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ATP6AP1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51879

Product Information

Application	WB
Primary Accession	Q15904
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52026

Additional Information

Gene ID	537
Other Names	V-type proton ATPase subunit S1, V-ATPase subunit S1, Protein XAP-3, V-ATPase Ac45 subunit, V-ATPase S1 accessory protein, Vacuolar proton pump subunit S1, ATP6AP1, ATP6IP1, ATP6S1, VATPS1, XAP3
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	ATP6AP1
Synonyms	ATP6IP1, ATP6S1, VATPS1, XAP3
Function	Accessory subunit of the proton-transporting vacuolar (V)- ATPase protein pump, which is required for luminal acidification of secretory vesicles (PubMed:33065002). Guides the V-type ATPase into specialized subcellular compartments, such as neuroendocrine regulated secretory vesicles or the ruffled border of the osteoclast, thereby regulating its activity (PubMed:27231034). Involved in membrane trafficking and Ca(2+)-dependent membrane fusion (PubMed:27231034). May play a role in the assembly of the V-type ATPase complex (Probable). In aerobic conditions, involved in intracellular iron homeostasis, thus triggering the activity of Fe(2+) prolyl hydroxylase (PHD) enzymes, and leading to HIF1A hydroxylation and subsequent proteasomal degradation (PubMed:28296633). In islets of Langerhans cells, may regulate the acidification of dense-core secretory granules (By similarity).
Cellular Location	Endoplasmic reticulum membrane; Single-pass type I membrane protein.

	Endoplasmic reticulum-Golgi intermediate compartment membrane. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane {ECO:0000250|UniProtKB:O54715}; Single-pass type I membrane protein. Cytoplasmic vesicle, clathrin-coated vesicle membrane {ECO:0000250|UniProtKB:O54715}; Single-pass type I membrane protein. Note=Not detected in trans-Golgi network.
Tissue Location	widely expressed, with highest levels in brain and lowest in liver and duodenum.

Background

Vacuolar ATPase is responsible for acidifying a variety of intracellular compartments in eukaryotic cells (By similarity).

References

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Ota T.,et al.Nat. Genet. 36:40-45(2004).
Ross M.T.,et al.Nature 434:325-337(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Yokoi H.,et al.Genomics 20:404-411(1994).