

# Goat Anti-ACE2 (C Terminal) Antibody

Peptide-affinity purified goat antibody Catalog # AF4556a

# **Specification**

# Goat Anti-ACE2 (C Terminal) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host

Host Clonality Calculated MW WB, IHC, Pep-ELISA

Q9BYF1

NP 001358344.1

Human, Mouse, Rat, Dog, Bovine

Goat Polyclonal 92463

## Goat Anti-ACE2 (C Terminal) Antibody - Additional Information

### **Gene ID 59272**

#### **Other Names**

Angiotensin-converting enzyme 2, 3.4.17.23, ACE-related carboxypeptidase, Angiotensin-converting enzyme homolog, ACEH, Metalloprotease MPROT15, Processed angiotensin-converting enzyme 2, ACE2

## **Dilution**

WB~~1:1000 IHC~~1:100~500 Pep-ELISA~~N/A

#### **Format**

Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin.

### **Immunogen**

Peptide with sequence C-PROPRIETARY., from the C Terminus of the protein sequence according to NP 001358344.1.

## **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Goat Anti-ACE2 (C Terminal) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Goat Anti-ACE2 (C Terminal) Antibody - 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: <a href="http://www.uniprot.org/citations/27217402" target=" blank">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="http://www.uniprot.org/citations/10924499" target=" blank">10924499</a>, PubMed:<a href="http://www.uniprot.org/citations/10969042" target="\_blank">10969042</a>, PubMed:<a href="http://www.uniprot.org/citations/11815627" target="blank">11815627</a>, PubMed:<a href="http://www.uniprot.org/citations/14504186" target="\_blank">14504186</a>, PubMed:<a href="http://www.uniprot.org/citations/19021774" target="blank">19021774</a>). Also removes the C-terminal residue from three other vasoactive peptides, neurotensin, kinetensin, and des-Arg bradykinin, but is not active on bradykinin (PubMed: <a href="http://www.uniprot.org/citations/10969042" target=" blank">10969042</a>, PubMed:<a href="http://www.uniprot.org/citations/11815627" target="\_blank">11815627</a>). 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:<a href="http://www.uniprot.org/citations/11815627" target=" blank">11815627</a>, PubMed:<a href="http://www.uniprot.org/citations/27217402" target=" blank">27217402</a>, PubMed:<a href="http://www.uniprot.org/citations/28293165" target="blank">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:<a href="http://www.uniprot.org/citations/18424768" target=" blank">18424768</a>, PubMed:<a href="http://www.uniprot.org/citations/19185582" target=" blank">19185582</a>).

# **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:323333915, 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).

### Goat Anti-ACE2 (C Terminal) Antibody - Protocols

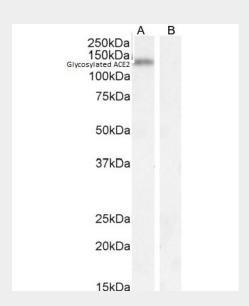
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence

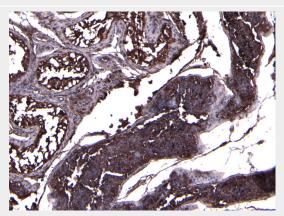


- Immunoprecipitation
- Flow Cytomety
- Cell Culture

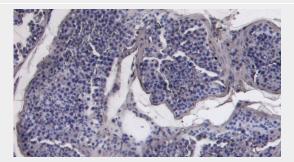
# Goat Anti-ACE2 (C Terminal) Antibody - Images



EB13085 (0.5 $\mu$ g/ml) staining of Human Kidney lysate (A) + Peptide (B) (35 $\mu$ g protein in RIPA buffer). Detected by chemiluminescence.



EB13085 (8μg/ml) staining of paraffin embedded Human Testis. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



EB13085 Negative Control showing staining of paraffin embedded Human Testis, with no primary antibody.