abcam

Product datasheet

Mouse Apolipoprotein AI Matched Antibody Pair Kit ab221440

Recombinant

1 References 2 Images

Overview

Product name	Mouse Apolipoprotein AI Matched Antibody Pair Kit
Detection method	Colorimetric
Assay type	ELISA set
Sensitivity	40.3 pg/ml
Range	156.2 pg/ml - 10000 pg/ml
Species reactivity	**Reacts with:** Mouse
Product overview	Human Apolipoprotein AI Matched Antibody Pair Kits include a capture and a biotinylated detector antibody pair, along with a calibrated protein standard, suitable for sandwich ELISA. The Matched Antibody Pair Kit can be used to quantify native and recombinant human Apolipoprotein AI. Optimization of the kit reagents to sample type, immunoassay format or instrumentation may be required. Guidelines for use of this kit in a standard 96-well microplate sandwich ELISA using HRP/TMB system of colorimetric detection is described in this assay procedure for the purposes of quantification. Protocol information and tips on the use of the Matched Antibody Pair kits for sandwich ELISA can be found on our **website**. An accessory pack can be purchased which includes buffer reagents required to perform 10 x 96-well plate sandwich ELISAs (**ab210905**). For additional information on the performance of the antibody pair used in this kit, please see our equivalent SimpleStep ELISA kit **ab238260**. Please note that while the antibody pair is the same provided in the corresponding SimpleStep ELISA Kit, due to differences in their formulation, this antibody pair cannot be used with the consumables provided with our SimpleStep ELISA Kits.
Tested applications	**Suitable for:** ELISA
Platform	Reagents

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	5 x 96 tests
Mouse Apolipoprotein AI Capture Antibody	1 x 50µg
Mouse Apolipoprotein AI Detector Antibody	1 x 12.5µg
Mouse Apolipoprotein AI Lyophilized Protein	1 vial

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.

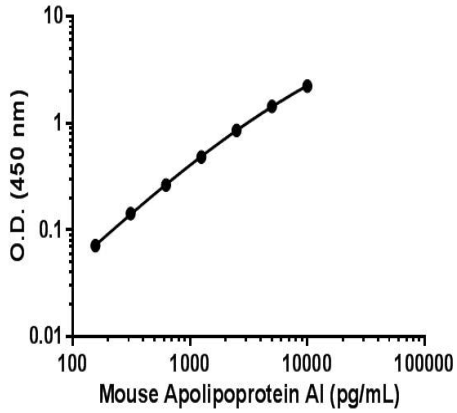
Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab221440 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
ELISA		Use at an assay dependent concentration.

Images



Mouse Apolipoprotein AI standard curve

Standard calibration curve. Background substracted values are graphed.

Sandwich ELISA - Mouse Apolipoprotein AI Matched Antibody Pair Kit (ab221440)

To learn more about the advantages of recombinant antibodies see **here**.

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