

Recombinant Human ApoA1 Protein (His Tag)

Catalog Number: PDMH100047

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Species	Human
Source	Mammalian-derived Human ApoA1 protein Met1-Gln267, with an C-terminal His
Calculated MW	29.3 kDa
Observed MW	30 kDa
Accession	P02647
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Background

Apolipoprotein A1 (APOA1) is a member of the apolipoprotein family whose members are proteins bind with lipids and form lipoproteins to transport these oil-soluble lipids such as fat and cholesterol through lymphatic and circulatory system. APOA1 is the main component of high density lipoprotein (HDL) in plasma and is involved in the esterification of cholesterol as a cofactor of lecithin-cholesterol acyltransferase (LCAT) which is responsible for the formation of most plasma cholesteryl esters, and thus play a major role in cholesterol efflux from peripheral cells. As a major component of the HDL complex, APOA1 helps to clear cholesterol from arteries. APOA1 is also characterized as a prostacyclin stabilizing factor, and thus may have an anticlotting effect. Defects in encoding gene may result in HDL deficiencies, including Tangier disease, and with systemic non-neuropathic amyloidosis. Men carrying a mutation may develop premature coronary artery disease.

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