

Anti-ATP7B antibody



Description Rabbit polyclonal to ATP7B.

Model STJ91777

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, IF, IHC

Immunogen Synthesized peptide derived from human ATP7B

Immunogen Region 130-210 aa, N-terminal

Gene ID <u>540</u>

Gene Symbol ATP7B

Dilution range IHC 1:100-1:300IF 1:200-1:1000ELISA 1:5000

Specificity ATP7B Polyclonal Antibody detects endogenous levels of ATP7B protein.

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.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Copper-transporting ATPase 2 Copper pump 2 Wilson disease-associated

protein WND/140 kDa

Molecular Weight 157.334 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:8700MIM:277900

Alternative Names Copper-transporting ATPase 2 Copper pump 2 Wilson disease-associated

protein WND/140 kDa

Function Copper ion transmembrane transporter involved in the export of copper out of

the cells, such as the efflux of hepatic copper into the bile.

Sequence and Domain Family Each HMA domain can bind a copper ion, they are tightly packed and closely

interact with each other. Wild-type ATP7B can usually be loaded with an

average 5.5 copper atoms per molecule.

Cellular Localization Golgi apparatus, trans-Golgi network membrane Late endosome.

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 . Not redistributed to the plasma membrane in response to elevated copper levels. Isoform 1: Golgi apparatus membrane Isoform 2: Cytoplasm WND/140 kDa: Mitochondrion

Post-translational Isoform 1 may be proteolytically cleaved at the N-terminus to produce the

Modifications WND/140 kDa form.

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