

Recombinant Mouse Apolipoprotein A I ab202174

1 Image

Description	
Product name	Recombinant Mouse Apolipoprotein A I
Purity	> 90 % SDS-PAGE. purified by using conventional chromatography technique
Expression system	Escherichia coli
Accession	<u>Q00623</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Mouse
Sequence	MGSSHHHHHHSSGLVPRGSHMGSDPEQSQWDKVKDFA NVYVDAVKDSGRD YVSQFESSLGQQNLNLLNWDTLGSTVSQLQERLGPL TRDFWDNLEKE TDWVRQEMNKDLEEVKQKVQPYLDEFQKKWKEDVELYR QKVAPLGAELQE SARQKLQELQGRLSPVAEEFRDRMRTHVDSLRTQLAPHS EQMRESLAQRL AELKSNPTLNEYHTRAKTHLKTGKARPAEDLRHSLMP MLETLKTQVQ SVIDKASETLTAQ
Predicted molecular weight	30 kDa including tags
Amino acids	25 to 264
Tags	His tag N-Terminus
Additional sequence information	Mature protein without signal peptide. NP_033822.

Specifications	
Our <u>Abpromise guarantee</u> covers the use of <b>ab202174</b> in the following tested applications.	
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.	
Applications	Mass Spectrometry SDS-PAGE
Mass spectrometry	MALDI-TOF

**Form** Liquid

## Preparation and Storage

**Stability and Storage** Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 7.40

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine), 0.02% DTT

## 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 occur 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.

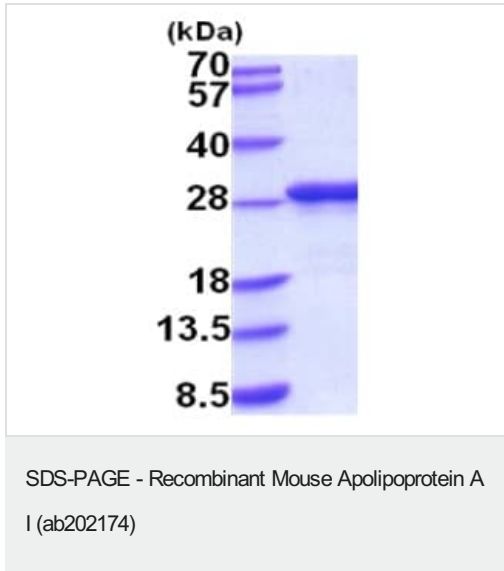
**Sequence similarities** Belongs to the apolipoprotein A1/A4/E family.

**Post-translational modifications** Palmitoylated.

Phosphorylation sites are present in the extracellular medium.

**Cellular localization** Secreted.

## Images



15% SDS-PAGE analysis of ab202174 (3 µg).

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

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