

APF493Hu01 100µg

Active Janus Kinase 3 (JAK3)

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: Prokaryotic expression.

Host: *E. coli*

Residues: Trp716~Asp967

Tags: N-terminal His-tag

Purity: >98%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: PBS, pH7.4, containing 0.01% Sarcosyl, 5% Trehalose.

Original Concentration: 150µg/mL

Applications: Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 8.4

Predicted Molecular Mass: 32.3kDa

Accurate Molecular Mass: 32kDa 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 2-8°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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WEVFS GVTMPISALD PAKKLQFYED RQQLPAPKWT
ELALLIQQCM AYEPVQRPSF RAVIRDLNSL ISSDYELLSD PTPGALAPRD
GLWNGAQLYA CQDPTIFEER HLKYISQLGK GNFGSVELCR YDPLGDNTGA
LVAVKQLQHS GPDQQRDFQR EIQILKALHS DFIVKYRGVS YGPGRQSLRL
VMEYLPSCGL RDFLQRHRAR LDASRLLLYS SQICKGMEYL GSRRCVHRDL
AARNILVESE AHVKIAD
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[ACTIVITY]

JAK3 (Tyrosine-protein kinase JAK3) is a non-receptor tyrosine kinase that involved in various processes such as cell growth, development, or differentiation. Besides, STAM2 has been identified as an interactor of JAK3, thus a binding ELISA assay was conducted to detect the interaction of recombinant human JAK3 and recombinant human STAM2. Briefly, JAK3 were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to STAM2-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-JAK3 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50μL stop solution to the wells and read at 450nm immediately. The binding activity of of JAK3 and STAM2 was shown in Figure 1, and this effect was in a dose dependent manner.

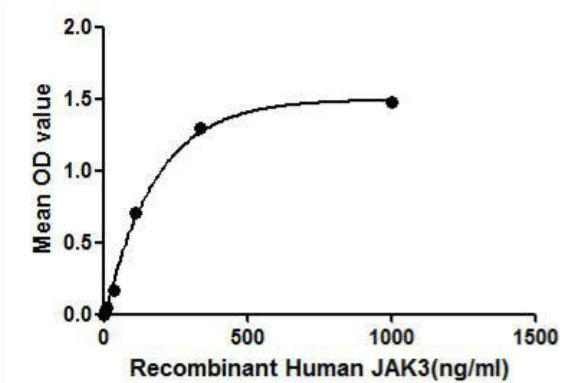


Figure 1. The binding activity of JAK3 with STAM2.

[IDENTIFICATION]

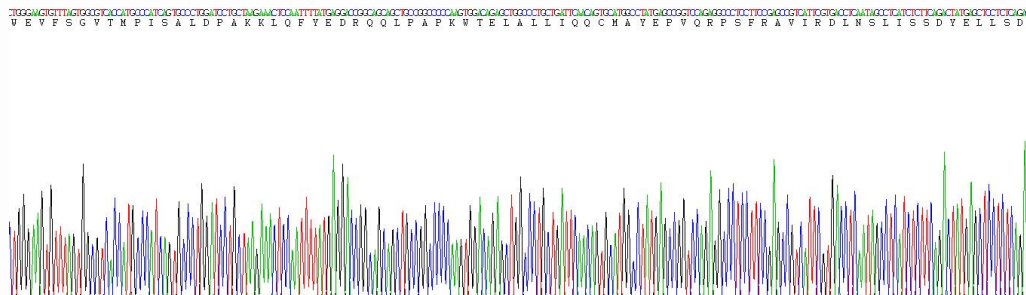


Figure 2. Gene Sequencing (extract)

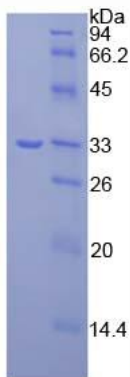


Figure 3. SDS-PAGE

Sample: Active recombinant JAK3, Human

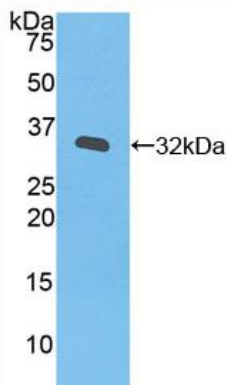


Figure 4. Western Blot

Sample: Recombinant JAK3, Human;

Antibody: Rabbit Anti-Human JAK3 Ab (PAF493Hu01)

[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.