

Cytokines

Human Recombinant Apolipoprotein A-I

Apolipoprotein A-I, His tag



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Catalog #100-1322

100 µg

Product Description

Apolipoprotein A-I (apo A-I) is a member of the apolipoprotein family and is a major glycoprotein component of high density lipoprotein (HDL) particles (Frank & Marcel). HDL particles facilitate the reverse transport of cholesterol from peripheral tissues to the liver and apo A-I participates in this process through various means. Apo A-I contains a His-residue tag at the amino end of the polypeptide chain. It binds to the scavenger receptor SR-A1, allowing HDL particles to interact with cells in peripheral tissues (Neyen et al.). It also acts as a cofactor for the lecithin cholesterol acyltransferase (LCAT), and is thus involved in the esterification of cholesterol (Frohlich). Apo A-I has been shown to bind to the scavenger receptor SR-B1 (Williams et al.) and the beta chain of ATP synthase (Martinez et al.) on hepatocytes, highlighting its importance in HDL endocytosis. Mutations in the APOA1 encoding gene may result in dysregulated HDL levels, leading to an increased risk of amyloidosis and ischemic heart disease (Haase et al.; Obici et al.).

Product Information

Alternative Names: Apolipoprotein A1

Accession Number: P02647 (Asp25-Gln267) was expressed with a polyhistidine tag and spacer sequence (AHFWQQENLYFQG) at the N-terminus.

Amino Acid Sequence: MHHHHHHAHF WQQENLYFQG DEPPQSPWDR VKDLATVYVD VLKDSGRDYV SQFEQSALGK QLNKLLDNW DSVTSTFSKL REQLGPVTQE FWDNLEKETE GLRQEMSKDL EEVKAKVQPY LDDFQKKWQE EMELYRQKVE PLRAELQEGA RQKLHELQEK LSPLGEEMRD RARAHVDALR THLAPYSDEL RQRLAARLEA LKENG GARLA EYHAKATEHL STLSEKAKPA LEDLRQG LLP VLESFKVSFL SALEEYTKKL NTQ

Predicted Molecular Mass: 30.7 kDa

Species: Human

Formulation: Lyophilized from sterile PBS, 10% Glycerol, pH 7.4. Trehalose (5 - 8%), mannitol, and 0.01% TWEEN® 80 are normally added as protectants before lyophilization.

Source: *E.coli*

Specifications

Activity: Not available

Purity: ≥ 92%

Endotoxin Level: Not available

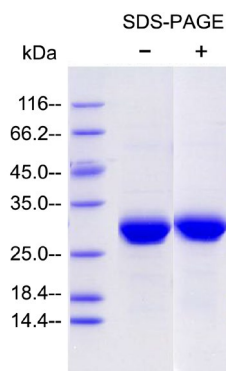
Preparation and Storage

Storage: Store at -20 to -80°C.

Stability: Stable as supplied for 12 months from date of receipt.

Preparation: Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.25 mg/mL by pipetting the solution down the sides of the vial. Do not vortex. As a general guide, do not store at 2 - 8°C for more than 1 month or at -80°C for more than 3 months. Avoid repeated freeze-thaw cycles.

Data



Human Recombinant Apolipoprotein A-I was resolved with SDS-PAGE under reducing (+) and non-reducing (-) conditions and visualized by Coomassie Blue staining. Human Recombinant Apolipoprotein A-I has a predicted molecular mass of 30.7 kDa.

Related Products

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References

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