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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 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.

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 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.

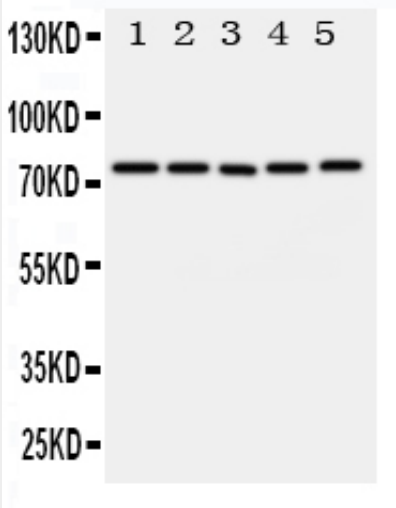
Anti-ABCG1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-ABCG1 Antibody - 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

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 aÂ protein that in humans is encoded by the ABCG1Â gene. ABCG1Â 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. ABCG1Â is induced in monocyte-derived macrophages during cholesterol influx mediated by acetylated low-density lipoprotein.Â Inhibition ofÂ ABCG1Â 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 reducedÂ ABCG1Â expression and diminishedÂ ABCG1-mediated cholesterol efflux.