Apolipoprotein A1 (APOA1) Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	Apolipoprotein A1 (APOA1), Polyclonal Antibody
Full Product Name	Biotin-Linked Antibody to Apolipoprotein A1 (APOA1)
Product Gene Name	anti-APOA1 antibody
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Homo sapiens (Human)
Form/Format	Supplied as solution form in PBS, pH7.4, 50% glycerol 0.05% Proclin-300.
Purity/Purification	Antigen-specific Affinity Chromatography
Concentration	0.73mg/mL (lot specific)
Preparation and Storage	**Storage:** Avoid repeated freeze/thaw cycles. Store at 4 degree C for frequent use. Aliquot and store at -20 degree C for 24 months. **Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
Matching Pairs	Unconjugated Antibody: APOA1 (MBS2001678) Biotin Conjugated Antibody: APOA1 (MBS2003751)
Matching Pairs	Biotin Conjugated Antibody: APOA1 (MBS2003751) Immunogen: APOA1 (MBS2009128)
Chromosome Location	Chromosome: 11; NC_000011.9 (116706467..116708338, complement). Location: 11q23-q24
OMIM	105200
3D Structure	ModBase 3D Structure for P02647
Supply Chain Verification	Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire.
Source	Antibody labeling
Label	Biotin
Unconjugated Antibody	MBS2001678
Traits	Liquid
Immunogen	Recombinant APOA1 (Gln122~Gln267) expressed in E.coli (MBS2009128).
Product Categories/Family for anti-APOA1 antibody	Biotin Antibody
ISO Certification	Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory.
Applications Tested/Suitable for anti-APOA1 antibody	Western Blot (WB); Immunohistochemistry (IHC); Immunocytochemistry (ICC); Immunofluorescence (IF).

Application Notes for anti-APOA1 antibody	Western blotting: 0.5-2ug/mL; Immunohistochemistry: 5-20ug/mL; Immunocytochemistry: 5-20ug/mL; Optimal working dilutions must be determined by end user.
Related Product Information for anti-APOA1 antibody	MBS2003751 is an antibody targeting APOA1. Also known as Biotin-Linked Antibody to Apolipoprotein A1 (APOA1). Reactive in Homo sapiens (Human). Host: Rabbit.
Other Notes	Small volumes of anti-APOA1 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for APOA1. It may not necessarily be applicable to this product.

NCBI GI #	4960066
NCBI GeneID	335
NCBI Accession #	AAD34604.1
UniProt Primary Accession #	P02647
UniProt Secondary Accession #	Q6LDN9; Q6Q785; Q9UCS8; Q9UCT8; A8K866
UniProt Related Accession #	P02647
NCBI Official Full Name	apolipoprotein A1
NCBI Official Synonym Full Names	apolipoprotein A-I
NCBI Official Symbol	APOA1
UniProt Protein Name	Apolipoprotein A-I
UniProt Synonym Protein Names	Apolipoprotein A1Cleaved into the following chain:Truncated apolipoprotein A-I; Alternative name(s):; Apolipoprotein A-I(1-242)
Protein Family	Apolipoprotein
UniProt Gene Name	APOA1
UniProt Synonym Gene Names	Apo-AI; ApoA-I
UniProt Entry Name	APOA1_HUMAN
NCBI Protein Information	apolipoprotein A-I; apo-AI
NCBI Summary for APOA1	This gene encodes apolipoprotein A-I, which is the major protein component of high density lipoprotein (HDL) in plasma. The protein promotes cholesterol efflux from tissues to the liver for excretion, and it is a cofactor for lecithin cholesterolacyltransferase (LCAT) which is responsible for the formation of most plasma cholesteryl esters. This gene is closely linked with two other apolipoprotein genes on chromosome 11. Defects in this gene are associated with HDL deficiencies, including Tangier disease, and with systemic non-neuropathic amyloidosis. [provided by RefSeq, Jul 2008]

UniProt Comments for APOA1	APOA1: 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. Interacts with APOA1BP and CLU. Component of a sperm activating protein complex (SPAP), consisting of APOA1, an immunoglobulin heavy chain, an immunoglobulin light chain and albumin. Interacts with NDRG1. Major protein of plasma HDL, also found in chylomicrons. Synthesized in the liver and small intestine. The oxidized form at Met-110 and Met-136 is increased in individuals with increased risk for coronary artery disease, such as in carrier of the eNOSa/b genotype and exposure to cigarette smoking. It is also present in increased levels in aortic lesions relative to native ApoA-I and increased levels are seen with increasing severity of disease. Belongs to the apolipoprotein A1/A4/E family. Protein type: Secreted; Secreted, signal peptide; Vesicle; Motility/polarity/chemotaxis; Cell development/differentiation; Endoplasmic reticulum; Lipid-binding Chromosomal Location of Human Ortholog: 11q23-q24 Cellular Component: extracellular space; chylomicron; cell surface; endoplasmic reticulum lumen; endocytic vesicle; early endosome; plasma membrane; extracellular region; cytoplasmic vesicle; nucleus; cytosol; vesicle Molecular Function: identical protein binding; protein binding; enzyme binding; phospholipid transporter activity; lipase inhibitor activity; cholesterol transporter activity; chemorepellent activity; beta-amyloid binding; cholesterol binding; phospholipid binding; phosphatidylcholine binding; high-density lipoprotein binding; apolipoprotein A-I receptor binding; apolipoprotein receptor binding Biological Process: phototransduction, visible light; negative chemotaxis; negative regulation of lipase activity; axon regeneration in the peripheral nervous system; sequestering of lipid; negative regulation of interleukin-1 beta secretion; regulation of cholesterol absorption; transforming growth factor beta receptor signaling pathway; positive regulation of stress fiber formation; response to drug; cholesterol metabolic process; platelet activation; organ regeneration; regulation of Cdc42 protein signal transduction; adrenal gland development; positive regulation of hydrolase activity; positive regulation of Rho protein signal transduction; lipoprotein metabolic process; positive regulation of transferase activity; vitamin transport; cholesterol biosynthetic process; negative regulation of cytokine secretion during immune response; cholesterol homeostasis; lipoprotein biosynthetic process; response to estrogen stimulus; peptidyl-methionine modification; phosphatidylcholine biosynthetic process; positive regulation of lipoprotein lipase activity; blood vessel endothelial cell migration; cellular lipid metabolic process; platelet degranulation; phospholipid efflux; retinoid metabolic process; transmembrane transport; response to nutrient; phospholipid homeostasis; integrin-mediated signaling pathway; receptor-mediated endocytosis; positive regulation of fatty acid biosynthetic process; regulation of protein amino acid phosphorylation; cholesterol transport; negative regulation of heterotypic cell-cell adhesion; protein amino acid oxidation; protein stabilization; neurite regeneration; cholesterol efflux; glucocorticoid metabolic process; G-protein coupled receptor protein signaling pathway; reverse cholesterol transport; negative regulation of inflammatory response; endothelial cell proliferation; blood coagulation Disease: Hypoalphalipoproteinemia, Primary; Amyloidosis, Familial Visceral
Research Articles on APOA1	**1.** Six apolipoproteins (APOA1, APOA2, APOB, APOC2, APOC3, and APOE) were able to differentiate bladder cancer from hernia. SAA4 was significantly increased in bladder cancer subgroups, whereas ProEGF was significantly decreased in bladder cancer subgroups.
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