

For Research Use Only

ACE2 Polyclonal antibody

Catalog Number: 28868-1-AP

Featured Product



Basic Information

Catalog Number: 28868-1-AP	GenBank Accession Number: BC048094	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 970 µg/ml by Nanodrop;	GeneID (NCBI): 59272	Recommended Dilutions: WB 1:500-1:1000 IHC 1:50-1:500 IF 1:200-1:800
Source: Rabbit	Full Name: angiotensin I converting enzyme (peptidyl-dipeptidase A) 2	
Isotype: IgG	Calculated MW: 805 aa, 92 kDa	
Immunogen Catalog Number: AG30683	Observed MW: 92, 120 kDa	

Applications

Tested Applications:

IF, 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: 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

*** 20ul sizes contain 0.1% BSA

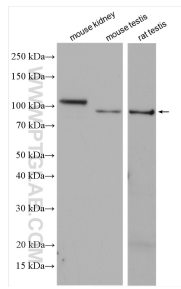
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

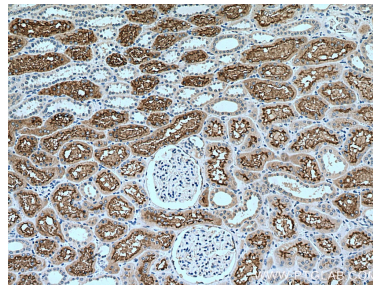
E: proteintech@ptglab.com
W: ptglab.com

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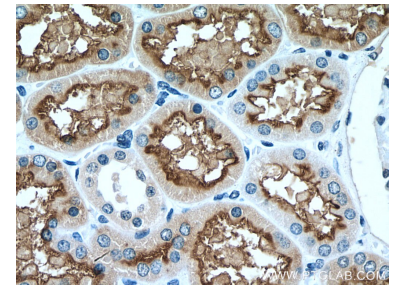
Selected Validation Data



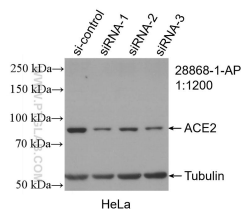
Various lysates were subjected to SDS PAGE followed by western blot with 28868-1-AP (ACE2 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



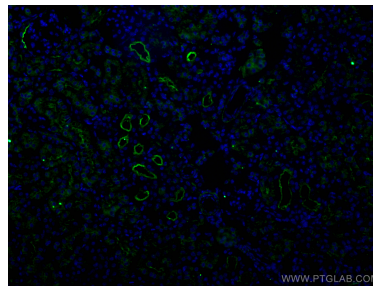
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 28868-1-AP (ACE2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



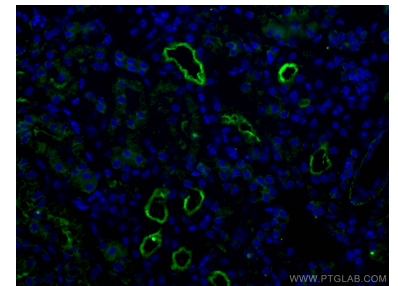
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 28868-1-AP (ACE2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).