BioVision

03/14

For research use only

ABCG1 Antibody (NT)

ALTERNATE NAMES: ABCG1; ABC8; WHT1; ATP-binding cassette sub-family G member 1; ATP-binding cassette transporter 8; White protein homolog

CATALOG #: 6704-100

AMOUNT: 100 µl

HOST/ISOTYPE: Rabbit IgG

IMMUNOGEN: 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.

PURIFICATION: This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

MOLECULAR WEIGHT: ~75.5 kDa

FORM: Liquid

FORMULATION: Supplied in PBS with 0.09% (W/V) sodium azide.

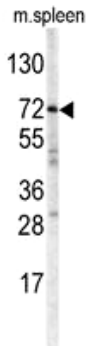
SPECIES REACTIVITY: Human, Mouse

STORAGE CONDITIONS: Maintain refrigerated at 2-8°C for up to 6 months. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

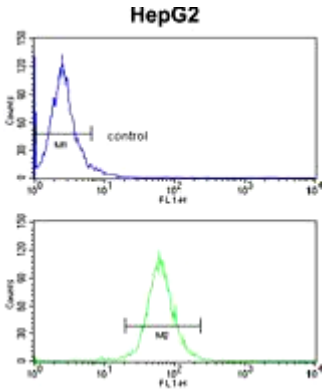
DESCRIPTION: ABCG1 (ATP-binding cassette sub-family G member 1), a transporter protein primarily involved in macrophage lipid homeostasis, localizes to intracellular compartments associated with ER /Golgi membranes, and its expression is highest in macrophage-rich tissue such as spleen, lung, and thymus as well as in brain. ABCG1 form heterodimers with heterologous ABCG partners and functional heterodimerization with ABCG4 has been of great interest because brain cells, mainly neurons and astrocytes, depict high expression of both transporters. ABCG1 is involved in the export of a variety of lipids (in conjunction with ABCA1) including cholesterol and phospholipids from macrophages to HDL. Macrophage lipid export is the first step in the reverse cholesterol transport pathway that exports cholesterol from peripheral cells to circulating lipoproteins for eventual excretion via liver. Cholesterol export to lipoprotein acceptors is compromised in macrophage foam cells, one of the early hallmarks of atherosclerosis. Moreover, ABCG1 plays role in T cells/inflammation, brain lipid homeostasis and its expression increases in macrophages of Tangier disease patients.

APPLICATION: Western blot: ~1:1000, FACS: ~1:10–1:50, IHC: ~1:50-1:100, IF: ~1:10-1:50

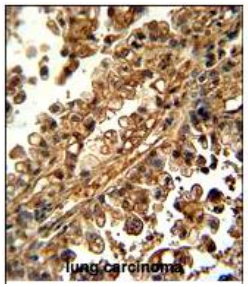
Note: This information is only intended as a guide. The optimal dilutions must be



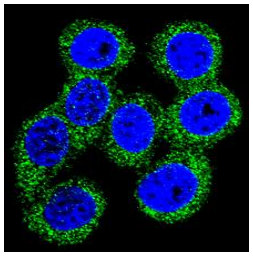
Western blot analysis of ABCG1 antibody (N-term) (Cat # 6704-100) in mouse spleen tissue lysates (35 µg/lane). ABCG1 (arrow) was detected using the purified Pab.



ABCG1 Antibody (N-term) (Cat #6704-100) 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) (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.



Confocal immunofluorescent analysis of ABCG1 Antibody (N-term) (Cat #6704-100) with 293 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).

RELATED PRODUCTS:

- ABCG1 Antibody (Center) **(Cat. No. 6705-100)**

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