

ARG82681
Human ACE2 ELISA KitPackage: 96 wells
Store at: 4°C

Summary

Product Description	ARG82681 Human ACE2 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human ACE2 in serum, plasma and cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	Not react with ACE1.
Target Name	ACE2
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	1.9 ng/ml
Sample Type	Serum, plasma and cell culture supernatants.
Standard Range	3.9 - 250 ng/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: less than 10% Inter-Assay CV: less than 10%
Alternate Names	Angiotensin-converting enzyme homolog; ACEH; Angiotensin-converting enzyme 2; Metalloprotease MPROT15; ACE-related carboxypeptidase; EC 3.4.17.23

Application Instructions

Assay Time ~ 3.5 hours

Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	ACE2
Gene Full Name	angiotensin I converting enzyme 2
Background	The protein encoded by this gene belongs to the angiotensin-converting enzyme family of dipeptidyl carboxydipeptidases and has considerable homology to human angiotensin 1 converting enzyme. This secreted protein catalyzes the cleavage of angiotensin I into angiotensin 1-9, and angiotensin II into the vasodilator angiotensin 1-7. The organ- and cell-specific expression of this gene suggests that it may

play a role in the regulation of cardiovascular and renal function, as well as fertility. In addition, the encoded protein is a functional receptor for the spike glycoprotein of the human coronaviruses SARS and HCoV-NL63. [provided by RefSeq, Jul 2008]

Function

Carboxypeptidase which converts angiotensin I to angiotensin 1-9, a peptide of unknown function, and angiotensin II to angiotensin 1-7, a vasodilator (PubMed:10969042, PubMed:10924499, PubMed:11815627). Also able to hydrolyze apelin-13 and dynorphin-13 with high efficiency (PubMed:11815627). By cleavage of angiotensin II, may be an important regulator of heart function (PubMed:10969042, PubMed:10924499). By cleavage of angiotensin II, may also have a protective role in acute lung injury (By similarity). Plays an important role in amino acid transport by acting as binding partner of amino acid transporter SL6A19 in intestine, regulating trafficking, expression on the cell surface, and its catalytic activity (PubMed:18424768, PubMed:19185582).

(Microbial infection) Acts as a receptor for SARS coronavirus/SARS-CoV.

(Microbial infection) Acts as a receptor for Human coronavirus NL63/HCoV-NL63. [UniProt]

Highlight

Related products:

[ACE2 antibodies](#); [ACE2 ELISA Kits](#); [ACE2 recombinant proteins](#);

Related news:

[HMGB1, a biomarker and therapeutic target in COVID-19](#)

New ELISA data calculation tool:

[Simplify the ELISA analysis by GainData](#)

PTM

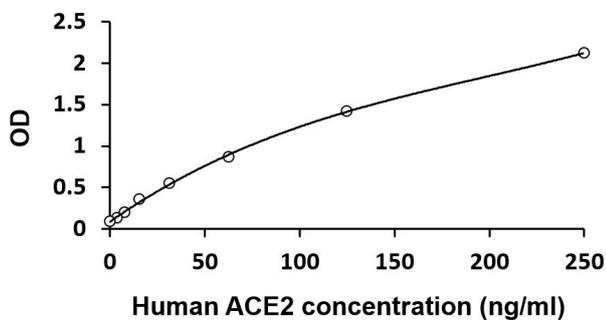
N-glycosylation on Asn-90 may limit SARS infectivity.

Proteolytic cleavage by ADAM17 generates a secreted form. Also cleaved by serine proteases: TMPRSS2, TMPRSS11D and HPN/TMPRSS1. [UniProt]

Cellular Localization

Processed angiotensin-converting enzyme 2: Secreted. Cell membrane; Single-pass type I membrane protein. Cytoplasm. Note=Detected in both cell membrane and cytoplasm in neurons. [UniProt]

Images



ARG82681 Human ACE2 ELISA Kit standard curve image

ARG82681 Human ACE2 ELISA Kit results of a typical standard run with optical density reading at 450 nm.