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

ATP6V1G1 Antibody(C-term) Blocking peptide

Synthetic peptide
Catalog # BP19555b

Specification

ATP6V1G1 Antibody(C-term) Blocking peptide - Product Information

Primary Accession O75348

ATP6V1G1 Antibody(C-term) Blocking peptide - Additional Information

Gene ID 9550

Other Names
V-type proton ATPase subunit G 1, V-ATPase subunit G 1, V-ATPase 13 kDa subunit 1, Vacuolar proton pump subunit G 1, Vacuolar proton pump subunit M16, ATP6V1G1, ATP6G, ATP6G1, ATP6J

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.

ATP6V1G1 Antibody(C-term) Blocking peptide - Protein Information

Name ATP6V1G1

Synonyms ATP6G, ATP6G1, ATP6J

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:32001091, 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 (PubMed:32001091). 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
Apical cell membrane

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

Tissue Location
Kidney; localizes to early distal nephron, encompassing thick ascending limbs and distal convoluted tubules (at protein level) (PubMed:29993276). Ubiquitous (PubMed:12384298)

ATP6V1G1 Antibody(C-term) Blocking peptide - Protocols

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

- Blocking Peptides

ATP6V1G1 Antibody(C-term) Blocking peptide - Images

ATP6V1G1 Antibody(C-term) Blocking peptide - Background

This gene encodes a component of vacuolar ATPase(V-ATPase), a multisubunit enzyme that mediates acidification ofeukaryotic intracellular organelles. V-ATPase dependent organelleacidification is necessary for such intracellular processes asprotein sorting, zymogen activation, receptor-mediated endocytosis,and synaptic vesicle proton gradient generation. V-ATPase iscomposed of a cytosolic V1 domain and a transmembrane V0 domain.The V1 domain consists of three A, three B, and two G subunits, aswell as a C, D, E, F, and H subunit. The V1 domain contains the ATPcatalytic site. The protein encoded by this gene is one of three V1domain G subunit proteins. Pseudogenes of this gene have beencharacterized.

ATP6V1G1 Antibody(C-term) Blocking peptide - References

Norgett, E.E., et al. J. Biol. Chem. 282(19):14421-14427(2007)Lamesch, P., et al. Genomics 89(3):307-315(2007)Stelzl, U., et al. Cell 122(6):957-968(2005)Morel, N. Biol. Cell 95(7):453-457(2003)Smith, A.N., et al. Mol. Cell 12(4):801-803(2003)