

For Research Use Only

# Renin Polyclonal antibody

Catalog Number: 14291-1-AP

23 Publications



## Basic Information

<b>Catalog Number:</b> 14291-1-AP	<b>GenBank Accession Number:</b> BC047752	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 300 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 5972	<b>Recommended Dilutions:</b> WB 1:500-1:2000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P00797	<b>IHC 1:400-1:1600</b>
<b>Isotype:</b> IgG	<b>Full Name:</b> renin	<b>IF/ICC 1:50-1:500</b>
<b>Immunogen Catalog Number:</b> AG5612	<b>Calculated MW:</b> 45 kDa	
	<b>Observed MW:</b> 45 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IHC, IF	<b>WB :</b> K-562 cells, HepG2 cells
<b>Species Specificity:</b> human	<b>IHC :</b> human kidney tissue, human gliomas tissue
<b>Cited Species:</b> human, mouse, rat	<b>IF/ICC :</b> HeLa cells, HepG2 cells
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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

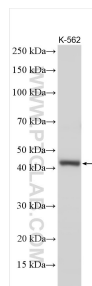
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

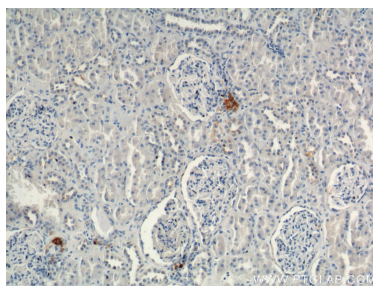
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

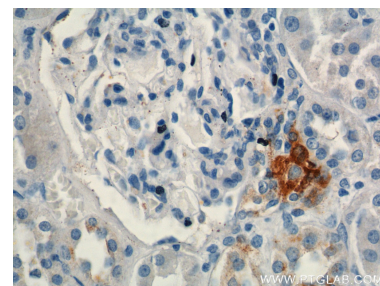
## Selected Validation Data



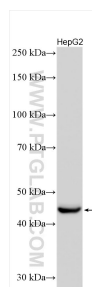
Various lysates were subjected to SDS PAGE followed by western blot with 14291-1-AP (Renin antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



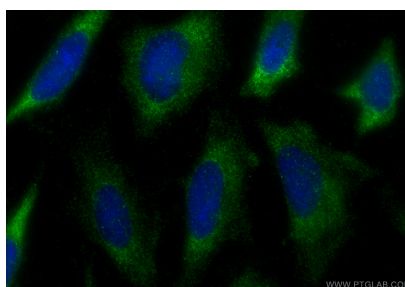
Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 14291-1-AP (Renin antibody) at dilution of 1:800 (under 10x lens).



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



Various lysates were subjected to SDS PAGE followed by western blot with 14291-1-AP (Renin antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using Renin antibody (14291-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).