# abcam

## Product datasheet

# Anti-Apolipoprotein A I antibody [EP1368Y] ab52945



重组 RabMAb

★★★★ 9 Abreviews 32 References 11 图像

概述

产品名称 Anti-Apolipoprotein A I抗体[EP1368Y]

描述 兔单克隆抗体[EP1368Y] to Apolipoprotein A I

宿主 Rabbit

经测试应用 适用于: Flow Cyt (Intra), WB, IP, IHC-P, ICC/IF, ELISA

种属反应性 与反应: Human, Recombinant fragment

免疫原 Synthetic peptide within Human Apolipoprotein A I aa 1-100 (N terminal). The exact sequence is

proprietary.

阳性对照 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

常规说明 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® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

性能

形式 Liquid

存放说明 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.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

纯度 Protein A purified

**克隆** 单克隆

**克隆编号** EP1368Y

**同种型** IgG

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab52945于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/20.
WB	<b>★★★★</b> ★ ★ (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	*** <u>*</u>	1/100 - 1/250.
ELISA		Use at an assay dependent concentration. Antibody conc. = 0 - 1000 ng/ml

## 靶标

功能

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.

组织特异性

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

疾病相关

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.

序列相似性

Belongs to the apolipoprotein A1/A4/E family.

翻译后修饰

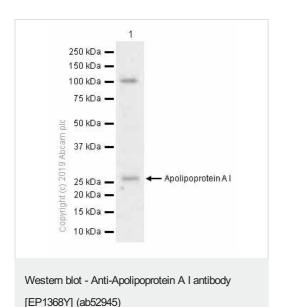
Palmitoylated.

Phosphorylation sites are present in the extracelllular medium.

细胞定位

Secreted.

#### 图片

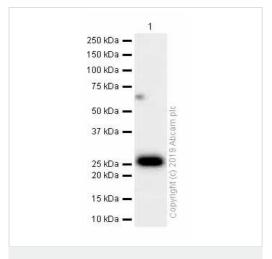


Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945) at 1/1000 dilution (Purified) + HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates at 15 µg

#### Secondary

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

**Predicted band size:** 31 kDa **Observed band size:** 31 kDa



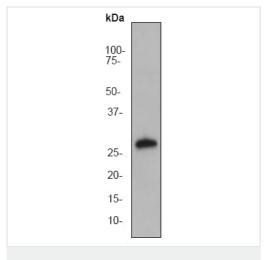
Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

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

#### 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



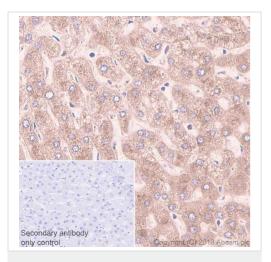
Western blot - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

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

#### **Secondary**

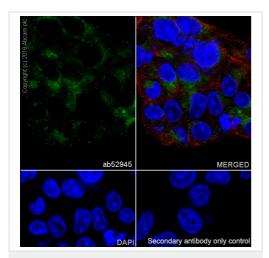
goat anti-rabbit HRP at 1/2000 dilution

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



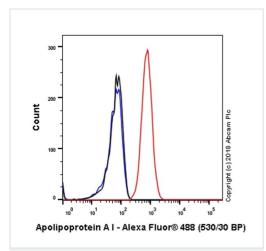
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

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 <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.



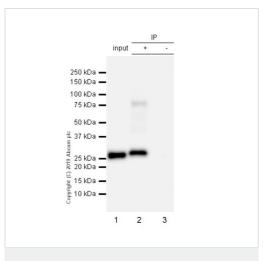
Immunocytochemistry/ Immunofluorescence - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

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 <a href="mailto:ab195889">ab195889</a> Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1/200 (2.5 µg/ml) dilution. Goat anti rabbit lgG (Alexa Fluor® 488, <a href="mailto:ab150077">ab150077</a>) 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 Fluorr<sup>®</sup> 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

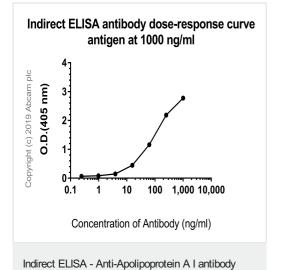
Lane 2 (+): ab52945 & Human fetal liver lysates

Lane 3 (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab52945 in Human fetal liver lysates

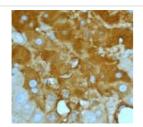
For western blotting, VeriBlot for IP Detection Reagent (HRP)

(ab131366) was used at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



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 lgG (H+L) at 1/2500 dilution was used as the secondary antibody.



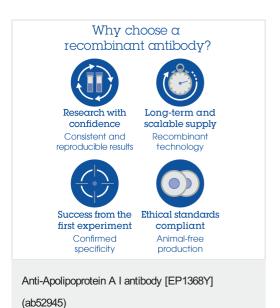
[EP1368Y] (ab52945)

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded 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.



Immunocytochemistry/ Immunofluorescence - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945) ab52945 (unpurified) at 1/100 dilution staining Apolipoprotein A I in HEPG2 cells by Immunofluorescence.



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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

# Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors