

ATP2B4 Antibody (C-term) Blocking Peptide Synthetic peptide Catalog # BP14531b

Specification

ATP2B4 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>P23634</u>

ATP2B4 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 493

Other Names

Plasma membrane calcium-transporting ATPase 4, PMCA4, Matrix-remodeling-associated protein 1, Plasma membrane calcium ATPase isoform 4, Plasma membrane calcium pump isoform 4, ATP2B4, ATP2B2, MXRA1

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.

ATP2B4 Antibody (C-term) Blocking Peptide - Protein Information

Name ATP2B4 (<u>HGNC:817</u>)

Synonyms ATP2B2, MXRA1

Function

Calcium/calmodulin-regulated and magnesium-dependent enzyme that catalyzes the hydrolysis of ATP coupled with the transport of calcium out of the cell (PubMed:8530416). By regulating sperm cell calcium homeostasis, may play a role in sperm motility (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Cell projection, cilium, flagellum membrane {ECO:0000250|UniProtKB:Q6Q477}; Multi-pass membrane protein

Tissue Location

Isoform XB is the most abundant isoform and is expressed ubiquitously. Isoforms containing segment Z have only been detected in heart, while isoforms containing segment a have been found in heart, stomach and brain cortex.



ATP2B4 Antibody (C-term) Blocking Peptide - Protocols

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

<u>Blocking Peptides</u>

ATP2B4 Antibody (C-term) Blocking Peptide - Images

ATP2B4 Antibody (C-term) Blocking Peptide - Background

The protein encoded by this gene belongs to the family ofP-type primary ion transport ATPases characterized by the formation an aspartyl phosphate intermediate during the reaction cycle. These enzymes remove bivalent calcium ions from eukaryotic cellsagainst very large concentration gradients and play a critical rolein intracellular calcium homeostasis. The mammalian plasma membranecalcium ATPase isoforms are encoded by at least four separate genesand the diversity of these enzymes is further increased by alternative splicing of transcripts. The expression of differentisoforms and splice variants is regulated in a developmental, tissue- and cell type-specific manner, suggesting that these pumpsare functionally adapted to the physiological needs of particularcells and tissues. This gene encodes the plasma membrane calciumATPase isoform 4. Alternatively spliced transcript variantsencoding different isoforms have been identified. [provided byRefSeq].

ATP2B4 Antibody (C-term) Blocking Peptide - References

Holton, M., et al. Cardiovasc. Res. 87(3):440-448(2010)Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :Juranic, N., et al. J. Biol. Chem. 285(6):4015-4024(2010)Ehret, G.B., et al. Eur. J. Hum. Genet. 17(12):1650-1657(2009)Aung, C.S., et al. Carcinogenesis 30(11):1962-1969(2009)