

Native Human Apolipoprotein A-I

Cat. No. APOA1-5301H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Native Human APOA1 is a single polypeptide chain containing 245 amino acids. Its molecular weight is 28300 Dalton.
Species	Human
Source	Human Plasma
Description	APOA1 is a protein that in humans is encoded by the APOA1 gene. It has a specific role in lipid metabolism. Apolipoprotein A-I is the major protein component of high density lipoprotein (HDL) in plasma. Chylomicrons secreted from the intestinal enterocyte also contain ApoA1 but it is quickly transferred to HDL in the bloodstream. The protein promotes cholesterol efflux from tissues to the liver for excretion. It is a cofactor for lecithin cholesterol acyltransferase (LCAT) which is responsible for the formation of most plasma cholesteryl esters. ApoA-I was also isolated as a prostacyclin (PGI ₂) stabilizing factor, and thus may have an anticlotting effect. Defects in the gene encoding it are associated with HDL deficiencies, including Tangier disease, and with systemic non-neuropathic amyloidosis. It has an approximate molecular weight 28 kDa.
Form	0.2 µm sterile filtered liquid in Tris-HCl + NaCl, pH 7.4 + disodium EDTA + sodium azide. Precaution: Sodium azide is a poisonous and hazardous substance which should be handled by trained staff only.
Concentration	> 0.9 mg/ml
Molecular Weight	28.3 kDa

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Purity	> 97% as determined by SDS-PAGE analysis.
Storage	Store at 2-4°C for short term storage and -20°C to -80°C for long term storage. Avoid repeated freeze-thaw cycles.
Official Symbol	APOA1

GENE INFORMATION

Gene Name	APOA1 apolipoprotein A-I [Homo sapiens]
Synonyms	APOA1; apolipoprotein A-I; MGC117399; OTTHUMP00000069348; OTTHUMP00000069347; OTTHUMP00000069346; apo-AI; apoA-I; OTTHUMP00000043268; Apolipoprotein A1; ALP-1; APOA; APOA-1; Apo-AI; BRP-14; LTW-1; LVTW-1; SEP-1; SEP-2; Apolipoprotein A-I; ApoA-I
Gene ID	335
mRNA Refseq	NM_000039
Protein Refseq	NP_000030
MIM	107680
UniProt ID	P02647
Chromosome Location	11q23-q24
Pathway	ABC-family proteins mediated transport; ABCA transporters in lipid homeostasis; African trypanosomiasis; Amyloids; Chylomicron-mediated lipid transport; FOXA2

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andFOXA3 transcription factor networks; Fat digestion and absorption; Fatty acid,triacylglycerol, and ketone body metabolism; Folate Metabolism; HDL-mediatedlipid transport; Hemostasis; Lipid digestion; Lipoprotein metabolism;Metabolism of lipids and lipoproteins; PPAR signaling pathway; Plateletactivation; Statin Pathway

Function

apolipoprotein A-Ireceptor binding; apolipoprotein receptor binding; beta-amyloid binding;cholesterol binding; contributes_to cholesterol transporter activity;cholesterol transporter activity; enzyme binding; high-density lipoproteinparticle binding; high-density lipoprotein particle receptor binding;identical protein binding; lipid transporter activity;phosphatidylcholine-sterol O-acyltransferase activator activity; phospholipidbinding; protein binding

PDB rendering basedon 1av1.

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