

APA049Hu01 100µg

Active Interferon Gamma (IFN γ)

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: Prokaryotic expression.

Host: *E. coli*

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.

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: 9.6

Predicted Molecular Mass: 18.0kDa

Accurate Molecular Mass: 16kDa as determined by SDS-PAGE reducing conditions.

[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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QDPYVKE AENLKKYFNA GHSDVADNGT
LFLGILKNWK EESDRKIMQS QIVSFYFKLF KNFKDDQSIQ KSVETIKEDM
NVKFFNSNKK KRDDFEKLTN YSVTDLNVQR KAIHELIVM AELSPAAKTG
KRKRSQMLFR GRRASQ
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[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 (2ng/mL) for 5 days, morphological changes occurred 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.

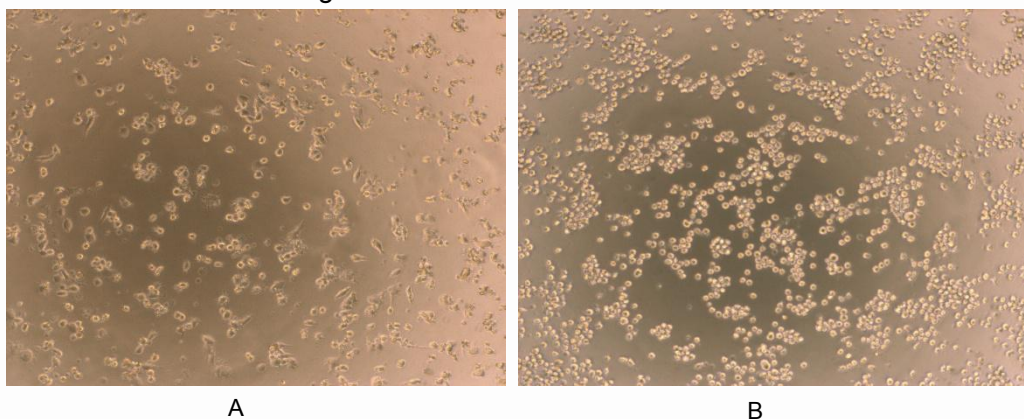


Figure 1. Effect of IFN- γ on THP1 cells.

(A) THP1 cells cultured in RPMI 1640, stimulated with 2ng/mL IFN- γ for 5 days;

(B) Unstimulated THP1 cells cultured in RPMI 1640 (negative control)

