

Rabbit ATP7B Polyclonal Antibody | anti-ATP7B antibody

ATP7B Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321012	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry

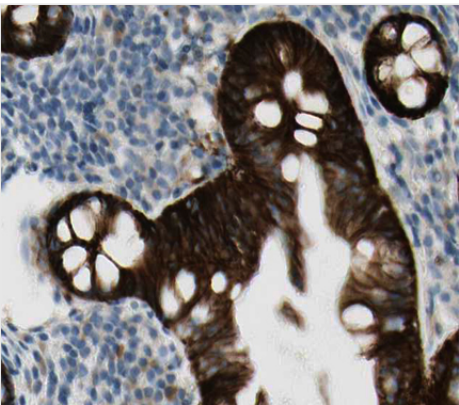
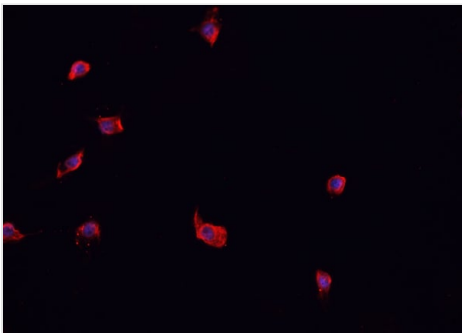
PRODUCT SYNONYMS

ATP7B; Polyclonal Antibody; ATP7B Antibody; ATP7B_HUMAN; ATPase; Cu(2+) transporting; beta polypeptide; Cu++ transporting; Copper pump 2; Copper transporting ATPase 2; PWD; Toxic milk; tx; WC1; WD; Wilson disease associated protein; Wilson disease-associated protein; WND; WND/140 kDa; anti-ATP7B antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	ATP7B antibody detects endogenous levels of ATP7B
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	1465
Applicable Applications for anti-ATP7B antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry)
Immunogen	A synthesized peptide derived from human ATP7B
Subcellular Location	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.
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.
Predicted Cross Reactivity	Bovine, Horse, Sheep, Rabbit
Similarity	Bovine (83%), Horse (83%), Sheep (83%), Rabbit (85%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)
AAA321012 staining CACO-2 cells by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) antibody, diluted at 1/600, was used as secondary antibody.

IHC (Immunohistochemistry)
AAA321012 at 1/100 staining human colon tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-ATP7B antibody

Description: The protein encoded by this gene belongs to the family of P-type cation transport ATPases. This gene encodes a polypeptide that acts as a membrane copper-transport protein. Defects in this gene are the cause of Wilson disease (WD). 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. Alternatively spliced transcript variants encoding different isoforms have been identified.

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.

Subunit Structure: Monomer. Interacts with COMMD1/MURR1 (PubMed:12968035, PubMed:17919502). Interacts with DCTN4, in a copper-dependent manner (PubMed:16554302). Interacts with ATOX1 (PubMed:18558714). Interacts (via C-terminus) with ZBTB16/PLZF (PubMed:16676348).

Post-translational Modifications: Isoform 1 may be proteolytically cleaved at the N-terminus to produce the WND/140 kDa form.

Similarity: 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. Belongs to the cation transport ATPase (P-type) (TC 3.A.3) family. Type IB subfamily.

NCBI AND UNIPROT INFORMATION

NCBI GI #	55743071
NCBI GeneID	540
NCBI Accession #	NP_000044.2
NCBI GenBank Nucleotide #	NM_000053.3
UniProt Accession #	P35670; Q16318; Q16319; Q4U3V3; Q59FJ9; Q5T7X7
Molecular Weight	Observed: 157 kDa Predicted: 158 kDa
NCBI Official Full Name	copper-transporting ATPase 2 isoform a
NCBI Official Synonym Full Names	ATPase copper transporting beta
NCBI Official Symbol	ATP7B
NCBI Official Synonym Symbols	WD; PWD; WC1; WND
NCBI Protein Information	copper-transporting ATPase 2

UniProt Protein Name	Copper-transporting ATPase 2
UniProt Gene Name	ATP7B
UniProt Synonym Gene Names	PWD; WC1; WND

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/atp7b-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-elisa/321012>