

# Polyclonal Antibody to ATPase, Na<sup>+</sup>/K<sup>+</sup> Transporting Alpha 1 Polypeptide (ATP1a1)

ATPase, Na<sup>+</sup>/K<sup>+</sup> Transporting Alpha 1 Polypeptide  
Catalog # AP74726

## Product Information

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|                   |                        |
|-------------------|------------------------|
| Application       | WB                     |
| Primary Accession | <a href="#">Q9N0Z6</a> |
| Reactivity        | Rabbit                 |
| Host              | Guinea Pig             |
| Clonality         | Polyclonal             |
| Calculated MW     | 112994                 |

## Additional Information

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|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene ID            | 100302415                                                                                                                                                                                         |
| Other Names        | Sodium pump subunit alpha-1; Na(+)/K(+) ATPase alpha-1 subunit; Sodium/potassium-transporting ATPase subunit alpha-1                                                                              |
| Target/Specificity | Oryctolagus cuniculus (Rabbit)                                                                                                                                                                    |
| Dilution           | WB~Western blotting: 0.5-2 µg/mL;1:500-2000<br>Immunohistochemistry: 5-20 µg/mL;1:50-200<br>Immunocytochemistry: 5-20 µg/mL;1:50-200<br>Optimal working dilutions must be determined by end user. |
| Format             | 0.01M PBS, pH7.4, containing 0.05% Proclin-300, 50% glycerol.                                                                                                                                     |
| Storage            | Store at -20 °C.Stable for 12 months from date of receipt                                                                                                                                         |

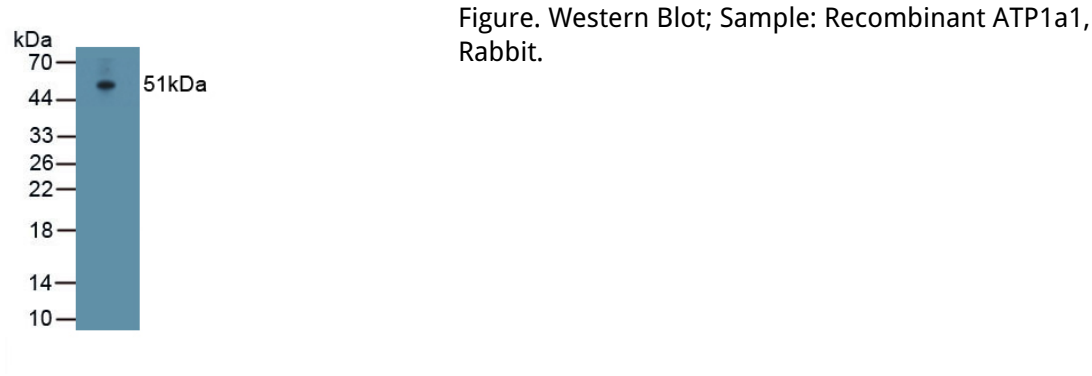
## Protein Information

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| Name     | ATP1A1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Function | Catalytic subunit of the Na(+)/K(+)-ATPase pump that hydrolyzes ATP to exchange ions across the plasma membrane, exporting 3 Na(+) and importing 2 K(+) per cycle against electrochemical gradients. It undergoes ATP-driven conformational changes that allow alternating binding and release of Na(+) and K(+) ions across the membrane (By similarity). This process maintains essential Na(+) and K(+) gradients for membrane potential and cellular function (PubMed: <a href="#">11738066</a> ). Could also be part of an osmosensory signaling pathway that senses body-fluid sodium levels and controls salt intake behavior as well as voluntary water intake to regulate sodium homeostasis (By similarity). |

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|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cellular Location | Cell membrane {ECO:0000250 UniProtKB:Q8VDN2}; Multi-pass membrane protein {ECO:0000250 UniProtKB:P05023}. Basolateral cell membrane {ECO:0000250 UniProtKB:P06685}; Multi-pass membrane protein {ECO:0000250 UniProtKB:P05023}. Cell membrane; Multi-pass membrane protein; Luminal side. Cell membrane, sarcolemma {ECO:0000250 UniProtKB:P05023}; Multi-pass membrane protein. Cell projection, axon {ECO:0000250 UniProtKB:P06685} Melanosome {ECO:0000250 UniProtKB:P05023}. Note=Expressed at the luminal side of the endocardial endothelium |
| Tissue Location   | Expressed in endocardial endothelial cells.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

Images



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