For Research Use Only

ATP6V0A4 Polyclonal antibody

Catalog Number:21570-1-AP Featured Product 5 Publications

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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+ 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
IF-P: 1:50-1:500

Applications

Tested Applications:
WB, IHC, IF-P, ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse

Cited Species:
human, 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 : mouse kidney tissue,

IHC : human kidney tissue,

IF-P : mouse kidney tissue,

Background Information

The ATP6V0A4 is a component of vacuolar-H+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 ATP6V0A4(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 ATP6V0A4 and is predicted to detect the a4 isoform only.

Notable Publications

Author	Pubmed ID	Journal	Application
Kyrylo Pyrshev	41091845	Function (Oxf)	IF
Xiaopu Gao	40721755	BMC Oral Health	WB
Hyoungjun Ham	39952956	Nat Commun	WB

Storage

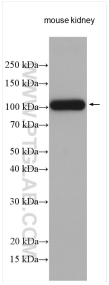
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

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

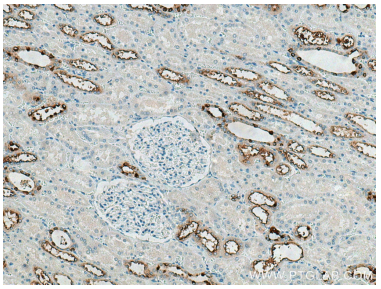
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

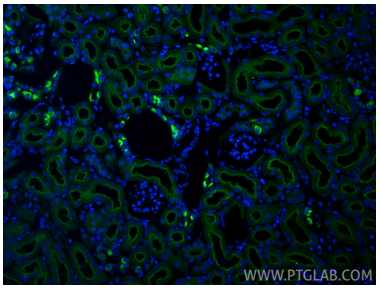
Selected Validation Data



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).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse kidney tissue using ATP6V0A4 antibody (21570-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).