

# ATP1A2 POLYCLONAL ANTIBODY

Catalog Number: 16836-1-AP

## Basic Information

<b>Catalog Number:</b> 16836-1-AP <b>Size:</b> 31 µg/150 µl <b>Source:</b> Rabbit <b>Isotype:</b> IgG <b>Purification Method:</b> Antigen affinity purification <b>Immunogen Catalog Number:</b> AG10515	<b>GenBank Accession Number:</b> BC052271 <b>GeneID (NCBI):</b> 477 <b>Full Name:</b> ATPase, Na <sup>+</sup> /K <sup>+</sup> transporting, alpha 2 (+) polypeptide <b>Calculated MW:</b> 1020aa, 112 kDa <b>Observed MW:</b> 97-100 kDa	<b>Recommended Dilutions:</b> WB 1:500-1:5000 IHC 1:20-1:200 IF 1:10-1:100
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## Applications

**Tested Applications:**  
ELISA, WB, IHC, IF, FC  
**Species Specificity:**  
Human, Mouse, Rat

**Positive Controls:**  
**WB :** HEK-293 cells;  
**IHC :** human skin tissue; human brain tissue, human heart tissue, human kidney tissue, human liver tissue, human testis tissue  
**IF :** HeLa cells;

## Background Information

ATP1A2 (Na<sup>+</sup>/K<sup>+</sup>-ATPase α-2 subunit) is the catalytic component of the active enzyme Na<sup>+</sup>/K<sup>+</sup>-ATPase, which catalyzes the hydrolysis of ATP coupled with the exchange of sodium and potassium ions across the plasma membrane. The Na<sup>+</sup>/K<sup>+</sup>-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. This antibody was raised against the internal region of the human ATP1A2 and can recognize all the isoforms of α subunit. The 65kDa band detected occasionally may be the degradation product of ATP1A2.

## Notable Publications

Author	Pubmed ID	Journal	Application
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## 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

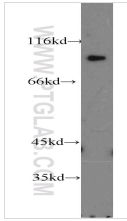
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

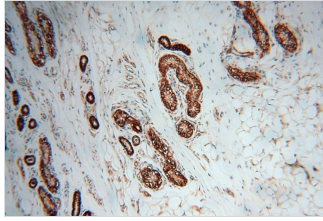
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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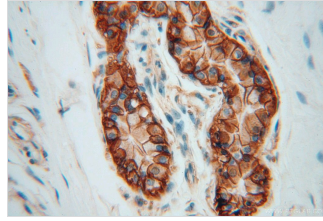
## Selected Validation Data



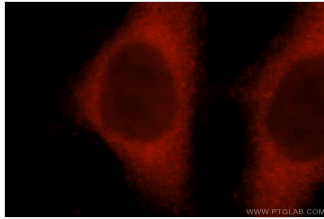
HEK-293 cells were subjected to SDS PAGE followed by western blot with 16836-1-AP(ATP1A2 antibody) at dilution of 1:1200



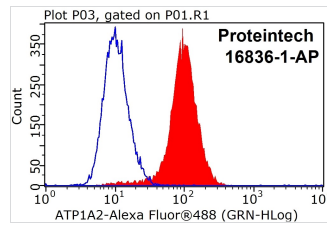
Immunohistochemical of paraffin-embedded human skin using 16836-1-AP(ATP1A2 antibody) at dilution of 1:100 (under 10x lens)



Immunohistochemical of paraffin-embedded human skin using 16836-1-AP(ATP1A2 antibody) at dilution of 1:100 (under 40x lens)



Immunofluorescent analysis of HeLa cells, using ATP1A2 antibody 16836-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



1X10<sup>6</sup> HeLa cells were stained with 0.5ug ATP1A2 antibody (16836-1-AP, red) and control antibody (blue). Fixed with 4% PFA blocked with 3% BSA (30 min). FITC-Goat anti-Rabbit IgG with dilution 1:100.