Data Sheet (Cat.No.TMPY-01024)

TargetMol

LIMPII/SR-B2 Protein, Human, Recombinant (His & hFc)

General Information

Synonyms:	LGP85;SR-BII;AMRF;EPM4;LIMPII;LIMP-2;HLGP85;CD36L2;scavenger receptor class B, member 2
Protein Construction:	A DNA sequence encoding the human SCARB2 (NP_005497.1) extracellular domain (Arg 27-Thr 432) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus. Predicted N terminal: Arg 27
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q14108
Molecular Weight:	74.4 kDa (predicted); 110-115 kDa (reducing condition, due to glycosylation)

QC Testing

Biological Activity:	Measured by its ability to bind recombinant human RSPO1 in a functional ELISA.
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

Lysosomal Integral Membrane Protein II (LIMPII), also known as SCARB2, LPG85, and CD36L2, is a type I II multi-pass membrane glycoprotein that is located primarily in limiting membranes of lysosomes and endosomes on all tissues and cell types so far examined. This protein may participate in membrane transportation and the reorganization of endosomal/lysosomal compartment. LIMPII is identified as a receptor for EV71 (human

enterovirus species A, Enterovirus 71) and CVA16 (coxsackievirus A16) which are most frequently associated with hand, foot and mouth disease (HFMD). Expression of human LIMPII enables normally unsusceptible cell lines to support the viruses' propagation and develop cytopathic effects. In addition, LIMPII also has been shown to bind thrombospondin-1, and may contribute to the pro-adhesive changes of activated platelets during coagulation, and inflammation. Deficiency of the protein in mice impairs cell membrane transport processes and causes pelvic junction obstruction, deafness, and peripheral neuropathy.

Reference

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