

Product datasheet

Anti-Apolipoprotein A I antibody [EP1368Y] ab52945

Recombinant RabMAb

★★★★☆ **9 Abreviews** **32 References** [11 Images](#)

Overview

Product name	Anti-Apolipoprotein A I antibody [EP1368Y]
Description	Rabbit monoclonal [EP1368Y] to Apolipoprotein A I
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), WB, IP, IHC-P, ICC/IF, ELISA
Species reactivity	Reacts with: Human, Recombinant fragment
Immunogen	Synthetic peptide within Human Apolipoprotein A I aa 1-100 (N terminal). The exact sequence is proprietary.
Positive control	WB: Human liver and fetal lysates IHC-P: Human liver Tissue ICC/IF: HepG2 cells Flow Cyt (intra): HepG2 cells IP: HepG2 cell lysates, Human fetal liver tissue lysate
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

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. Avoid freeze / thaw cycle. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EP1368Y
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab52945 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
Flow Cyt (Intra)		1/20.
WB	★★★★★ (5)	1/1000. Detects a band of approximately 31 kDa (predicted molecular weight: 31 kDa). For unpurified use at 1/20000 dilution.
IP		1/60.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols .
ICC/IF	★★★★★ (2)	1/100 - 1/250.
ELISA		Use at an assay dependent concentration. Antibody conc. = 0 - 1000 ng/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	<p>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.</p> <p>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.</p> <p>Defects in APOA1 are the cause of amyloid polyneuropathy-nephropathy lowa type (AMYLLOWA) [MIM:107680]; also known as amyloidosis van Allen type or familial amyloid polyneuropathy type III. AMYLLOWA is a hereditary generalized amyloidosis due to deposition of amyloid mainly</p>

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 occur 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

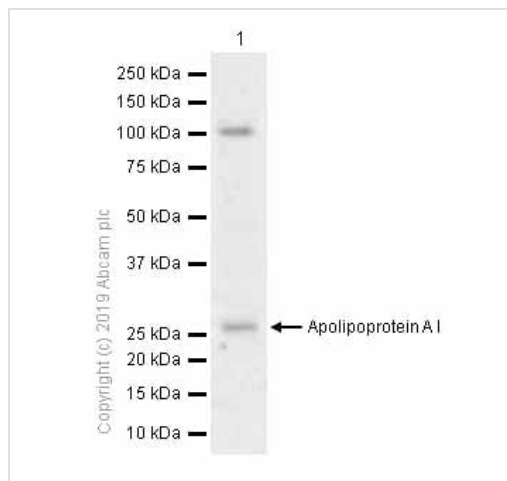
Palmitoylated.

Phosphorylation sites are present in the extracellular medium.

Cellular localization

Secreted.

Images



Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945) at 1/1000 dilution (Purified) + HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates at 15 µg

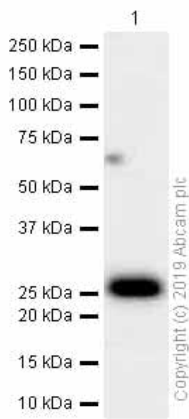
Secondary

Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 31 kDa

Observed band size: 31 kDa

Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)



Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

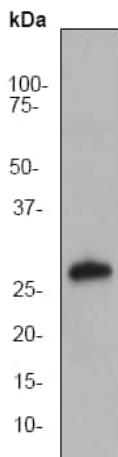
Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945) at 1/1000 dilution (Purified) + Human liver lysates at 15 µg

Secondary

Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 31 kDa

Observed band size: 31 kDa



Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

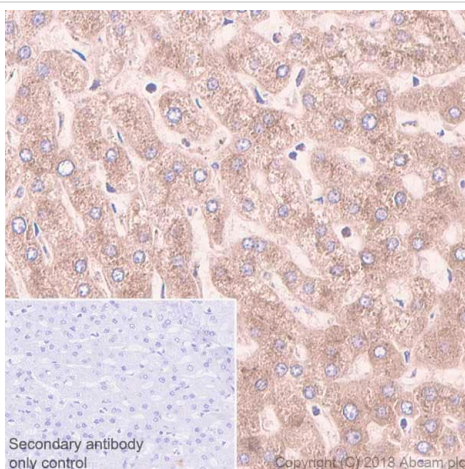
Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945) at 1/20000 dilution ((unpurified)) + fetal liver lysate at 10 µg

