


## Product datasheet

# Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] ab75762

**KO VALIDATED** Recombinant RabMAB

[13 References](#) [7 Images](#)

### Overview

<b>Product name</b>	Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757]
<b>Description</b>	Rabbit monoclonal [EPR2757] to Angiotensin Converting Enzyme 1
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> ELISA, WB, IHC-P <b>Unsuitable for:</b> Flow Cyt, ICC/IF or IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Mouse 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Fetal kidney, fetal heart and fetal lung lysates; human kidney and spleen tissues.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAB<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAB<sup>®</sup> patents</a>.</p> <p>Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant

<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR2757
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab75762 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>ELISA</b>		Use a concentration of 0.002 - 2 µg/ml.
<b>WB</b>		1/500 - 1/1000. Detects a band of approximately 195 kDa (predicted molecular weight: 150 kDa).
<b>IHC-P</b>		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

**Application notes** Is unsuitable for Flow Cyt, ICC/IF or IP.

## Target

**Function** Converts angiotensin I to angiotensin II by release of the terminal His-Leu, this results in an increase of the vasoconstrictor activity of angiotensin. Also able to inactivate bradykinin, a potent vasodilator. Has also a glycosidase activity which releases GPI-anchored proteins from the membrane by cleaving the mannose linkage in the GPI moiety.

**Tissue specificity** Ubiquitously expressed, with highest levels in lung, kidney, heart, gastrointestinal system and prostate. Isoform Testis-specific is expressed in spermatocytes and adult testis.

**Involvement in disease**

Ischemic stroke (ISCHSTR) [MIM:601367]: A stroke is an acute neurologic event leading to death of neural tissue of the brain and resulting in loss of motor, sensory and/or cognitive function. Ischemic strokes, resulting from vascular occlusion, is considered to be a highly complex disease consisting of a group of heterogeneous disorders with multiple genetic and environmental risk factors. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry.

Renal tubular dysgenesis (RTD) [MIM:267430]: Autosomal recessive severe disorder of renal tubular development characterized by persistent fetal anuria and perinatal death, probably due to pulmonary hypoplasia from early-onset oligohydramnios (the Potter phenotype). Note=The disease is caused by mutations affecting the gene represented in this entry.

Microvascular complications of diabetes 3 (MVCD3) [MIM:612624]: Pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry.

Intracerebral hemorrhage (ICH) [MIM:614519]: A pathological condition characterized by bleeding

into one or both cerebral hemispheres including the basal ganglia and the cerebral cortex. It is often associated with hypertension and craniocerebral trauma. Intracerebral bleeding is a common cause of stroke. Note=Disease susceptibility is associated with variations affecting the gene represented in this entry.

#### Sequence similarities

Belongs to the peptidase M2 family.

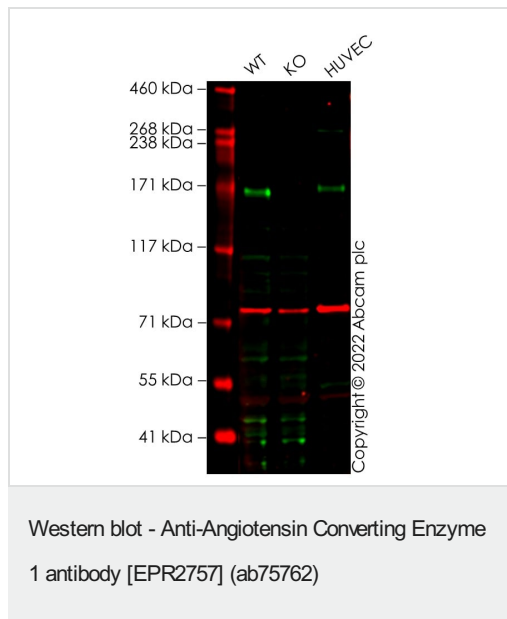
#### Post-translational modifications

Phosphorylated by CK2 on Ser-1299; which allows membrane retention.

#### Cellular localization

Secreted and Cell membrane.

## Images



**All lanes :** Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762) at 1/500 dilution

**Lane 1 :** SKNF1 cell lysate

**Lane 2 :** Ace knockout SKNF1 cell lysate

**Lane 3 :** HUVEC cell lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

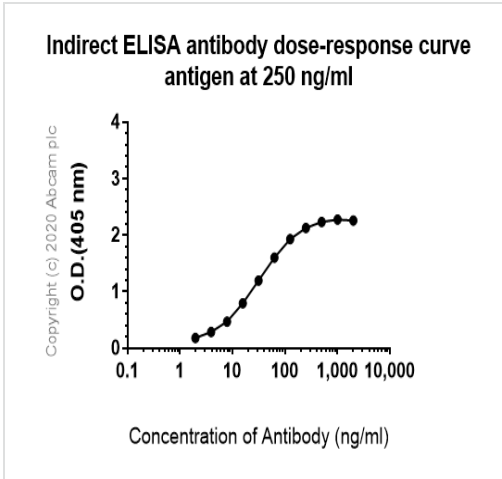
Performed under reducing conditions.

