

Renin Polyclonal antibody

Catalog Number: 14291-1-AP

20 Publications

Basic Information

Catalog Number:

14291-1-AP

Size:

300 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG5612

GenBank Accession Number:

BC047752

GeneID (NCBI):

5972

UNIPROT ID:

P00797

Full Name:

renin

Calculated MW:

45 kDa

Observed MW:

45 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IHC 1:400-1:1600

IF 1:20-1:200

Applications

Tested Applications:

IF/ICC, IHC, WB, ELISA

Cited Applications:

WB, IF, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : K-562 cells,

IHC : human kidney tissue, human gliomas tissue, mouse kidney tissue

IF : HepG2 cells,

Background Information

REN(Renin) is also named as angiotensinogenase and belongs to the peptidase A1 family. It 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. Human prorenin and renin are synthesized in juxtaglomerular cells and it locates in the juxtaglomerular cells and afferent arteriole as cytoplasmic granules (PMID:19664745, 9453303). REN has 2 isoforms produced by alternative splicing with the molecular weight of 45-47kDa. The mature REN can be detected as 38-42 kDa due to the cleavage of signal peptide and propeptide, and also detected as 55-60 kDa with variable degrees of glycosylation (PMID: 20966072, 15226276). Defects in REN are a cause of renal tubular dysgenesis (RTD) and familial juvenile hyperuricemic nephropathy type 2 (HNF12).

Notable Publications

Author	Pubmed ID	Journal	Application
Eriko Negishi	30256128	Am J Physiol Renal Physiol	WB
Hadrien-Gaël Boyer	29084882	Hypertension	IHC
Brasilina Caroccia	29066763	Sci Rep	IHC

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

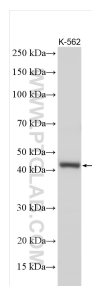
For technical support and original validation data for this product please contact:

T: 4006900926

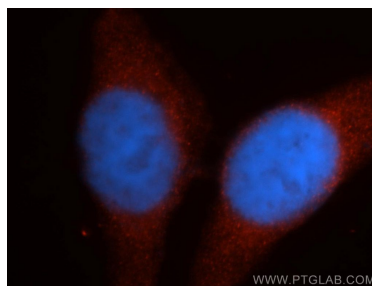
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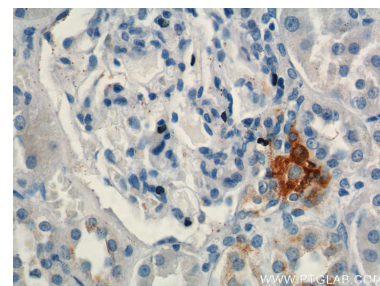
Selected Validation Data



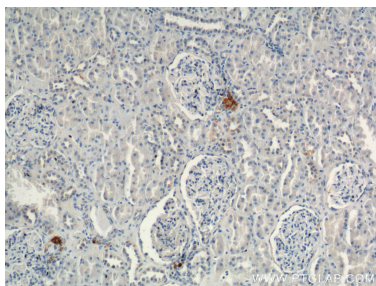
Various lysates were subjected to SDS PAGE followed by western blot with 14291-1-AP (Renin antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of HepG2 cells, using REN antibody 14291-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 14291-1-AP (Renin antibody at dilution of 1:800 (under 40x lens).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 14291-1-AP (Renin antibody at dilution of 1:800 (under 10x lens).