

BCRP (ABCG2) Antibody
Purified Rabbit Polyclonal Antibody
Catalog # ABV11644**Specification**

BCRP (ABCG2) Antibody - Product Information

Application	WB
Primary Accession	Q9UNQ0
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	72314

BCRP (ABCG2) Antibody - Additional Information**Gene ID** 9429**Other Names**

Breast Cancer Resistance Protein, BCRP1, ATP-binding cassette sub-family G member 2, ATP binding cassette sub family G (WHITE) member 2, ABCG2, Mitoxantrone resistance associated protein, MXR, MXR1

Target/Specificity

BCRP (ABCG2)

Formulation

Each vial contains 5mg BSA, 0.9 mg NaCl, 0.2 mg Na₂HPO₄, 0.05 mg NaN₃, 0.05 mg Thimerosal

Handling

The vial should be centrifuged to collect the lyophilized solid before reconstituting

Background Descriptions**Precautions**

BCRP (ABCG2) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

BCRP (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, PubMed:12958161, PubMed:19506252, PubMed:20705604, PubMed:28554189, PubMed:30405239, PubMed: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, PubMed: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)

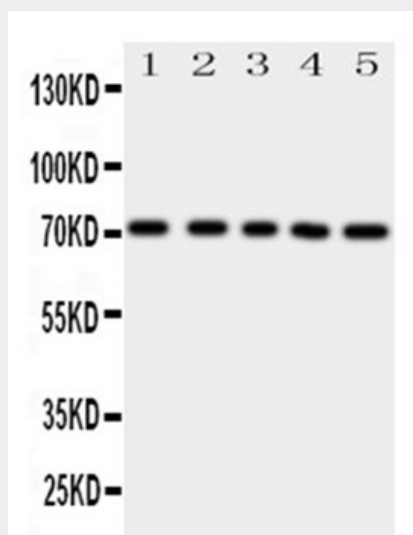
BCRP (ABCG2) Antibody - Protocols

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](#)

BCRP (ABCG2) Antibody - Images



Lane1: Hela cell lysate; Lane2: SW620 cell lysate; Lane3: MCF-7 cell lysate; Lane4: SKOV cell lysate; Lane5: Jurkat cell lysate

BCRP (ABCG2) Antibody - Background

BCRP, also called ABCG2, is encoded by the ABCG2 gene. BCRP is a well-characterized ABC-transporter (which limits uptake or mediates efflux of a wide variety of drugs, carcinogens, dietary toxins across cellular membranes). It is an ATP-dependent pump with broad substrate specificity. Significant expression has been observed in the placenta and it has been shown to have a role in protecting the fetus from xenobiotics in the maternal circulation. It plays protective roles in blocking absorption at the apical membrane of the intestine, and at the blood-testis barrier, the blood-brain barrier and the membranes of hematopoietic progenitor and other stem cells. At the apical membranes of the liver and kidney, it enhances excretion of xenobiotics. In the lactating mammary gland, it has a role on excreting vitamins such as riboflavin and biotin into milk.

BCRP (ABCG2) Antibody - Citations

- [Application of JC1 for non-toxic isolation of cells with MDR transporter activity by flow cytometry.](#)