

Angiotensin Converting Enzyme 2 (ACE2) Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 19502 **Clone No.:** S754

Size: 100ul

Format: Protein A-purified antibody in TBS, pH 7.4, 1% BSA, 40% glycerol, 0.05% sodium azide.

BACKGROUND

Angiotensin-converting enzyme 2 (ACE2) is a zinc containing metalloenzyme located on the surface of endothelial and other cells in the lungs, arteries, heart, kidney, and intestines. The primary function of ACE2 is to offset activity of angiotensin-converting enzyme (ACE). ACE cleaves angiotensin I into the vasoconstrictor angiotensin II. ACE2 in turn cleaves angiotensin II into the vasodilator angiotensin 1-7. In addition, ACE2 is the main entry point into cells for some coronaviruses including HCoV-NL63, SARS-CoV (the coronavirus that causes SARS) and SARS-CoV-2 (the coronavirus that causes COVID-19). More precisely, the binding of the spike S1 protein of SARS-CoV and SARS-CoV2 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.

SPECIFICATION SUMMARY

Antigen: Recombinant human ACE2 produced in a mammalian expression system.

Accession no.: Q9BYF1

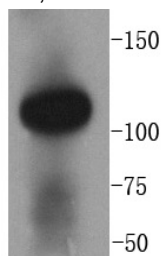
Gene ID: 59272

Host Species: Rabbit

Specificity: Human, mouse, and rat ACE2.

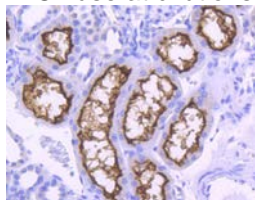
APPLICATION

Immunoblotting: use at dilutions of 1:1,000-1:5,000. A band of ~92kDa is detected.

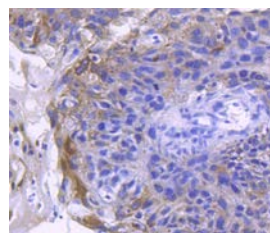


Detection of ACE2 in human kidney lysate with #19502 diluted 1:1,000.

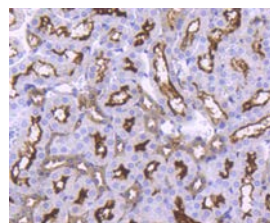
IHC: use at dilutions of 1:50-1:200.



Detection of ACE2 in paraffin-embedded human kidney.

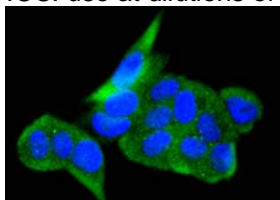


Detection of ACE2 in paraffin-embedded human breast carcinoma.

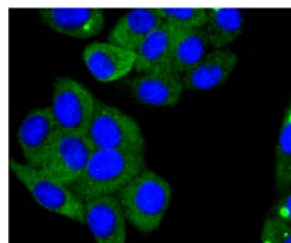


Detection of ACE2 in paraffin-embedded mouse kidney.

ICC: use at dilutions of 1:100-1:500.



Detection of ACE2 in MCF-7 cells (green) after paraformaldehyde fixation and permeabilization with 0.25% Triton X100 in PBS.



Detection of ACE2 in HepG2 cells (green) after paraformaldehyde fixation and permeabilization with 0.25% Triton X100 in PBS.

These are recommended dilutions.
Endusers should determine optimal dilutions
for their applications.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Store product in appropriate aliquots to avoid multiple freeze-thaw cycles.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.