Human SCARB1 / CD36L1 / CLA-1 Protein (His & Fc Tag)

Catalog Number: 11069-H03H

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

CD36L1; CLA-1; CLA1; HDLQTL6; SR-BI; SRB1; AI120173; CD36; Cd36l1; Cla-1; Cla1; D5Ertd460e; Hdlq1; Hlb398; mSR-BI; SR-B1; SR-BI; Srb1; SRBI

Protein Construction:

A DNA sequence encoding the human SCARB1 (NP_005496.4) extracellular domain (Pro 33-Tyr 443) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 98 % as determined by SDS-PAGE

Bio Activity:

1. Measured by its ability to bind recombinant mouse ApoAI in a functional ELISA. 2. Measured by its ability to bind recombinant Human ApoAI in a functional ELISA.

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 ℃

Predicted N terminal: Pro 33

Molecular Mass:

The recombinant human SCARB1/Fc is a disulfide-linked homodimer. The reduced monomer consists of 659 amino acids and has a predicted molecular mass of 78 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhSCARB1/Fc monomer is approximately 110-115 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

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:

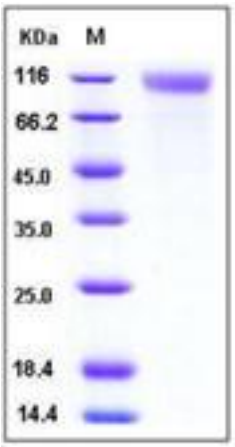
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Scavenger receptor class B, member 1 (SCARB1), also known as CD36L1, is a member of the scavenger receptor family. SCARB1 is expressed primarily in liver and non placental steroidogenic tissues, and predominantly localized to cholesterol and sphingomyelin-enriched domains within the plasma membrane. SCARB1 is proposed as a receptor for different ligands such as phospholipids, cholesterol ester, lipoproteins, phosphatidylserine and apoptotic cells, and is involved in a wide variety of physiological processes. As a key component in the reverse cholesterol transport pathway, SCARB1 binds high density lipoproteins (HDLs) and mediates selective cholesterol uptake by a mechanism distinct from the LDL pathway. High density lipoproteins (HDLs) play a critical role in cholesterol metabolism and their plasma concentrations are inversely correlated with risk for atherosclerosis. SCARB1 may thus serve as a useful marker that predicts variation in baseline lipid levels and postprandial lipid response. The mouse SCARB1 has been shown to exert actions in determining the levels of plasma lipoprotein cholesterol and the accumulation of cholesterol stores in the adrenal gland.

References

1.Murao, K. et al., 1997, J. Biol. Chem. 272(28): 17551-17557.
2.Ikemoto, M. et al., 2000, Proc. Natl. Acad. Sci. U.S.A. 97 (12): 6538-6543.
3.Husemann, J. et al., 2001, Am. J. Pathol. 158 (3): 825-832.