

For Research Use Only

# ACE2 Polyclonal antibody

Catalog Number: 21115-1-AP

Featured Product

141 Publications



## Basic Information

### Catalog Number:

21115-1-AP

### Size:

150ul, Concentration: 427 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG15455

### 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:

120 kDa, 92 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:500-1:2000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:500-1:1000

IF-P: 1:50-1:500

IF-Fro: 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF-P, IF-Fro, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, canine, monkey

**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, human skeletal muscle tissue

IP: mouse kidney tissue,

IHC: human kidney tissue, mouse testis tissue, human small intestine tissue

IF-P: human kidney tissue, mouse kidney tissue

IF-Fro: 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).

## Notable Publications

Author	Pubmed ID	Journal	Application
Shunhua Long	36178477	Viral Immunol	FC
Chang-Ki Oh	36175661	Nat Chem Biol	WB,IF
Zemin Zhu	36175845	BMC Mol Cell Biol	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

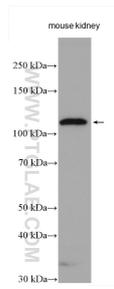
For technical support and original validation data for this product please contact:

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

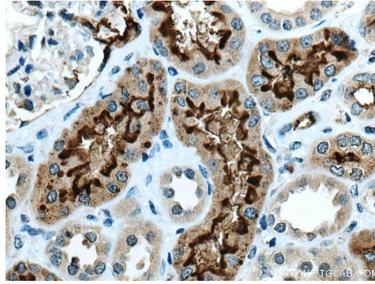
E: proteintech@ptglab.com  
W: ptglab.com

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

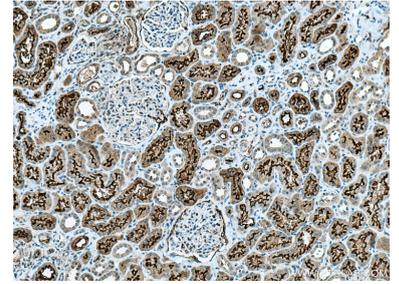
## Selected Validation Data



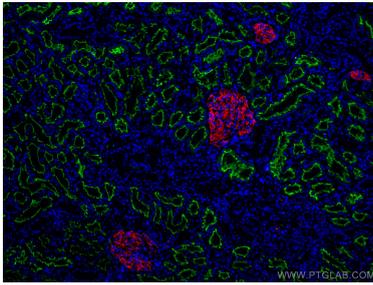
mouse kidney tissue lysates were subjected to SDS PAGE followed by western blot with 21115-1-AP (ACE2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



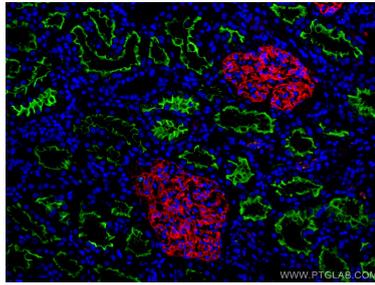
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 21115-1-AP (ACE2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



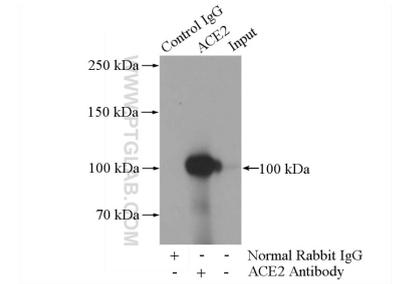
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 21115-1-AP (ACE2 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



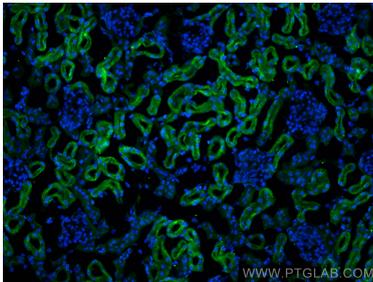
Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using ACE2 antibody (21115-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), PTPRO antibody (67000-1-Ig, Clone: 2F2B4, red).



Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using ACE2 antibody (21115-1-AP) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), PTPRO antibody (67000-1-Ig, Clone: 2F2B4, red).



IP result of anti-ACE2 (IP:21115-1-AP, 5ug; Detection:21115-1-AP 1:1000) with mouse kidney tissue lysate 4000ug.



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse kidney tissue using ACE2 antibody (21115-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).