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Anti-ATP1A1 (Phospho-S16) Antibody

Catalog # AP60429

Product Information

Application	WB, IHC
Primary Accession	P05023
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Bovine, Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	112896

Additional Information

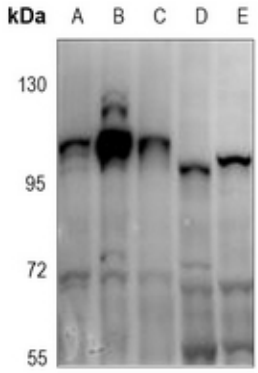
Gene ID	476
Other Names	Sodium/potassium-transporting ATPase subunit alpha-1; Na(+)/K(+) ATPase alpha-1 subunit; Sodium pump subunit alpha-1
Target/Specificity	KLH-conjugated synthetic phosphopeptide corresponding to residues surrounding S16 of human ATP1A1 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

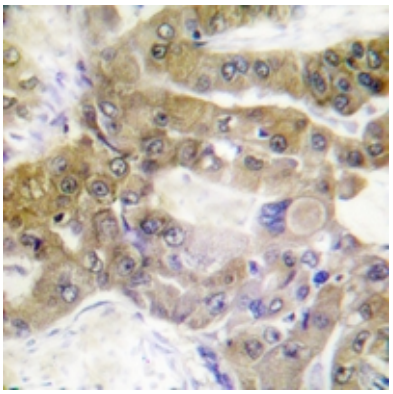
Name	ATP1A1
Function	Catalytic subunit of the Na(+)/K(+)-ATPase pump that hydrolyzes ATP to exchange ions across the plasma membrane, exporting 3 Na(+) and importing 2 K(+) per cycle against electrochemical gradients (PubMed:29499166, PubMed:30388404, PubMed:35803952). It undergoes ATP- driven conformational 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

Images



Western blot analysis of ATP1A1 (Phospho-S16) expression in HEK293T (A), HCT116 (B), Panc1 (C), PC12 (D), CT26 (E) whole cell lysates. (Predicted band size: 112 kD; Observed band size: 112 kD)



Immunohistochemical analysis of ATP1A1 (Phospho-S16) staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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