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# KD-Validated Anti-ATP7B Rabbit Monoclonal Antibody

**Rabbit monoclonal antibody**
**Catalog # AGI1370**

## Specification

### KD-Validated Anti-ATP7B Rabbit Monoclonal Antibody - Product Information

| | |
|---|---|
| Application | **WB, FC, ICC** |
| Primary Accession | P35670 |
| Reactivity | **Human** |
| Clonality | **Monoclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **Predicted, 157 kDa , observed, 157 kDa KDa** |
| Gene Name | **ATP7B** |
| Aliases | **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** |
| Immunogen | **A synthesized peptide derived from human ATP7b** |

### KD-Validated Anti-ATP7B Rabbit Monoclonal Antibody - Additional Information

Gene ID **540**

**Other Names**
Copper-transporting ATPase 2, 7.2.2.8, Copper pump 2, Wilson disease-associated protein, WND/140 kDa, ATP7B, PWD, WC1, WND

### KD-Validated Anti-ATP7B Rabbit Monoclonal Antibody - 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

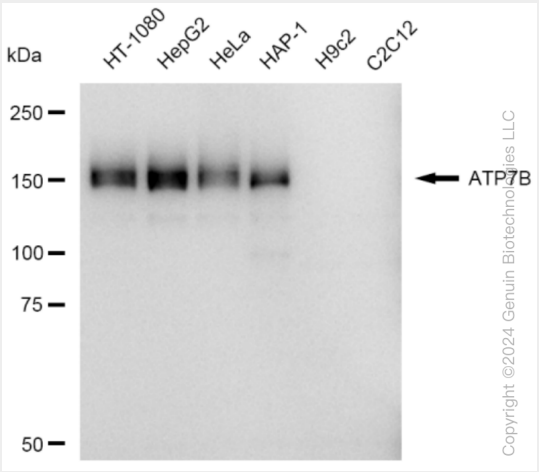
**Tissue Location**
Most abundant in liver and kidney and also found in brain. Isoform 2 is expressed in brain but not in liver. The cleaved form WND/140 kDa is found in liver cell lines and other tissues

## KD-Validated Anti-ATP7B Rabbit Monoclonal Antibody - Protocols

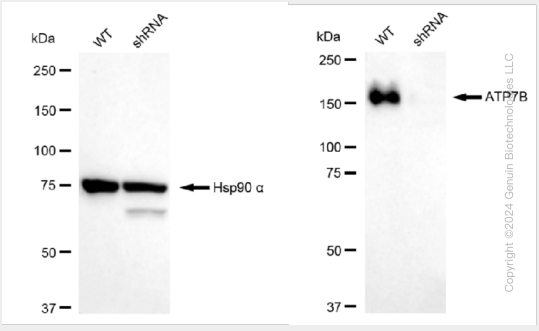
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## KD-Validated Anti-ATP7B Rabbit Monoclonal Antibody - Images




Western blotting analysis using anti-ATP7B antibody (Cat#AGI1370). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ATP7B antibody (Cat#AGI1370, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



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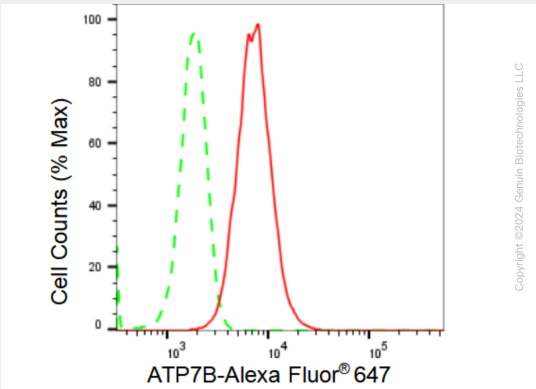
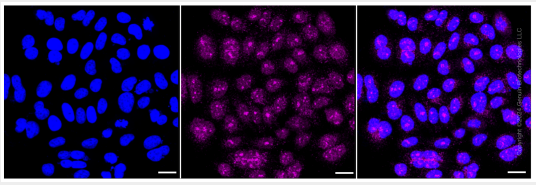
Western blotting analysis using anti-ATP7B antibody (Cat#AGI1370). ATP7B expression in wild type (WT) and ATP7B shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-ATP7B antibody (Cat#AGI1370, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.




Flow cytometric analysis of ATP7B expression in HepG2 cells using ATP7B antibody (Cat#AGI1370, 1:2,000). Green, isotype control; red, ATP7B.



Immunocytochemical staining of HepG2 cells with ATP7B antibody (Cat#AGI1370, 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.