

## Product datasheet for AP13060PU-N

### OriGene Technologies, Inc.

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# **Angiotensin Converting Enzyme 2 (ACE2) Rabbit Polyclonal Antibody**

#### **Product data:**

**Product Type:** Primary Antibodies

Applications: IHC, WB

Recommended Dilution: ELISA: 1/1,000.

Immunohistochemistry: 1/50 - 1/100.

Western Blot: 1/50 - 1/200.

Reactivity: Human
Host: Rabbit
Isotype: Ig

Clonality: Polyclonal

**Immunogen:** This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide

selected from the center region of human ACE2.

**Specificity:** This antibody reacts to ACE2 (SARS Receptor).

Formulation: PBS with 0.09% (W/V) sodium azide

State: Purified

State: Liquid purified Ig

**Concentration:** lot specific

**Purification:** Protein G column, eluted with high and low pH buffers and neutralized immediately, followed

by dialysis against PBS

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Gene Name: angiotensin I converting enzyme 2

Database Link: Entrez Gene 59272 Human

Q9BYF1





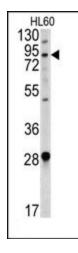
#### Background:

ACE2 cDNA encodes a deduced 805-amino acid protein containing a potential 17-amino acid N-terminal signal peptide and a putative 22-amino acid C-terminal membrane anchor. It also possesses a zinc metalloprotease consensus sequence and a conserved glutamine residue that may function as a third zinc ligand. ACE2 is expressed predominantly in vascular endothelial cells of the heart and kidney. ACE converts angiotensin I to angiotensin II, ACE2 converts angiotensin I to angiotensin 1-9, which has 9 amino acids. Angiotensin II is a potent blood vessel constrictor, while angiotensin 1-9 does not impact blood vessels but is cleaved by ACE to a shorter peptide, angiotensin 1-7, which is a blood vessel dilator. Spike (S) proteins of coronaviruses, including the SARS coronavirus, bind with cellular receptors to mediate infection of target cells. ACE2 binds the S1 domain of the SARS coronavirus S protein. SARS coronavirus replicates efficiently on ACE2-transfected but not mock-transfected 293T cells. Anti-ACE2 but not anti-ACE1 antibody blocks viral replication on Vero E6 cells. It has been proposed that ACE2 is a functional receptor for SARS coronavirus.

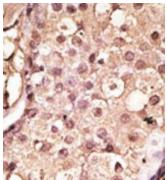
Synonyms:

Angiotensin-converting enzyme 2

# **Product images:**



Western blot analysis of anti-ACE2 (SARS Receptor) Antibody (Center) in HL60 cell line lysates (35ug/lane). ACE2 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining.