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ATP6AP2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP19956c

Specification

ATP6AP2 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	O75787
Other Accession	NP_005756.2
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**39008**
Antigen Region	**205-234**

ATP6AP2 Antibody (Center) - Additional Information

Gene ID 10159

Other Names
Renin receptor, ATPase H(+)-transporting lysosomal accessory protein 2, ATPase H(+)-transporting lysosomal-interacting protein 2, ER-localized type I transmembrane adaptor, Embryonic liver differentiation factor 10, N14F, Renin/prorenin receptor, Vacuolar ATP synthase membrane sector-associated protein M8-9, ATP6M8-9, V-ATPase M89 subunit, ATP6AP2, ATP6IP2, CAPER, ELDF10

Target/Specificity
This ATP6AP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 205-234 amino acids from the Central region of human ATP6AP2.

Dilution
WB~~1:1000

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
ATP6AP2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ATP6AP2 Antibody (Center) - Protein Information

Name ATP6AP2 (HGNC:18305)

Function Multifunctional protein which functions as a renin, prorenin cellular receptor and is involved in the assembly of the lysosomal proton-transporting V-type ATPase (V-ATPase) and the acidification of the endo-lysosomal system (PubMed:12045255, PubMed:29127204, PubMed:30374053, PubMed:32276428). May mediate renin-dependent cellular responses by activating ERK1 and ERK2 (PubMed:12045255). By increasing the catalytic efficiency of renin in AGT/angiotensinogen conversion to angiotensin I, may also play a role in the renin-angiotensin system (RAS) (PubMed:12045255). Through its function in V-type ATPase (v- ATPase) assembly and acidification of the lysosome it regulates protein degradation and may control different signaling pathways important for proper brain development, synapse morphology and synaptic transmission (By similarity).

Cellular Location
Endoplasmic reticulum membrane; Single-pass type I membrane protein. Lysosome membrane; Single- pass type I membrane protein. Cytoplasmic vesicle, autophagosome membrane {ECO:0000250|UniProtKB:Q9CYN9}; Single-pass type I membrane protein. Cell projection, dendritic spine membrane {ECO:0000250|UniProtKB:Q9CYN9}; Single-pass type I membrane protein. Cell projection, axon {ECO:0000250|UniProtKB:Q9CYN9}. Endosome membrane {ECO:0000250|UniProtKB:Q9CYN9}; Single-pass type I membrane protein. Cytoplasmic vesicle, clathrin-coated vesicle membrane {ECO:0000250|UniProtKB:Q6AXS4}; Single-pass type I membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250|UniProtKB:Q6AXS4}; Single-pass type I membrane protein

Tissue Location
Expressed in brain, heart, placenta, liver, kidney and pancreas. Barely detectable in lung and skeletal muscles. In the kidney cortex it is restricted to the mesangium of glomeruli. In the coronary and kidney artery it is expressed in the subendothelium, associated to smooth muscles where it colocalizes with REN. Expressed in vascular structures and by syncytiotrophoblast cells in the mature fetal placenta.

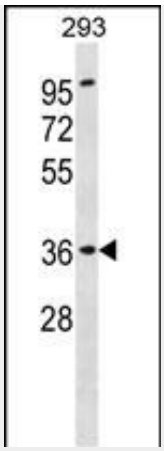
ATP6AP2 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ATP6AP2 Antibody (Center) - Images

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ATP6AP2 Antibody (Center) (Cat. #AP19956c) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the ATP6AP2 antibody detected the ATP6AP2 protein (arrow).

ATP6AP2 Antibody (Center) - Background

This gene encodes a protein that is associated with adenosine triphosphatases (ATPases). Proton-translocating ATPases have fundamental roles in energy conservation, secondary active transport, acidification of intracellular compartments, and cellular pH homeostasis. There are three classes of ATPases- F, P, and V. The vacuolar (V-type) ATPases have a transmembrane proton-conducting sector and an extramembrane catalytic sector. The encoded protein has been found associated with the transmembrane sector of the V-type ATPases.

ATP6AP2 Antibody (Center) - References

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Cruciat, C.M., et al. Science 327(5964):459-463(2010)
Nabi, A.H., et al. Biochim. Biophys. Acta 1794(12):1838-1847(2009)
Alcazar, O., et al. Exp. Eye Res. 89(5):638-647(2009)
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