

## Anti-ABCG5 Antibody Picoband®

Catalog Number: PB9415

### About ABCG5

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.

### Overview

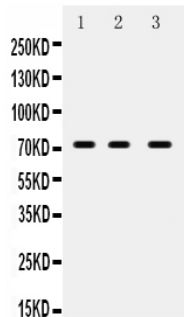
Product Name	Anti-ABCG5 Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-ABCG5 Antibody Picoband® catalog # PB9415. Tested in WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , and 0.05 mg Na <sub>3</sub> . *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q9H222

### Technical Details

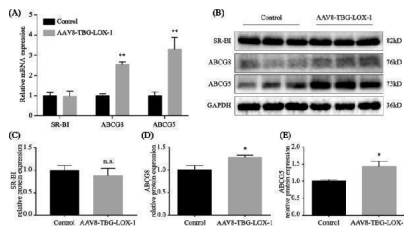
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human ABCG5, different from the related mouse and rat sequences by two amino acids.
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Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml, Human

## Anti-ABCG5 Antibody Picoband® (PB9415) Images



Western blot analysis of ABCG5 using anti-ABCG5 antibody (PB9415). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: MCF-7 Whole Cell Lysate at 40ug, Lane 2: A549 Whole Cell Lysate at 40ug, Lane 3: PANC Whole Cell Lysate at 40ug. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-ABCG5 antigen affinity purified polyclonal antibody (Catalog # PB9415) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for ABCG5 at approximately 73 kDa. The expected band size for ABCG5 is at 73 kDa.



Quantitative real-time PCR and Western blot analysis of SR-BI, ABCG5, and ABCG8. A Quantitative real-time PCR analysis of the mRNA levels of SR-BI, ABCG8 and ABCG5 in liver of the mice in the control and LOX-1 groups. The expression of mRNA was normalized to that of GAPDH. B - E Western blot analysis of the hepatic lipid metabolism core pathway-related proteins SR-BI, ABCG5, and ABCG8 8 weeks after virus transduction. Values are expressed as mean ± SD. \*\*P<0.01 compared with the control group Index in PubMed under a CC BY license. PMID: 35236285

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### Anti-ABCG5 Antibody

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