENTIFICATION]

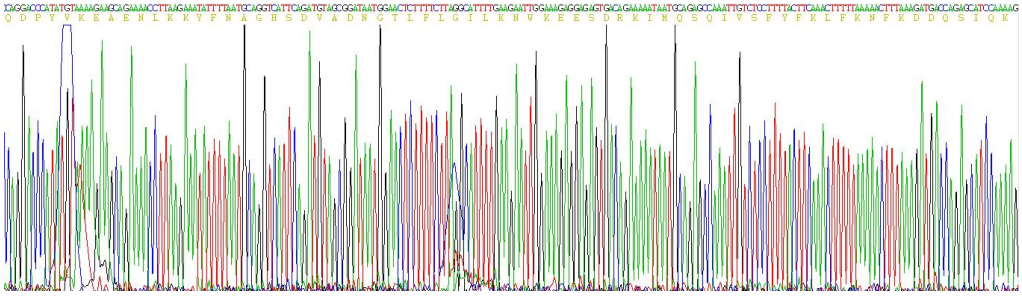


Figure 2. Gene Sequencing (extract)

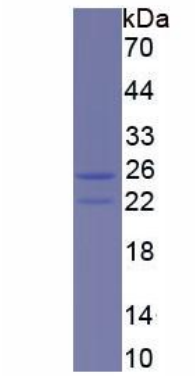


Figure 3. SDS-PAGE

Sample: Active recombinant IFNg, Human

[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.