Human Apolipoprotein A-I/APOA1, Tag Free

HA211090

Product name:	Human Apolipoprotein A-I/APOA1, Tag Free
Species reactivity:	Human
Bio-Activity:	Testing in progress.
Protein construction description:	A DNA sequence encoding the human Apolipoprotein A-I/APOA1 protein (P02647) (Asp 25-Gln 267) was expressed with tag free.

Background: Apolipoprotein AI (Apo-AI) is a protein that in humans is encoded by the APOA1 gene.As the major component of HDL particles, it has a specific role in lipid metabolism.Apolipoprotein AI is the major protein component of high density lipoprotein (HDL) particles in plasma. Chylomicrons secreted from the intestinal enterocyte also contain apo-AI, but it is quickly transferred to HDL in the bloodstream. The protein, as a component of HDL particles, enables efflux of fat molecules by accepting fats from within cells (including macrophages within the walls of arteries which have become overloaded with ingested fats from oxidized LDL particles) for transport (in the water outside cells) elsewhere, including back to LDL particles or 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. Apolipoprotein AI has also been isolated as a prostacyclin (PGI2) 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.Apo-AI is often used as a biomarker for prediction of cardiovascular diseases. The ratio apoB-100/apoA1 (i.e. LDL & larger particles vs. HDL particles), NMR measured lipoprotein (low density lipoprotein (LDL)/(HDL) particle ratios even more so, has always had a stronger correlation with myocardial infarction event rates than older methods of measuring lipid transport in the water outside cells.

Purity:	>95% as determined by SDS-PAGE.
Endotoxin:	Less than 1.0 EU per μg by the LAL method.
Fragment region:	Apolipoprotein A-I/APOA1 (25-267)
Source:	HEK293
Accession:	P02647
Predicted molecular mass:	28.9 kD
Formulation:	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
Reconstitution:	Reconstitute at 250 μg/ml in sterile water.
Storage:	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20℃ to -80℃ It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.

Images

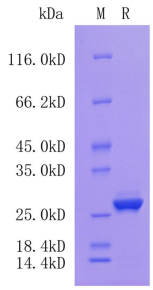

Fig1: Protein on SDS-PAGE under reducing (R) condition.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".