

Anti-ABCG5 Antibody
Catalog # ABO11178**Specification**

Anti-ABCG5 Antibody - 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.

Anti-ABCG5 Antibody - Additional Information

Gene ID 64240

Other Names

ATP-binding cassette sub-family G member 5, Sterolin-1, ABCG5

Calculated MW

72504 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Membrane ; Multi-pass membrane protein .

Tissue Specificity

Strongly expressed in the liver, lower levels in the small intestine and colon.

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 reconstitution, 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.

Anti-ABCG5 Antibody - 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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/11099417), PubMed: [11138003](http://www.uniprot.org/citations/11138003), PubMed: [27144356](http://www.uniprot.org/citations/27144356), PubMed: [15054092](http://www.uniprot.org/citations/15054092)). Required for normal sterol homeostasis (PubMed: [11099417](http://www.uniprot.org/citations/11099417), PubMed: [11138003](http://www.uniprot.org/citations/11138003), PubMed: [15054092](http://www.uniprot.org/citations/15054092)). The heterodimer with ABCG8 has ATPase activity (PubMed: [16893193](http://www.uniprot.org/citations/16893193), PubMed: [20210363](http://www.uniprot.org/citations/20210363), PubMed: [27144356](http://www.uniprot.org/citations/27144356)).

Cellular Location

Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein

Tissue Location

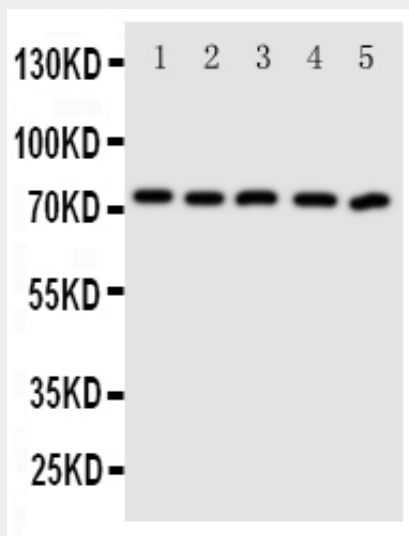
Strongly expressed in the liver, lower levels in the small intestine and colon.

Anti-ABCG5 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](#)

Anti-ABCG5 Antibody - Images



Anti-ABCG5 antibody, ABO11178, Western blotting
All lanes: Anti ABCG5 (ABO11178) at 0.5ug/ml
Lane 1: MCF-7 Whole Cell Lysate at 40ug
Lane 2: A549 Whole Cell Lysate at 40ug
Lane 3: HT1080 Whole Cell Lysate at 40ug
Lane 4: U87 Whole Cell Lysate at 40ug
Lane 5: SKOV Whole Cell Lysate at 40ug
Predicted bind size: 73KD
Observed bind size: 73KD

Anti-ABCG5 Antibody - 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 atherosclerosis, 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.