

ACE2 (NCOVID / SARS Receptor) Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM2197b

Specification

ACE2 (NCOVID / SARS Receptor) Antibody - Product Information

Application	WB,E
Primary Accession	Q9BYF1
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgM,k

ACE2 (NCOVID / SARS Receptor) Antibody - Additional Information

Gene ID 59272

Other Names

Angiotensin-converting enzyme 2,
ACE-related carboxypeptidase,
Angiotensin-converting enzyme homolog,
ACEH, Metalloprotease MPROT15, Processed
angiotensin-converting enzyme 2, ACE2

Target/Specificity

Purified His-tagged ACE2 protein was used to
produce this monoclonal antibody.

Dilution

WB~1:1000

Format

Purified monoclonal antibody supplied in PBS
with 0.09% (W/V) sodium azide. This antibody
is prepared by Euglobin precipitation followed
by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2
weeks. For long term storage store at -20°C
in small aliquots to prevent freeze-thaw
cycles.

Precautions

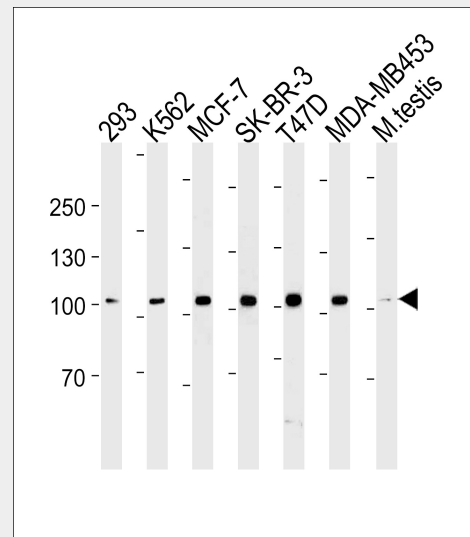
ACE2 (NCOVID / SARS Receptor) Antibody is
for research use only and not for use in
diagnostic or therapeutic procedures.

ACE2 (NCOVID / SARS Receptor) Antibody - Protein Information

Name ACE2 ([HGNC:13557](#))

Function

Essential counter-regulatory



ACE2 (SARS Receptor) Antibody (Center) (Cat. #AM2197b) western blot analysis in 293, K562, MCF-7, SK-BR-3, T47D, MDA-MB-453 cell line and mouse testis tissue lysates (35µg/lane). This demonstrates the ACE2 antibody detected the ACE2 protein (arrow).

ACE2 (NCOVID / SARS Receptor) Antibody - Background

Carboxypeptidase which converts angiotensin I to angiotensin 1-9, a peptide of unknown function, and angiotensin II to angiotensin 1-7, a vasodilator. Also able to hydrolyze apelin-13 and dynorphin-13 with high efficiency. May be an important regulator of heart function. In case of human coronaviruses SARS and HCoV-NL63 infections, serve as functional receptor for the spike glycoprotein of both coronaviruses.

ACE2 (NCOVID / SARS Receptor) Antibody - References

Donoghue M., et al. *Circ. Res.* 87:E1-E9(2000).
Tipnis S.R., et al. *J. Biol. Chem.* 275:33238-33243(2000).
Douglas G.C., et al. *Endocrinology* 145:4703-4711(2004).
Itoyama S., et al. *Am. J. Med. Genet. A* 136:52-57(2005).
Suzuki Y., et al. Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.

carboxypeptidase of the renin- angiotensin hormone system that is a critical regulator of blood volume, systemic vascular resistance, and thus cardiovascular homeostasis (PubMed:27217402). Converts angiotensin I to angiotensin 1- 9, a nine-amino acid peptide with anti-hypertrophic effects in cardiomyocytes, and angiotensin II to angiotensin 1-7, which then acts as a beneficial vasodilator and anti-proliferation agent, counterbalancing the actions of the vasoconstrictor angiotensin II (PubMed:10969042, PubMed:10924499, PubMed:11815627, PubMed:19021774, PubMed:14504186). Also removes the C-terminal residue from three other vasoactive peptides, neurotensin, kinetensin, and des-Arg bradykinin, but is not active on bradykinin (PubMed:10969042, PubMed:11815627). Also cleaves other biological peptides, such as apelin-13, [Pyr1]apelin-13, apelin-17, apelin-36), casomorphins (beta-casomorphin-7, neocasomorphin) and dynorphin A with high efficiency (PubMed:11815627, PubMed:27217402, PubMed:28293165). In addition, ACE2 C-terminus is homologous to collectrin and is responsible for the trafficking of the neutral amino acid transporter SL6A19 to the plasma membrane of gut epithelial cells via direct interaction, regulating its expression on the cell surface and its catalytic activity (PubMed:18424768, PubMed:19185582).

Cellular Location

[Processed angiotensin-converting enzyme 2]: Secreted

Tissue Location

Expressed in endothelial cells from small and large arteries, and in arterial smooth muscle cells (at protein level) (PubMed:15141377). Expressed in lung alveolar epithelial cells, enterocytes of the small intestine, Leydig cells and Sertoli cells (at protein level) (PubMed:15141377). Expressed in the renal

proximal tubule and the small intestine (at protein level) (PubMed:18424768) Expressed in heart, kidney, testis, and gastrointestinal system (PubMed:10969042, PubMed:10924499, PubMed:15231706, PubMed:12459472, PubMed:15671045).

ACE2 (NCOVID / SARS Receptor) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)