

For Research Use Only

ACE2 Polyclonal antibody

Catalog Number: 21115-1-AP

Featured Product

112 Publications



Basic Information

Catalog Number:

21115-1-AP

Size:

150ul, Concentration: 500 µg/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 µg for 1.0-3.0 mg of total protein lysate

IHC 1:500-1:1000

IF 1:50-1:500

Applications

Tested Applications:

WB, IP, IF, FC, IHC, ELISA

Cited Applications:

WB, IP, IF, FC, IHC, CoIP

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse, monkey, canine

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: human kidney tissue, mouse kidney tissue

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

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 renin-angiotensin 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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

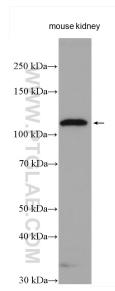
For technical support and original validation data for this product please contact:

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

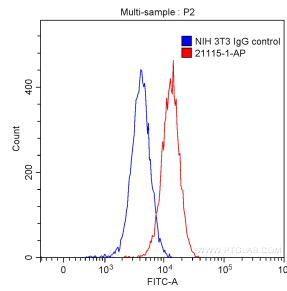
E: proteintech@ptglab.com
W: ptglab.com

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

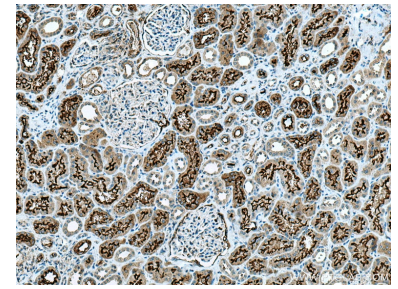
Selected Validation Data



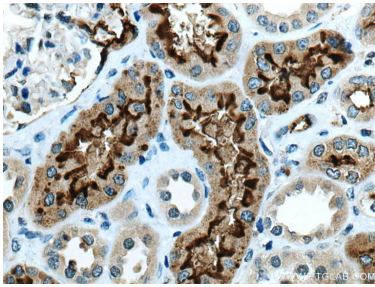
mouse kidney tissue lysates were subjected to SDS PAGE followed by western blot with 21115-1-AP (ACE2 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



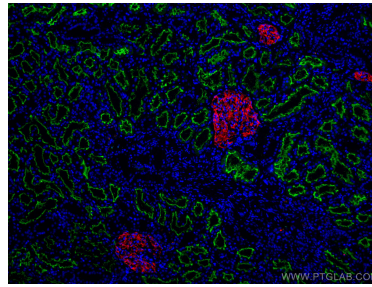
1×10^6 NIH/3T3 cells were stained with 0.20 ug/test Anti-Human ACE2 (21115-1-AP) (red) or 0.20 ug control antibody (blue) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000. Fixed with 90% MeOH.



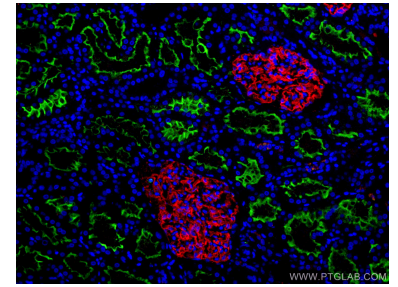
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 21115-1-AP (ACE2 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



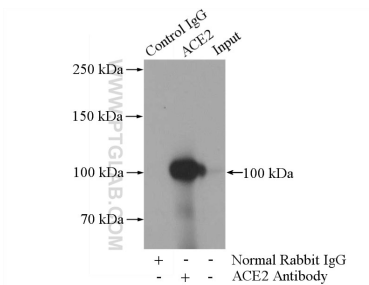
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 21115-1-AP (ACE2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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.