APJ769Hu01 100μg
Active Von Hippel Lindau Tumor Suppressor (vHL)
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~Asp213
Tags: N-terminal His-tag
Purity: >80%
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: 27.8kDa
Accurate Molecular Mass: 35kDa 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]

MPRRAENWDE AEVGAEEAGV EEYGPEEDGG EESGAEESGP EESGPEELGA
EEEMEAGRPR PVLRSVNSRE PSQVIFCNRS PRVVLPVWLN FDGEPQPYPT
LPPGTGRRIH SYRGHLWLFR DAGTHDGLLV NQTELFVPSL NVDGQPIFAN
ITLPVYTLKE RCLQVVRSLV KPENYRRLDI VRSLYEDLED HPNVQKDLER
LTQERIAHQR MGD

[ACTIVITY]

Von Hippel Lindau Tumor Suppressor (vHL) is a key tumor suppressor that plays a critical role in regulating cellular responses to oxygen levels. Encoded by the VHL gene, this protein functions primarily as part of a multi-protein E3 ubiquitin ligase complex, which targets specific proteins for degradation via the ubiquitin-proteasome system. To test the effect of vHL on cell proliferation, 293T cells were seeded into triplicate wells of 96-well plates and allowed to attach, replaced with various concentrations of recombinant human vHL. 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 vHL for 72h. The result was shown in Figure 1. It was obvious that vHL significantly decreased cell viability of 293T cells. The ED50 of recombinant human vHL is 1.607 μg/ml.

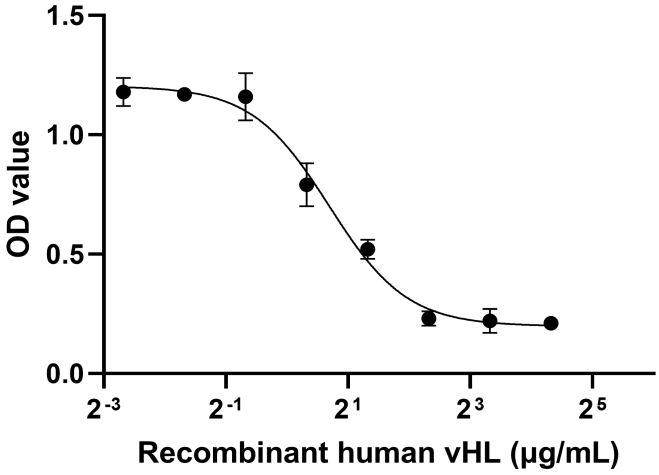

Figure1. The dose-effect curve of recombinant human vHL on 293T cells

[IDENTIFICATION]

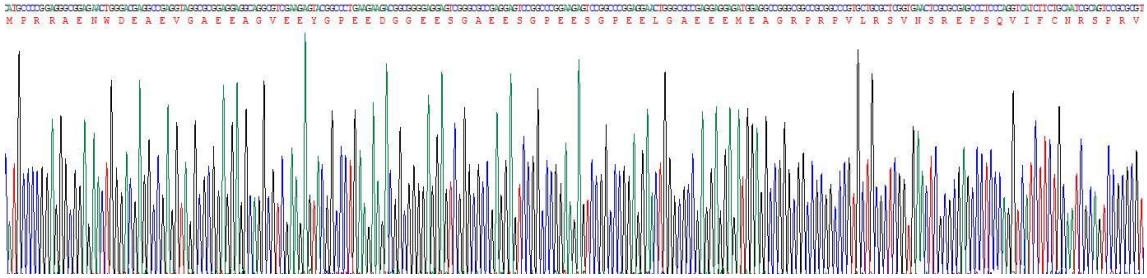

Figure 2. Gene Sequencing (extract)

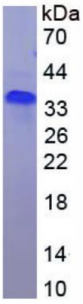

Figure 3. SDS-PAGE

Sample: Active recombinant vHL, 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.