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Anti-ATP6AP1 Antibody

Catalog # AP51879

Product Information

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

Additional Information

Gene ID	537
Other Names	ATP6IP1; ATP6S1; VATPS1; XAP3; 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
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human ATP6AP1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

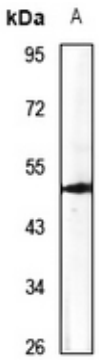
Name	ATP6AP1
Synonyms	ATP6IP1, ATP6S1, VATPS1, XAP3
Function	Accessory subunit of the V0 complex of vacuolar(H+)-ATPase (V-ATPase), a multisubunit enzyme composed of a peripheral complex (V1) that hydrolyzes ATP and a membrane integral complex (V0) that translocates protons (PubMed:28296633, PubMed:33065002). 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 promotes acidification of the extracellular environment (PubMed:28296633, PubMed:33065002). The V-ATPase complex also acts as an activator for mTORC1 on lysosomal membrane by promoting the guanine nucleotide exchange factor (GEF) of the Ragulator complex, thereby enabling mTORC1 recruitment (PubMed:22053050). 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.

References

Chen E.Y.,et al.Hum. Mol. Genet. 5:659-668(1996).
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).

Images



Western blot analysis of ATP6AP1 expression in BV2 (A) whole cell lysates. (Predicted band size: 52 kD; Observed band size: 52 kD)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.