10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ATP6V1D Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP4791b

Specification

ATP6V1D Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9Y5K8

ATP6V1D Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 51382

Other Names
V-type proton ATPase subunit D, V-ATPase subunit D, V-ATPase 28 kDa accessory protein, Vacuolar proton pump subunit D, ATP6V1D, ATP6M, VATD

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.

ATP6V1D Antibody (C-term) Blocking Peptide - Protein Information

Name ATP6V1D

Synonyms ATP6M, VATD

Function
Subunit of the V1 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: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 is responsible for acidifying the extracellular environment (By similarity). May play a role in cilium biogenesis through regulation of the transport and the localization of proteins to the cilium (PubMed:21844891).

Cellular Location
Membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic vesicle, clathrin- coated vesicle membrane {ECO:0000250|UniProtKB:P39942}; Peripheral membrane protein. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cell projection, cilium. Note=Localizes to centrosome and the base of the cilium.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ATP6V1D Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

ATP6V1D Antibody (C-term) Blocking Peptide - Images

ATP6V1D Antibody (C-term) Blocking Peptide - Background

ATP6V1D encodes a component of vacuolar ATPase (V-ATPase), a multisubunit enzyme that mediates acidification of eukaryotic intracellular organelles. V-ATPase dependent organelle acidification is necessary for such intracellular processes as protein sorting, zymogen activation, receptor-mediated endocytosis, and synaptic vesicle proton gradient generation. V-ATPase is composed of a cytosolic V1 domain and a transmembrane V0 domain. The V1 domain consists of three A and three B subunits, two G subunits plus the C, D, E, F, and H subunits. The V1 domain contains the ATP catalytic site. The V0 domain consists of five different subunits: a, c, c', c', and d.

ATP6V1D Antibody (C-term) Blocking Peptide - References

Smith, A.N., et al. J. Bioenerg. Biomembr. 40(4):371-380(2008)Morel, N. Biol. Cell 95(7):453-457(2003)Smith, A.N., et al. Mol. Cell 12(4):801-803(2003)Kawasaki-Nishi, S., et al. FEBS Lett. 545(1):76-85(2003)