

Anti-ATP1A1 Antibody (aa800-850)

Rabbit Anti Human Polyclonal Antibody

Catalog # ALS18463

Product Information

Application	WB, IHC-P, FC
Primary Accession	P05023
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	112896

Additional Information

Gene ID	476
Alias Symbol	ATP1A1
Other Names	ATP1A1, Na ⁺ , K ⁺ ATPase alpha subunit, Na, K-ATPase alpha-1 subunit, Na ⁺ /K ⁺ ATPase 1, Sodium pump 1, Sodium pump subunit alpha-1
Target/Specificity	Endogenous levels of human, mouse, and rat ATP1A1.
Reconstitution & Storage	Immunoaffinity purified
Precautions	Anti-ATP1A1 Antibody (aa800-850) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

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 (PubMed: 29499166 , PubMed: 30388404 , PubMed: 35803952). It undergoes ATP- driven conformational changes that allow alternating binding and release of Na ⁽⁺⁾ and K ⁽⁺⁾ ions across the membrane (PubMed: 35803952). This process maintains essential Na ⁽⁺⁾ and K ⁽⁺⁾ gradients for membrane potential and cellular function. 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).
Cellular Location	Cell membrane {ECO:0000250 UniProtKB:Q8VDN2}; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250 UniProtKB:P06685}; Multi-pass membrane protein. Cell membrane, sarcolemma; Multi-pass membrane protein. Cell projection, axon {ECO:0000250 UniProtKB:P06685}. Melanosome. Note=Identified by mass spectrometry in melanosome fractions

from stage I to stage IV

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.