

For Research Use Only

ATP6V0A4 Recombinant monoclonal antibody

Catalog Number: 86321-1-RR



Basic Information

Catalog Number: 86321-1-RR	GenBank Accession Number: BC109305	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 50617	CloneNo.: 250861E8
Source: Rabbit	UNIPROT ID: Q9HBG4	Recommended Dilutions: WB: 1:5000-1:50000 IHC: 1:10000-1:40000
Isotype: IgG	Full Name: ATPase, H ⁺ transporting, lysosomal V0 subunit a4	
Immunogen Catalog Number: AG16095	Calculated MW: 840 aa, 96 kDa	
	Observed MW: 85 kDa	

Applications

Tested Applications:

WB, IHC, ELISA

Species Specificity:

human, mouse, rat

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, rat kidney tissue

IHC : human kidney tissue, 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.

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

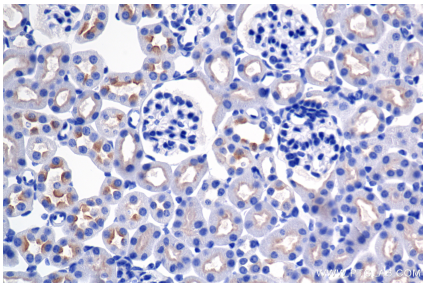
For technical support and original validation data for this product please contact:

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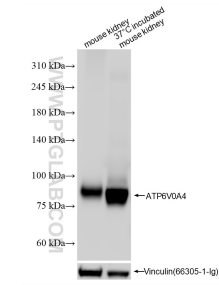
E: proteintech@ptglab.com
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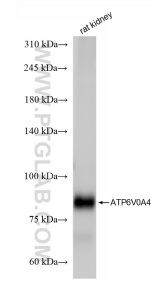
Selected Validation Data



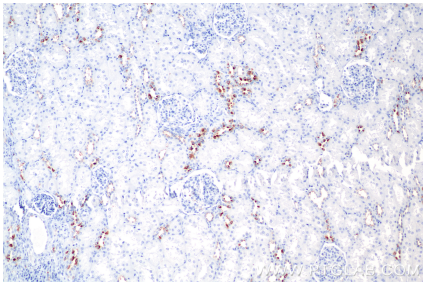
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 86321-1-RR (ATP6VOA4 antibody) at dilution of 1:80000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



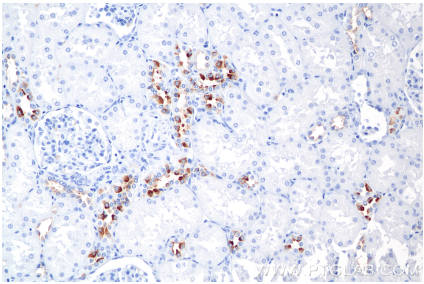
Various lysates were subjected to SDS PAGE followed by western blot with 86321-1-RR (ATP6VOA4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



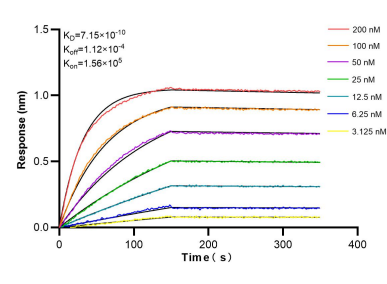
rat kidney tissue were subjected to SDS PAGE followed by western blot with 86321-1-RR (ATP6VOA4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 86321-1-RR (ATP6VOA4 antibody) at dilution of 1:20000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 86321-1-RR (ATP6VOA4 antibody) at dilution of 1:20000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Bilayer interferometry (BLI) kinetic assays of 86321-1-RR against Human ATP6VOA4 were performed. The affinity constant is 0.715 nM.