APA049Ra61 100μg
Active Interferon Gamma (IFNg)
Organism Species: *Rattus norvegicus (Rat)*
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: Gln23~Cys156
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.
Applications: Cell culture; Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 9.5
Predicted Molecular Mass: 17.1kDa
Accurate Molecular Mass: 19kDa 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 2-8ºC 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 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]

QGTLIESL ESLKNYFNSS SMDAMEGKSL LLDIWRNWQK DGNTKILESQ IISFYLRLFE VLKDNQAISN NISVIESHLI TNFFSNSKAK KDAFMSIAKF EVNNPQIQHK AVNELIRVIH QLSPESSLRK RKRSRC

[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 lymphocytes. Therefore, EL4 cells were seeded into 96-well plates at a density of 8,000 cells/well with 5% serum standard DMEM including various concentrations of recombinant rat IFN-γ. After incubated for 72h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10 μl of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after incubating the plate for 2 hours at 37 ℃. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant rat IFN-γ for 72h. The result was shown in Figure 1. It was obvious that IFN-γ significantly inhibit cell viability of EL4 cells. The ED50 is 1.41 μg/mL.

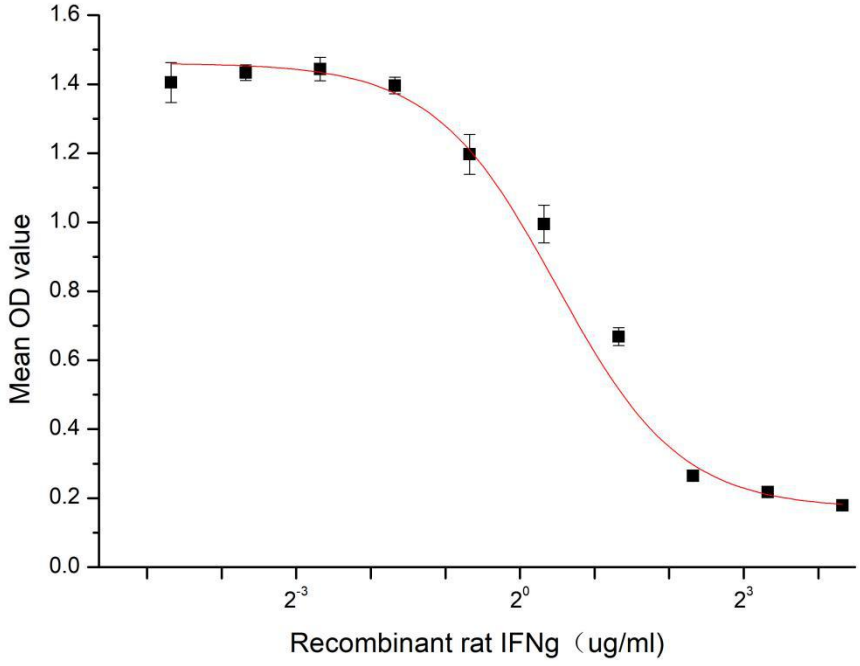

Figure 1. Inhibition of EL4 cells proliferation after stimulated with IFN-γ

[IDENTIFICATION]

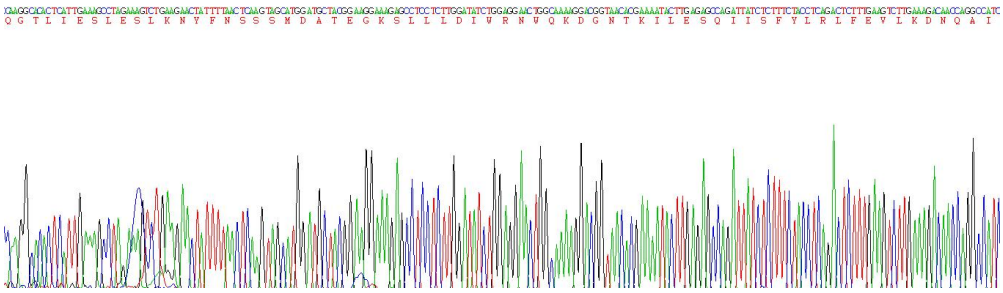

Figure 2. Gene Sequencing (extract)

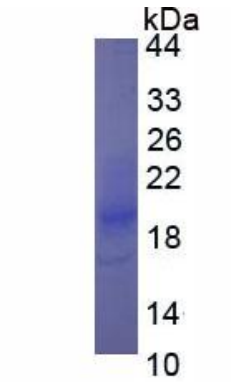

Figure 3. SDS-PAGE

Sample: Active recombinant IFNg, Rat

[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.