

ATP12A Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP8687c**Specification**

ATP12A Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P54707](#)**ATP12A Antibody (Center) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody [AP8687c](/products/AP8687c) was selected from the Center region of human ATP12A. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ATP12A Antibody (Center) Blocking Peptide - 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](http://www.uniprot.org/citations/11341842), PubMed: [7485470](http://www.uniprot.org/citations/7485470), PubMed: [8853415](http://www.uniprot.org/citations/8853415), PubMed: [9774385](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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)

ATP12A Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

ATP12A Antibody (Center) Blocking Peptide - Images**ATP12A Antibody (Center) Blocking Peptide - 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.

ATP12A Antibody (Center) Blocking Peptide - References

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