

**ATP4B Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP5181a**

**Specification**

---

**ATP4B Antibody (N-term) - Product Information**

Application	FC, WB,E
Primary Accession	<a href="#">P51164</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	33367
Antigen Region	52-78

**ATP4B Antibody (N-term) - Additional Information**

**Gene ID** 496

**Other Names**

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

**Target/Specificity**

This ATP4B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 52-78 amino acids from the N-terminal region of human ATP4B.

**Dilution**

FC~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

ATP4B Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**ATP4B Antibody (N-term) - 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 luminal-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

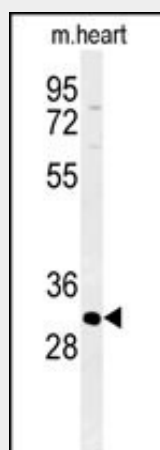
{ECO:0000250|UniProtKB:P20648}

#### ATP4B Antibody (N-term) - Protocols

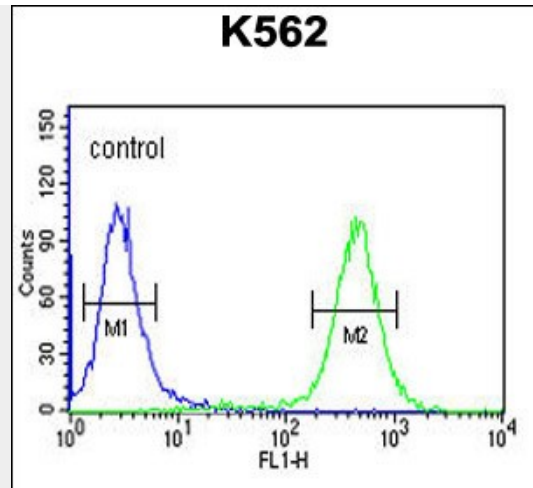
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### ATP4B Antibody (N-term) - Images



Western blot analysis of ATP4B Antibody (N-term) (Cat. #AP5181a) in mouse heart tissue lysates (35ug/lane). ATP4B (arrow) was detected using the purified Pab.



ATP4B Antibody (N-term) (Cat. #AP5181a) flow cytometric analysis of K562 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

#### **ATP4B Antibody (N-term) - Background**

ATP4B belongs to a family of P-type cation-transporting ATPases. The gastric H<sup>+</sup>, K<sup>+</sup>-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<sup>(+)</sup> and K<sup>(+)</sup> ions across the plasma membrane. It is also responsible for gastric acid secretion. This gene encodes the beta subunit of the gastric H<sup>+</sup>, K<sup>+</sup>-ATPase.

#### **ATP4B Antibody (N-term) - 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)