# abcam

# Product datasheet

# Anti-Angiotensin Converting Enzyme 1 antibody ab39172

★★★★★ 1 Abreviews 8 References 1 Image

#### Overview

Product name Anti-Angiotensin Converting Enzyme 1 antibody

**Description** Rabbit polyclonal to Angiotensin Converting Enzyme 1

Host species Rabbit

**Specificity** This antibody is specific for Angiotensin Converting Enzyme 1.

Tested applications Suitable for: WB

Species reactivity Reacts with: Recombinant fragment

Predicted to work with: Rat

**Immunogen** Synthetic peptide based on the carboxy end of the second peptidase unit of human Angiotensin

Converting Enzyme 1. Read Abcam's proprietary immunogen policy (Peptide available as

ab41280.)

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

# **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

**Storage buffer** Preservative: 0.05% Sodium azide

Constituent: 50% Glycerol

Purity Immunogen affinity purified

**Purification notes**This antibody has been peptide-affinity purified.

**Clonality** Polyclonal

**Isotype** IgG

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# **Applications**

#### The Abpromise guarantee

Our Abpromise quarantee covers the use of ab39172 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
WB	<b>★★★★</b> (1)	

#### **Application notes**

WB: 1/1000 when using colorimetric substrates such as BCIP/NBT, and 1/5000 for chemiluminescent substrates. Detects a band of approximately 175-184kDa, due to glycosylation and other post-translational modifications (predicted molecular weight: 150 kDa). Dilution optimised using Chromogenic detection. Not yet tested in other applications. Optimal dilutions/concentrations should be determined by the end user.

#### **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.

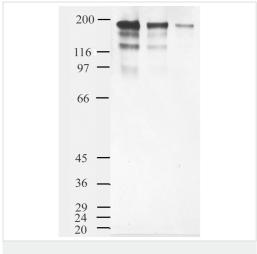
Post-translational modifications

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

**Cellular localization** 

Secreted and Cell membrane.

# **Images**



Western blot - Anti-Angiotensin Converting Enzyme 1 antibody - Carboxyterminal end (ab39172) **All lanes :** Anti-Angiotensin Converting Enzyme 1 antibody

(ab39172) at 1/1000 dilution

**Lane 1**: ACE1 at 0.05 μg **Lane 2**: ACE1 at 0.01 μg **Lane 3**: ACE1 at 0.001 μg

**Predicted band size:** 150 kDa **Observed band size:** 170 kDa

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

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