10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ABCG5 Rabbit pAb

ABCG5 Rabbit pAb
Catalog # AP52320

Product Information

Application	WB
Primary Accession	Q9H222
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	72504
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ABCG5
Epitope Specificity	251-350/651
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Multi-pass membrane protein (Probable).
DISEASE	Defects in ABCG5 are a cause of sitosterolemia (STSL) [MIM:210250]; also known as phytosterolemia or shellfish sterolemia. It is a rare autosomal recessive disorder characterized by increased intestinal absorption of all sterols including cholesterol, plant and shellfish sterols, and decreased biliary excretion of dietary sterols into bile. Sitosterolemia patients have hypercholesterolemia, very high levels of plant sterols in the plasma, and frequently develop tendon and tuberous xanthomas, accelerated atherosclerosis and premature coronary artery disease.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intra-cellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). 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. 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. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	64240
Other Names	ATP-binding cassette sub-family G member 5, 7.6.2.-, Sterolin-1, ABCG5

	(HGNC:13886)
Dilution	WB=1:500-2000,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

References

Berge K.E.,et al.Science 290:1771-1775(2000).
Lee M.-H.,et al.Nat. Genet. 27:79-83(2001).
Schmitz G.,et al.J. Lipid Res. 42:1513-1520(2001).
Lu K.,et al.Am. J. Hum. Genet. 69:278-290(2001).
Hubacek J.A.,et al.Hum. Mutat. 18:359-360(2001).