

ATP1A2 Recombinant antibody

Catalog Number: 84999-4-RR

Basic Information

Catalog Number: 84999-4-RR	GenBank Accession Number: BC052271	Purification Method: Protein A purification
Size: 100ul, Concentration: 1000 ug/ml by Nanodrop;	GeneID (NCBI): 477	CloneNo.: 242414G12
Source: Rabbit	UNIPROT ID: P50993	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:200-1:800
Isotype: IgG	Full Name: ATPase, Na ⁺ /K ⁺ transporting, alpha 2 (+) polypeptide	
Immunogen Catalog Number: AG10489	Calculated MW: 1020 aa, 112 kDa	
	Observed MW: 97-100 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 : 37°C incubated mouse brain tissue, 37°C incubated rat brain tissue

IHC : mouse heart tissue,

Background Information

ATP1A2 (Na⁺/K⁺-ATPase α-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 α-subunit (~110 kDa) and a small β-subunit (~55 kDa). The α subunit has four isoforms identified to date: α1, α2, α3 and α4. The α1 isoform is expressed ubiquitously but the α2 isoform is present largely in the skeletal muscle, heart and vascular smooth muscle. The α3 isoform is found almost exclusively in neurons and ovaries. The α4 isoform is expressed in sperm. For optimal WB detection with ATP1A2, we do not recommend boiling the sample after lysis.

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

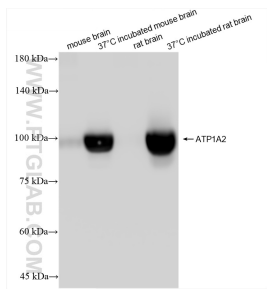
For technical support and original validation data for this product please contact:

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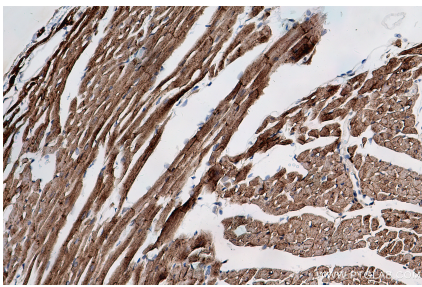
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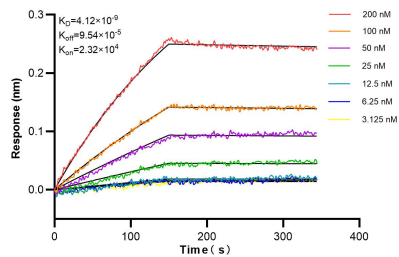
Selected Validation Data



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.



Immunohistochemical analysis of paraffin-embedded 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).



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