

ABCG2 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50950

Specification

ABCG2 Antibody - Product Information

Application	WB, E
Primary Accession	O9UNQ0
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	72 KDa

ABCG2 Antibody - Additional Information

Gene ID 9429

Other Names

ATP-binding cassette sub-family G member 2, Breast cancer resistance protein, CDw338, Mitoxantrone resistance-associated protein, Placenta-specific ATP-binding cassette transporter, Urate exporter, CD338, ABCG2, ABCP, BCRP, BCRP1, MXR

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

ABCG2 Antibody - Protein Information

Name ABCG2

Synonyms ABCP, BCRP, BCRP1, MXR

Function

Broad substrate specificity ATP-dependent transporter of the ATP-binding cassette (ABC) family that actively extrudes a wide variety of physiological compounds, dietary toxins and xenobiotics from cells (PubMed: [11306452](http://www.uniprot.org/citations/11306452), PubMed: [12958161](http://www.uniprot.org/citations/12958161), PubMed: [19506252](http://www.uniprot.org/citations/19506252), PubMed: [20705604](http://www.uniprot.org/citations/20705604), PubMed: [28554189](http://www.uniprot.org/citations/28554189), PubMed: [30405239](http://www.uniprot.org/citations/30405239), PubMed: [31003562](http://www.uniprot.org/citations/31003562)). Involved in porphyrin homeostasis, mediating the export of protoporphyrin IX (PPIX) from both mitochondria to cytosol and cytosol to extracellular space, it also functions in the cellular export of heme (PubMed: [20705604](http://www.uniprot.org/citations/20705604), PubMed: [20705604](http://www.uniprot.org/citations/20705604)).

<http://www.uniprot.org/citations/23189181> target="_blank">23189181). Also mediates the efflux of sphingosine-1-P from cells (PubMed:20110355). Acts as a urate exporter functioning in both renal and extrarenal urate excretion (PubMed:19506252, PubMed:20368174, PubMed:22132962, PubMed:31003562, PubMed:36749388). In kidney, it also functions as a physiological exporter of the uremic toxin indoxyl sulfate (By similarity). Also involved in the excretion of steroids like estrone 3-sulfate/E1S, 3beta-sulfooxy-androst-5-en-17-one/DHEAS, and other sulfate conjugates (PubMed:12682043, PubMed:28554189, PubMed:30405239). Mediates the secretion of the riboflavin and biotin vitamins into milk (By similarity). Extrudes pheophorbide a, a phototoxic porphyrin catabolite of chlorophyll, reducing its bioavailability (By similarity). Plays an important role in the exclusion of xenobiotics from the brain (Probable). It confers to cells a resistance to multiple drugs and other xenobiotics including mitoxantrone, pheophorbide, camptothecin, methotrexate, azidothymidine, and the anthracyclines daunorubicin and doxorubicin, through the control of their efflux (PubMed:11306452, PubMed:12477054, PubMed:15670731, PubMed:18056989, PubMed:31254042). In placenta, it limits the penetration of drugs from the maternal plasma into the fetus (By similarity). May play a role in early stem cell self-renewal by blocking differentiation (By similarity).

Cellular Location

Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Mitochondrion membrane; Multi-pass membrane protein. Note=Enriched in membrane lipid rafts

Tissue Location

Highly expressed in placenta (PubMed:9850061). Low expression in small intestine, liver and colon (PubMed:9861027) Expressed in brain (at protein level) (PubMed:12958161)

ABCG2 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 Cytometry](#)
- [Cell Culture](#)

ABCG2 Antibody - Images

ABCG2 Antibody - Background

High-capacity urate exporter functioning in both renal and extrarenal urate excretion. Plays a role

in porphyrin homeostasis as it is able to mediate the export of protoporphyrin IX (PPIX) both from mitochondria to cytosol and from cytosol to extracellular space, and cellular export of heme, and heme. Xenobiotic transporter that may play an important role in the exclusion of xenobiotics from the brain. Appears to play a major role in the multidrug resistance phenotype of several cancer cell lines. Implicated in the efflux of numerous drugs and xenobiotics: mitoxantrone, the photosensitizer pheophorbide, camptothecin, methotrexate, azidothymidine (AZT), and the anthracyclines daunorubicin and doxorubicin.

ABCG2 Antibody - References

- Allikmets R., et al. *Cancer Res.* 58:5337-5339(1998).
Doyle L.A., et al. *Proc. Natl. Acad. Sci. U.S.A.* 95:15665-15670(1998).
Doyle L.A., et al. *Proc. Natl. Acad. Sci. U.S.A.* 96:2569-2569(1999).
Kage K., et al. Submitted (MAR-2001) to the EMBL/GenBank/DDBJ databases.
Komatani H., et al. *Cancer Res.* 61:2827-2832(2001).