10320 Camino Santa Fe, Suite G
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Goat anti-ACE2 (N Terminal) Antibody
Peptide-affinity purified goat antibody
Catalog # AF4549a

Specification

Goat anti-ACE2 (N Terminal) Antibody - Product Information

Application	**WB, IHC, FC**
Primary Accession	Q9BYF1
Other Accession	NP_001358344.1
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Calculated MW	**92463**

Goat anti-ACE2 (N Terminal) Antibody - 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

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 (N Terminal) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat anti-ACE2 (N 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: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:<a

href="http://www.uniprot.org/citations/10924499" target="_blank">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).

Goat anti-ACE2 (N Terminal) Antibody - 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

Goat anti-ACE2 (N Terminal) Antibody - Images

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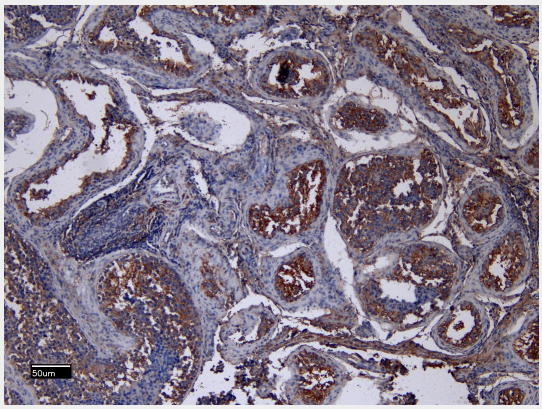
EB13087 (0.01µg/ml) staining of recombinant hACE2 (1 µg protein in PBS, pH 7.4). Detected by chemiluminescence.

EB13087 (1.5µg/ml) staining of HepG2 cell lysate (35µg protein in RIPA buffer). Detected by chemiluminescence.



EB13087 (8µg/ml) staining of paraffin embedded Human Testis. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.

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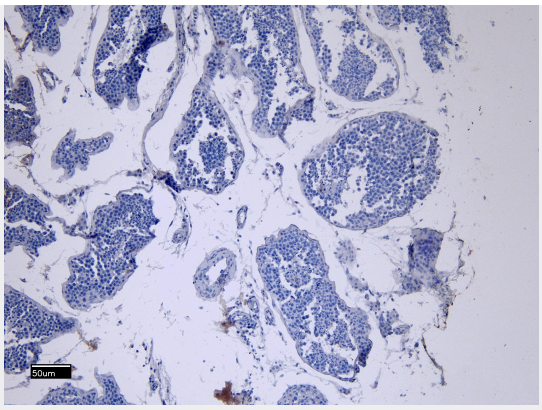
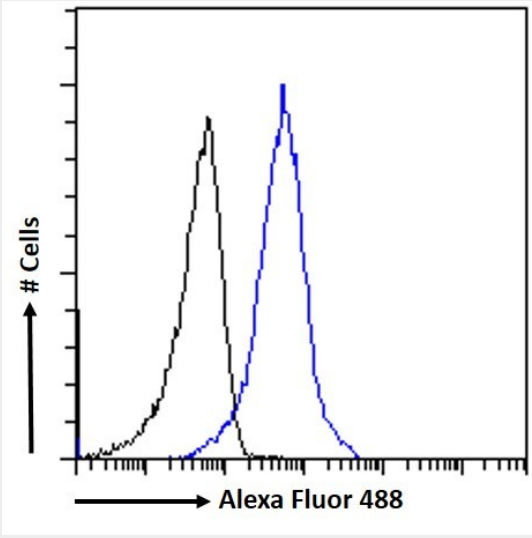


EB13087 Negative Control showing staining of paraffin embedded Human Testis, with no primary antibody.



EB13087 Flow cytometric analysis of paraformaldehyde fixed HepG2 cells (blue line), permeabilized with 0.5% Triton. Primary incubation 1hr (10ug/ml) followed by Alexa Fluor 488 secondary antibody (1ug/ml). IgG control: Unimmunized goat IgG (black line) f