Oxidized Lowdensity Lipo (OXLDL) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Oxidized Lowdensity Lipoprotein (OXLDL), ELISA Kit
Full Product Name	Human Oxidized Lowdensity Lipoprotein ELISA Kit
Product Gene Name	OXLDL elisa kit
Species Reactivity	Human
Assay Type	Sandwich
Samples	Undiluted original Human Oxidized body fluids, tissue homogenates, secretions or feces samples. This kit is NOT suitable for assaying non-biological sources of substances.
Detection Range	62.5 ng/ml - 2000 ng/ml.
Sensitivity	10ng/ml.
Specificity	No significant cross-reactivity or interference between this analyte and analogues is observed.
Preparation and Storage	Store all reagents at 2-8 degree C
Inter-assay Precision	Inter-assay CV (%) is less than 15%. [CV(%) = SD/mean ×100].
Intra-assay Precision	Intra-assay CV (%) is less than 15%.
Molecular Weight	30,959 Da
OMIM	602601
3D Structure	ModBase 3D Structure for P78380
Related Product Information for OXLDL elisa kit	Background/Introduction: This Quantitative Sandwich ELISA kit is only for in vitro research use only! This kit is intended to be used for determination the level of OXLDL (hereafter termed "analyte") in undiluted original Human Oxidized body fluids, tissue homogenates, secretions or feces samples. This kit is NOT suitable for assaying non-biological sources of substances.
Other Notes	Small volumes of OXLDL elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for OXLDL purchase	MBS028134 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Oxidized Lowdensity Lipoprotein (OXLDL) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing OXLDL. The ELISA analytical biochemical technique of the MBS028134 kit is based on OXLDL antibody-OXLDL antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect OXLDL antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, OXLDL. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for OXLDL. It may not necessarily be applicable to this product.

NCBI GI #	4505501
NCBI GeneID	4973
NCBI Accession #	NP_002534.1

UniProt Primary Accession #	P78380
UniProt Secondary Accession #	Q2PP00; Q7Z484; A8K7V9; B4DI48; G3V1I4
UniProt Related Accession #	P78380
GenBank Nucleotide #	NM_002543.3
NCBI Official Full Name	oxidized low-density lipoprotein receptor 1 isoform 1
NCBI Official Synonym Full Names	oxidized low density lipoprotein (lectin-like) receptor 1
NCBI Official Symbol	OLR1
NCBI Official Synonym Symbols	LOX1; LOXIN; SLOX1; CLEC8A; SCARE1
UniProt Protein Name	Oxidized low-density lipoprotein receptor 1
UniProt Synonym Protein Names	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
UniProt Gene Name	OLR1
UniProt Synonym Gene Names	CLEC8A; LOX1; Ox-LDL receptor 1; LOX-1; Lectin-like oxLDL receptor 1; hLOX-1
UniProt Entry Name	OLR1_HUMAN
NCBI Protein Information	oxidized low-density lipoprotein receptor 1; hLOX-1; ox LDL receptor 1; lectin-type oxidized LDL receptor 1; scavenger receptor class E, member 1; C-type lectin domain family 8 member A; oxidized low-density lipoprotein receptor 1, soluble form
NCBI Summary for OXLDL	This gene encodes a low density lipoprotein receptor that belongs to the C-type lectin superfamily. This gene is regulated through the cyclic AMP signaling pathway. The encoded protein binds, internalizes and degrades oxidized low-density lipoprotein. This protein may be involved in the regulation of Fas-induced apoptosis. This protein may play a role as a scavenger receptor. Mutations of this gene have been associated with atherosclerosis, risk of myocardial infarction, and may modify the risk of Alzheimer's disease. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Feb 2010]

UniProt Comments for OXLDL	OLR1: Receptor that mediates the recognition, internalization and degradation of oxidatively modified low density lipoprotein (oxLDL) by vascular endothelial cells. OxLDL is a marker of atherosclerosis that induces vascular endothelial cell activation and dysfunction, resulting in pro-inflammatory responses, pro- oxidative conditions and apoptosis. Its 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. In addition to binding oxLDL, it 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. Also involved in inflammatory process, by acting as a leukocyte-adhesion molecule at the vascular interface in endotoxin-induced inflammation. Also acts as a receptor for advanced glycation end (AGE) products, activated platelets, monocytes, apoptotic cells and both Gram-negative and Gram- positive bacteria. Independent association genetic studies have implicated OLR1 gene variants in myocardial infarction susceptibility. OLR1 may be involved in Alzheimer disease (AD). Involvement in AD is however unclear: according to some authors (PubMed:12354387, PubMed:12810610 and PubMed:15976314), variations in OLR1 modify the risk of AD, while according to other (PubMed:15000751 and PubMed:15060104) they do not. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Receptor, misc.; Membrane protein, integral Chromosomal Location of Human Ortholog: 12p13.2-p12.3 Cellular Component: nucleoplasm; intracellular membrane-bound organelle; membrane; integral to plasma membrane; plasma membrane; receptor complex; lipid raft Molecular Function: low-density lipoprotein receptor activity; protein binding; carbohydrate binding Biological Process: cell death; receptor-mediated endocytosis; leukocyte adhesion; response to hydrogen peroxide; blood circulation; lipoprotein metabolic process; blood coagulation; inflammatory response; proteolysis; leukocyte migration Disease: Myocardial Infarction, Susceptibility To
Research Articles on OXLDL	**1.** identified 6 of the 8 components of the chaperonin-containing TCP-1 (CCT) complex bound to LOX-1 cytoplasmic domain
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