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Anti-ATP6V0A2 Antibody

Catalog # AP53844

Product Information

Application	WB, IF/IC
Primary Accession	Q9Y487
Reactivity	Human, Mouse, Rat, Mk
Host	Rabbit
Clonality	Polyclonal
Calculated MW	98082

Additional Information

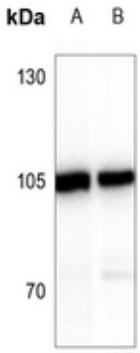
Gene ID	23545
Other Names	V-type proton ATPase 116 kDa subunit a isoform 2; V-ATPase 116 kDa isoform a2; Lysosomal H(+)-transporting ATPase V0 subunit a2; TJ6; Vacuolar proton translocating ATPase 116 kDa subunit a isoform 2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human ATP6V0A2. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IF/IC~~N/A
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

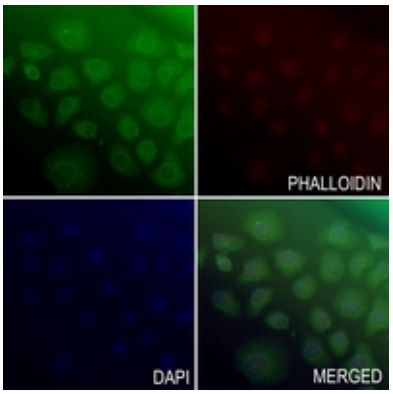
Name	ATP6V0A2
Function	Subunit of the V0 complex of vacuolar(H+)-ATPase (V-ATPase), a multisubunit enzyme composed of a peripheral complex (V1) that hydrolyzes ATP and a membrane integral complex (V0) that translocates protons (By similarity). V-ATPase is responsible for acidifying and maintaining the 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). Essential component of the endosomal pH-sensing machinery (PubMed:16415858). May play a role in maintaining the Golgi functions, such as glycosylation maturation, by controlling the Golgi pH (PubMed:18157129). 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).

Cellular Location	Cell membrane; Multi-pass membrane protein. Endosome membrane. Note=In kidney proximal tubules, also detected in subapical vesicles.

Images



Western blot analysis of ATP6V0A2 expression in mouse brain (A), rat brain (B) whole cell lysates. (Predicted band size: 98 kD; Observed band size: 105 kD)



Immunofluorescent analysis of ATP6V0A2 staining in SGC7901 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).