abcam

Product datasheet

Anti-Angiotensin Converting Enzyme 1 antibody ab28311

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Overview

Product name Anti-Angiotensin Converting Enzyme 1 antibody

Description Rabbit polyclonal to Angiotensin Converting Enzyme 1

Host species Rabbit

Specificity ab28311 recognizes metallopeptidase ACE1.

Tested applications Suitable for: WB, IHC-P

Species reactivity Reacts with: Human, Recombinant fragment

Immunogen The antibody is made to a synthetic peptide based on the first peptidase unit of human ACE1

(Human). Read Abcam's proprietary immunogen policy (Peptide available as ab41278.)

General notesThe 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

Constituents: PBS, 50% Glycerol

Purity Immunogen affinity purified

Purification notesThe antibody has been peptide-affinity purified and concentrated.

Clonality Polyclonal

Isotype IgG

Applications

1

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab28311 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	★★★★ (1)	1/1000. when using colorimetric substrates such as BCIP/NBT and 1/5000 for chemiluminescent substrates. Predicted molecular weight: 150 kDa. Dilution optimised using Chromogenic detection
IHC-P	**** (1)	Use at an assay dependent concentration.

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.

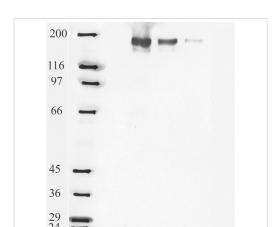
Post-translational modifications

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 (ab28311)

Lane 1: Molecular weight markers

Lanes 2-4: Anti-Angiotensin Converting Enzyme 1 antibody

(ab28311) at 1/1000 dilution

Lane 2: rh-ACE1 at 0.05 μg **Lane 3**: rh-ACE1 at 0.01 μg **Lane 4**: rh-ACE1 at 0.001 μg

Observed band size: 150 kDa

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

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