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Anti-ABCG1 Antibody

Catalog # AP50949

Product Information

Application	WB, IF/IC
Primary Accession	P45844
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	75592

Additional Information

Gene ID	9619
Other Names	ABC8; WHT1; ATP-binding cassette sub-family G member 1; ATP-binding cassette transporter 8; White protein homolog
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human ABCG1. The exact sequence is proprietary.
Dilution	WB~~ 1:1000 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

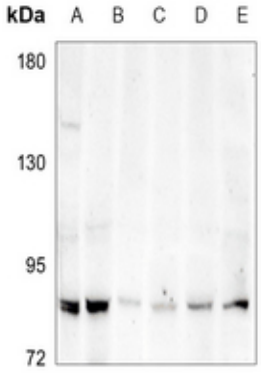
Name	ABCG1 (HGNC:73)
Synonyms	ABC8, WHT1
Function	Catalyzes the efflux of phospholipids such as sphingomyelin, cholesterol and its oxygenated derivatives like 7beta- hydroxycholesterol and this transport is coupled to hydrolysis of ATP (PubMed:17408620, PubMed:24576892). The lipid efflux is ALB-dependent (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.

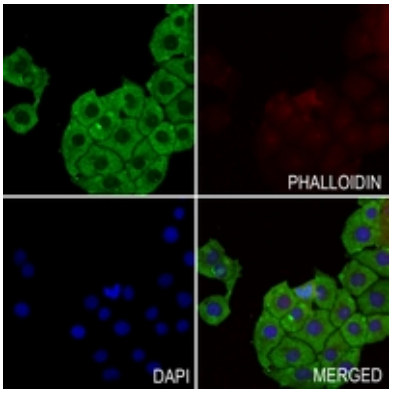
References

Chen H.M.,et al.Am. J. Hum. Genet. 59:66-75(1996).
Berry A.,et al.Genomics 68:22-29(2000).
Porsch-Oezcueruemez M.,et al.J. Biol. Chem. 276:12427-12433(2001).
Lorkowski S.,et al.Biochem. Biophys. Res. Commun. 280:121-131(2001).
Kennedy M.A.,et al.J. Biol. Chem. 276:39438-39447(2001).

Images



Western blot analysis of ABCG1 expression in MCF7 (A), Hela (B), PC12 (C), RAW264.7 (D), SHSY5Y (E), THP1 (F) whole cell lysates. (Predicted band size: 75 kD; Observed band size: 76 kD)



Immunofluorescent analysis of ABCG1 staining in Hela cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Citations

- Murine Beta-Amyloid (1-42) Oligomers Disrupt Endothelial Barrier Integrity and VEGFR Signaling via Activating Astrocytes to Release Deleterious Soluble Factors

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