

## ATP12A Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP8687c

### **Specification**

## ATP12A Antibody (Center) Blocking Peptide - Product Information

Primary 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 <a href=/products/AP8687c>AP8687c</a> 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:<a href="http://www.uniprot.org/citations/11341842" target="\_blank">11341842</a>, PubMed:<a href="http://www.uniprot.org/citations/7485470" target="\_blank">7485470</a>, PubMed:<a href="http://www.uniprot.org/citations/8853415" target="\_blank">8853415</a>, PubMed:<a href="http://www.uniprot.org/citations/9774385" target="\_blank">9774385</a>, PubMed:<a href="http://www.uniprot.org/citations/9774385" target="\_blank">9774385</a>). 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:<a href="http://www.uniprot.org/citations/29391451" target=" blank">29391451</a>/a>).



## **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)