APJ890Hu01 100μg
Active F-Box And WD Repeat Domain Containing Protein 7 (FBXW7)
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: Asp279~Val515
Tags: N-terminal His-tag
Purity: >95%
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: 9.3
Predicted Molecular Mass: 30.8kDa
Accurate Molecular Mass: 31kDa 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 37ºC 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]

DF ISLLPKELAL YVLSFLEPKD
LLQAAQTCRY WRILAEDNLL WREKCKEEGI DEPLHIKRRK VIKPGFIHSP
WKSAYIRQHR IDTNWRRGEL KSPKVLKGHD DHVITCLQFC GNRIVSGSDD
NTLKVWSAVT GKCLRTLVGH TGGVWSSQMR DNIIISGSTD RTLKVWNAET
GECIHTLYGH TSTVRCMHLH EKRVVSGSRD ATLRVWDIET GQCLHVLMGH
VAAVRCVQYD GRRVV

[ACTIVITY]

Box And WD Repeat Domain Containing Protein 7 (FBXW7) , also known as FBW7, AGO, or SEL-10, is a crucial component of the Skp1-Cullin1-F-box (SCF) ubiquitin ligase complex, which plays a pivotal role in regulating protein turnover through ubiquitination and subsequent proteasomal degradation. As an F-box protein, FBXW7 functions as the substrate recognition subunit of the SCF complex, specifically targeting a diverse array of oncogenic proteins for degradation, thereby exerting significant tumor-suppressive effects. To test the effect of FBXW7 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 FBXW7. 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 ℃. Cell viability was assessed by CCK-8 assay after incubation with recombinant human FBXW7 for 72h. The result was shown in Figure 1. It was obvious that FBXW7 significantly decreased cell viability of A549 cells. The ED50 of recombinant human FBXW7 is 1.525 μg/ml.

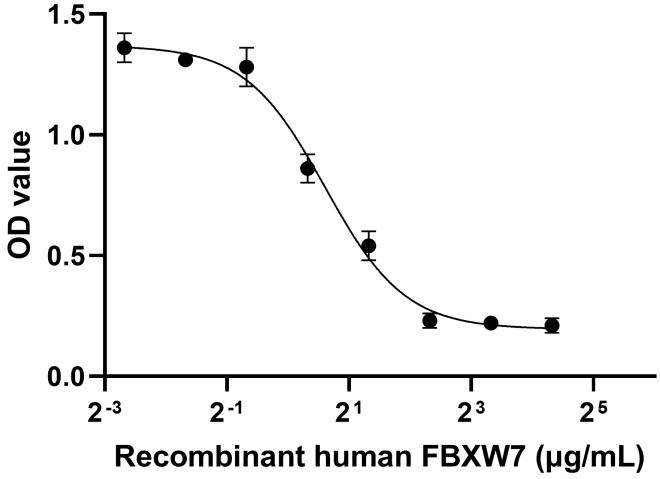

Figure.1 The dose-effect curve of recombinant human FBXW7 on A549 cells

[IDENTIFICATION]

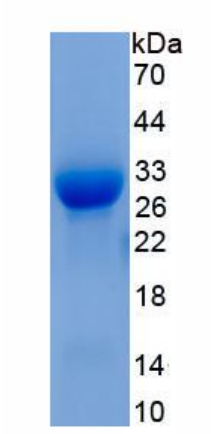

Figure 2. SDS-PAGE

Sample: Active recombinant FBXW7, 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.