

## SR-BI/SCARB1 Protein, Human, Recombinant (hFc)

### General Information

Synonyms:	HDLQTL6;SR-BI;SRB1;CD36L1;CLA-1;CLA1;scavenger receptor class B, member 1
Protein Construction:	A DNA sequence encoding the human SCARB1 ( NP_001076428.1) (Pro33-Tyr443) was expressed with the Fc region of human IgG1 at the C-terminus. Predicted N terminal: Pro 33
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q8WTV0-5
Molecular Weight:	73.4 kDa (predicted)

### QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 90 % as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/µg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 µm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

### Preparation and Storage

**Reconstitution:**  
A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

**Stability & Storage:**  
It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

**Shipping:**  
In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

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.

### Reference

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