

## ABCG1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6529A

### Specification

# ABCG1 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Antigen Region IF, WB, IHC-P, FC,E <u>P45844</u> <u>Q64343</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 168-195

## ABCG1 Antibody (N-term) - 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 IF~~1:10~50 WB~~1:2000 IHC-P~~1:50~100 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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.

### ABCG1 Antibody (N-term) - 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**

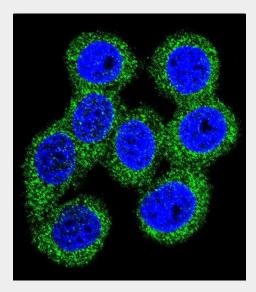
Expressed in several tissues. Expressed in macrophages; expression is increased in macrophages from patients with Tangier disease.

## ABCG1 Antibody (N-term) - Protocols

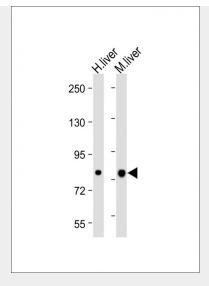
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

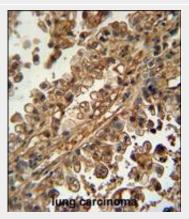
### ABCG1 Antibody (N-term) - Images



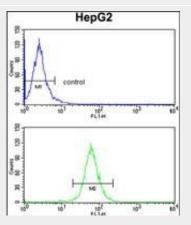
Confocal immunofluorescent analysis of ABCG1 Antibody (N-term)(Cat#AP6529a) with 293 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).



All lanes : Anti-ABCG1 Antibody (N-term) at 1:2000 dilution Lane 1: Human liver lysate Lane 2: Mouse liver lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 76 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



ABCG1 Antibody (N-term) (Cat. #AP6529a) immunohistochemistry analysis in formalin fixed and paraffin embedded human lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ABCG1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



ABCG1 Antibody (N-term) (Cat.#AP6529a) flow cytometry analysis of HepG2 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



# ABCG1 Antibody (N-term) - 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 (N-term) - 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)