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Anti-ABCG5 Antibody

Catalog # ABO11178

Product Information

Application	WB
Primary Accession	Q9H222
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for ATP-binding cassette sub-family G member 5(ABCG5) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	64240
Other Names	ATP-binding cassette sub-family G member 5, Sterolin-1, ABCG5
Calculated MW	72504
Application Details	Western blot, 0.1-0.5 □g/ml, Human
Subcellular Localization	Membrane ; Multi-pass membrane protein .
Tissue Specificity	Strongly expressed in the liver, lower levels in the small intestine and colon.
Source	Eukaryota
Protein Name	ATP-binding cassette sub-family G member 5
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human ABCG5(116-131aa NGRALRREQFQDCFSY).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the ABC transporter superfamily. ABCG family. Eye pigment

precursor importer (TC 3.A.1.204) subfamily.

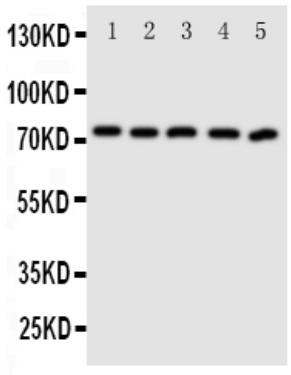
Protein Information

Name	ABCG5 (HGNC:13886)
Function	ABCG5 and ABCG8 form an obligate heterodimer that mediates Mg(2+)- and ATP-dependent sterol transport across the cell membrane (PubMed:27144356). Plays an essential role in the selective transport of dietary plant sterols and cholesterol in and out of the enterocytes and in the selective sterol excretion by the liver into bile (PubMed:11099417, PubMed:11138003, PubMed:15054092, PubMed:27144356). Required for normal sterol homeostasis (PubMed:11099417, PubMed:11138003, PubMed:15054092). The heterodimer with ABCG8 has ATPase activity (PubMed:16893193, PubMed:20210363, PubMed:27144356).
Cellular Location	Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein
Tissue Location	Strongly expressed in the liver, lower levels in the small intestine and colon.

Background

ABCG5(Atp-binding cassette, subfamily g, member 5) also known as STEROLIN 1, is a protein that in humans is encoded by the ABCG5 gene. The protein encoded by this gene is a member of the superfamily of ATP-binding cassette(ABC) transporters. This protein is a member of the White subfamily. The protein encoded by this gene functions as a half-transporter to limit intestinal absorption and promote biliary excretion of sterols. The ABCG5 gene contains 13 exons and spans about 28 kb.The ABCG5 gene is mapped on 2p21. It is expressed in a tissue-specific manner in the liver, colon, and intestine. This gene is tandemly arrayed on chromosome 2, in a head-to-head orientation with family member ABCG8. Mutations in this gene may contribute to sterol accumulation and atheroschlerosis, and have been observed in patients with sitosterolemia. Small(2003) reviewed the role of ABC transporters in secretion of cholesterol from liver into bile, particularly the role of ABCG5/ABCG8.The ABCG5 and ABCG8 genes are an example of closely neighboring genes in a head-to-head orientation that, when mutated, cause the same phenotype.

Images



Anti-ABCG5 antibody, ABO11178, Western blottingAll lanes: Anti ABCG5 (ABO11178) at 0.5ug/mlLane 1: MCF-7 Whole Cell Lysate at 40ugLane 2: A549 Whole Cell Lysate at 40ugLane 3: HT1080 Whole Cell Lysate at 40ugLane 4: U87 Whole Cell Lysate at 40ugLane 5: SKOV Whole Cell Lysate at 40ugPredicted bind size: 73KDObserved bind size: 73KD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.