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ABCG1 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP6529c

Specification

ABCG1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P45844

ABCG1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 9619

Other Names
ATP-binding cassette sub-family G member 1, ATP-binding cassette transporter 8, White protein homolog, ABCG1, ABC8, WHT1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6529c was selected from the Center region of human ABCG1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ABCG1 Antibody (Center) Blocking Peptide - Protein Information

Name ABCG1 (HGNC:73)

ABCG1 Antibody (Center) Blocking Peptide - Background

ABCG1 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. It is involved in macrophage cholesterol and phospholipids transport, and may regulate cellular lipid homeostasis in other cell types.

ABCG1 Antibody (Center) Blocking Peptide - References

Furuyama,S., J. Atheroscler. Thromb. 16 (3), 194-200 (2009)Stefulj,J., Circ. Res. 104 (5), 600-608 (2009)Mauerer,R., Exp. Mol. Med. 41 (2), 126-132 (2009)

Synonyms ABC8, WHT1

Function
Catalyzes the efflux of phospholipids such as sphingomyelin, cholesterol and its oxygenated derivatives like 7beta-hydroxycholesterol and this transport is coupled to hydrolysis of ATP (PubMed:17408620, PubMed:24576892). The lipid efflux is ALB-dependent (PubMed:16702602). Is an active component of the macrophage lipid export complex. Could also be involved in intracellular lipid transport processes. The role in cellular lipid homeostasis may not be limited to macrophages. Prevents cell death by transporting cytotoxic 7beta-hydroxycholesterol (PubMed:17408620).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein. Golgi apparatus membrane; Multi-pass membrane protein. Cell membrane Note=Predominantly localized in the intracellular compartments mainly associated with the endoplasmic reticulum (ER) and Golgi membranes

Tissue Location
Expressed in several tissues. Expressed in macrophages; expression is increased in macrophages from patients with Tangier disease.

ABCG1 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides