For Research Use Only

## ACE2 Monoclonal antibody, PBS Only

Catalog Number: 66699-1-PBS

**Featured Product** 



**Basic Information** 

Catalog Number:

66699-1-PBS

Size: 1 mg/ml Source:

Mouse Isotype: IgG1

Immunogen Catalog Number:

AG15554

GenBank Accession Number:

BC048094 GenelD (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 A purification

CloneNo.: 2F12A4

**Applications** 

**Tested Applications:** 

WB, IF, IHC, Indirect ELISA

Species Specificity:

Human, mouse

## **Background Information**

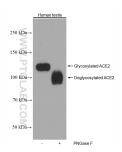
ACE2 (Angiotensin-converting enzyme 2), also named as ACEH, is a zinc metalloprotease of the ACE family and a critical regulator of the reninangiotensin system. ACE2 has a more restricted tissue distribution than ACE, being found predominantly in the heart, kidneys, and testes although low levels have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

Storage

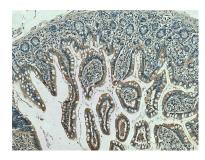
Storage: Store at -80°C. Storage Buffer:

PBS Only

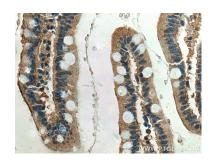
## Selected Validation Data



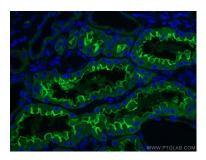
Untreated and PNGase F-treated lysates of human testis tissue were subjected to SDS PAGE followed by western blot with 66699-1-Ig (ACE2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours. PNGase F was obtained from Atagenix (cat.NO. ata808). This data was developed using the same antibody clone with 66699-1-PBS in a different storage buffer formulation.



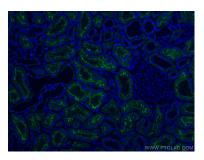
Immunohistochemical analysis of paraffinembedded human small intestine tissue slide using 66699-1-1g (ACE2 antibody) at dilution of 1:2000 (under  $10\times$  lens).. This data was developed using the same antibody clone with 66699-1-PBS in a different storage buffer formulation.



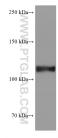
Immunohistochemical analysis of paraffinembedded human small intestine tissue slide using 66699-1-Ig (ACE2 antibody) at dilution of 1:2000 (under 40x lens). This data was developed using the same antibody clone with 66699-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 66699-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed human kidney tissue using ACE2 antibody (66699-1-Ig, Clone: 2F 12A4) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L). This data was developed using the same antibody clone with 66699-1-PBS in a different storage buffer formulation.



human testis tissue were subjected to SDS PAGE followed by western blot with 66699-1-1g (ACE2 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66699-1-PBS in a different storage buffer formulation.