

Product datasheet

Anti-Angiotensinogen antibody [EPR22199-203] ab229005

Recombinant RabMAb

★★★★★ [2 Abreviews](#) [5 Images](#)

Overview

Product name	Anti-Angiotensinogen antibody [EPR22199-203]
Description	Rabbit monoclonal [EPR22199-203] to Angiotensinogen
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, IP
Species reactivity	Reacts with: Mouse
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse liver, kidney, heart, brain and lung tissue lysate. IHC-P: Mouse kidney and testis tissue. IP: Mouse liver tissue lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR22199-203

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab229005 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		1/1000. Predicted molecular weight: 53 kDa.
IHC-P	★★★★★ (1)	1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/30.

Target

Function

Essential component of the renin-angiotensin system (RAS), a potent regulator of blood pressure, body fluid and electrolyte homeostasis. In response to lowered blood pressure, the enzyme renin cleaves angiotensinogen to produce angiotensin-1 (angiotensin 1-10). Angiotensin-1 is a substrate of ACE (angiotensin converting enzyme) that removes a dipeptide to yield the physiologically active peptide angiotensin-2 (angiotensin 1-8). Angiotensin-1 and angiotensin-2 can be further processed to generate angiotensin-3 (angiotensin 2-8), angiotensin-4 (angiotensin 3-8). Angiotensin 1-7 is cleaved from angiotensin-2 by ACE2 or from angiotensin-1 by MME (nepriylisin). Angiotensin 1-9 is cleaved from angiotensin-1 by ACE2.

Angiotensin-2 acts directly on vascular smooth muscle as a potent vasoconstrictor, affects cardiac contractility and heart rate through its action on the sympathetic nervous system, and alters renal sodium and water absorption through its ability to stimulate the zona glomerulosa cells of the adrenal cortex to synthesize and secrete aldosterone.

Angiotensin-3 stimulates aldosterone release.

Angiotensin 1-7 is a ligand for the G-protein coupled receptor MAS1 (By similarity). Has vasodilator and antidiuretic effects (By similarity). Has an antithrombotic effect that involves MAS1-mediated release of nitric oxide from platelets.

Tissue specificity

Expressed by the liver and secreted in plasma.

Involvement in disease

Genetic variations in AGT are a cause of susceptibility to essential hypertension (EHT) [MIM:145500]. Essential hypertension is a condition in which blood pressure is consistently higher than normal with no identifiable cause.

Defects in AGT are a cause of renal tubular dysgenesis (RTD) [MIM:267430]. RTD is an 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).

Sequence similarities

Belongs to the serpin family.

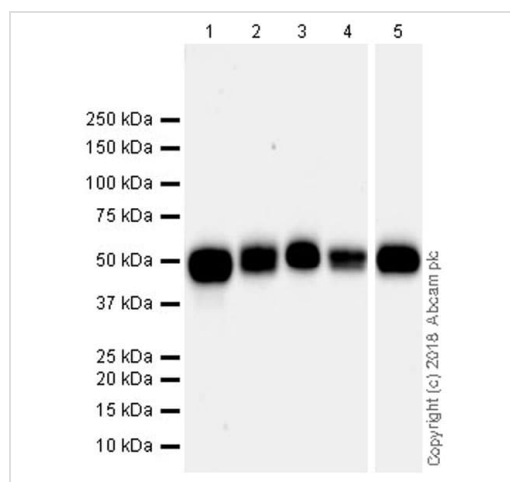
Post-translational modifications

Beta-decarboxylation of Asp-34 in angiotensin-2, by mononuclear leukocytes produces alanine. The resulting peptide form, angiotensin-A, has the same affinity for the AT1 receptor as angiotensin-2, but a higher affinity for the AT2 receptor.

Cellular localization

Secreted.

Images



Western blot - Anti-Angiotensinogen antibody
[EPR22199-203] (ab229005)

All lanes : Anti-Angiotensinogen antibody [EPR22199-203]
(ab229005) at 1/1000 dilution

Lane 1 : Mouse liver tissue lysate

Lane 2 : Mouse kidney tissue lysate

Lane 3 : Mouse heart tissue lysate

Lane 4 : Mouse brain tissue lysate

Lane 5 : Mouse lung tissue lysate

Lysates/proteins at 20 µg per lane.

