

## Mouse anti-Human ACE2 (SARS Receptor) Monoclonal Antibody | anti-ACE2 antibody

ACE2 (SARS Receptor) Antibody (Center) (Ascites)

|                               |                      |                            |                                            |
|-------------------------------|----------------------|----------------------------|--------------------------------------------|
| CATALOG #<br><b>AAA283524</b> | HOST<br><b>Mouse</b> | REACTIVITY<br><b>Human</b> | APPLICATIONS<br><b>ELISA, Western Blot</b> |
|-------------------------------|----------------------|----------------------------|--------------------------------------------|

### PRODUCT SYNONYMS

ACE2 (SARS Receptor); Monoclonal Antibody; ACE2 (SARS Receptor) Antibody (Center) (Ascites); Angiotensin-converting enzyme 2; ACE-related carboxypeptidase; Angiotensin-converting enzyme homolog; ACEH; Metalloprotease MPROT15; Processed angiotensin-converting enzyme 2; ACE2; anti-ACE2 antibody

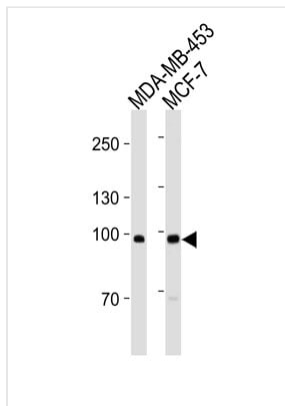
### PRODUCT SPECIFICATIONS

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|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Reactivity                                     | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Clonality                                      | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Isotype                                        | IgM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Specificity                                    | Purified His-tagged ACE2 protein was used to produced this monoclonal antibody.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Form/Format                                    | Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Sequence Positions                             | 1-270                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Sequence Length                                | 805                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Applicable Applications for anti-ACE2 antibody | ELISA, WB (Western Blot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Function                                       | Essential counter-regulatory carboxypeptidase of the renin- angiotensin hormone system that is a critical regulator of blood volume, systemic vascular resistance, and thus cardiovascular homeostasis (PubMed: ). Converts angiotensin I to angiotensin 1- 9, anine-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: , PubMed: , PubMed: ,PubMed: ,PubMed: ). Also removes the C-terminal residue from three other vasoactive peptides, neurotensin, kinetensin, and des-Arg bradykinin, but is not active on bradykinin (PubMed: ,PubMed: ). Also cleaves other biological peptides, such as apelins (apelin-13, [Pyr1]apelin-13,apelin-17, apelin-36), casomorphins (beta-casomorphin- 7, neocasomorphin) and dynorphin A with high efficiency (PubMed: ,PubMed: , PubMed: ). Inaddition, 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: , PubMed: ). |
| Cellular Location                              | [Processed angiotensin-converting enzyme 2]: Secreted [Isoform 2]: Apical cell membrane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Tissue Location                                | Expressed in endothelial cells from small and large arteries, and in arterial smooth muscle cells (at protein level) (PubMed:15141377). Expressed in 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 (at protein level) (PubMed: 10969042, PubMed: 10924499, PubMed: 15231706, PubMed: 12459472, PubMed: 15671045, PubMed: 32715618, PubMed: 32170560). In lung, expressed at low levels in some alveolar type 2 cells, the expression seems to be individual- specific (at protein level) (PubMed: 32425701, PubMed: 15141377, PubMed: 32715618, PubMed: 32170560, PubMed: 33432184). Expressed in nasal epithelial cells (at protein level) (PubMed: 33432184). Coexpressed with TMPRSS2 within some lung alveolar type 2 cells, ileal absorptive enterocytes, intestinal epithelial cells, cornea, gallbladder and nasal goblet secretory cells (PubMed: 32413319, PubMed: 32327758, PubMed: 32358202). Coexpressed with TMPRSS4 within mature enterocytes (PubMed:32404436).                                                                                                       |

#### Preparation and 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.

## IMAGES



#### WB (Western Blot)

ACE2 (SARS Receptor) Antibody (Center)(AAA283524) western blot analysis in MDA-MB-453,MCF-7 cell line lysates (35ug/lane).This demonstrates the ACE2 (SARS Receptor) antibody detected the ACE2 (SARS Receptor) protein (arrow).

## ADDITIONAL INFORMATION

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-ACE2 antibody | 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. |
| Product Categories/Family for anti-ACE2 antibody   | <a href="#">Crown Antibodies</a> ; <a href="#">Cardiovascular</a> ; <a href="#">Cell Biology</a>                                                                                                                                                                                                                                                                                                                             |
| References                                         | Donoghue M., et al. Circ. Res. 87:E1-E9(2000).<br>Tipnis S.R., et al. J. Biol. Chem. 275:33238-33243(2000).<br>Douglas G.C., et al. Endocrinology 145:4703-4711(2004).<br>Itoyama S., et al. Am. J. Med. Genet. A 136:52-57(2005).<br>Suzuki Y., et al. Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.                                                                                                             |

## NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | <a href="#">11225609</a>                                                                                                                            |
| NCBI GeneID                      | <a href="#">59272</a>                                                                                                                               |
| NCBI Accession #                 | <a href="#">NP_068576.1</a>                                                                                                                         |
| NCBI GenBank Nucleotide #        | <a href="#">NM_021804.2</a>                                                                                                                         |
| UniProt Accession #              | <a href="#">Q9BYF1</a> ; <a href="#">Q6UWP0</a> ; <a href="#">Q86WT0</a> ; <a href="#">Q9NRA7</a> ; <a href="#">Q9UFZ6</a> ; <a href="#">C7ECU1</a> |
| NCBI Official Full Name          | angiotensin-converting enzyme 2                                                                                                                     |
| NCBI Official Synonym Full Names | angiotensin I converting enzyme 2                                                                                                                   |
| NCBI Official Symbol             | ACE2                                                                                                                                                |
| NCBI Official Synonym Symbols    | ACEH                                                                                                                                                |
| NCBI Protein Information         | angiotensin-converting enzyme 2                                                                                                                     |
| UniProt Protein Name             | Angiotensin-converting enzyme 2                                                                                                                     |
| UniProt Gene Name                | <b>ACE2</b>                                                                                                                                         |

|                            |            |
|----------------------------|------------|
| UniProt Synonym Gene Names | ACEH       |
| UniProt Entry Name         | ACE2_HUMAN |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/ace2-sars-receptor-antibody-western-blot-elisa/283524>