

APF883Hu01 100µg

Active S-Phase Kinase Associated Protein 1 (SKP1)

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: Met1~Lys163
Tags: N-terminal His-tag

Purity: >90%

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

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

Original Concentration: 200µg/mL

Applications: Cell culture; Activity Assays.

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

Predicted isoelectric point: 4.4

Predicted Molecular Mass: 22.4kDa

Accurate Molecular Mass: 26kDa 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]

MPSIKLQSSD GEIFEVDVEI AKQSVTIKTM LEDLGMDDEG DDDPVPLPNV NAAILKKVIQ WCTHHKDDPP PPEDDENKEK RTDDIPVWDQ EFLKVDQGTL FELILAANYL DIKGLLDVTC KTVANMIKGK TPEEIRKTFN IKNDFTEEEE AQVRKENQWC EEK

[ACTIVITY]

S-Phase Kinase Associated Protein 1 (SKP1) is a core component of the SKP1-Cullin-F-box (SCF) E3 ubiquitin ligase complex. It is an adaptor protein, connecting cullin and F-box proteins in the complex. SKP1 mediates the ubiquitination of proteins involved in cell cycle progression, signal transduction and transcription. Previous studies have shown that SKP1 protein is associated with Mitochondrial Dna Depletion Syndrome 13 and Parkinson. To test the effect of SKP1 on cell proliferation, A549 cells were seeded into triplicate wells of 96-well plates and allowed to attach, replaced with various concentrations of recombinant human SKP1. 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 1-4 hours at 37 °C. Cell viability was assessed by CCK-8 assay after incubation with recombinant human SKP1 for 72h. The result was shown in Figure 1. It was obvious that SKP1 significantly decreased cell viability of A549 cells. The ED50 of recombinant human SKP1 is 0.375 µg/ml.

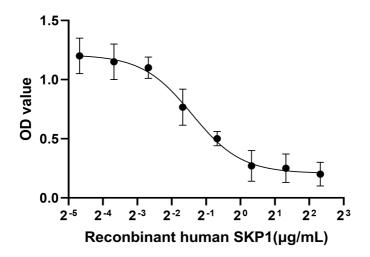


Figure 1. The dose-effect curve of recombinant human SKP1 on A549 cells

[IDENTIFICATION]

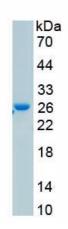


Figure 2. SDS-PAGE

Sample: Active recombinant SKP1, 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.