APC802Hu01 100μg
Active Tensin 1 (TNS1)
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: Ser4~Gly307
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: 8.6
Predicted Molecular Mass: 38.3kDa
Accurate Molecular Mass: 38kDa 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]

SRTMEDS CELDLVYVTE RIIAVSFPST ANEENFRSNL REVAQMLKSK
HGGNYLLFNL SERRPDITKL HAKVLEFGWP DLHTPALEKI CSICKAMDTW
LNADPHNVVV LHNKGNRGRI GVVIAAYMHY SNISASADQA LDRFAMKRFY
EDKIVPIGQP SQRRYVHYFS GLLSGSIKMN NKPLFLHHVI MHGIPNFESK
GGCRPFLRIY QAMQPVYTSG IYNIPGDSQT SVCITIEPGL LLKGDILLKC
YHKKFRSPAR DVIFRVQFHT CAIHDLGVVF GKEDLDDAFK DDRFPEYGKV
EFVFSYG

[ACTIVITY]

Tensin 1 (TNS1) is a protein localizes to focal adhesions, regions of the plasma membrane where the cell attaches to the extracellular matrix. It crosslinks actin filaments and contains a Src homology 2 (SH2) domain, which is often found in molecules involved in signal transduction. TNS1 contains binding domain, which allows it to interact with a variety of signaling molecules and transmembrane receptors, such as integrins and receptor tyrosine kinases. To test the effect of TNS1 protein 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 TNS1. 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 TNS1 for 72h. The result was shown in Figure 1. It was obvious that TNS1 significantly decreased cell viability of A549 cells. The ED50 of recombinant human TNS1 is 1.348 μg/ml.

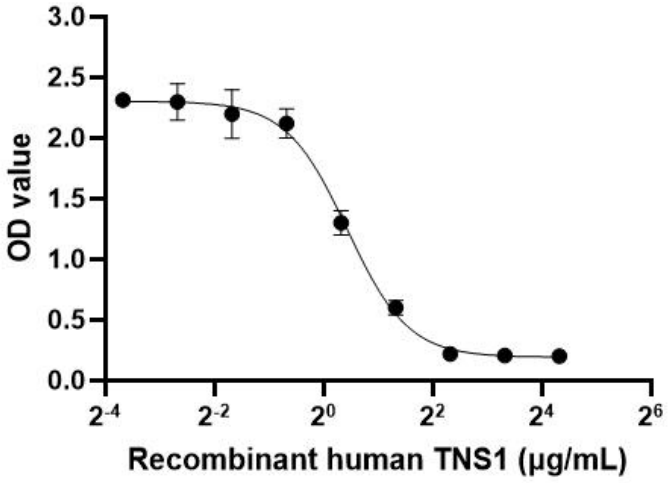

Figure 1. The dose-effect curve of recombinant human TNS1 on A549 cells

[IDENTIFICATION]

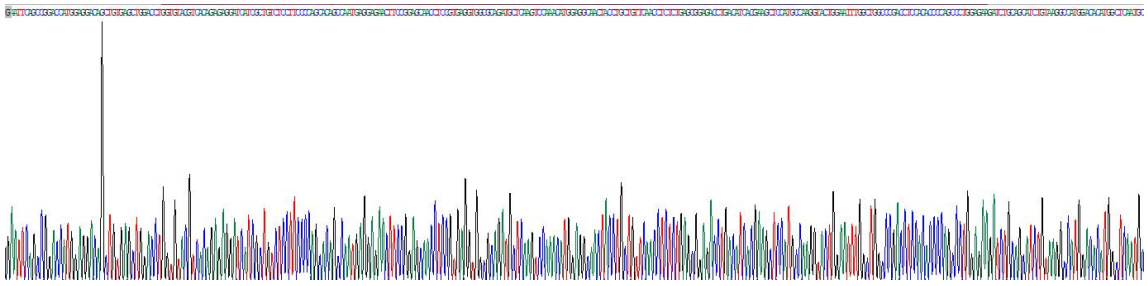

Figure 2. Gene Sequencing (extract)

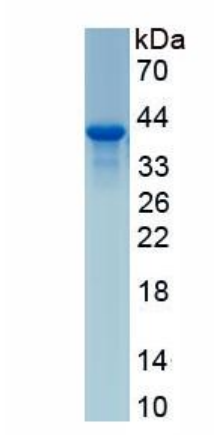

Figure 3. SDS-PAGE

Sample: Active recombinant TNS1, 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.