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ATP12A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8687c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	P54707
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22581
Calculated MW	115511
Antigen Region	833-859

Additional Information

Gene ID	479
Other Names	Potassium-transporting ATPase alpha chain 2, Non-gastric H(+)/K(+) ATPase subunit alpha, Proton pump, ATP12A, ATP1AL1
Target/Specificity	This ATP12A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 833-859 amino acids from the Central region of human ATP12A.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ATP12A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ATP12A {ECO:0000303|PubMed:29391451, ECO:0000312|HGNC:HGNC:13816}
Function	The catalytic subunit of a H(+)/K(+) ATPase and/or Na(+)/K(+) ATPase pump

	which transports K(+) ions in exchange for Na(+) and/or H(+) ions across the apical membrane of epithelial cells. Uses ATP as an energy source to pump K(+) ions into the cell while transporting Na(+) and/or H(+) ions to the extracellular compartment (PubMed:11341842, PubMed:7485470, PubMed:8853415, PubMed:9774385). Involved in the maintenance of electrolyte homeostasis through K(+) ion absorption in kidney and colon (By similarity). In the airway epithelium, may play a primary role in mucus acidification regulating its viscosity and clearance (PubMed:29391451).
Cellular Location	Apical cell membrane; Multi-pass membrane protein
Tissue Location	Expressed in airway epithelial cells (at protein level) (PubMed:29391451). Found in skin and kidney. Detected in prostate basal cells (at protein level). Expression is increased in benign prostate hyperplasia and tumor tissues (at protein level)

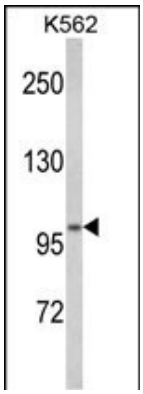
Background

ATP12A belongs to the family of P-type cation transport ATPases. This protein is a catalytic subunit of the ouabain-sensitive H+/K+ -ATPase that catalyzes the hydrolysis of ATP coupled with the exchange of H(+) and K(+) ions across the plasma membrane. It is also responsible for potassium absorption in various tissues.

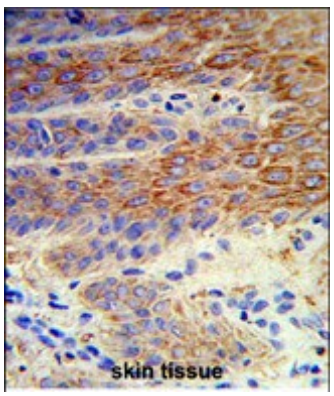
References

Li,J., et.al., Kidney Int. 65 (4), 1301-1310 (2004)

Images

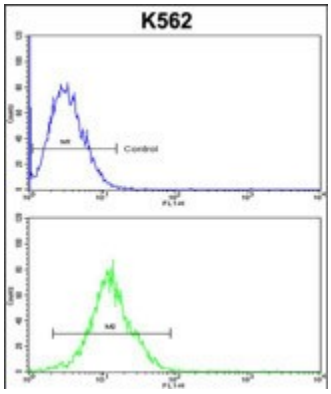


Western blot analysis of ATP12A Antibody (Center) (Cat. #AP8687c) in K562 cell line lysates (35ug/lane). ATP12A (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human skin reacted with ATP12A Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

ATP12A Antibody (Center)(Cat. #AP8687c) flow cytometric analysis of k562 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated



goat-anti-rabbit secondary antibodies were used for the analysis.

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