

APB886Mu61 100µg
Active Angiotensin I Converting Enzyme 2 (ACE2)
Organism Species: *Mus musculus (Mouse)*
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Eukaryotic expression.

Host: 293F cell

Residues: Gln18~Thr740

Tags: N-terminal His-tag

Purity: >95%

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

Buffer Formulation: PBS, pH7.4, containing 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: 5.2

Predicted Molecular Mass: 85.2kDa

Accurate Molecular Mass: 87kDa 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]

```
          QSL TEENAKTFLN NFNQEAEDLS YQSSLASWNY
NTNITEENAQ KMSEAAAKWS AFYEEQSKTA QSFSLQEIQT PIIKRQLQAL
QQSGSSALSA DKNKQLNTIL NTMSTIYSTG KVCNPKNPQE CLLLEPGLDE
IMATSTDYNS RLWAWEGWRA EVGKQLRPLY EYVVLKNEM ARANNYNDYG
DYWRGDYEA EADGYNYNRN QLIEDVERTF AEIKPLYEHL HAYVRRKLMQ
TYPYSISPTG CLPAHLLGDM WGRFWTNLYP LTVPFAQKPN IDVTDAMMNQ
GWAERIFQE AEKFFVSVGL PHMTQGFWAN SMLTEPADGR KVVCHPTAWD
LGHGDFRIKM CTKVTMDNFL TAHHEMGHIQ YDMAYARQPF LLRNGANEGF
HEAVGEIMSL SAATPKHLKS IGLLPDFQEQ DSETEINFLK KQALTIIVGTL
PFTYMLEKWR WMVFRGEIPK EQWMKKWEM KREIVGVVEP LPHDETYCDP
ASLFHVSNDY SFIRYYTRTI YQFQFQEQALC QAAKYNGSLH KCDISNSTEA
GQKLLKMLSL GNSEPWTKAL ENVVGARNMD VKPLLNYFQP LFDWLKEQNR
NSFVGWNTTEW SPYADQSIKV RISLKSALGA NAYEWTNNEM FLFRSSVAYA
MRKYFSIIKN QTVPFLEEDV RVSDLKPRVS FYFFVTSPOQ VSDVIPRSEV
EDAIRMSRGR INDVFGFLNDN SLEFLGIHPT LEPPYQPPVT
```

[ACTIVITY]

Angiotensin I Converting Enzyme 2 (ACE2), as a transmembrane protein, serves as the main entry point into cells for some coronaviruses. More specifically, the binding of the spike S1 protein of SARS-CoV and SARS-CoV-2 to the enzymatic domain of ACE2 on the surface of cells results in endocytosis and translocation of both the virus and the enzyme into endosomes located within cells.

The activity of recombinant mouse ACE2 is measured by its ability to cleave a fluorogenic peptide substrate MCA-Tyr-Val-Ala-Asp-Ala-Pro-Lys(DNP)-OH in the assay buffer 50 mM Tris, 1 M NaCl, pH 7.5. The rmACE2 is diluted to 0.5 ug/mL in assay buffer. Loading into a black well plate 50 µL of 0.5 ug/mL rmACE2 and start the reaction by adding 50 µL of 20 µM substrate, with a substrate blank containing 50 µL assay buffer, 50 µL substrate, and no rmACE2. Then read at excitation and emission wavelengths of 320 nm and 405 nm, respectively, in kinetic mode for 5 minutes. The specific activity of recombinant mouse ACE2 is > 1800 pmol/min/µg.

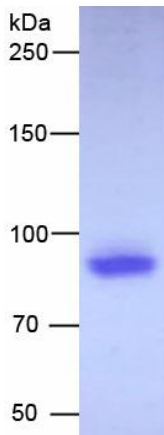


Figure 3. SDS-PAGE

Sample: Active recombinant ACE2, Mouse

[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.