

ATP4B Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP5181a

Specification

ATP4B Antibody (N-term) Blocking Peptide - Product Information

Primary Accession [P51164](#)

ATP4B Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 496

Other Names

Potassium-transporting ATPase subunit beta, Gastric H(+)/K(+) ATPase subunit beta, Proton pump beta chain, ATP4B

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.

ATP4B Antibody (N-term) Blocking Peptide - Protein Information

Name ATP4B ([HGNC:820](#))

Function

The beta subunit of the gastric H(+)/K(+) ATPase pump which transports H(+) ions in exchange for K(+) ions across the apical membrane of parietal cells. Plays a structural and regulatory role in the assembly and membrane targeting of a functionally active pump (By similarity). Within a transport cycle, the transfer of a H(+) ion across the membrane is coupled to ATP hydrolysis and is associated with a transient phosphorylation of the alpha subunit that shifts the pump conformation from inward-facing (E1) to outward-facing state (E2). Interacts with the phosphorylation domain of the alpha subunit and functions as a ratchet, stabilizing the lumenal-open E2 conformation and preventing the reverse reaction of the transport cycle (By similarity).

Cellular Location

Apical cell membrane {ECO:0000250|UniProtKB:P20648}; Single-pass type II membrane protein.
Cell membrane {ECO:0000250|UniProtKB:P18597}; Single-pass type II membrane protein.
Note=Localized in the apical canalicular membrane of parietal cells
{ECO:0000250|UniProtKB:P20648}

ATP4B Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ATP4B Antibody (N-term) Blocking Peptide - Images

ATP4B Antibody (N-term) Blocking Peptide - Background

ATP4B belongs to a family of P-type cation-transporting ATPases. The gastric H⁺, K⁺-ATPase is a heterodimer consisting of a high molecular weight catalytic alpha subunit and a smaller but heavily glycosylated beta subunit. This enzyme is a proton pump that catalyzes the hydrolysis of ATP coupled with the exchange of H⁽⁺⁾ and K⁽⁺⁾ ions across the plasma membrane. It is also responsible for gastric acid secretion. This gene encodes the beta subunit of the gastric H⁺, K⁺-ATPase.

ATP4B Antibody (N-term) Blocking Peptide - References

Bab-Dinitz, E., et al. Biochemistry 48(36):8684-8691(2009)Knouff, C.W., et al. Pharmacogenet. Genomics 18(12):1051-1057(2008)Oh, J.H., et al. Mamm. Genome 16(12):942-954(2005)