

Anti-ABCG1 Antibody
Catalog # ABO11175

Specification

Anti-ABCG1 Antibody - 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.

Anti-ABCG1 Antibody - 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 MW KDa

Application Details

Western blot, 0.1-0.5 µg/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. .

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 reconstitution, 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.

Anti-ABCG1 Antibody - 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 transporter is coupled to hydrolysis of ATP (PubMed: [17408620](http://www.uniprot.org/citations/17408620)), (PubMed: [24576892](http://www.uniprot.org/citations/24576892)). The lipid efflux is ALB-dependent (PubMed: [16702602](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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.

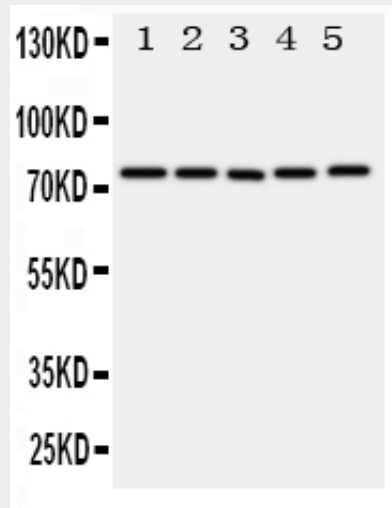
Anti-ABCG1 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-ABCG1 Antibody - Images



Anti-ABCG1 antibody, ABO11175, Western blotting All lanes: Anti ABCG1 (ABO11175) at 0.5ug/ml Lane 1: U87 Whole Cell Lysate at 40ug Lane 2: SMMC Whole Cell Lysate at 40ug Lane 3: HELA Whole Cell Lysate at 40ug Lane 4: COLO320 Whole Cell Lysate at 40ug Lane 5: MCF-7 Whole Cell Lysate at 40ug Predicted bind size: 75KD Observed bind size: 75KD

Anti-ABCG1 Antibody - 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.