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Rabbit Anti-Angiotensin II antibody

SL0587R

Product Name:	Angiotensin II
Chinese Name:	血管紧张素Ⅱ抗体
Alias:	Alpha 1 antiproteinase, antitrypsin; Ang II; ANG III; Angiotensin I; Angiotensin II; Angiotensin III; Angiotensinogen; Angiotensinogen (serpin peptidase inhibitor, clade A member 8); ANHU; Pre angiotensinogen; Serine (or cysteine) proteinase inhibitor; Serpin A8; SERPINA8; AT-2; AT-II; ANGT_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Horse,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	53kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	(DRVYIHPF-GG)8K4K2KG:
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	AGT, pre-angiotensinogen or angiotensinogen precursor, is expressed in the liver and is cleaved by the enzyme renin in response to lowered blood pressure. The resulting product, angiotensin I, is then cleaved by angiotensin converting enzyme (ACE) to generate the physiologically active enzyme angiotensin II. The protein is involved in

maintaining blood pressure and in the pathogenesis of essential hypertension and preeclampsia. Mutations in this gene are associated with susceptibility to essential hypertension, and can cause renal tubular dysgenesis, a severe disorder of renal tubular development. Defects in this gene have also been associated with non-familial structural atrial fibrillation, and inflammatory bowel disease.

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 (By similarity).

Subunit:
During pregnancy, exists as a disulfide-linked 2:2 heterotetramer with the proform of PRG2 and as a complex (probably a 2:2:2 heterohexamer) with pro-PRG2 and C3dg.

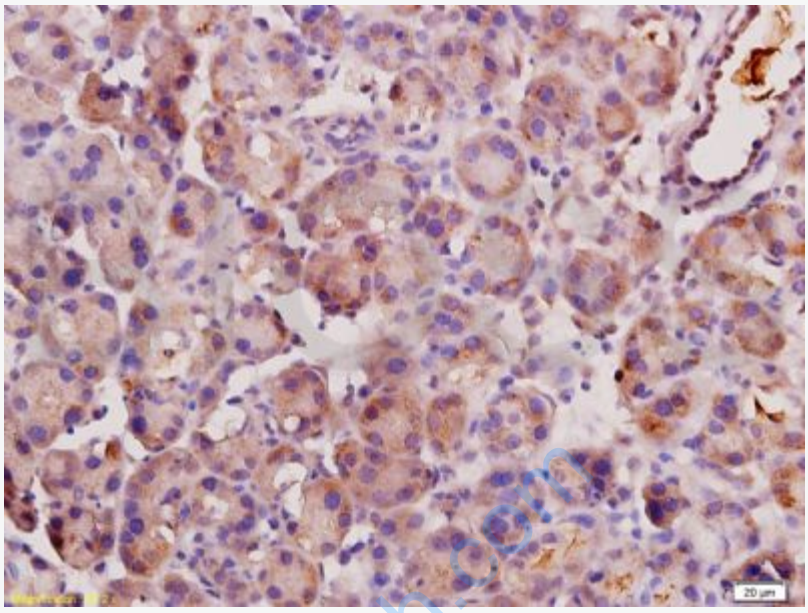
Subcellular Location:
Secreted.

Tissue Specificity:
Expressed by the liver and secreted in plasma.

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.

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). **Similarity:** Belongs to the serpin family. **SWISS:** P01019 **Gene ID:** 183 **Database links:** Entrez Gene: 183Human Entrez Gene: 11606Mouse Entrez Gene: 24179Rat Omim: 106150Human SwissProt: P01019Human SwissProt: P11859Mouse SwissProt: P01015Rat Unigene: 19383Human Unigene: 301626Mouse Unigene: 6319Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. 血管紧张素II是调节血压、血容量的重要因子，也是一种可能的神经介质。Ang II控制血压和体液平衡，但现在进一步认识到Ang II还与炎性改变有关.

Picture:	 Tissue/cell: rat pancreas tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min; Incubation: Anti-Angiotensin II Polyclonal Antibody, Unconjugated(SL0587R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining