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# ATP1A2 Recombinant antibody, PBS Only Catalog Number:84999-4-PBS



### Basic Information

Catalog Number: 84999-4-PBS Size: 100ug, Concentration: 1 mg/ml by Nanodrop; Source: Rabbit Isotype: IgG Immunogen Catalog Number: AG10489 GenBank Accession Number: BC052271 GeneID (NCBI): 477 UNIPROT ID: P50993 Full Name: ATPase, Na+/K+ transporting, alpha 2 (+) polypeptide Calculated MW: 1020 aa, 112 kDa

Observed MW: 97-100 kDa Purification Method: Protein A purification CloneNo.: 242414G12

# Applications

Tested Applications: WB, IHC, Indirect ELISA Species Specificity: human, mouse, rat

#### **Background Information**

ATP1A2 (Na+/K+-ATPase a-2 subunit) is the catalytic component of the active enzyme Na+/K+-ATPase, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. The Na+/K+-ATPase is composed of a larger catalytic a-subunit (~110 kDa) and a small  $\beta$ -subunit (~55 kDa). The a subunit has four isoforms identified to date: a1, a2, a3 and a4. The a1 isoform is expressed ubiquitously but the a2 isoform is present largely in the skeletal muscle, heart and vascular smooth muscle. The a3 isoform is found almost exclusively in neurons and ovaries. The a4 isoform is expressed in sperm. For optimal WB detection with ATP1A2, we do not recommend boiling the sample after lysis.

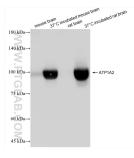
#### Storage

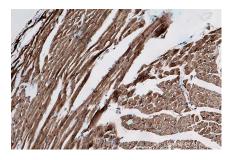
Storage: Store at -80°C. Storage Buffer: PBS Only

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

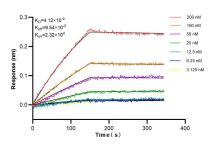
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## Selected Validation Data





Various lysates were subjected to SDS PAGE followed by western blot with 84999-4-RR (ATP1A2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84999-4-PBS in a different storage buffer formulation. Immunohistochemical analysis of paraffinembedded mouse heart tissue slide using 84999-4-RR (ATP1A2 antibody) at dilution of 1:400 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84999-4-PBS in a different storage buffer formulation.



Biolayer interferometry (BLL) kinetic assays of 84999-4-RR against Human ATP1A2 were performed. The affinity constant is 4.12 nM.