Recombinant Human OLR1
Catalog # C524
Derived from Human Cells

DESCRIPTION
Recombinant Human Oxidized Low-Density Lipoprotein Receptor 1 is produced by our Mammalian expression system and the target gene encoding Ser61-Gln273 is expressed with a 6His tag at the C-terminus.

Accession #: P78380
Known as: 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

FORMULATION
Lyophilized from a 0.2 μm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

SHIPPING
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

STORAGE
Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

RECONSTITUTION
Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100μg/ml.

Dissolve the lyophilized protein in distilled water.
Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

QUALITY CONTROL
Purity: Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin: Less than 0.1 ng/μg (1 IEU/μg).

AMINO ACID SEQUENCE
SQVSDLTTGEQANLTHQKKLEGGQISARQAAEASEQSENELKEMIETLRKLNEKSKEQMELHHQNLNLQETLKRVANCSAP
CPQDWWHGENCYLFSSGSFNWEKSEQKECLSDLAKLLKINSTADLDIFQQAYSSSFPFWMGLSRRNPPSYPWLEDGSPLMP
HLFRVGAWSQTYSPGTCAYIQRGAVYAENCILAAFSICQKANLRAQVDHHHHH

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.