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ACE2
Rabbit Monoclonal antibody(Mab)
Catalog # AD80519

Specification

ACE2 - Product info

Application	**IHC-P**
Primary Accession	Q9BYF1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Monoclonal**
Calculated MW	**92463**

ACE2 - Additional info

Gene ID **59272**

Other Names
Angiotensin-converting enzyme 2, 3.4.17.23, Angiotensin-converting enzyme homolog, ACEH, Angiotensin-converting enzyme-related carboxypeptidase, ACE-related carboxypeptidase, 3.4.17.-, Metalloprotease MPROT15 {ECO:0000303|Ref.6}, Processed angiotensin-converting enzyme 2, ACE2 (HGNC:13557)

Dilution
IHC-P~~Ready-to-use

Storage
Maintain refrigerated at 2-8°C

ACE2 - Protein Information

Name ACE2 (HGNC:13557)

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: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:10924499,**

	PubMed:10969042, PubMed:11815627, PubMed:14504186, PubMed:19021774). 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 apelins (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 [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:10924499, PubMed:10969042, PubMed:12459472, PubMed:15231706, PubMed:15671045, PubMed:32170560, PubMed:32715618). In lung, expressed at low levels in some alveolar type 2 cells, the expression seems to be individual- specific (at protein level) (PubMed:15141377, PubMed:32170560, PubMed:32425701, PubMed:32715618, PubMed:33432184). Expressed in nasal epithelial cells (at protein level) (PubMed:32333915, 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:32327758, PubMed:32358202, PubMed:32413319). Coexpressed with TMPRSS4 within mature enterocytes (PubMed:32404436).**

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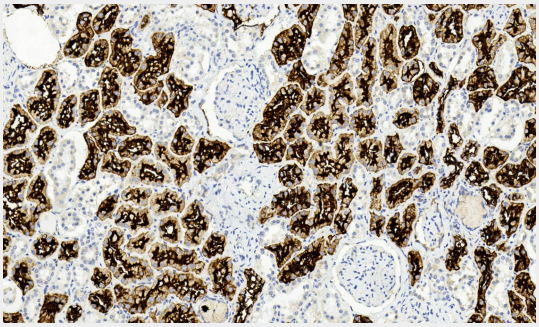
ACE2 - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ACE2 - Images



Kidney