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

Catalog Number: PDMH100394

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

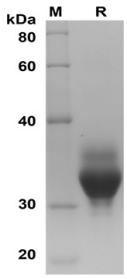
Description

Species	Human
Source	HEK293 Cells-derived Human OLR1 protein Ser61-Gln273, with an C-terminal His
Calculated MW	23.3 kDa
Observed MW	32 kDa
Accession	P78380
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg of the protein as determined by the LAL method
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 a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Human OLR1/LOX-1 proteins, 2μg/lane of Recombinant Human OLR1/LOX-1 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 32 KD.

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.