For Research Use Only

ACE2 Polyclonal antibody

Catalog Number: 28868-1-AP

Featured Product



Basic Information

 Catalog Number:
 GenBank Accession Number:

 28868-1-AP
 BC048094

 Size:
 GeneID (NCBI):

 970 ug/ml
 59272

 Source:
 UNIPROT ID:

 Rabbit
 Q9BYF1

Isotype: Full Name:

IgG angiotensin I converting enzyme (peptidyl-dipeptidase A) 2

AG30683 Calculated MW:

805 aa, 92 kDa Observed MW: 92, 120 kDa Purification Method: Antigen affinity purification

Recommended Dilutions: WB 1:500-1:1000 IHC 1:50-1:500

IF-P 1:50-1:500

Applications

Tested Applications: WB, IHC, IF-P, ELISA Species Specificity: human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: mouse kidney tissue, HeLa cells, mouse testis tissue, rat testis tissue

IHC: human kidney tissue, human colon cancer tissue, human small intestine tissue

IF-P: mouse kidney tissue,

Background Information

ACE2 (Angiotensin-converting enzyme 2), also named as ACEH, is a zinc metalloprotease of the ACE family and a critical regulator of the reninangiotensin system. ACE2 has a more restricted tissue distribution than ACE, being found predominantly in the heart, kidneys, and testes although low levels have been detected in a variety of tissues (PMID:15983030). ACE2 has been shown to be a functional receptor of the human coronaviruses SARS-CoV and SARS-CoV-2 (PMID: 32142651). The expression level and expression pattern of human ACE2 in different tissues might be critical for the susceptibility, symptoms, and outcome of 2019-nCoV/SARS-CoV-2 infection (PMID: 32133153). It can be used as a potential therapeutic target of SARS-CoV-2 (PMID: 32125455). The calculated molecular weight of ACE2 is 92kDa but it migrates to 120kDa due to N-glycosylation (PMID:16166094). Sometimes, several cleaved fragments can also be detected as 75kDa, 50 kDa or 37kDa (PMID: 29561187, 22009550, 30759273). It has 2 isoforms produced by alternative splicing. This antibody is specific to ACE2. The location of ACE2 is membrane and cytoplasm, however it accumulates in the nucleus during the mitosis (PMID: 1730413/PMID: 18292088). 28868-1-AP is specific for ACE2, and its antigen region is 30-356aa.

Storage

Storage:

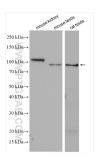
Store at -20°C. Stable for one year after shipment.

Storage Buffer

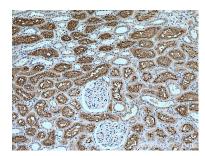
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

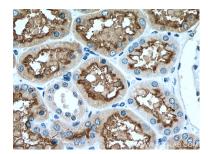
Selected Validation Data



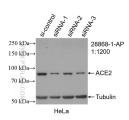
Various lysates were subjected to SDS PAGE followed by western blot with 28868-1-AP (ACE2 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



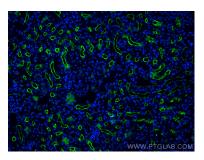
Immunohistochemical analysis of paraffinembedded human kidney tissue slide using 28868-1-AP (ACE2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



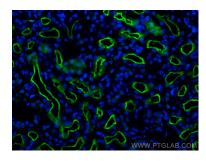
Immunohistochemical analysis of paraffinembedded human kidney tissue slide using 28868-1-AP (ACE2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of ACE2 antibody (28868-1-AP; 1:1200; incubated at room temperature for 1.5 hours) with sh-Control and sh-ACE2 transfected HeLa cells.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse kidney tissue using ACE2 antibody (28868-1-AP) at dilution of 1:200 and Multi-rAb Coralite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse kidney tissue using ACE2 antibody (28868-1-AP) at dilution of 1:200 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).