Product datasheet

Anti-Angiotensinogen antibody [EPR2930(2)] ab108294

Overview

Product name: Anti-Angiotensinogen antibody [EPR2930(2)]
Description: Rabbit monoclonal [EPR2930(2)] to Angiotensinogen
Host species: Rabbit
Tested applications:
Suitable for: WB, IP, ICC, Flow Cyt
Unsuitable for: IHC-P
Species reactivity: Reacts with: Human
Immunogen: Synthetic peptide within Human Angiotensinogen aa 50-150. The exact sequence is proprietary.
Positive control: Fetal kidney, fetal artery, fetal heart, HepG2, and Human plasma lysates
General notes: Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

Our RabMab® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents.

This product is a recombinant rabbit monoclonal antibody.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer: pH: 7.20
Preservative: 0.05% Sodium azide
Constituents: 0.1% BSA, 40% Glycerol, 9.85% Tris glycine, 50% Tissue culture supernatant
Purity: Tissue culture supernatant
Clonality: Monoclonal
Clone number: EPR2930(2)
Isotype: IgG

Applications
**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 (neprilysin). 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.

**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.

**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).

**Cellular localization**

Secreted.
Western blot - Anti-Angiotensinogen antibody [EPR2930(2)] (ab108294)

All lanes: Anti-Angiotensinogen antibody [EPR2930(2)] (ab108294) at 1/10000 dilution

Lane 1: Human fetal kidney lysate
Lane 2: Human fetal artery lysate
Lane 3: Human fetal heart lysate
Lane 4: HepG2 cell lysate
Lane 5: Human plasma lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 53 kDa

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