Product Name: ATP7B Rabbit Polyclonal Antibody
Catalog #: APRab07345

Summary

Production Name	ATP7B Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	IHC,IF,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ATP7B
Alternative Names	ATP7B; PWD; WC1; WND; Copper-transporting ATPase 2; Copper pump 2; Wilson disease-associated protein
Gene ID	540.0
SwissProt ID	P35670.The antiserum was produced against synthesized peptide derived from human ATP7B. AA range:161-210

Application

Dilution Ratio	IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:5000. Not yet tested in other applications.
Molecular Weight	

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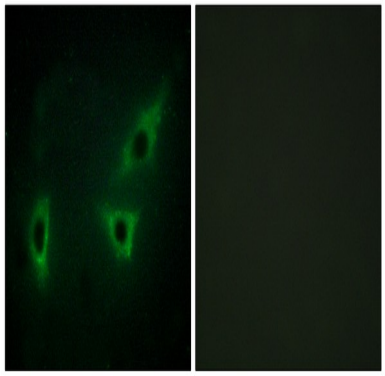
Background

This gene is a member of the P-type cation transport ATPase family and encodes a protein with several membrane-spanning domains, an ATPase consensus sequence, a hinge domain, a phosphorylation site, and at least 2 putative copper-binding sites. This protein functions as a monomer, exporting copper out of the cells, such as the efflux of hepatic copper into the bile. Alternate transcriptional splice variants, encoding different isoforms with distinct cellular localizations, have been characterized. Mutations in this gene have been associated with Wilson disease (WD). [provided by RefSeq, Jul 2008],catalytic activity:ATP + H(2)O + Cu(2+)(In) = ADP + phosphate + Cu(2+)(Out).,disease:Defects in ATP7B are the cause of Wilson disease (WD) [MIM:277900]. WD is an autosomal recessive disorder of copper metabolism in which copper cannot be incorporated into ceruloplasmin in liver, and cannot be excreted from the liver into the bile. Copper accumulates in the liver and subsequently in the brain and kidney. The disease is characterized by neurologic manifestations and signs of cirrhosis.,function:Involved in the export of copper out of the cells, such as the efflux of hepatic copper into the bile.,online information:Wilson's disease website,PTM:Isoform 1 may be proteolytically cleaved at the N-terminus to produce the WND/140 kDa form.,similarity:Belongs to the cation transport ATPase (P-type) family.,similarity:Belongs to the cation transport ATPase (P-type) family. Type IB subfamily.,similarity:Contains 6 HMA domains.,subcellular location:Predominantly found in the trans-Golgi network (TGN). Not redistributed to the plasma membrane in response to elevated copper levels.,subunit:Monomer. Interacts with COMMD1/MURR1.,tissue specificity:Most abundant in liver and kidney and also found in brain. Isoform 2 is expressed in brain but not in liver. The cleaved form WND/140 kDa is found in liver cell lines and other tissues.,

Research Area

Image Data



Immunofluorescence analysis of HeLa cells, using ATP7B Antibody. The picture on the right is blocked with the synthesized peptide.

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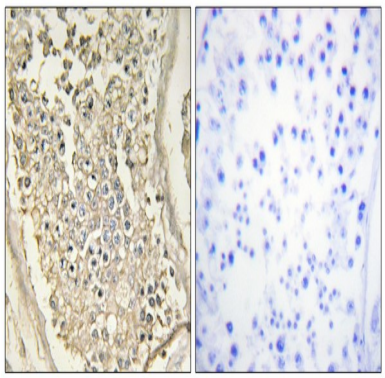

Immunohistochemistry analysis of paraffin-embedded human testis tissue, using ATP7B Antibody. The picture on the right is blocked with the synthesized peptide.

Note

For research use only.