

ABCG1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6529A

Product Information

Application	WB, E
Primary Accession	<u>P45844</u>
Other Accession	<u>Q64343</u>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19678
Calculated MW	75592
Antigen Region	168-195

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	This ABCG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 168-195 amino acids from the N-terminal region of human ABCG1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ABCG1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ABCG1 (<u>HGNC:73</u>)
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: <u>17408620</u> , PubMed: <u>24576892</u>). The lipid efflux is ALB-dependent (PubMed: <u>16702602</u>). 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: <u>17408620</u>).
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.

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.

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)

Images



All lanes : Anti-ABCG1 Antibody (N-term) at 1:1000 dilution Lane 1: THP-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 95kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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