

# ACE2 Rabbit mAb

Catalog # AP78978

## Product Information

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<b>Application</b>	WB, IHC-P, IP
<b>Primary Accession</b>	<a href="#">Q9BYF1</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Monoclonal Antibody
<b>Calculated MW</b>	92463

## Additional Information

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<b>Gene ID</b>	59272
<b>Other Names</b>	ACE2
<b>Dilution</b>	WB~~1/500-1/1000 IHC-P~~N/A IP~~N/A
<b>Format</b>	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

## Protein Information

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<b>Name</b>	ACE2 ( <a href="#">HGNC:13557</a> )
<b>Function</b>	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: <a href="#">27217402</a> ). 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: <a href="#">10924499</a> , PubMed: <a href="#">10969042</a> , PubMed: <a href="#">11815627</a> , PubMed: <a href="#">14504186</a> , PubMed: <a href="#">19021774</a> ). Also removes the C-terminal residue from three other vasoactive peptides, neuropeptid Y, neuropeptid YY and des-Arg bradykinin, but is not active on bradykinin (PubMed: <a href="#">10969042</a> , PubMed: <a href="#">11815627</a> ). Also cleaves other biological peptides, such as apelin (apelin-13, [Pyr1]apelin-13, apelin-17, apelin-36), casomorphins (beta-casomorphin- 7, neocasomorphin) and dynorphin A with high efficiency (PubMed: <a href="#">11815627</a> , PubMed: <a href="#">27217402</a> , PubMed: <a href="#">28293165</a> ). 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

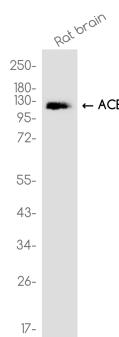
[Processed angiotensin-converting enzyme 2]: Secreted [Isoform 2]: Apical cell membrane

#### 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).

## Images

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