


Anti-ATP7b antibody ab133731

[1 References](#) [2 Images](#)

Overview

Product name	Anti-ATP7b antibody
Description	Rabbit polyclonal to ATP7b
Host species	Rabbit
Tested applications	Suitable for: IHC-P, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide from the N-Terminus of Human ATP7b.
Positive control	Human lung (respiratory epithelium) tissue or HeLa cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 0.88% Sodium chloride, 50% Glycerol (glycerin, glycerine), 48% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The **Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab133731 in the following tested applications.

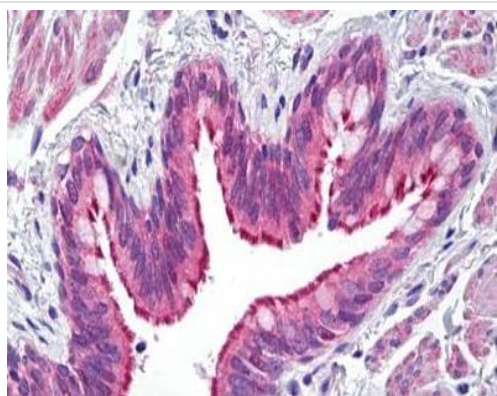
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 10 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/500.

Target

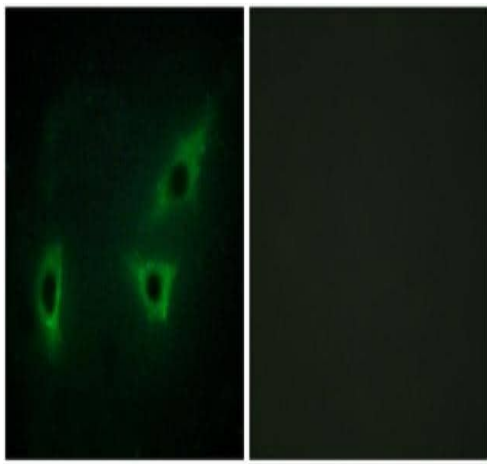
Function	Involved in the export of copper out of the cells, such as the efflux of hepatic copper into the bile.
Tissue specificity	Most abundant in liver and kidney and also found in brain. Isoform 2 is expressed in brain but not in liver. The cleaved form WND/140 kDa is found in liver cell lines and other tissues.
Involvement in 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.
Sequence similarities	Belongs to the cation transport ATPase (P-type) (TC 3.A.3) family. Type IB subfamily. Contains 6 HMA domains.
Post-translational modifications	Isoform 1 may be proteolytically cleaved at the N-terminus to produce the WND/140 kDa form.
Cellular localization	Cytoplasm; Mitochondrion and Golgi apparatus > trans-Golgi network membrane. Predominantly found in the trans-Golgi network (TGN). Not redistributed to the plasma membrane in response to elevated copper levels.

Images



Immunohistochemical analysis of formalin-fixed, paraffin embedded Human lung (respiratory epithelium) tissue labelling ATP7b with ab133731 at 10 µg/ml followed by biotinylated goat anti-rabbit IgG secondary antibody, alkaline phosphatase-streptavidin and chromogen.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATP7b antibody (ab133731)



Immunofluorescence analysis of HeLa cells, labelling ATP7b with ab133731 at a 1/100 dilution (left image), or immunizing peptide (right image).

Immunocytochemistry/ Immunofluorescence - Anti-ATP7b antibody (ab133731)

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