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ATP1B3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12745b

Product Information

Application	WB, IHC-P, E
Primary Accession	P54709
Other Accession	NP_001670.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32424
Calculated MW	31513
Antigen Region	241-270

Additional Information

Gene ID	483
Other Names	Sodium/potassium-transporting ATPase subunit beta-3, Sodium/potassium-dependent ATPase subunit beta-3, ATPB-3, CD298, ATP1B3
Target/Specificity	This ATP1B3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 241-270 amino acids from the C-terminal region of human ATP1B3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	ATP1B3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ATP1B3
Function	This is the non-catalytic component of the active enzyme, which catalyzes the hydrolysis of ATP coupled with the exchange of Na(+) and K(+) ions across the plasma membrane. The exact function of the beta-3 subunit is not known.

Cellular Location	Apical cell membrane {ECO:0000250|UniProtKB:Q63377}; Single-pass type II membrane protein. Basolateral cell membrane {ECO:0000250|UniProtKB:Q63377}; Single-pass type II membrane protein. Melanosome Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV

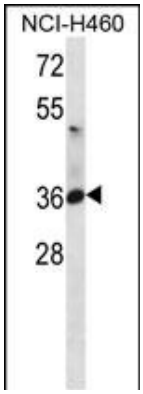
Background

The protein encoded by this gene belongs to the family of Na+/K+ and H+/K+ ATPases beta chain proteins, and to the subfamily of Na+/K+ -ATPases. Na+/K+ -ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions across the plasma membrane. These gradients are essential for osmoregulation, for sodium-coupled transport of a variety of organic and inorganic molecules, and for electrical excitability of nerve and muscle. This enzyme is composed of two subunits, a large catalytic subunit (alpha) and a smaller glycoprotein subunit (beta). The beta subunit regulates, through assembly of alpha/beta heterodimers, the number of sodium pumps transported to the plasma membrane. The glycoprotein subunit of Na+/K+ -ATPase is encoded by multiple genes. This gene encodes a beta 3 subunit. This gene encodes a beta 3 subunit. A pseudogene exists for this gene, and it is located on chromosome 2. [provided by RefSeq].

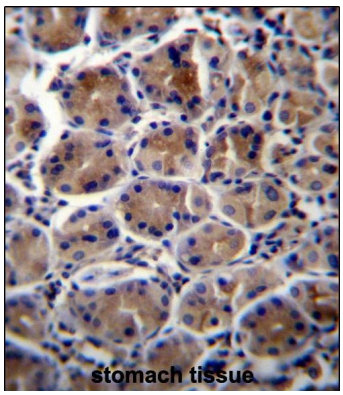
References

Floyd, R.V., et al. Reprod Sci 17(4):366-376(2010)
Aughey, R.J., et al. J. Appl. Physiol. 103(1):39-47(2007)
Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :
Chiampanichayakul, S., et al. Tissue Antigens 68(6):509-517(2006)
Chi, A., et al. J. Proteome Res. 5(11):3135-3144(2006)

Images



ATP1B3 Antibody (C-term) (Cat. #AP12745b) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the ATP1B3 antibody detected the ATP1B3 protein (arrow).



ATP1B3 Antibody (C-term) (Cat. #AP12745b)immunohistochemistry analysis in formalin fixed and paraffin embedded human stomach tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of ATP1B3 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Mapping of the N-linked glycoproteome of human spermatozoa.