abcam

Product datasheet

Recombinant Human Apolipoprotein A I ab50239

4 References 1 Image

Description

Product name	Recombinant Human Apolipoprotein A I
Purity	> 95 % SDS-PAGE. ab50239 purity is greater than 97% by SDS-PAGE gel and HPLC analyses.
Endotoxin level	< 0.100 Eu/µg
Expression system	Escherichia coli
Accession	**P02647**
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MDEPPQSPWD RVKDLATVYV DVLKDSGRDY VSQFEGSALG KQLNLKLLDN WDSVTSTFSK LREQLGPVTQ EFWDNLEKET EGLRQEMSKD LEEVKAKVQP YLDDFQKKWQ EEMELYRQKV EPLRAELQEG ARQKLHELQE KLSPLGEEMR DRARAHVDAL RTHLAPYSDE LRQRLAARLE ALKENGGARL AEYHAKATEH LSTLSEKAKP ALEDLRQGLL PVLESFKVSF LSALEEYTKK LNTQ
Predicted molecular weight	28 kDa

Specifications

Our **Abpromise guarantee** covers the use of **ab50239** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Sandwich ELISA
Form	Lyophilized
Additional notes	Molecular Weight: 28.2 kDa

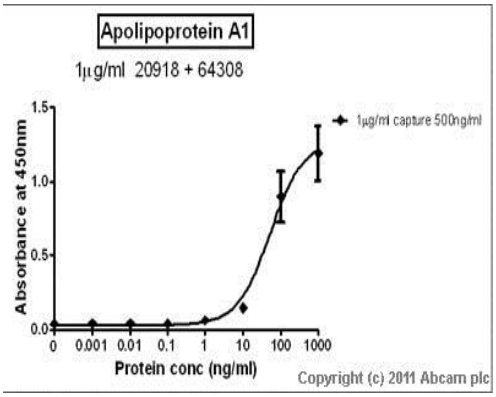
Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Reconstitution	Initially reconstitute in water to 0.1-1.0 mg/ml. Store at 2°C to 8°C for up to 1 week or prepare for extended storage. After initial reconstitution, further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA). Store working aliquots at -20°C to -80°C.

General Info

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



Sandwich ELISA - Recombinant Human Apolipoprotein A I (ab50239)

Standard curve for Apolipoprotein A I (Analyte: ab50239); dilution range 1pg/ml to 1µg/ml using Capture Antibody **ab20918** at 1µg/ml and Detector Antibody **ab64308** at 0.5µg/ml.

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