

ATP6V0A4 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5369c

Specification

ATP6V0A4 Antibody (Center) - Product Information

Application WB, FC,E
Primary Accession Q9HBG4

Other Accession NP 570856.2, NP 570855.2

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Human
Rabbit
Polyclonal
Rabbit IgG
235-261

ATP6V0A4 Antibody (Center) - Additional Information

Gene ID 50617

Other Names

V-type proton ATPase 116 kDa subunit a isoform 4, V-ATPase 116 kDa isoform a4, Vacuolar proton translocating ATPase 116 kDa subunit a isoform 4, Vacuolar proton translocating ATPase 116 kDa subunit a kidney isoform, ATP6V0A4, ATP6N1B, ATP6N2

Target/Specificity

This ATP6V0A4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 235-261 amino acids from the Central region of human ATP6V0A4.

Dilution

WB~~1:1000 FC~~1:10~50

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

ATP6V0A4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP6V0A4 Antibody (Center) - Protein Information

Name ATP6V0A4



Synonyms ATP6N1B, ATP6N2

Function Subunit of the V0 complex of vacuolar(H+)-ATPase (V-ATPase), a multisubunit enzyme composed of a peripheral complex (V1) that hydrolyzes ATP and a membrane integral complex (V0) that translocates protons (By similarity). V-ATPase is responsible for acidifying and maintaining the pH of intracellular compartments and in some cell types, is targeted to the plasma membrane, where it is responsible for acidifying the extracellular environment (By similarity). Involved in normal vectorial acid transport into the urine by the kidney (PubMed:10973252, PubMed:12414817).

Cellular Location

Apical cell membrane; Multi-pass membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:Q920R6}; Multi-pass membrane protein. Note=Localizes to the apical surface of alpha- intercalated cells in the cortical collecting ducts of the distal nephron (PubMed:10973252). Localizes to the basolateral surface of beta-intercalated cells in the cortical collecting ducts of the distal nephron (By similarity). {ECO:0000250|UniProtKB:Q920R6, ECO:0000269|PubMed:10973252}

Tissue Location

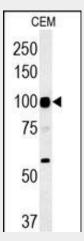
Expressed in adult and fetal kidney. Found in the inner ear.

ATP6V0A4 Antibody (Center) - Protocols

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

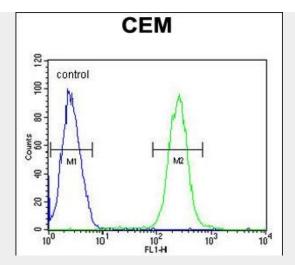
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ATP6V0A4 Antibody (Center) - Images



ATP6V0A4 Antibody (Center)(Cat. #AP5369c) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the ATP6V0A4 antibody detected the ATP6V0A4 protein (arrow).





ATP6V0A4 Antibody (Center) (Cat. #AP5369c) flow cytometric analysis of CEM cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ATP6V0A4 Antibody (Center) - Background

This gene encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of intracellular compartments of eukaryotic cells. V-ATPase dependent acidification is necessary for such intracellular processes as protein sorting, zymogen activation, receptor-mediated endocytosis, and synaptic vesicle proton gradient generation. V-ATPase is composed of a cytosolic V1 domain and a transmembrane V0 domain. The V1 domain consists of three A and three B subunits, two G subunits plus the C, D, E, F, and H subunits. The V1 domain contains the ATP catalytic site. The V0 domain consists of five different subunits: a, c, c', c", and d. This gene is one of four genes in man and mouse that encode different isoforms of the a subunit. Alternatively spliced transcript variants encoding the same protein have been described. Mutations in this gene are associated with renal tubular acidosis associated with preserved hearing.

ATP6V0A4 Antibody (Center) - References

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