## For Research Use Only

## ACE2 Recombinant antibody

Catalog Number:80063-1-RR



**Purification Method:** 

Protein A purification

CloneNo.:

**Basic Information** 

Catalog Number: 80063-1-RR

BC048094
GeneID (NCBI):
59272
UNIPROT ID:

 59272
 4H12

 UNIPROT ID:
 Recommended Dilutions:

 Q9BYF1
 IHC 1:800-1:3200

 Full Name:
 IF-P 1:50-1:500

Rabbit Isotype: IgG

Source:

Size: 500 µg/ml

Immunogen Catalog Number: AG30683

Calculated MW: 805 aa, 92 kDa

GenBank Accession Number:

angiotensin I converting enzyme (peptidyl-dipeptidase A) 2

**Applications** 

Tested Applications: IF-P, IHC, ELISA

Species Specificity:

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:

IHC: human kidney tissue,

IF-P: human 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). 80063-1-RR 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:

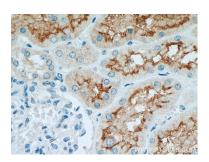
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

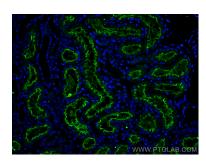
## Selected Validation Data



Immunohistochemical analysis of paraffinembedded human kidney tissue slide using 80063-1-RR (ACE2 antibody) at dilution of 1:1500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human kidney tissue slide using 80063-1-RR (ACE2 antibody) at dilution of 1:1500 (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 (80063-1-RR, Clone: 4H12) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).