Secondary

goat anti-rabbit HRP at 1/2000 dilution

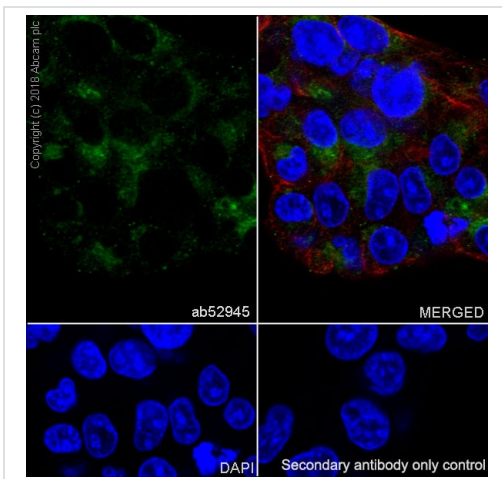
Predicted band size: 31 kDa

Observed band size: 31 kDa



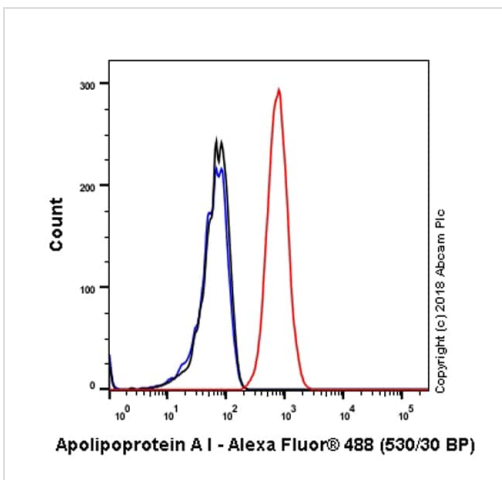
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human liver tissue sections labeling Apolipoprotein A I with purified ab52945 at 1/100 dilution (1.95 µg/ml). Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



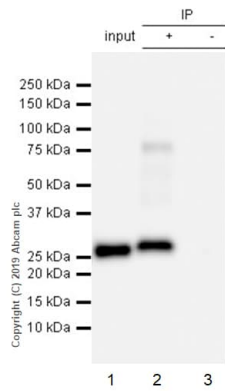
Immunocytochemistry/ Immunofluorescence - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

Immunocytochemistry/ Immunofluorescence analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Apolipoprotein A I with purified ab52945 at 1/250 dilution (0.8 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 (2.5 µg/ml) dilution. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

Intracellular Flow Cytometry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Apolipoprotein A I with purified ab52945 at 1/20 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunoprecipitation - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

ab52945 (purified) at 1/20 dilution (1ug) immunoprecipitating Apolipoprotein A I in Human fetal liver lysates.

Lane 1: Human fetal liver lysates 10ug

Lane 2 (+): ab52945 & Human fetal liver lysates

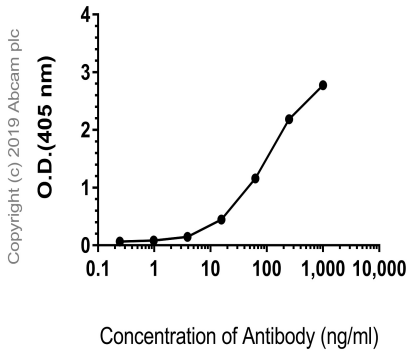
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab52945 in Human fetal liver lysates

For western blotting, VeriBlot for IP Detection Reagent (HRP)

(**ab131366**) was used at 1/1000 dilution.

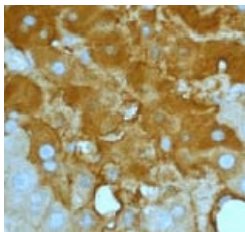
Blocking and diluting buffer: 5% NFDm/TBST.

Indirect ELISA antibody dose-response curve antigen at 1000 ng/ml



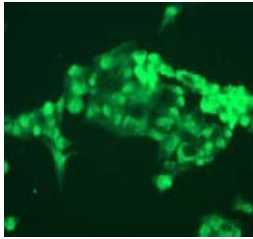
Indirect ELISA - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

ELISA analysis of Apolipoprotein A I recombinant protein at 1000 ng/mL with ab52945 at 1000~0ng/mL. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L) at 1/2500 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

ab52945 (unpurified) at 1/100 dilution staining Apolipoprotein A I in human liver by Immunohistochemistry, Paraffin embedded tissue.



ab52945 (unpurified) at 1/100 dilution staining Apolipoprotein A I in HEPG2 cells by Immunofluorescence.

Immunocytochemistry/ Immunofluorescence - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

Why choose a recombinant antibody?



Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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