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Recombinant Anti-ATP7B Rabbit mAb

Catalog # AP95270

Product Information

Application	WB, FC, IF/IC
Primary Accession	P35670
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Calculated MW	157263

Additional Information

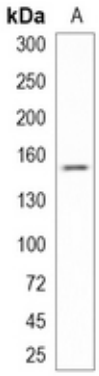
Gene ID	540
Other Names	PWD; WC1; WND; Copper-transporting ATPase 2; Copper pump 2; Wilson disease-associated protein
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human ATP7B protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) FC~~1:10~50 IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

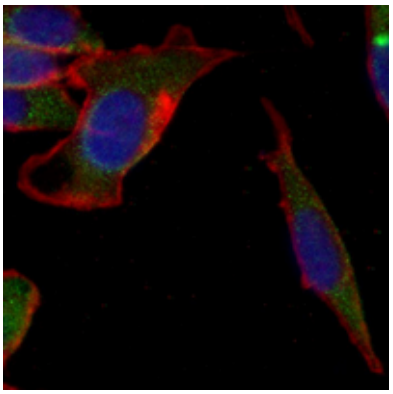
Name	ATP7B
Synonyms	PWD, WC1, WND
Function	Copper ion transmembrane transporter involved in the export of copper out of the cells. It is involved in copper homeostasis in the liver, where it ensures the efflux of copper from hepatocytes into the bile in response to copper overload.
Cellular Location	Golgi apparatus, trans-Golgi network membrane; Multi-pass membrane protein. Late endosome Note=Predominantly found in the trans-Golgi network (TGN). Localized in the trans-Golgi network under low copper conditions, redistributes to cytoplasmic vesicles when cells are exposed to elevated copper levels, and then recycles back to the trans-Golgi network when copper is removed (PubMed:10942420). [Isoform 2]: Cytoplasm
Tissue Location	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

Images



Western blot analysis of ATP7B expression in HepG2 (A) whole cell lysates. (Predicted band size: 157 kD; Observed band size: 157 kD)



Immunofluorescent analysis of ATP7B staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).