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ATP6V1B1 Antibody (Center) Blocking peptide

Synthetic peptide
Catalog # BP11538c

Specification

ATP6V1B1 Antibody (Center) Blocking peptide - Product Information

Primary Accession P15313

ATP6V1B1 Antibody (Center) Blocking peptide - Additional Information

Gene ID 525

Other Names
V-type proton ATPase subunit B, kidney isoform, V-ATPase subunit B 1, Endomembrane proton pump 58 kDa subunit, Vacuolar proton pump subunit B 1, ATP6V1B1, ATP6B1, VATB, VPP3

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.

ATP6V1B1 Antibody (Center) Blocking peptide - Protein Information

Name ATP6V1B1

Synonyms ATP6B1, VATB, VPP3

Function
Non-catalytic subunit of the V1 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 (PubMed:16769747). 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 (PubMed:32001091). Essential for the proper assembly and activity of V- ATPase (PubMed:16769747). In renal intercalated cells, mediates secretion of protons (H+) into the urine thereby ensuring correct urinary acidification (PubMed:16769747). Required for optimal olfactory function by mediating the acidification of the nasal olfactory epithelium (By similarity).

Cellular Location

Apical cell membrane. Basolateral cell membrane {ECO:0000250|UniProtKB:Q91YH6}

Tissue Location
Kidney; localizes to early distal nephron, encompassing thick ascending limbs and distal convoluted tubules (at protein level) (PubMed:29993276, PubMed:16769747). Expressed in the cochlea and endolymphatic sac (PubMed:9916796)

ATP6V1B1 Antibody (Center) Blocking peptide - Protocols

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

- Blocking Peptides

ATP6V1B1 Antibody (Center) Blocking peptide - Images

ATP6V1B1 Antibody (Center) Blocking peptide - Background

This gene encodes a component of vacuolar ATPase(V-ATPase), a multisubunit enzyme that mediates acidification ofeukaryotic intracellular organelles. V-ATPase dependent organelleacidification is necessary for such intracellular processes asprotein sorting, zymogen activation, receptor-mediated endocytosis,and synaptic vesicle proton gradient generation. V-ATPase iscomposed of a cytosolic V1 domain and a transmembrane V0 domain.The V1 domain consists of three A and three B subunits, two Gsubunits plus the C, D, E, F, and H subunits. The V1 domaincontains the ATP catalytic site. The V0 domain consists of fivedifferent subunits: a, c, c', c'', and d. Additional isoforms ofmany of the V1 and V0 subunit proteins are encoded by multiplegenes or alternatively spliced transcript variants. This encodedprotein is one of two V1 domain B subunit isoforms and is found inthe kidney. Mutations in this gene cause distal renal tubularacidosis associated with sensorineural deafness. [provided byRefSeq].

ATP6V1B1 Antibody (Center) Blocking peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Sharifian, M., et al. Iran J Kidney Dis 4(3):202-206(2010)Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)Andreucci, E., et al. Pediatr. Nephrol. 24(11):2147-2153(2009)Sethi, S.K., et al. Indian Pediatr 46(5):425-427(2009)