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ATP6V0B Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10432c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q99437
Other Accession	Q2TA24, NP_001034546.1, NP_004038.1
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30059
Calculated MW	21406
Antigen Region	104-131

Additional Information

Gene ID	533
Other Names	V-type proton ATPase 21 kDa proteolipid subunit, V-ATPase 21 kDa proteolipid subunit, Vacuolar proton pump 21 kDa proteolipid subunit, hATPL, ATP6V0B, ATP6F
Target/Specificity	This ATP6V0B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 104-131 amino acids from the Central region of human ATP6V0B.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
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	ATP6V0B Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ATP6V0B
Synonyms	ATP6F

Function	Proton-conducting pore forming 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 (PubMed:33065002). 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).
Cellular Location	Cytoplasmic vesicle, clathrin-coated vesicle membrane {ECO:0000250|UniProtKB:Q2TA24}; Multi-pass membrane protein
Tissue Location	Ubiquitous.

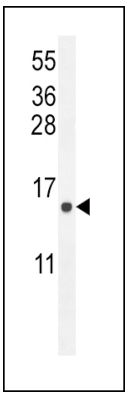
Background

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 part of the transmembrane V0 domain and is the human counterpart of yeast VMA16. Two alternatively spliced transcript variants that encode different proteins have been found for this gene.

References

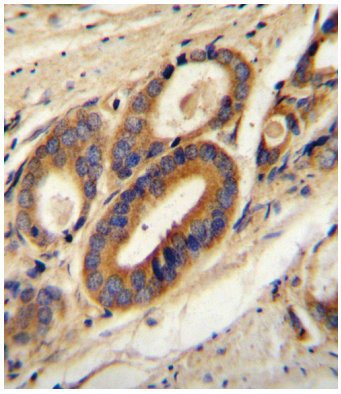
Lu, M., et al. J. Biol. Chem. 282(34):24495-24503(2007)
Rojas, J.D., et al. Biochem. Biophys. Res. Commun. 320(4):1123-1132(2004)
Morel, N. Biol. Cell 95(7):453-457(2003)
Smith, A.N., et al. Mol. Cell 12(4):801-803(2003)
Izumi, H., et al. Biochim. Biophys. Acta 1628(2):97-104(2003)

Images



ATP6V0B Antibody (Center) (Cat. #AP10432c) western blot analysis in U251 cell line lysates (35ug/lane).This demonstrates the EKI2 antibody detected the EKI2 protein (arrow).

ATP6V0B Antibody (Center) (Cat. #AP10432c) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ATP6V0B Antibody (Center) for immunohistochemistry.



Clinical relevance has not been evaluated.