

Mouse anti-Human, Mouse ACE2 Monoclonal Antibody | anti-ACE2 antibody

ACE2 Antibody

CATALOG # AAA283459	HOST Mouse	REACTIVITY Human, Mouse	APPLICATIONS ELISA, Western Blot
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PRODUCT SYNONYMS

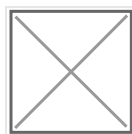
ACE2; Monoclonal Antibody; ACE2 Antibody; Angiotensin-converting enzyme 2; ACE-related carboxypeptidase; Angiotensin-converting enzyme homolog; ACEH; Metalloprotease MPROT15; Processed angiotensin-converting enzyme 2; anti-ACE2 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse
Clonality	Monoclonal
Isotype	IgM,k
Clone Number	881CT16.4.4
Specificity	Purified His-tagged ACE2 protein was used to produced this monoclonal antibody.
Form/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.
Concentration	Vial Concentration: 2 (varies by lot)
Sequence Length	805
Applicable Applications for anti-ACE2 antibody	ELISA, WB (Western Blot)
Antigen Type	Recombinant Protein
Function	Essential counter-regulatorycarboxypeptidase of the renin- angiotensinhormone system that is a critical regulatorof blood volume, systemic vascularresistance, and thus cardiovascularhomeostasis (PubMed:). Convertsangiotensin I to angiotensin 1- 9, anine-amino acid peptide withanti-hypertrophic effects in cardiomyocytes,and angiotensin II to angiotensin 1-7, whichthen acts as a beneficial vasodilator andanti-proliferation agent, counterbalancingthe actions of the vasoconstrictorangiotensin II (PubMed: ,PubMed: ,PubMed: ,PubMed: ,PubMed:). Alsoremoves the C-terminal residue from threeoother vasoactive peptides, neurotensin,kinetensin, and des-Arg bradykinin, but isnot active on bradykinin (PubMed: ,PubMed:). Alsocleaves other biological peptides, such asapelins (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 tocollectrin and is responsible for thetrafficking of the neutral amino acidtransporter SL6A19 to the plasmamembrane of gut epithelial cells via directinteraction, regulating its expression on thecell surface and its catalytic activity(PubMed: ,PubMed:).
Cellular Location	[Processed angiotensin-converting enzyme2]: 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 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). 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) western blot analysis in 293, K562, MCF-7, SK-BR-3, T47D, MDA-MB-453 cell line and mouse testis tissue lysates (35ug/lane). This demonstrates the ACE2 antibody detected the ACE2 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	Crown Antibodies ; Cardiovascular ; Cell Biology
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/DBJ databases.

NCBI AND UNIPROT INFORMATION

NCBI GI #	11225609
NCBI GeneID	59272
NCBI Accession #	NP_068576.1
NCBI GenBank Nucleotide #	NM_021804.2
UniProt Accession #	Q9BYF1 ; Q6UWP0 ; Q86WT0 ; Q9NRA7 ; Q9UFZ6 ; C7ECU1
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	ACE2
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-antibody-clone-881ct16-4-4-western-blot-elisa/283459>