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Anti-ABCG1 Antibody

Catalog # ABO11175

Product Information

Application	WB
Primary Accession	P45844
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for ATP-binding cassette sub-family G member 1(ABCG1) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	75592
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Endoplasmic reticulum membrane ; Multi-pass membrane protein . Golgi apparatus membrane ; Multi-pass membrane protein . Predominantly localized in the intracellular compartments mainly associated with the endoplasmic reticulum (ER) and Golgi membranes.
Tissue Specificity	Expressed in several tissues. Expressed in macrophages; expression is increased in macrophages from patients with Tangier disease. .
Source	Eukaryota
Protein Name	ATP-binding cassette sub-family G member 1
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human ABCG1(627-647aa ETCHFQKSEAILRELDVENAK), identical to the related rat and mouse sequences.
Purification	Immunogen affinity purified.

Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the ABC transporter superfamily. ABCG family. Eye pigment precursor importer (TC 3.A.1.204) subfamily.

Protein Information

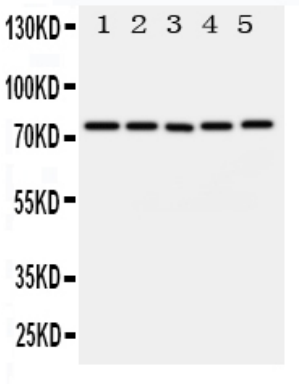
Name	ABCG1 (HGNC:73)
Synonyms	ABC8, WHT1
Function	Catalyzes the efflux of phospholipids such as sphingomyelin, cholesterol and its oxygenated derivatives like 7beta- hydroxycholesterol and this transport is coupled to hydrolysis of ATP (PubMed:17408620, PubMed:24576892). The lipid efflux is ALB-dependent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

Background

ABCG1(Atp-binding cassette, subfamily g, member 1) also known as ABC8, ABC TRANSPORTER 8 or WHITE, DROSOPHILA, HOMOLOG OF, is a protein that in humans is encoded by the ABCG1 gene. ABCG1 is a regulator of macrophage cholesterol and phospholipid transport. The protein encoded by this gene is a member of the superfamily of ATP-binding cassette(ABC) transporters.The ABCG1 gene is mapped on 21q22.3. 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 is induced in monocyte-derived macrophages during cholesterol influx mediated by acetylated low-density lipoprotein. Inhibition of ABCG1 protein expression using an antisense strategy resulted in reduced HDL3-dependent efflux of cholesterol and choline-phospholipids. In macrophages, silencing of GPS2 by RNA interference reduced ABCG1 expression and diminished ABCG1-mediated cholesterol efflux.

Images

Anti-ABCG1 antibody, ABO11175, Western blottingAll lanes: Anti ABCG1 (ABO11175) at 0.5ug/mlLane 1: U87 Whole Cell Lysate at 40ugLane 2: SMMC Whole Cell Lysate at 40ugLane 3: HELA Whole Cell Lysate at 40ugLane 4: COLO320 Whole Cell Lysate at 40ugLane 5: MCF-7 Whole Cell Lysate at 40ugPredicted bind size: 75KDObserved bind size: 75KD



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