

ACE2 Monoclonal antibody

Catalog Number: 66699-1-Ig

Featured Product

37 Publications

Basic Information

Catalog Number:

66699-1-Ig

Concentration:

1856 ug/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG15554

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:

Protein G purification

CloneNo.:

2F12A4

Recommended Dilutions:

WB: 1:2000-1:6000

IHC: 1:1000-1:4000

IF-P: 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF-P, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse

Cited Species:

human, mouse, 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: human testis tissue, human skeletal muscle tissue

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

IF-P: human kidney tissue, mouse testis tissue, mouse heart 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	IF
Shengjie Li	32991984	Ocul Surf	IHC
Ni Huang	33140061	medRxiv	WB,IF,FC

Storage

Storage:

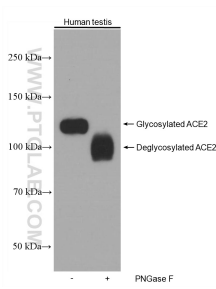
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

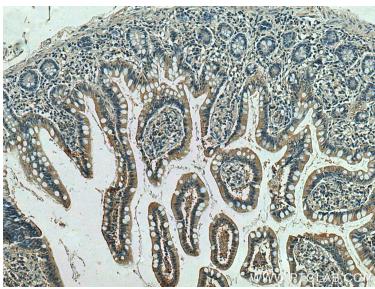
PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



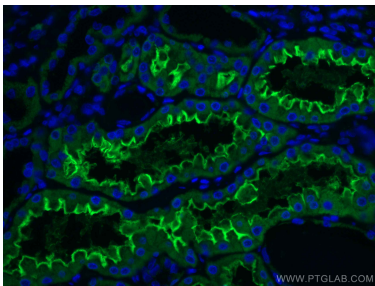
Untreated and PNGase F-treated lysates of human testis tissue were subjected to SDS PAGE followed by western blot with 66699-1-Ig (ACE2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808).



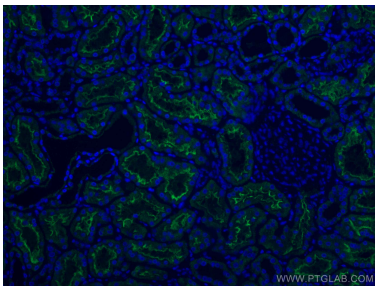
Immunohistochemical analysis of paraffin-embedded human small intestine tissue slide using 66699-1-Ig (ACE2 antibody) at dilution of 1:2000 (under 10x lens)..



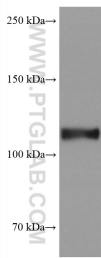
Immunohistochemical analysis of paraffin-embedded human small intestine tissue slide using 66699-1-Ig (ACE2 antibody) at dilution of 1:2000 (under 40x lens)..



Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using ACE2 antibody (66699-1-Ig, Clone: 2F12A4) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using ACE2 antibody (66699-1-Ig, Clone: 2F12A4) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



human testis tissue were subjected to SDS PAGE followed by western blot with 66699-1-Ig (ACE2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.