

ATP6V0A2 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP5110c**Specification**

ATP6V0A2 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q9Y487](#)**ATP6V0A2 Antibody (Center) Blocking Peptide - 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, ATP6V0A2

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ATP6V0A2 Antibody (Center) Blocking Peptide - 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.

ATP6V0A2 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ATP6V0A2 Antibody (Center) Blocking Peptide - Images

ATP6V0A2 Antibody (Center) Blocking Peptide - Background

ATP6V0A2 is a subunit of the vacuolar ATPase (v-ATPase), an heteromultimeric enzyme that is present in intracellular vesicles and in the plasma membrane of specialized cells, and which is essential for the acidification of diverse cellular components. V-ATPase is comprised of a membrane peripheral V(1) domain for ATP hydrolysis, and an integral membrane V(0) domain for proton translocation. The subunit encoded by this gene is a component of the V(0) domain.

ATP6V0A2 Antibody (Center) Blocking Peptide - References

Morava, E., et al. Eur. J. Hum. Genet. 17(9):1099-1110(2009)Guillard, M., et al. Biochim. Biophys. Acta 1792(9):903-914(2009)Huchtagowder, V., et al. Hum. Mol. Genet. 18(12):2149-2165(2009)