Human ApoAI Protein (Fc Tag)

Catalog Number: 10686-H02H

General Information

Gene Name Synonym:
Apolipoprotein A-I

Protein Construction:
A DNA sequence encoding the pro-form of human APOA1 (CAA26097.1) (Met 1-Gln 267) was fused with Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:
1. Measured by its binding ability in a functional ELISA. 2. Immobilized Human ApoAI at 10 μg/mL (100 μl/well) can bind biotinylated human SCARB1. The EC50 of biotinylated human SCARB1 is 0.37 μg/mL.

Endotoxin:
< 1.0 EU per μg of the protein as determined by the LAL method

Stability:
Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Asp 25

Molecular Mass:
The recombinant human APOA1/Fc is a disulfide-linked homodimeric protein. The reduced monomer consists of 481 amino acids migrates as approximately 55 kDa band in SDS-PAGE under reducing conditions as predicted.

Formulation:
Lyophilized from sterile 100mM Glycine, 10mM NaCl, 50mM Tris, pH 7.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:
Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:

Protein Description

Apolipoprotein A1 (APOA1) is a member of the apolipoprotein family whose members are proteins bind with lipids and form lipoproteins to translate 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.

References