For Research Use Only

ACE2 Polyclonal antibody

Catalog Number:28868-1-AP Featured Product

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Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
28868-1-AP

Size:
970 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG30683

GenBank Accession Number:
BC048094

GeneID (NCBI):
59272

UNIPROT ID:
Q9BYF1

Full Name:
angiotensin I converting enzyme (peptidyl-dipeptidase A) 2

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 1:200-1:800

Applications

Tested Applications:
IF-P, IHC, WB,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 small intestine tissue

IF-P : mouse kidney tissue,

Background Information

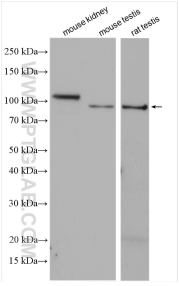
ACE2 (Angiotensin-converting enzyme 2), also named as ACEH, is a zinc metalloprotease of the ACE family and a critical regulator of the reninangiotensin system. ACE2 has a more restricted tissue distribution than ACE, being found predominantly in the heart, kidneys, and testes although low levels have 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

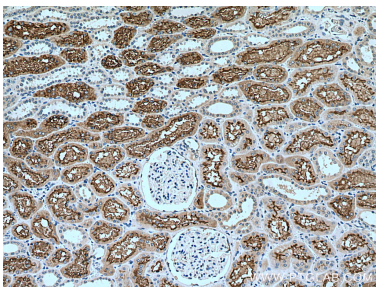
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

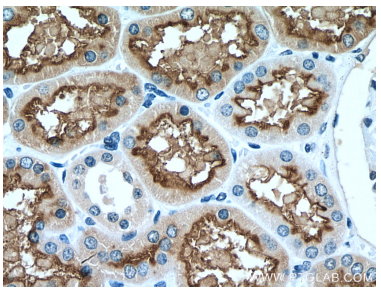
Selected Validation Data



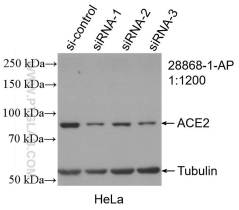
Various lysates were subjected to SDS PAGE followed by western blot with 28868-1-AP (ACE2 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



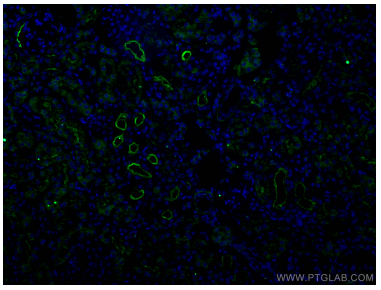
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 28868-1-AP (ACE2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



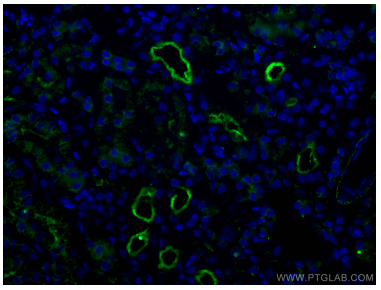
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 28868-1-AP (ACE2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 mouse kidney tissue using ACE2 antibody (28868-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



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