abcam

Product datasheet

Anti-Apolipoprotein A I antibody [EP1368Y] ab52945

Recombinant RabMAb

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Overview

Product name	Anti-Apolipoprotein A I antibody [EP1368Y]
Description	Rabbit monoclonal [EP1368Y] to Apolipoprotein A I
Host species	Rabbit
Tested applications	**Suitable for:** Sandwich ELISA, IHC-FoFr, WB, IP, IHC-P, ICC/IF **Unsuitable for:** Flow Cyt
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide within Human Apolipoprotein A I aa 1-100 (N terminal). The exact sequence is proprietary.
Positive control	Fetal liver lysate, human liver tissue and HEPG2 cell
General notes	Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents This product is a recombinant rabbit monoclonal antibody.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol, 0.05% BSA, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EP1368Y
Isotype	IgG

Applications

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
Sandwich ELISA		1/2000 - 1/4000. Can be paired for Sandwich ELISA with Goat polyclonal to Apolipoprotein A I (HRP) (ab20784). PubMed: 20421239
IHC-FoFr	★★★★★	Use at an assay dependent concentration.
WB		1/20000. Detects a band of approximately 31 kDa (predicted molecular weight: 31 kDa).
IP		1/60.
IHC-P		Use at an assay dependent concentration.
ICC/IF		1/100 - 1/250.

Application notes Is unsuitable for Flow Cyt.

Target

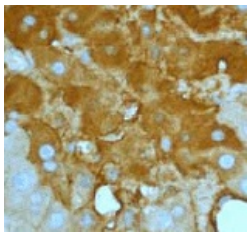
Function Participates in the reverse transport of cholesterol from tissues to the liver for excretion by promoting cholesterol efflux from tissues and by acting as a cofactor for the lecithin cholesterol acyltransferase (LCAT). As part of the SPAP complex, activates spermatozoa motility.

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.

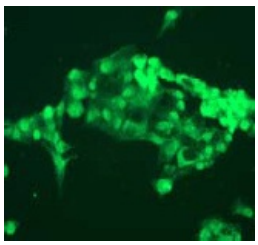
	Clinical features include renal amyloidosis resulting in nephrotic syndrome, arterial hypertension, hepatosplenomegaly, cholestasis, petechial skin rash.
Sequence similarities	Belongs to the apolipoprotein A1/A4/E family.
Post-translational modifications	Palmitoylated. Phosphorylation sites are present in the extracelllular medium.
Cellular localization	Secreted.

Images



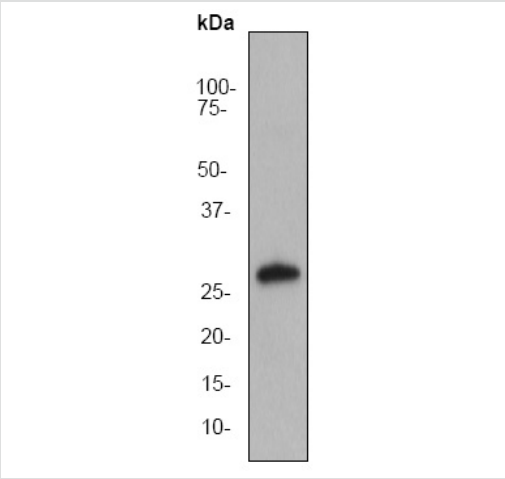
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945)

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



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

Anti-Apolipoprotein A I antibody [EP1368Y] (ab52945) at 1/20000 dilution + 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

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