

APA033Mu61 50µg

Active Interferon Alpha (IFNα)

Organism Species: Mus musculus (Mouse)

Instruction manual

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

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Eukaryotic expression.

Host: 293F cell

Residues: Cys24~Lys189

Tags: N-terminal His-tag

Purity: >98%

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 0.01% sarcosyl and 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: 9.1

Predicted Molecular Mass: 20.7kDa

Accurate Molecular Mass: 20&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.

[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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CDLPQTH NLRNKRALTL LVQMRRLSPL
SCLKDRKDFG FPQEKVDAQQ IKKAQAIPVL SELTQQILNI FTSKDSSAAW
NTLLDSFCN DLHQQLNDLQ GCLMQQVG VQ EFPLTQEDAL LAVRKYFHRI
TVYLREKKHS PCAWEVVRAE VWRALSSSAN VLGRLREEK
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[ACTIVITY]

The Interferon-alpha (IFNa) proteins belong to type I interferons (IFNs) which a large subgroup of interferon proteins that help regulate the activity of the immune system. The IFNa proteins produced by leukocytes are also known as leukocyte interferon. They are mainly involved in innate immune response against viral infection. Besides, Interferon-alpha 13 (IFNA13) has been identified as an interactor of IFNa, thus a binding ELISA assay was conducted to detect the interaction of recombinant mouse IFNa and recombinant mouse IFNA13. Briefly, IFNA were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to IFNA13-coated microtiter wells and incubated for

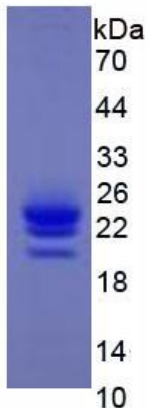


Figure 3. SDS-PAGE

Sample: Active recombinant IFNa, Mouse

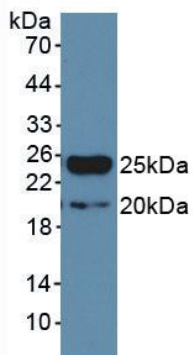


Figure 4. Western Blot

Sample: Recombinant IFNa, Mouse;

Antibody: Rabbit Anti-Mouse IFNa Ab (PAA033Mu06)