

For Research Use Only

ATP6V0A4 Recombinant monoclonal antibody, PBS Only

Catalog Number: 86321-1-PBS



Basic Information

Catalog Number: 86321-1-PBS	GenBank Accession Number: BC109305	Purification Method: Protein A purification
Size: 100ug, Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 50617	CloneNo.: 250861E8
Source: Rabbit	UNIPROT ID: Q9HBG4	
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, Indirect ELISA

Species Specificity:
human, mouse, rat

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

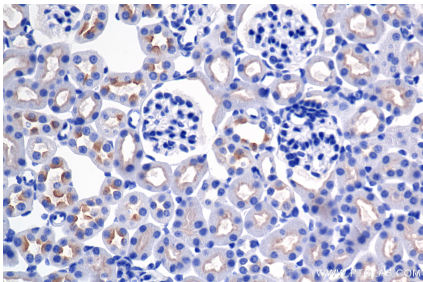
Storage:
Store at -80°C.

Storage Buffer:
PBS only, pH7.3

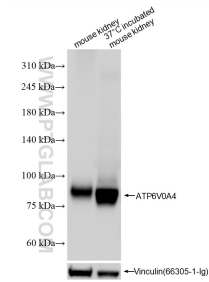
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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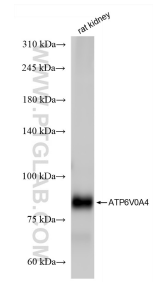
Selected Validation Data



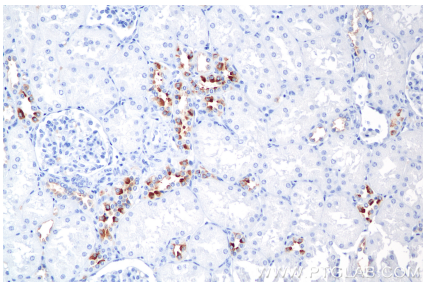
Immunohistochemical analysis of paraffin-embedded mouse kidney tissue slide using 86321-1-RR (ATP6VOA4 antibody) at dilution of 1:80000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 86321-1-PBS in a different storage buffer formulation.



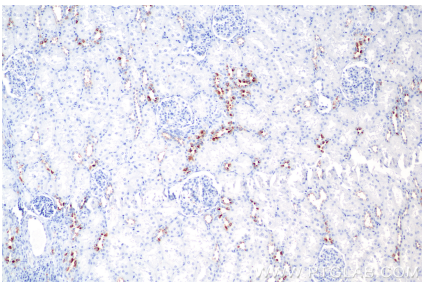
Various lysates were subjected to SDS PAGE followed by western blot with 86321-1-RR (ATP6VOA4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86321-1-PBS in a different storage buffer formulation.



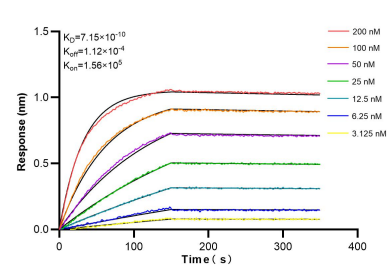
rat kidney tissue were subjected to SDS PAGE followed by western blot with 86321-1-RR (ATP6VOA4 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 86321-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 86321-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 86321-1-PBS in a different storage buffer formulation.



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