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Anti-ATP1A1 Antibody (Internal)

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18419

Product Information

Application	WB, IHC-P
Primary Accession	P05023
Predicted	Human, Mouse, Rat, Pig, Sheep, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	112896
Concentration (mg/ml)	1 mg/ml

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	Recognizes endogenous levels of ATP1A1 protein.
Reconstitution & Storage	Immunoaffinity purified
Precautions	Anti-ATP1A1 Antibody (Internal) 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'.