SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-ACE2/AF350 Conjugated antibody

SL1004R-AF350

Product Name	Anti-ACE2/AF350
Chinese Name	AF350 标记的血管紧张素转换酶 2 抗体
Alias	ACE-2; ACE 2; Angiotensin converting enzyme 2; ACE related carboxypeptidase; ACEH; Angiotensin converting enzyme homolog; Angiotensin converting enzyme like protein; Angiotensin I Converting Enzyme (peptidyl dipeptidase A) 2; Angiotensin I converting enzyme 2; DKFZP434A014; EC 3.4.17; OTTHUMP00000022963; angiotensin-converting enzyme 2 precursor; ACE2_HUMAN; Angiotensin-converting enzyme 2; ACE-related carboxypeptidase; Angiotensin-converting enzyme homolog; Metalloprotease MPROT15; Processed angiotensin-converting enzyme 2.
Research Area	Cell biology immunology Signal transduction
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	87kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human ACE2 C-terminus
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks

Product Detail

at 2-4 °C.

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. Also able to hydrolyze apelin-13 and dynorphin-13 with high efficiency. May be an important regulator of heart function. In case of human coronaviruses SARS and HCoV-NL63 infections, serve as functional receptor for the spike glycoprotein of both coronaviruses.

Subunit:
Interacts with ITGB1. Interacts with SARS-CoV and HCoV-NL63 spike glycoprotein.

Subcellular Location:
Processed angiotensin-converting enzyme 2: Secreted.
Cell membrane; Single-pass type I membrane protein.

Tissue Specificity:
Expressed in endothelial cells from small and large arteries, and in arterial smooth muscle cells. Expressed in lung alveolar epithelial cells, enterocytes of the small intestine, Leydig cells and Sertoli cells (at protein level). Expressed in heart, kidney, testis, and gastrointestinal system.

Post-translational modifications:
N-glycosylation on Asn-90 may limit SARS infectivity.
Proteolytic cleavage by ADAM17 generates a secreted form.
Belongs to the peptidase M2 family.

Similarity:
Belongs to the peptidase M2 family.

Database links:

Entrez Gene: 59272 Human

Entrez Gene: 70008 Mouse

Entrez Gene: 302668 Rat

Omim: 300335 Human

SwissProt: Q9BYF1 Human

SwissProt: Q8R0I0 Mouse

SwissProt: Q5EGZ1 Rat

Unigene: 178098 Human

Unigene: 13451 Mouse

Unigene: 129779 Rat

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Synthesis and Degradation（Synthesis and Degradation）
ACE-2 的分布范围比较局限，ACE2 主要在心脏、肾脏、睾丸中表达显著， 近来人们发现 ACE2 也分布在胃肠道、脑和肺脏中。
有关学者在研究心脏和肾脏中发现，ACE2 在心肌缺血、肾功能衰竭、动脉粥样硬化和 Diabetes 并发症中，ACE2 对血管紧张素产生和降解过程中有一定的生理作用。
特别是对 ACE2 在具有生理活性的-活性肽产生过程中的作用更值得进一步研究。 ACE2 的发现为 Cardiovascular 病和肾脏病研究开辟了新天地，并提供了新的治疗靶点，可能导致未来 Cardiovascular 疾病治疗策略的改变。