Recombinant Human OLR1/LOX-1 protein (His tag)

Catalog Number:PDMH100077

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Synonyms	Oxidized Low-Density Lipoprotein Receptor 1;Ox-LDL Receptor 1;C-Type Lectin Domain Family 8 Member A;Lectin-Like Oxidized LDL Receptor 1;LOX-1;Lectin-Like oxLDL Receptor 1;hLOX-1;Lectin-Type Oxidized LDL Receptor 1;OLR1;CLEC8A;LOX1;LOXIN;SCARE1;
Species	Human
Expression Host	HEK293 Cells
Sequence	Ser61-Gln273
Accession	P78380
Calculated Molecular Weight	23.3 kDa
Observed molecular weight	32 kDa
Tag	C-His

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Background

Oxidized Low-Density Lipoprotein Receptor 1 (Ox-LDL Receptor 1) is a secreted; single-pass type II membrane protein which belongs to the C-type lectin superfamily. Ox-LDL Receptor 1 is expressed at high levels in endothelial cells and vascular-rich organs such as placenta; lung; liver; brain; aortic intima; bone marrow; spinal cord and substantia nigra. The expression of Ox-LDL Receptor 1 is induced by inflammatory cytokines such as TNF; IFNG and IL6 by pathological conditions; such as hyperlipidemia; hypertension and diabetes mellitus. Ox-LDL Receptor 1 mediates the recognition; internalization and degradation of oxidatively modified low density lipoprotein (OxLDL) by vascular endothelial cells. Ox-LDL Receptor 1 association with oxLDL induces the activation of NF-kappa-B through an increased production of intracellular reactive oxygen and a variety of pro-atherogenic cellular responses including a reduction of nitric oxide (NO) release; monocyte adhesion and apoptosis. Ox-LDL Receptor 1 also binds to oxLDL; which acts as a receptor for the HSP70 protein involved in antigen cross-presentation to naive T-cells in dendritic cells; thereby participating in cell-mediated antigen cross-presentation. It also participates in inflammatory process; by acting as a leukocyte-adhesion molecule at the vascular interface in endotoxin-induced inflammation.