

Recombinant Protein Technical Manual Recombinant Rat OLR1/LOX1 Protein (His Tag)

RPES4981

Product Data:

Product SKU: RPES4981 Size: 20μg

Species: Rat Expression host: HEK293 Cells

Uniprot: 070156

Protein Information:

Molecular Mass: 37.9 kDa

AP Molecular Mass: 43-47 kDa

Tag: N-His

Bio-activity:

Purity: > 90 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ of the protein as determined by the LAL method

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C 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

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: OLR1;Lox1;Oldlr1

Immunogen Information:

Sequence: Leu60-Gln364

Background:

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 multiligand 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 inducted 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.