# abcam

# Product datasheet

# Anti-Apolipoprotein A I antibody [EP1368Y] - Low endotoxin, Azide free ab185132

Recombinant

RabMAb

# 6 References 8 Images

#### Overview

Product name Anti-Apolipoprotein A I antibody [EP1368Y] - Low endotoxin, Azide free

Description Rabbit monoclonal [EP1368Y] to Apolipoprotein A I - Low endotoxin, Azide free

Host species Rabbit

Tested applications Suitable for: IP, IHC-P, ICC/IF, WB, Flow Cyt (Intra), ELISA

Species reactivity Reacts with: Human, Recombinant fragment

**Immunogen** Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control 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** ab185132 is the carrier-free version of <u>ab52945</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

Our <u>Low endotoxin, azide-free formats</u> have low endotoxin level (≤ 1 EU/ml, determined by the LAL assay) and are free from azide, to achieve consistent experimental results in functional assays.

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Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

#### **Properties**

Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.20

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EP1368Y

**Isotype** IgG

#### **Applications**

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab185132 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
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. 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		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 30 kDa.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ELISA		Use at an assay dependent concentration.

# **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 lowa 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

Palmitoylated.

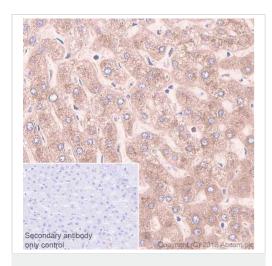
modifications

Phosphorylation sites are present in the extracelllular medium.

**Cellular localization** 

Secreted.

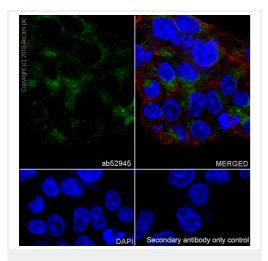
#### **Images**



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Apolipoprotein A I antibody [EP1368Y] - Low endotoxin, Azide free (ab185132)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human liver tissue sections labeling Apolipoprotein A I with purified <a href="mailto:ab52945">ab52945</a> at 1/100 dilution (1.95 µg/ml). Perform heat mediated antigen retrieval using <a href="mailto:ab93684">ab93684</a> (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.

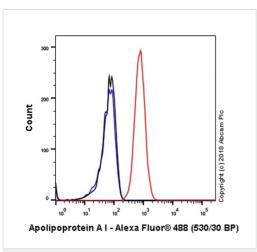
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52945).



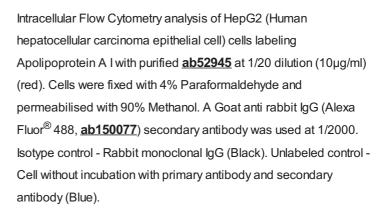
Immunocytochemistry/ Immunofluorescence - Anti-Apolipoprotein A I antibody [EP1368Y] - Low endotoxin, Azide free (ab185132)

Immunocytochemistry/ Immunofluorescence analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Apolipoprotein A I with purified <u>ab52945</u> 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 <u>ab195889</u> Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) at 1/200 (2.5 μg/ml) dilution. Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488, <u>ab150077</u>) 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.

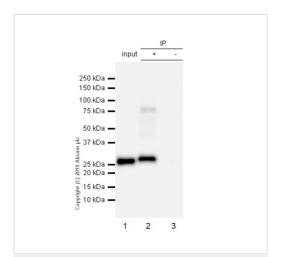
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52945).



Flow Cytometry (Intracellular) - Anti-Apolipoprotein A I antibody [EP1368Y] - Low endotoxin, Azide free (ab185132)



This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52945).



Immunoprecipitation - Anti-Apolipoprotein A I antibody [EP1368Y] - Low endotoxin, Azide free (ab185132)

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

Lane 1: Human fetal liver lysates 10ug

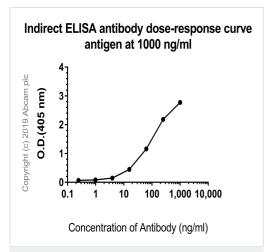
Lane 2 (+): ab52945 & Human fetal liver lysates

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of <u>ab52945</u> 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.

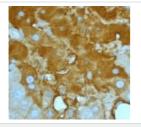
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab52945</u>).



Indirect ELISA - Anti-Apolipoprotein A I antibody
[EP1368Y] - Low endotoxin, Azide free (ab185132)

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

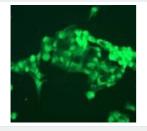
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52945).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Apolipoprotein A I antibody [EP1368Y] - Low endotoxin, Azide free (ab185132)

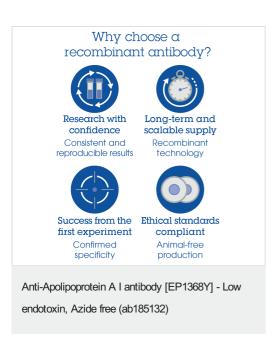
<u>ab52945</u> at 1/100 dilution staining Apolipoprotein A I in human liver by Immunohistochemistry, Paraffin embedded tissue.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab52945</u>).



Immunocytochemistry/ Immunofluorescence - Anti-Apolipoprotein A I antibody [EP1368Y] - Low endotoxin, Azide free (ab185132) <u>ab52945</u> at 1/100 dilution staining Apolipoprotein A I in HEPG2 cells by Immunofluorescence.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab52945).



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