

Product name:	Renin Rabbit Polyclonal Antibody
Cat number:	ABN17017
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human REN. AA range:207-256
Reactivity:	Human,Rat,Mouse
Applications:	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000
Molecular Weight:	40kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

Renin catalyzes the first step in the activation pathway of angiotensinogen--a cascade that can result in aldosterone release, vasoconstriction, and increase in blood pressure. Renin, an aspartyl protease, cleaves angiotensinogen to form angiotensin I, which is converted to angiotensin II by angiotensin I converting enzyme, an important regulator of blood pressure and electrolyte balance. Transcript variants that encode different protein isoforms and that arise from alternative splicing and the use of alternative promoters have been described, but their full-length nature has not been determined. Mutations in this gene have been shown to cause familial hyperproreninemia. [provided by RefSeq, Jul 2008], catalytic activity: Cleavage of Leu-[Xaa bond in angiotensinogen to generate angiotensin I., disease: Defects in REN 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)., enzyme regulation: Interaction with ATP6AP2 results in a 5-fold increased efficiency in angiotensinogen processing., function: Renin is a highly specific endopeptidase, whose only known function is to generate angiotensin I from angiotensinogen in the plasma, initiating a cascade of reactions that produce an elevation of blood pressure and increased sodium retention by the kidney., online information: Renin entry, similarity: Belongs to the peptidase A1 family., subcellular location: Associated to membranes via binding to ATP6AP2., subunit: Interacts with ATP6AP2.,