

ATP2C1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP17155b**Specification**

ATP2C1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P98194](#)**ATP2C1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 27032**Other Names**

Calcium-transporting ATPase type 2C member 1, ATPase 2C1, ATP-dependent Ca(2+) pump PMR1, ATP2C1, KIAA1347, PMR1L

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.

ATP2C1 Antibody (C-term) Blocking Peptide - Protein Information**Name** ATP2C1 {ECO:0000303|PubMed:10615129, ECO:0000312|HGNC:HGNC:13211}**Function**

ATP-driven pump that supplies the Golgi apparatus with Ca(2+) and Mn(2+) ions, both essential cofactors for processing and trafficking of newly synthesized proteins in the secretory pathway (PubMed:16192278, PubMed:30923126, PubMed:21187401, PubMed:12707275, PubMed:20439740). Within a catalytic cycle, acquires Ca(2+) or Mn(2+) ions on the cytoplasmic side of the membrane and delivers them to the luminal side. The transfer of ions across the membrane is coupled to ATP hydrolysis and is associated with a transient phosphorylation that shifts the pump conformation from inward-facing to outward-facing state (PubMed:16192278, PubMed:16332677, PubMed:30923126). Plays a primary role in the maintenance of Ca(2+) homeostasis in the trans-Golgi compartment with a functional impact on Golgi and post-Golgi protein sorting as well as a structural impact on cisternae morphology (PubMed:20439740).

target="_blank">20439740, PubMed:14632183). Responsible for loading the Golgi stores with Ca(2+) ions in keratinocytes, contributing to keratinocyte differentiation and epidermis integrity (PubMed:14632183, PubMed:10615129, PubMed:20439740). Participates in Ca(2+) and Mn(2+) ions uptake into the Golgi store of hippocampal neurons and regulates protein trafficking required for neural polarity (By similarity). May also play a role in the maintenance of Ca(2+) and Mn(2+) homeostasis and signaling in the cytosol while preventing cytotoxicity (PubMed:21187401).

Cellular Location

Golgi apparatus, trans-Golgi network membrane; Multi-pass membrane protein. Golgi apparatus, Golgi stack membrane; Multi-pass membrane protein. Note=During neuron differentiation, shifts from juxtanuclear Golgi position to multiple Golgi structures distributed over the neural soma with a predominance in the apical dendritic trunk {ECO:0000250|UniProtKB:Q80XR2}

Tissue Location

Found in most tissues except colon, thymus, spleen and leukocytes (PubMed:15831496). Expressed in keratinocytes (at protein level) (PubMed:15831496, PubMed:14632183)

ATP2C1 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ATP2C1 Antibody (C-term) Blocking Peptide - Images

ATP2C1 Antibody (C-term) Blocking Peptide - Background

The protein encoded by this gene belongs to the family of P-type cation transport ATPases. This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the transport of the calcium. Defects in this gene cause Hailey-Hailey disease, an autosomal dominant disorder. Alternatively spliced transcript variants encoding different isoforms have been identified.

ATP2C1 Antibody (C-term) Blocking Peptide - References

Baron, S., et al. Biochim. Biophys. Acta 1798(8):1512-1521(2010) Davila, S., et al. Genes Immun. 11(3):232-238(2010) Tian, H., et al. J. Dermatol. Sci. 58(1):80-82(2010) Ding, Y.G., et al. Clin. Exp. Dermatol. 34 (8), E968-E971 (2009) :Nechama, M., et al. BMC Cell Biol. 10, 70 (2009) :