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ATP6V1B1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51878

Product Information

Application	WB
Primary Accession	P15313
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56833

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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human ATP6V1B1. The exact sequence is proprietary.
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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:16769747, PubMed:29993276). Expressed in the cochlea and endolymphatic sac (PubMed:9916796)

Background

Non-catalytic subunit of the peripheral V1 complex of vacuolar ATPase. V-ATPase is responsible for acidifying a variety of intracellular compartments in eukaryotic cells.

References

Suedhof T.C.,et al.Proc. Natl. Acad. Sci. U.S.A. 86:6067-6071(1989).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Suzuki Y.,et al.Submitted (APR-2005) to the EMBL/GenBank/DDBJ databases.
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Pushkin A.,et al.Am. J. Physiol. 284:C667-C673(2003).