

KD-Validated Anti-ABCB1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1002

Specification

KD-Validated Anti-ABCB1 Rabbit Monoclonal Antibody - Product Information

WB, ICC **Application Primary Accession** P08183

Reactivity Rat, Human, Mouse Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 141 kDa, observed, 130-180

kDa KDa ABCB1

Gene Name Aliases

ABCB1; ATP Binding Cassette Subfamily B Member 1; PGY1; Multidrug Resistance Protein 1; CD243; GP170; ABC20; P-170; MDR1; ATP-Binding Cassette, Sub-Family B (MDR/TAP), Member 1; ATP-Dependent Translocase ABCB1; Phospholipid

Transporter ABCB1; Colchicin Sensitivity; P-Glycoprotein 1; CLCS; P-GP; ATP-Binding

Cassette Sub-Family B Member 1;

Doxorubicin Resistance; P-Glycoprotein; CD243 Antigen; EC 3.6.3.44; EC 7.6.2.2; EC

7.6.2.1; EC 3.6.3; P-Gp

A synthesized peptide derived from human **Immunogen**

P Glycoprotein 1

KD-Validated Anti-ABCB1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 5243

Other Names

ATP-dependent translocase ABCB1, ATP-binding cassette sub-family B member 1, Multidrug resistance protein 1, 7.6.2.2, P-glycoprotein 1, Phospholipid transporter ABCB1, 7.6.2.1, CD243, ABCB1 (HGNC:40), MDR1, PGY1

KD-Validated Anti-ABCB1 Rabbit Monoclonal Antibody - Protein Information

Name ABCB1 (HGNC:40)

Synonyms MDR1, PGY1

Function

Translocates drugs and phospholipids across the membrane (PubMed: 2897240, PubMed:35970996, PubMed:<a



href="http://www.uniprot.org/citations/8898203" target="_blank">8898203, PubMed:9038218, PubMed:35507548). Catalyzes the flop of phospholipids from the cytoplasmic to the exoplasmic leaflet of the apical membrane. Participates mainly to the flop of phosphatidylcholine, phosphatidylethanolamine, beta-D-glucosylceramides and sphingomyelins (PubMed:8898203).

Energy-dependent efflux pump responsible for decreased drug accumulation in multidrug-resistant cells (PubMed:<a href="http://www.uniprot.org/citations/2897240"

target="_blank">2897240, PubMed:35970996, PubMed:9038218).

Cellular Location

Cell membrane; Multi-pass membrane protein {ECO:0000255|PROSITE-ProRule:PRU00441} Apical cell membrane. Cytoplasm Note=ABCB1 localization is influenced by C1orf115 expression levels (plasma membrane versus cytoplasm). Localized to the apical membrane of enterocytes (PubMed:28408210).

Tissue Location

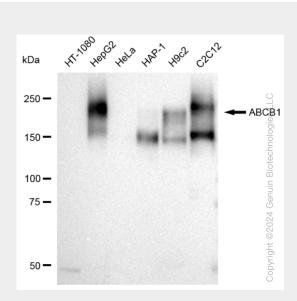
Expressed in small intestine (PubMed:28408210). Expressed in liver, kidney and brain.

KD-Validated Anti-ABCB1 Rabbit Monoclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

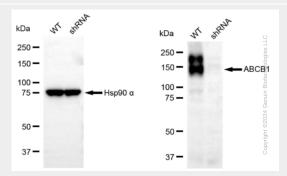
KD-Validated Anti-ABCB1 Rabbit Monoclonal Antibody - Images



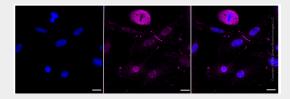
Western blotting analysis using anti-ABCB1 antibody (Cat#AGI1002). Total cell lysates (30 μg)



from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ABCB1 antibody (Cat#AGI1002, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-ABCB1 antibody (Cat#AGI1002). ABCB1 expression in wild type (WT) and ABCB1 shRNA knockdown (KD) Hela cells with 30 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-ABCB1 antibody (Cat#AGI1002, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Immunocytochemical staining of HepG2 cells with ABCB1 antibody (Cat#AGI1002, 1:1,000). Nuclei were stained blue with DAPI; ABCB1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar: 20 µm.