abcam

Product datasheet

Anti-ABCA1 antibody ab7360

6 Abreviews 59 References 4 Images

Overview

Product name	Anti-ABCA1 antibody
Description	Rabbit polyclonal to ABCA1
Host species	Rabbit
Specificity	ab7360 has previously been shown to work well in ICC/IF on HeLa cells. However recent batches of this antibody, do not work in this application. We would recommend **ab18180** for researchers wanting to detect ABCA1 in ICC/IF. For further information, please contact our Scientific Support Team.
Tested applications	**Suitable for:** WB, IHC-P
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Synthetic peptide corresponding to Human ABCA1. Synthetic peptide: The immunogen is generated from within residues 1100-1300 of Human ABCA1 Database link: **O95477**
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Store at +4°C short term (1-2 weeks). Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab7360 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★☆☆ **(5)**	1/500 - 1/1000. Predicted molecular weight: 220 kDa. Additional non-specific bands are seen at lower molecular weights, but do not interfere with the ABC1 signal. It is important not to boil the sample before loading onto the gel. Boiling can cause aggregation in large proteins, resulting in the proteins inability to enter into the gel.
IHC-P		1/500.

Target

Function cAMP-dependent and sulfonylurea-sensitive anion transporter. Key gatekeeper influencing intracellular cholesterol transport.

Tissue specificity Widely expressed, but most abundant in macrophages.

Involvement in disease Defects in ABCA1 are a cause of high density lipoprotein deficiency type 1 (HDLD1) [MIM:205400]; also known as analphalipoproteinemia or Tangier disease (TGD). HDLD1 is a recessive disorder characterized by absence of high density lipoprotein (HDL) cholesterol from plasma, accumulation of cholesteryl esters, premature coronary artery disease (CAD), hepatosplenomegaly, recurrent peripheral neuropathy and progressive muscle wasting and weakness.
Defects in ABCA1 are a cause of high density lipoprotein deficiency type 2 (HDLD2) [MIM:604091]; also known as familial hypoalphalipoproteinemia (FHA). HDLD2 is inherited as autosomal dominant trait. It is characterized by moderately low HDL cholesterol, predilection toward premature coronary artery disease (CAD) and a reduction in cellular cholesterol efflux.

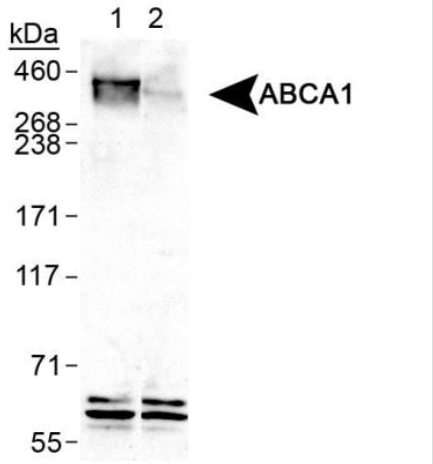
Sequence similarities Belongs to the ABC transporter superfamily. ABCA family.
Contains 2 ABC transporter domains.

Domain Multifunctional polypeptide with two homologous halves, each containing an hydrophobic membrane-anchoring domain and an ATP binding cassette (ABC) domain.

Post-translational modifications Phosphorylation on Ser-2054 regulates phospholipid efflux.
Palmitoylation by DHHC8 is essential for membrane localization.

Cellular localization Membrane.

Images



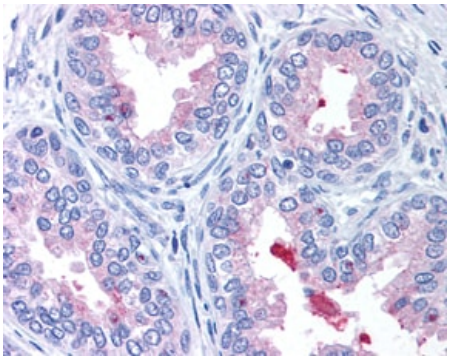
Western blot - Anti-ABCA1 antibody (ab7360)

All lanes : Anti-ABCA1 antibody (ab7360)

Lane 1 : RAW 264.7 whole cell lysate treated with T0901317
Lane 2 : RAW 264.7 whole cell lysate untreated

Lysates/proteins at 25 µg per lane.

Predicted band size: 220 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ABCA1 antibody (ab7360)

ab7360, staining ABCA1 in human prostate epithelium showing luminal and membrane staining by Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections).

Western blot - Anti-ABCA1 antibody (ab7360)

The experiment was performed by treating RAW macrophages with 9-cis-retinoic acid and 22R-hydroxycholesterol, known inducers of ABCA1expression in macrophages. Then total cell post-nuclear lysate (40ug protein) was separated by SDS-PAGE and detected using a 1:1000 dilution of ab7360 affinity purified Lot G incubated for 1 hour at room temperature (Lane A). Although there are lower molecular weight bands on the blot, the ABCA1 signal is excellent and gives the expected 3 bands. It is not known why ABCA1 runs as three bands, but it has been found to do so by many researchers. It is probably due to protein modifications such as glycosylation. The antibody was also tested against ABCA1 transiently expressed in 293 cells as an independent test with excellent results.

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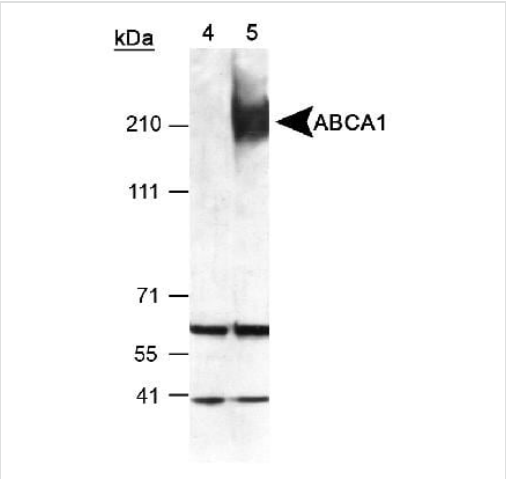

Western blot - Anti-ABCA1 antibody (ab7360)

Detection of ABCA1 in mouse peritoneal macrophages using ab7360. ECL exposure, 1 min.
Lane 4: T09 uninduced lysate
Lane 5: T09 induced lysate Detection of ABCA1 in mouse peritoneal macrophages using ab7360. ECL exposure, 1 min.
Lane 4: T09 uninduced lysate
Lane 5: T09 induced lysate

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