

**Anti-ATP4B Picoband Antibody**  
**Catalog # ABO10342****Specification**

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**Anti-ATP4B Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P51164</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Potassium-transporting ATPase subunit beta(ATP4B) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-ATP4B Picoband Antibody - Additional Information**

**Gene ID** 496

**Other Names**

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

**Calculated MW**

33367 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**Subcellular Localization**

Cell membrane; Single-pass type II membrane protein.

**Protein Name**

Potassium-transporting ATPase subunit beta

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human ATP4B (1-28aa MAALQEKKTCGQRMEEFQRYCWNPD TGQ), different from the related mouse and rat sequences by five amino acids.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-ATP4B Picoband Antibody - 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).

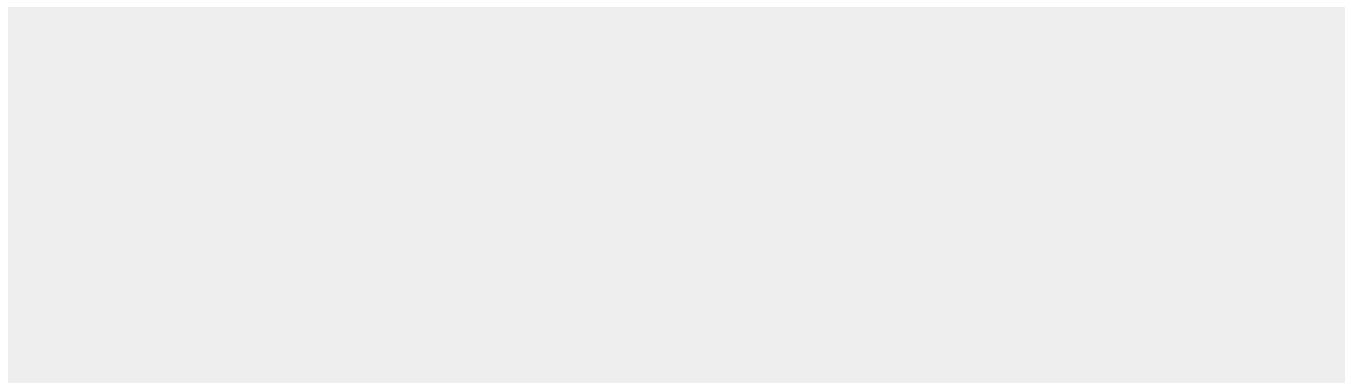
**Cellular Location**

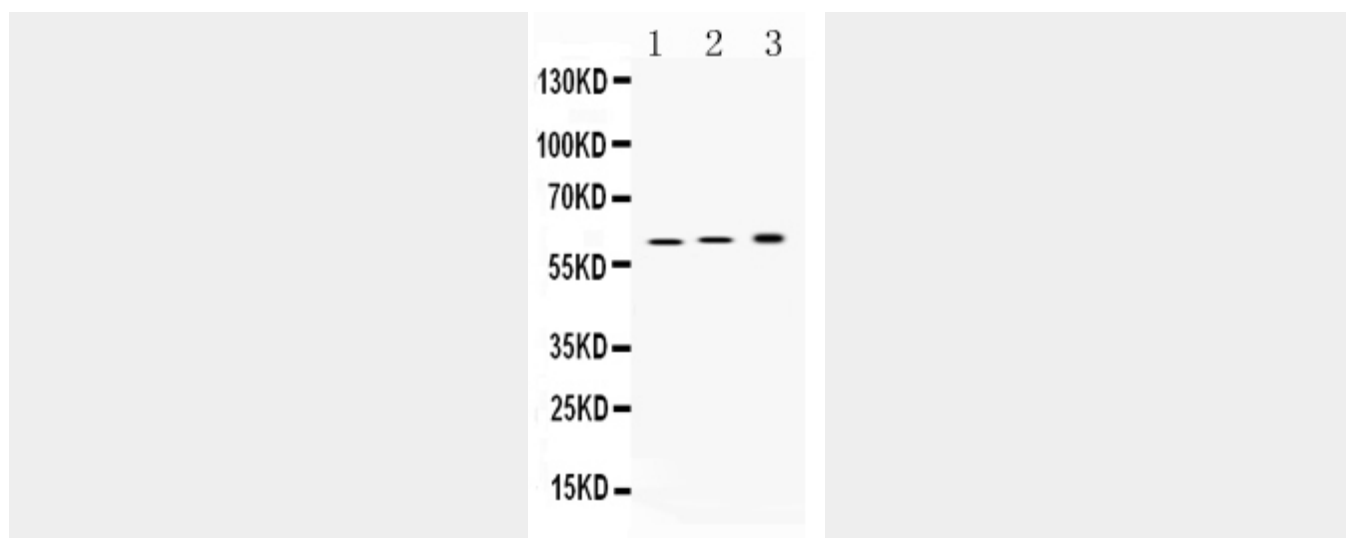
Apical cell membrane {ECO:0000250|UniProtKB:P20648}; Single-pass type II membrane protein.  
Cell membrane {ECO:0000250|UniProtKB:P18597}; Single-pass type II membrane protein.  
Note=Localized in the apical canalicular membrane of parietal cells  
{ECO:0000250|UniProtKB:P20648}

**Anti-ATP4B Picoband Antibody - 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](#)

**Anti-ATP4B Picoband Antibody - Images**



Western blot analysis of ATP4B expression in rat stomach extract (lane 1), mouse stomach extract (lane 2) and SGC7901 whole cell lysates (lane 3). ATP4B at 60KD was detected using rabbit anti- ATP4B Antigen Affinity purified polyclonal antibody (Catalog # ABO10342) at 0.5  $\mu$ g/mL. The blot was developed using chemiluminescence (ECL) method .

#### **Anti-ATP4B Picoband Antibody - Background**

This gene encodes the beta subunit of the gastric H<sup>+</sup>, K<sup>+</sup>-ATPase. The protein encoded by this gene 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(+) and K(+) ions across the plasma membrane. It is also responsible for gastric acid secretion.