

Renin Polyclonal Antibody

Catalog No: YT4047

Reactivity: Human

Applications: WB;IHC;IF;ELISA

Target: Renin

Fields: >>Renin-angiotensin system;>>Renin secretion;>>Diabetic cardiomyopathy

Gene Name: REN

Protein Name: Renin

Human Gene Id: 5972

Human Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

REN. AA range:207-256

P00797

Specificity: Renin Polyclonal Antibody detects endogenous levels of Renin protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 40kD

1/3

Cell Pathway: Renin-angiotensin system;

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],

Function:

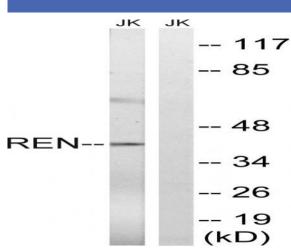
catalytic activity:Cleavage of Leu-|-Xaa bond in angiotensinogen to generate angiotensin I.,disease:Defects in REN are a cause of renal tubular dysgenesis (RTD) [MIM:267430]. RTD is an autosomal recessive severe disorder of renal tubular development characterized by persistent fetal anuria and perinatal 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

Subcellular Location:

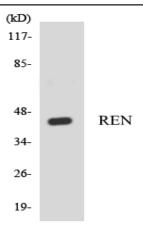
Secreted. Membrane. Associated to membranes via binding to ATP6AP2.

Expression : Colon, Fetal liver, Ovary,

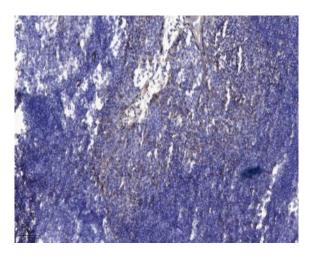
Products Images



Western blot analysis of lysates from Jurkat cells, using REN Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HepG2 cells using REN antibody.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).