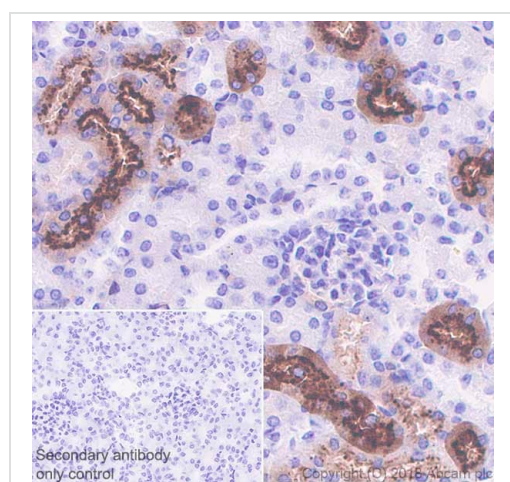
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at
1/100000 dilution

Predicted band size: 53 kDa

Exposure time: 114 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.

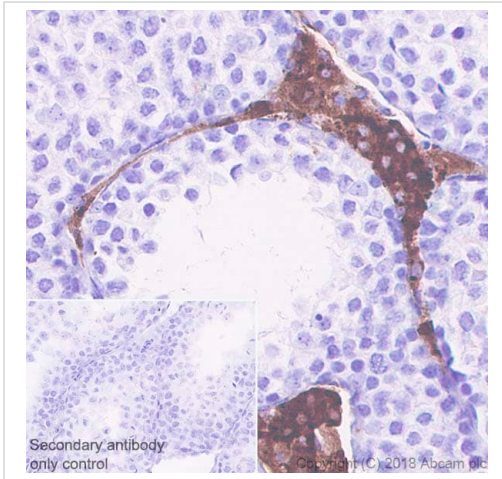


Immunohistochemistry (Formalin/PFA-fixed paraffin-
embedded sections) - Anti-Angiotensinogen
antibody [EPR22199-203] (ab229005)

Immunohistochemical analysis of paraffin-embedded mouse kidney tissue stained for Angiotensinogen with ab229005 at 1/2000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody. Cytoplasmic staining in the proximal tubules of mouse kidney (PMID: 7648615) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG ready to use.

Heat-mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).

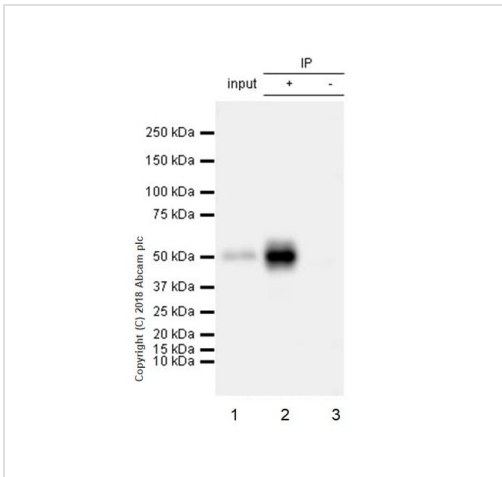


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Angiotensinogen antibody [EPR22199-203] (ab229005)

Immunohistochemical analysis of paraffin-embedded mouse testis tissue stained for Angiotensinogen with ab229005 at 1/2000 dilution, followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP) secondary antibody. Cytoplasmic staining in the Leydig cells of mouse testis (PMID: 20361351) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG ready to use.

Heat-mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).



Immunoprecipitation - Anti-Angiotensinogen antibody [EPR22199-203] (ab229005)

Angiotensinogen was immunoprecipitated from 0.35 mg mouse liver tissue lysates with ab229005 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab229005 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) was used for detection at 1/5000 dilution.

Lane 1: Mouse liver lysate (10 µg) (Input).

Lane 2: [ab29005](#) IP in mouse liver lysate (+).

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab229005 in mouse liver lysate (-).

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: 10 seconds.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Angiotensinogen antibody [EPR22199-203]
(ab229005)

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

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