abcam

Product datasheet

Anti-Apolipoprotein A I antibody ab64308

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Overview

Product name	Anti-Apolipoprotein A I antibody
Description	Rabbit polyclonal to Apolipoprotein A I
Host species	Rabbit
Tested applications	**Suitable for:** Sandwich ELISA, WB, ICC/IF
Species reactivity	**Reacts with:** Human **Predicted to work with:** Baboon
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 200 to the C-terminus of Human Apolipoprotein A I.Read Abcam's proprietary immunogen policy(Peptide available as **ab66674**.)
Positive control	Recombinant Human Apolipoprotein A I (**ab50239**) can be used as a positive control in WB. This antibody gave a positive signal in the following Human Tissue Lysates: Testis, Ovary, Lung, Thymus ICC/IF: HepG2 cells
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	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab64308 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
Sandwich ELISA		Use a concentration of 0.5 µg/ml. For sandwich ELISA, use this antibody as Detection at 0.5µg/ml with **ab20918** as Capture.
WB	★★★★☆ **(2)**	Use a concentration of 1 µg/ml. Detects a band of approximately 27 kDa (predicted molecular weight: 31 kDa).
ICC/IF		Use a concentration of 5 µg/ml.

Target

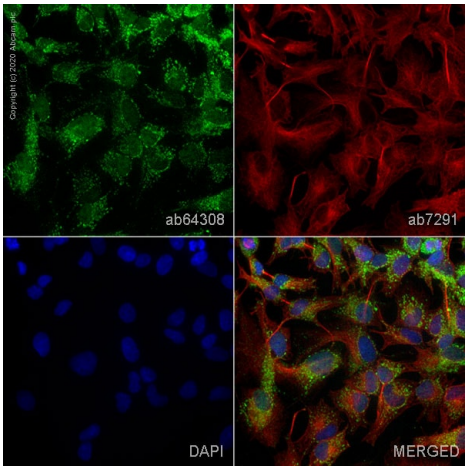
Function Participates in the reverse transport of cholesterol from tissues to the liver for excretion by promoting cholesterol efflux from tissues and by acting as a cofactor for the lecithin cholesterol acyltransferase (LCAT). As part of the SPAP complex, activates spermatozoa motility.

Tissue specificity Major protein of plasma HDL, also found in chylomicrons. Synthesized in the liver and small intestine.

Involvement in disease Defects in APOA1 are a cause of high density lipoprotein deficiency type 2 (HDLD2) [MIM:604091]; also known as familial hypoalphalipoproteinemia (FHA). Inheritance is autosomal dominant.
Defects in APOA1 are a cause of the low HDL levels observed in high density lipoprotein deficiency type 1 (HDLD1) [MIM:205400]; also known as analphalipoproteinemia or Tangier disease (TGD). HDLD1 is a recessive disorder characterized by the absence of plasma HDL, accumulation of cholesteryl esters, premature coronary artery disease, hepatosplenomegaly, recurrent peripheral neuropathy and progressive muscle wasting and weakness. In HDLD1 patients, ApoA-I fails to associate with HDL probably because of the faulty conversion of pro-ApoA-I molecules into mature chains, either due to a defect in the converting enzyme activity or a specific structural defect in Tangier ApoA-I.
Defects in APOA1 are the cause of amyloid polyneuropathy-nephropathy Iowa type (AMYLIOWA) [MIM:107680]; also known as amyloidosis van Allen type or familial amyloid polyneuropathy type III. AMYLIOWA is a hereditary generalized amyloidosis due to deposition of amyloid mainly constituted by apolipoprotein A1. The clinical picture is dominated by neuropathy in the early stages of the disease and nephropathy late in the course. Death is due in most cases to renal amyloidosis. Severe peptic ulcer disease can occurr in some and hearing loss is frequent. Cataracts is present in several, but vitreous opacities are not observed.
Defects in APOA1 are a cause of amyloidosis type 8 (AMYL8) [MIM:105200]; also known as systemic non-neuropathic amyloidosis or Ostertag-type amyloidosis. AMYL8 is a hereditary generalized amyloidosis due to deposition of apolipoprotein A1, fibrinogen and lysozyme

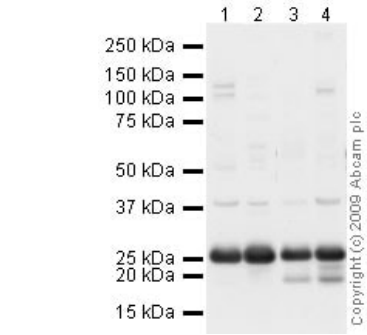
	amyloids. Viscera are particularly affected. There is no involvement of the nervous system. Clinical features include renal amyloidosis resulting in nephrotic syndrome, arterial hypertension, hepatosplenomegaly, cholestasis, petechial skin rash.
Sequence similarities	Belongs to the apolipoprotein A1/A4/E family.
Post-translational modifications	Palmitoylated. Phosphorylation sites are present in the extracelllular medium.
Cellular localization	Secreted.

Images



Immunocytochemistry/ Immunofluorescence - Anti-Apolipoprotein A I antibody (ab64308)

ab64308 staining Apolipoprotein A I in HepG2 cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab64308 at 5µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).



Western blot - Anti-Apolipoprotein A I antibody (ab64308)

All lanes : Anti-Apolipoprotein A I antibody (ab64308) at 1 µg/ml

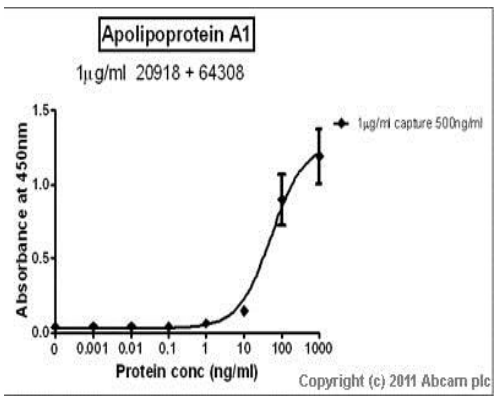
Lane 1 : Human testis tissue lysate - total protein (**ab30257**)
Lane 2 : Human ovary tissue lysate - total protein (**ab30222**)
Lane 3 : Lung (Human) Tissue Lysate - adult normal tissue
Lane 4 : Human thymus tissue lysate - total protein (**ab30146**)

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

Predicted band size: 31 kDa
Observed band size: 27 kDa



Sandwich ELISA - Anti-Apolipoprotein A I antibody (ab64308)

Standard Curve for Apolipoprotein A I (Analyte: **ab50239**) dilution range 1pg/ml to 1ug/ml using Capture Antibody Mouse monoclonal [1409] to Apolipoprotein A I (**ab20918**) at 1ug/ml and Detector Antibody Rabbit polyclonal to Apolipoprotein A I (ab64308) at 0.5ug/ml

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