Product Name: KD-Validated ATP7B Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01347
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 157.3kDa

Antigen Information

Gene Name	ATP7B
Alternative Names	ATP7B; ATPase Copper Transporting Beta; Copper-Transporting ATPase 2; Copper Pump 2; WND; ATPase, Cu++ Transporting, Beta Polypeptide; Wilson Disease-Associated Protein; PWD; WC1; ATPase, Cu++ Transporting, Beta Polypeptide (Wilson Disease); ATPase, Cu(2+)-Transporting, Beta Polypeptide; Copper-Transporting Protein ATP7B; Wilson Disease; EC 7.2.2.8; EC 3.6.3.4; EC 3.6.3; WD
Gene ID	540.0
SwissProt ID	P35670
Immunogen	A synthesized peptide derived from human ATP7b

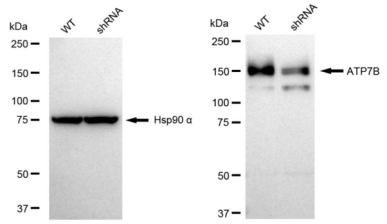
Background

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 is a monomer, and functions as a copper-transporting ATPase which exports 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 which is characterized by copper accumulation. [provided by RefSeq, Dec 2019]

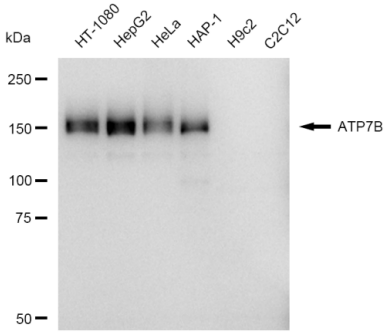
Research Area

Signal Transduction,Metabolism

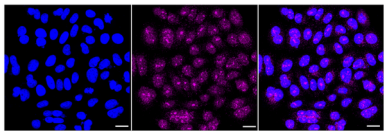
Image Data



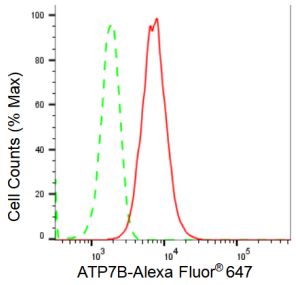
Western blotting analysis using ATP7B antibody (KVAb01347). ATP7B expression in wild type (WT) and ATP7B shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with ATP7B antibody (KVAb01347, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using ATP7B antibody (KVAb01347). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ATP7B antibody (KVAb01347, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HepG2 cells with ATP7B antibody (KVAb01347, 1:1,000). Nuclei were stained blue with DAPI; ATP7B was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Flow cytometric analysis of ATP7B expression in HepG2 cells using ATP7B antibody (KVAb01347, 1:2,000). Green, isotype control; red, ATP7B.