

Anti-ATP4B Picoband Antibody

Catalog # ABO10342

Product Information

Application	WB
Primary Accession	P51164
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.

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
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat
Subcellular Localization	Cell membrane; Single-pass type II membrane protein.
Source	Eukaryota
Protein Name	Potassium-transporting ATPase subunit beta
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
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.

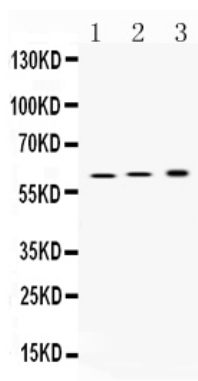
Protein Information

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}

Background

This gene encodes the beta subunit of the gastric H⁺, K⁺-ATPase. The protein encoded by this gene 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.

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 µg/mL. The blot was developed using chemiluminescence (ECL) method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.