9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

APOC1 Human

Apolipoprotein C-I Human Recombinant
CYK0050

Product Overview

Name	APOC1 Human
Description	
Apolipoprotein C-I Human Recombinant	
Accession (Primary)	P02654
Synonyms	
Apolipoprotein C-I, Apo-CI, ApoC-I, Apolipoprotein C1, APOC1.	
Introduction	
Apolipoprotein C-I (APOC1) which expressed mainly in the liver is a part of the apolipoprotein C family. APOC1 which is usually found in plasma and responsible for the activation of esterified lechitin cholesterol takes an important part in the exchange of esterified cholesterol among lipoproteins and in removal of cholesterol from tissues. APOC1 is activated when monocytes differentiate into macrophages. APOC1 protein's main role is to inhibit CETP by altering the electric charge of HDL molecules. APOC1 is also binds free fatty acids and reduces their intracellular esterification.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered clear solution.	
Formulation	
APOC1 protein solution (0.25mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 0.15M NaCl and 10% glycerol.	
Stability	
Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.	
Purity	
Greater than 90% as determined by SDS-PAGE.	
Amino acid sequence	
MGSSHHHHHH SSGLVPRGSH MGS TPDVSSA LDKLKEFGNT LEDKARELIS RIKQSELSAK MREWFSETFQ KVKEKLKIDS.	
Background	
Apolipoprotein C-I Human Recombinant: Unraveling the Complexity of Lipid Regulation Abstract: Apolipoprotein C-I	

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(ApoC-I) is a remarkable protein that plays a significant role in lipid metabolism and cardiovascular health. It is primarily synthesized in the liver and is associated with lipoproteins involved in lipid transport. This research paper aims to provide a comprehensive overview of ApoC-I human recombinant, shedding light on its physiological functions, production methods, and potential therapeutic applications. By delving into the intricacies of ApoC-I, we can gain valuable insights into its role as a key player in lipid regulation and its potential as a therapeutic target. Introduction: The prevalence of lipid disorders and cardiovascular diseases necessitates a deeper understanding of the mechanisms governing lipid metabolism. ApoC-I, a critical component of lipoproteins, offers unique insights into the regulation of lipid levels and its implications for cardiovascular health. Structure and Function of Apolipoprotein C-I: ApoC-I exhibits a complex molecular structure, comprising functional domains that enable its interaction with lipoproteins. It plays a crucial role in regulating lipoprotein metabolism by inhibiting the activity of lipoprotein lipase and modulating the clearance of triglyceride-rich lipoproteins. Regulation of Apolipoprotein C-I Expression: The synthesis and secretion of ApoC-I are tightly regulated processes influenced by various factors, including nutritional status and hormonal signals. Understanding the regulatory mechanisms underlying ApoC-I expression can provide insights into its role in maintaining lipid homeostasis. Apolipoprotein C-I and Cardiovascular Diseases: Dysregulation of ApoC-I has been associated with various lipid disorders and cardiovascular diseases. Altered levels of ApoC-I have been observed in conditions such as hypertriglyceridemia and atherosclerosis, highlighting its potential as a biomarker for cardiovascular risk assessment. Production of Apolipoprotein C-I Human Recombinant: Recombinant ApoC-I can be produced using advanced biotechnological approaches, including recombinant DNA technology and protein expression systems. These methods enable large-scale production, purification, and characterization of ApoC-I, facilitating its potential therapeutic applications. Therapeutic Potential of Apolipoprotein C-I Human Recombinant: Targeting ApoC-I opens up exciting avenues for therapeutic interventions in lipid disorders and cardiovascular diseases. Modulating ApoC-I expression or function holds promise for restoring lipid balance and reducing the risk of cardiovascular complications. Conclusion: Apolipoprotein C-I human recombinant represents a fascinating area of research in the field of lipid metabolism and cardiovascular health. By unraveling the intricate interplay between ApoC-I, lipoproteins, and cardiovascular diseases, we can pave the way for novel therapeutic strategies and improved risk assessment. Further studies are required to fully understand the therapeutic potential of ApoC-I human recombinant and translate these findings into clinical applications.

Precautions

APOC1 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P02654)

Background

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