**Predicted band size:** 150 kDa

**Observed band size:** 170 kDa

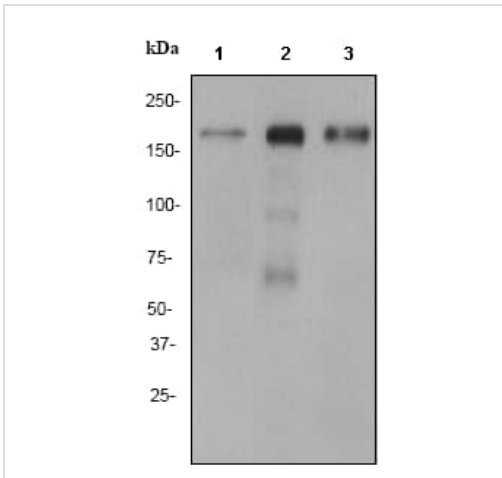
Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] staining at 1/500 dilution, shown in green; Mouse anti-CANX [CANX/1543] ([ab238078](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab75762 was shown to bind specifically to Angiotensin Converting Enzyme 1. A band was observed at 170 kDa in wild-type SKNF1 cell lysates with no signal observed at this size in Ace knockout cell line. To generate this image, wild-type and Ace knockout SKNF1 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with primary antibodies overnight at 4 °C. Blots

were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



ELISA - Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762)

ELISA analysis of Human ACE (angiotensin converting enzyme) (membrane form only) recombinant protein at 250ng/ml with ab75762. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.



Western blot - Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762)

**All lanes** : Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762) at 1/1000 dilution

**Lane 1** : fetal kidney lysate

**Lane 2** : fetal heart lysate

**Lane 3** : fetal lung lysate

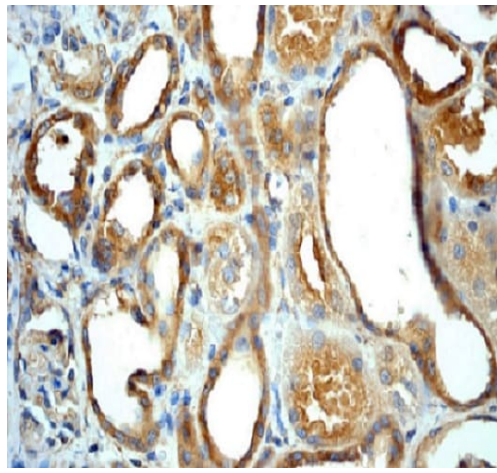
Lysates/proteins at 10 µg per lane.

**Secondary**

**All lanes** : goat anti-rabbit HRP at 1/2000 dilution

**Predicted band size:** 150 kDa

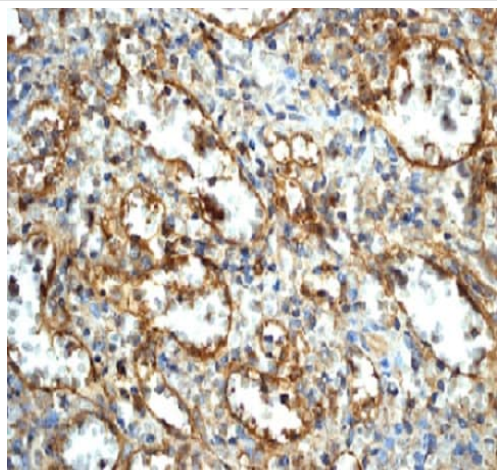
**Observed band size:** 195 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762)

ab75762 at 1/100 dilution staining Angiotensin Converting Enzyme 1 in human kidney by Immunohistochemistry, Paraffin-embedded tissue.

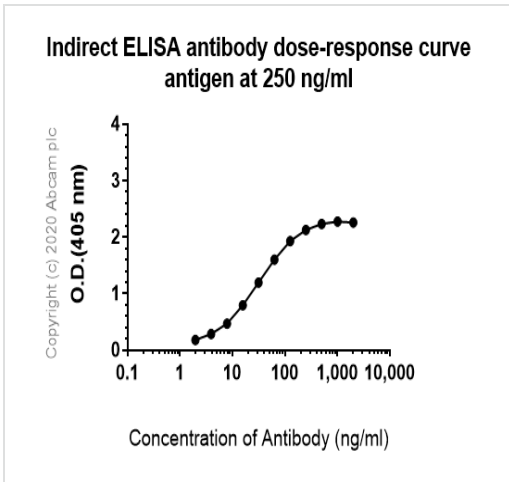
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762)

ab75762 at 1/100 dilution staining Angiotensin Converting Enzyme 1 in human spleen by Immunohistochemistry, Paraffin-embedded tissue. Note positive staining of endothelial cells.





Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



ELISA analysis of Human ACE (angiotensin converting enzyme) (membrane form only) recombinant protein at 250 ng/mL with ab75762. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.

ELISA - Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762)

**Why choose a recombinant antibody?**

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-Angiotensin Converting Enzyme 1 antibody [EPR2757] (ab75762)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

**Our Abpromise to you: Quality guaranteed and expert technical support**

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish

- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors