

Product datasheet

Anti-Angiotensinogen antibody ab97381

[2 Images](#)

Overview

Product name	Anti-Angiotensinogen antibody
Description	Rabbit polyclonal to Angiotensinogen
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant protein fragment containing a sequence corresponding to a region within amino acids 1-446 of Human Angiotensin (NP_000020) Run BLAST with ExPASy Run BLAST with NCBI
Positive control	HepG2 lysate Hepatocellular carcinoma Huh7 xenograft (IHC-P)

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Thimerosal (merthiolate) Constituents: 10% Glycerol, 0.1M Tris, 0.1M Glycine, pH 7
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab97381** 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		1/500 - 1/3000. Predicted molecular weight: 53 kDa.
IHC-P		1/100 - 1/250.

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 (nepriylsin). 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.

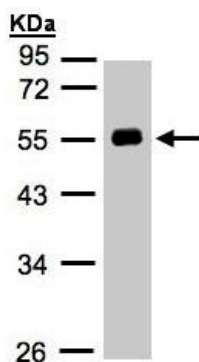
Post-translational modifications

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

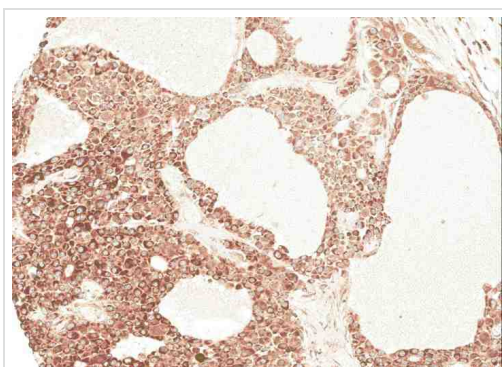


Western blot - Anti-Angiotensinogen antibody (ab97381)

Anti-Angiotensinogen antibody (ab97381) at 1/1000 dilution + HepG2 whole cell lysate at 30 µg

Predicted band size: 53 kDa

10% SDS PAGE



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Angiotensinogen antibody (ab97381)

Immunohistochemical analysis of paraffin-embedded Hepatocellular carcinoma Huh7, using Angiotensinogen antibody (ab97381) at 1/100 dilution.

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