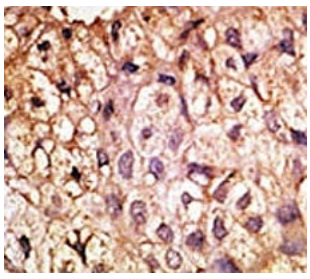
ACE2 Antibody (F49432)

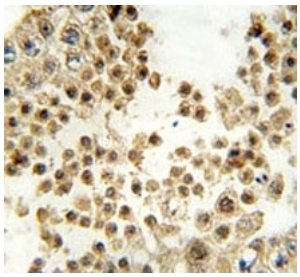
Catalog No.	Formulation	Size
F49432-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F49432-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

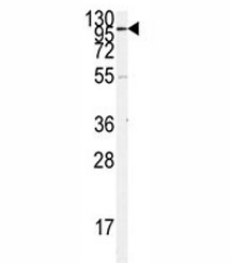
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Purified
UniProt	Q9BYF1
Applications	Western Blot : 1:1000 IHC (Paraffin) : 1:50-1:100 ELISA : peptide immunogen
Limitations	This ACE2 antibody is available for research use only.



IHC analysis of FFPE human hepatocarcinoma tissue stained with the ACE2 antibody



IHC analysis of FFPE human testis tissue stained with ACE2 antibody



Western blot analysis of ACE2 antibody and K562 lysate. Predicted molecular weight: 90-100 kDa.

Description

This gene encodes a deduced 805-amino acid protein containing a potential 17-amino acid N-terminal signal peptide and a putative 22-amino acid C-terminal membrane anchor. It also possesses a zinc metalloprotease consensus sequence and a conserved glutamine residue that may function as a third zinc ligand. ACE2 is expressed predominantly in vascular endothelial cells of the heart and kidney. ACE converts angiotensin I to angiotensin II, ACE2 converts angiotensin I to angiotensin 1-9, which has 9 amino acids. Angiotensin II is a potent blood vessel constrictor, while angiotensin 1-9 does not impact blood vessels but is cleaved by ACE to a shorter peptide, angiotensin 1-7, which is a blood vessel dilator. Spike (S) proteins of coronaviruses, including the SARS coronavirus, bind with cellular receptors to mediate infection of target cells. ACE-2 binds the S1 domain of the SARS coronavirus S protein. SARS coronavirus replicates efficiently on ACE2-transfected but not mock-transfected 293T cells. Anti-ACE-2 but not anti-ACE1 antibody blocks viral replication on Vero E6 cells. It has been proposed that ACE2 is a functional receptor for SARS coronavirus.

Application Notes

Titration of the ACE2 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 59-90 from the human protein was used as the immunogen for this ACE2 antibody.

Storage

Aliquot the ACE2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.