

For Research Use Only

# ATP6VOA4 Polyclonal antibody

Catalog Number: 21570-1-AP

Featured Product

2 Publications



## Basic Information

### Catalog Number:

21570-1-AP

### Size:

150ul, Concentration: 260 ug/ml by Nanodrop and 187 ug/ml by Bradford method using BSA as the standard;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG16095

### GenBank Accession Number:

BC109305

### GeneID (NCBI):

50617

### UNIPROT ID:

Q9HBG4

### Full Name:

ATPase, H<sup>+</sup> transporting, lysosomal V0 subunit a4

### Calculated MW:

840 aa, 96 kDa

### Observed MW:

100 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

IHC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse

### Cited Species:

human, mouse

### Positive Controls:

WB : mouse kidney tissue,

IHC : human kidney tissue,

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

## Background Information

The ATP6VOA4 is a component of vacuolar-H<sup>+</sup>ATPase (V-ATPase) which is a multi-subunit enzyme that couples ATP hydrolysis to proton pumping across membranes. The V-ATPases are comprised of two major parts, the cytosolic V1 domain involved in ATP-binding and subsequent hydrolysis, and the membrane-associated V0 domain responsible for proton translocation. The V0 domain is composed of five subunits: a, c, c', c'' and d. The 'a' subunit of V0 domain has four isoforms: a1-a4. It has been found that mutations in ATP6VOA4(a4) are associated with distal renal tubular acidosis (dRTA) combined in some cases with progressive hearing loss leading to sensorineural deafness. This antibody was generated against the internal region of human ATP6VOA4 and is predicted to detect the a4 isoform only.

## Notable Publications

Author	Pubmed ID	Journal	Application
Amity F Eaton	38984989	Function (Oxf)	WB, IF
Jinming Xu	37559594	Oncol Lett	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

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

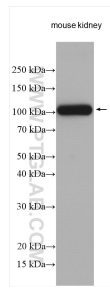
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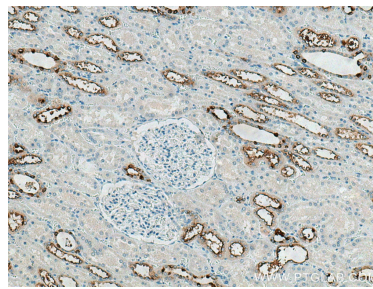
E: proteintech@ptglab.com  
W: ptglab.com

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## Selected Validation Data



Mouse kidney lysates were subjected to SDS PAGE followed by western blot with 21570-1-AP (ATP6V0A4 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 21570-1-AP (ATP6V0A4 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).