

For Research Use Only

# ACE2 Recombinant antibody

Catalog Number:80063-1-RR



## Basic Information

<b>Catalog Number:</b> 80063-1-RR	<b>GenBank Accession Number:</b> BC048094	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 500 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 59272	<b>CloneNo.:</b> 4H12
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> Q9BYF1	<b>Recommended Dilutions:</b> IHC 1:800-1:3200 IF-P 1:50-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> angiotensin I converting enzyme (peptidyl-dipeptidase A) 2	
<b>Immunogen Catalog Number:</b> AG30683	<b>Calculated MW:</b> 805 aa, 92 kDa	

## Applications

<b>Tested Applications:</b> IHC, IF-P, ELISA	<b>Positive Controls:</b> IHC : human kidney tissue, IF-P : human kidney tissue,
<b>Species Specificity:</b> Human	

**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 coronavirus 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

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

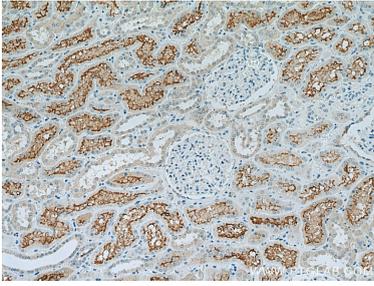
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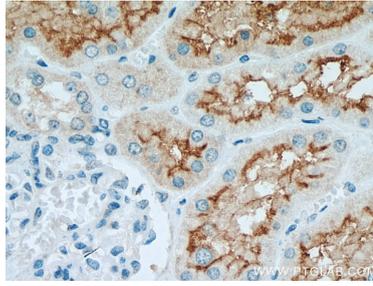
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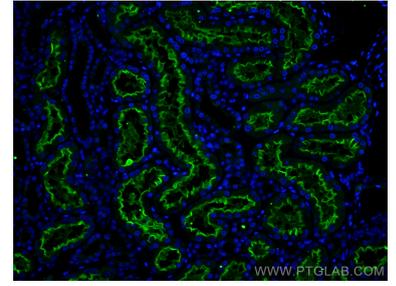
## Selected Validation Data



Immunohistochemical analysis of paraffin-embedded 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 paraffin-embedded 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).