

## Goat anti-ACE2 (C Terminal) Antibody

Peptide-affinity purified goat antibody Catalog # AF4548a

## **Product Information**

**Application** WB, IHC, Pep-ELISA

Primary Accession <a href="Q9BYF1">Q9BYF1</a>

Other Accession NP\_001358344.1

Reactivity Human
Host Goat
Clonality Polyclonal
Clone Names ACE2
Calculated MW 92463

## **Additional Information**

**Gene ID** 59272

**Other Names** ACE 2 antibody; ACE related carboxypeptidase antibody; ACE-related

carboxypeptidase antibody; ACE2 antibody; ACE2\_HUMAN antibody; ACEH antibody; Angiotensin converting enzyme 2 antibody; Angiotensin converting

enzyme homolog antibody; Angiotensin converti

**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. Aliquot and store at -20°C. Minimize freezing and

thawing.

**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.

## **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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.