

Product Name: KD-Validated ABCB1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01822**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,ICC,IHC-P
Reactivity	Human,Mouse,Rat
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; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 141.5kDa

Antigen Information

Gene Name	ABCB1
Alternative Names	ABCB1; ATP Binding Cassette Subfamily B Member 1; P-GP1; 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
Gene ID	5243.0
SwissProt ID	P08183
Immunogen	A synthesized peptide derived from human P Glycoprotein

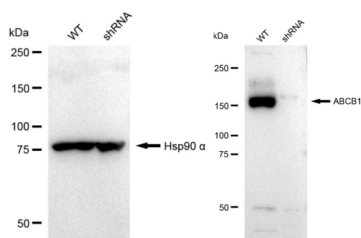
Background

The membrane-associated protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the MDR/TAP subfamily. Members of the MDR/TAP subfamily are involved in multidrug resistance. The protein encoded by this gene is an ATP-dependent drug efflux pump for xenobiotic compounds with broad substrate specificity. It is responsible for decreased drug accumulation in multidrug-resistant cells and often mediates the development of resistance to anticancer drugs. This protein also functions as a transporter in the blood-brain barrier. Mutations in this gene are associated with colchicine resistance and Inflammatory bowel disease 13. Alternative splicing and the use of alternative promoters results in multiple transcript variants. [provided by RefSeq, Feb 2017]

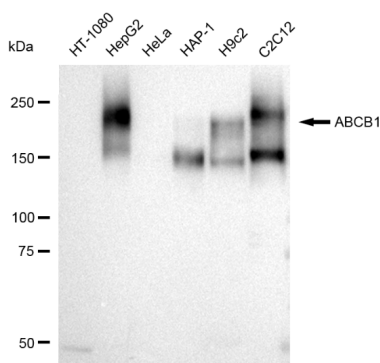
Research Area

Signal Transduction, Stem Cells, Cancer, Neuroscience

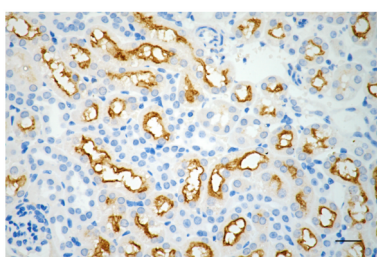
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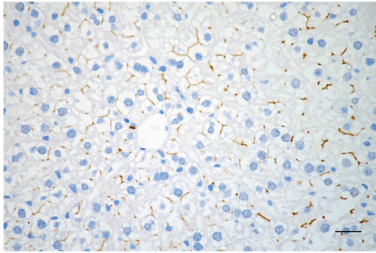


Western blotting analysis using ABCB1 antibody (KVA01822). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with ABCB1 antibody (KVA01822, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively. ABCB1, ATP binding cassette subfamily B member 1.

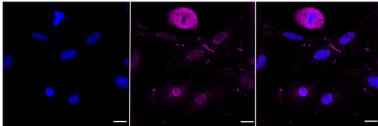


Immunohistochemistry was performed on paraffin-embedded mouse kidney using ABCB1 antibody (KVA01822, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.





Immunohistochemistry was performed on paraffin-embedded mouse liver using ABCB1 antibody (KVA01822, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HepG2 cells with ABCB1 antibody (KVA01822, 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.