

ABCG2 Rabbit mAb

Catalog # AP76407

Product Information

Application WB
Primary Accession Q9UNQ0
Reactivity Human
Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 72314

Additional Information

Gene ID 9429

Other Names ABCG2

Dilution WB~~1/500-1/1000

Format Liquid

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:<u>28554189</u>, PubMed:<u>30405239</u>, PubMed:<u>31003562</u>). 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:<u>23189181</u>). Also mediates the efflux of sphingosine-1-P from cells (PubMed:<u>20110355</u>). 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). In inflammatory macrophages, exports itaconate from the cytosol to the extracellular compartment and limits the activation of TFEB-dependent lysosome biogenesis involved in antibacterial innate immune response.

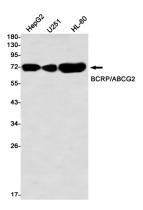
Cellular Location

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)

Images



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