For Research Use Only

## CoraLite®594-conjugated ACE2 Polyclonal antibody



Catalog Number: CL594-21115

**Featured Product** 

**Basic Information** 

Catalog Number: GenBank Accession Number:

CL594-21115 BC048094 GeneID (NCBI):

100ul , Concentration: 1000  $\mu g/ml$  by 59272 Nanodrop: **UNIPROT ID:** 

Q9BYF1 Rabbit Full Name:

Isotype: angiotensin I converting enzyme (peptidyl-dipeptidase A) 2 IgG

Immunogen Catalog Number: Calculated MW: 805 aa, 92 kDa AG15455

> Observed MW: 120 kDa, 92 kDa

**Purification Method:** 

Antigen affinity purification Recommended Dilutions:

IF 1:50-1:500

Excitation/Emission maxima

wavelengths: 588 nm / 604 nm

**Applications** 

**Tested Applications:** 

FC (Intra), IF

Species Specificity: human, mouse, rat

Positive Controls:

IF: mouse 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).

Storage

Storage:

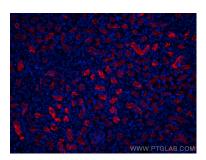
Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

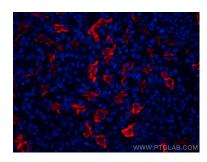
Aliquoting is unnecessary for -20°C storage

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

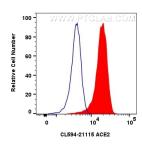
## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed mouse kidney tissue using Coralite®594 ACE2 antibody (CL594-21115) at dilution of 1:200.



Immunofluorescent analysis of (4% PFA) fixed mouse kidney tissue using CoraLite®594 ACE2 antibody (CL594-21115) at dilution of 1:200.



1x10^6 HEK-293 cells were intracellularly stained with 0.8 ug CoraLite®594 Anti-Human ACE2 (CL594-21115)(red), or 0.8 ug CoraLite®594-conjugated Rabbit IgG control Rabbit PolyAb (CL594-30000) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).