

Human OLR1 / LOX1 Protein (His Tag)

Catalog Number: 10585-H07H



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CLEC8A; LOX1; LOXIN; OLR1; SCARE1; SLOX1

Protein Construction:

A DNA sequence encoding the human OLR1 (P78380) extracellular domain (Ser 61-Gln 273) was expressed, with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 85 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: His

Molecular Mass:

The recombinant human OLR1 consists of 229 amino acids and has a calculated molecular mass of 26.5 kDa. It exists as a disulfide-linked homodimer. As a result of glycosylation, the apparent molecular mass of rhOLR1 is approximately 30-35 kDa in SDS-PAGE under reducing conditions, and 60-70 kDa in non-reduced SDS-PAGE.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

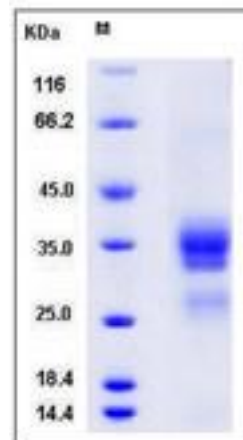
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Oxidized low-density lipoprotein receptor 1 (Ox-LDL receptor 1 or OLR1), also known as lectin-type oxidized LDL receptor 1 (LOX1), is a receptor protein that belongs to the C-type lectin superfamily. LOX1 is a multi-ligand receptor originally identified as the endothelial oxidized LDL receptor. OLR1 / LOX1 was isolated from an aortic endothelial cell, and recently it has been discovered in macrophages and vascular smooth muscle cells in artery vessels. The expression of LOX1 is induced by inflammatory stimuli and oxidative stimuli. This protein binds, internalizes and degrades oxidized low-density lipoprotein. LOX1 may play an important role in the progression of vulnerable carotid plaque and might regulate vulnerable plaque formation in cooperation with MMPs and TIMP-2. In clinical, LOX1 is thought to be involved in the development of atherosclerotic lesions.

References

- 1.Hinagata J, *et al.* (2006) Oxidized LDL receptor LOX-1 is involved in neointimal hyperplasia after balloon arterial injury in a rat model. *Cardiovasc Res.* 69 (1): 263-71.
- 2.Melan MA, *et al.* (1994) The LOX1 Gene of Arabidopsis Is Temporally and Spatially Regulated in Germinating Seedlings. *Plant Physiol.* 105 (1): 385-93.
- 3.Saito A, *et al.* (2010) Relationship between lectin-like oxidized low-density lipoprotein receptor 1 expression and preoperative echogenic findings of vulnerable carotid plaque. *Acta Neurochir (Wien).* 152 (4): 589-95.

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For US Customer: Fax: 267-657-0217 • Tel: 215-583-7898

Global Customer: Fax :+86-10-5862-8288 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>