Product Name: V-ATPase B1 Rabbit Polyclonal Antibody
Catalog #: APRab19733

Summary

Production Name	V-ATPase B1 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ELISA
Reactivity	Human,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ATP6V1B1
Alternative Names	ATP6V1B1; ATP6B1; VATB; VPP3; 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
Gene ID	525.0
SwissProt ID	P15313.The antiserum was produced against synthesized peptide derived from human ATP6V1B1. AA range:381-430

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000..
Molecular Weight	60kD

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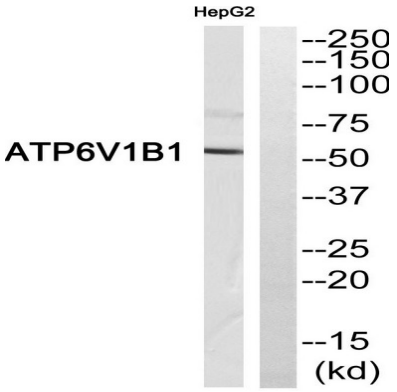
Background

This gene encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of eukaryotic intracellular organelles. V-ATPase dependent organelle 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. Additional isoforms of many of the V1 and V0 subunit proteins are encoded by multiple genes or alternatively spliced transcript variants. This encoded protein is one of two V1 domain B subunit isoforms and is found idisease:Defects in ATP6V1B1 are the cause of distal renal tubular acidosis with deafness (dRTA) [MIM:267300]. Inheritance is autosomal recessive. Patients with recessive dRTA are severely affected, presenting with either acute illness or growth failure at a young age, and bilateral sensorineural deafness. Other features include low serum K(+) due to renal potassium wasting, and elevated urinary calcium. If untreated, this acidosis may result in dissolution of bone, leading to osteomalacia and rickets. Renal deposition of calcium salts (nephrocalcinosis) and renal stone formation commonly occur.,domain:The PDZ-binding motif mediates interactions with SLC9A3R1 and SCL4A7.,function: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.,similarity:Belongs to the ATPase alpha/beta chains family.,subcellular location:Endomembrane.,subunit:V-ATPase is an heteromultimeric enzyme composed of a peripheral catalytic V1 complex (main components: subunits A, B, C, D, E, and F) attached to an integral membrane V0 proton pore complex (main component: the proteolipid protein). Forms a complex with SLC9A3R1 and SCL4A7.,tissue specificity:Expressed in the cochlea and endolymphatic sac.,

Research Area

Oxidative phosphorylation;Vibrio cholerae infection;Epithelial cell signaling in Helicobacter pylori infection;

Image Data



Western blot analysis of ATP6V1B1 Antibody. The lane on the right is blocked with the ATP6V1B1 peptide.

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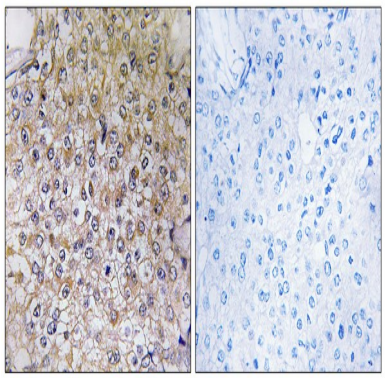
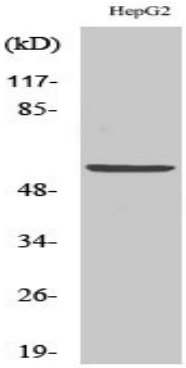


Immunohistochemistryt analysis of paraffin-embedded human breast carcinoma, using ATP6V1B1 Antibody. The lane on the right is blocked with the ATP6V1B1 peptide.



Western Blot analysis of various cells using V-ATPase B1 Polyclonal Antibody. Secondary antibody was diluted at 1:20000

Note

For research use only.