abcam

Product datasheet

Alexa Fluor® 488 Anti-Apolipoprotein A I antibody [EP1368Y] ab279676

Recombinant RabMAb

3 Images

Overview

Product name Alexa Fluor® 488 Anti-Apolipoprotein A lantibody [EP1368Y]

Description Alexa Fluor® 488 Rabbit monoclonal [EP1368Y] to Apolipoprotein A I

Host species Rabbit

Conjugation Alexa Fluor® 488. Ex: 495nm, Em: 519nm

Tested applications Suitable for: Flow Cyt (Intra), ICC/IF

Species reactivity Reacts with: Human

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

Positive control Flow Cyt (intra)-intra: HepG2 cells. ICC: HepG2 cells.

General notes 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**.

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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 long

term. Avoid freeze / thaw cycle. Store In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, 68% PBS

Purity Protein A purified

Clonality Monoclonal
Clone number EP1368Y

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab279676 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)		1/50.
ICC/IF		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 $\frac{1}{2}$

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.

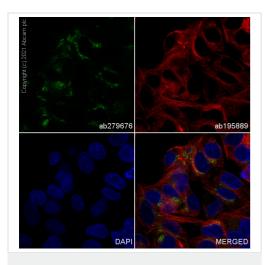
modifications

Phosphorylation sites are present in the extracelllular medium.

Cellular localization

Secreted.

Images

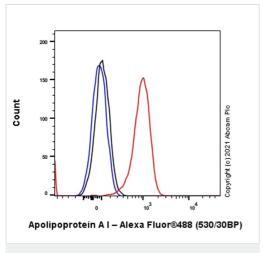


Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-Apolipoprotein A I antibody [EP1368Y] (ab279676)

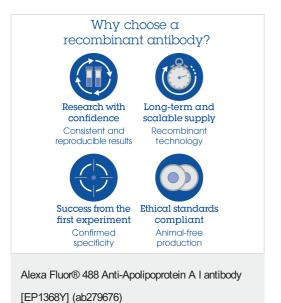
Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (human liver hepatocellular carcinoma cell line) cells labeling Apolipoprotein A I with ab279676 at 1/50 (10.0 μ g/ml) dilution (Green).

Confocal image showing cytoplasmic staining in HepG2 cells.

<u>ab195889</u> anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor[®] 594) was used to counterstain tubulin at 1/200 dilution (Red). The nuclear counterstain was DAPI (Blue).



Flow Cytometry (Intracellular) - Alexa Fluor® 488 Anti-Apolipoprotein A I antibody [EP1368Y] (ab279676) Flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized HepG2 (human hepatocellular carcinoma epithelial cell) cells labeling Apolipoprotein A I with ab279676 at 1/50 dilution (1 μ g) (Red) compared with a Rabbit monoclonal isotype control - Alexa Fluor 488 (Black) isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue).



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