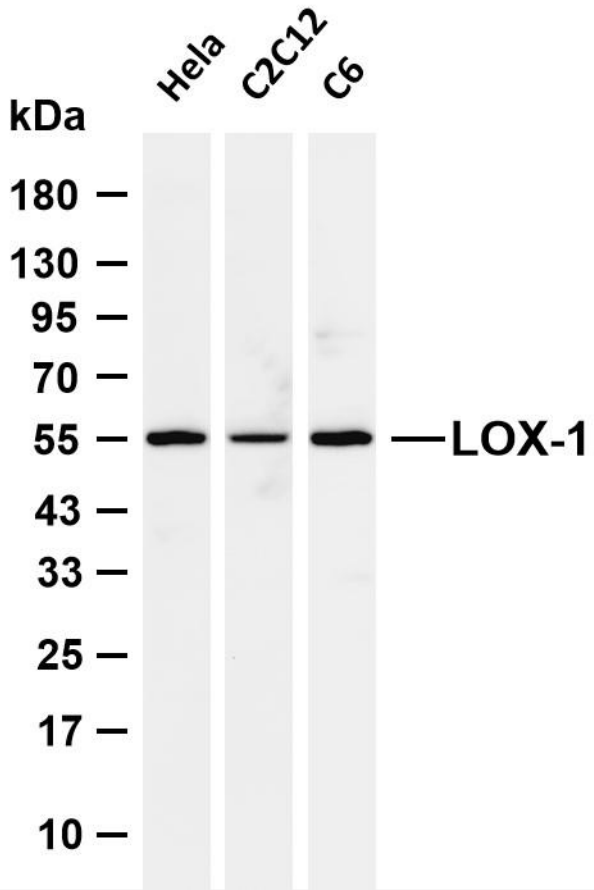
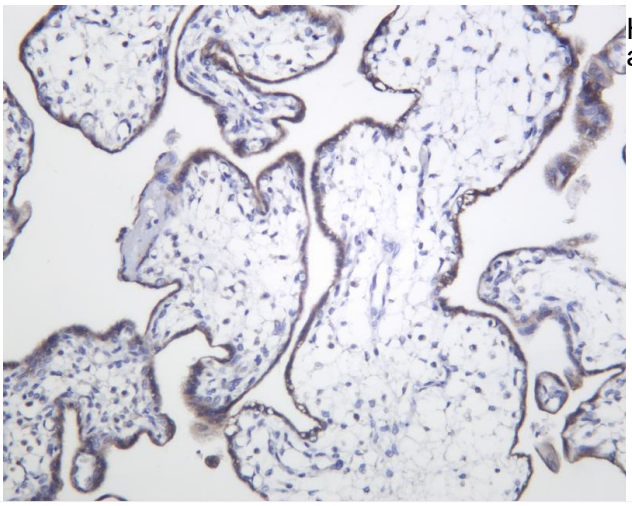
LOX-1 Rabbit mAb

Catalog No	YP-rAb-17137
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,ELISA
Gene Name	OLR1 CLEC8A LOX1
Protein Name	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) [Cleaved into: Oxidized low-density lipoprotein receptor 1, soluble form]
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:500-1:2000; IF 1:200-1:1000; ELISA 1:5000-1:20000; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	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 ;
Observed Band	55kD
Calculated Molecular Weight	31kD
Cell Pathway	Cell membrane; Lipid-anchor. Cell membrane; Single-pass type II membrane protein. Membrane raft. Secreted. A secreted form also exists. Localization to membrane rafts requires palmitoylation.
Tissue Specificity	Expressed at high level in endothelial cells and vascular-rich organs such as placenta, lung, liver and brain, aortic intima, bone marrow, spinal cord and substantia nigra. Also expressed at the surface of dendritic cells. Widely expressed at intermediate and low level.
Function	Disease:Defects in OLR1 may be a cause of susceptibility to myocardial infarction [MIM:608557].,Disease:Defects in OLR1 may be associated with susceptibility to Alzheimer disease (AD) [MIM:104300]. 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.,Domain:The C-type lectin domain mediates the recognition and binding of oxLDL.,Domain:The cytoplasmic region is required for subcellular sorting on the cell surface.,Function: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.,induction:By inflammatory cytokines such as TNF-alpha, IFN-gamma, IL-6 and by pathological conditions such as hyperlipidemia, hypertension and diabetes mellitus. Up-regulated in atherosclerotic lesions, by oxLDL, reactive oxygen species and fluid shear stress, suggesting that it may participate in amplification of oxLDL-induced vascular dysfunction.,online information:Oxidized LDL receptor,PTM:N-glycosylated.,PTM:The intrachain disulfide-bonds prevent N-glycosylation at some sites.,similarity:Contains 1 C-type lectin domain.,subcellular location:A secreted form also exists.,subunit:Homodimer; disulfide-linked. May form a hexamer composed of 3 homodimers. Interacts with HSP70.,tissue specificity:Expressed at high level in endothelial cells and vascular-rich organs such as placenta, lung, liver and brain, aortic intima, bone marrow, spinal cord and substantia nigra. Also expressed at the surface of dendritic cells. Widely expressed at intermediate and low level.,
Background	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],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-LOX-1 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: Hela Lane 2: C2C12 Lane 2: C6 Predicted band size: 31kDa Observed band size: 55kDa



Human placenta was stained with anti-LOX-1 Rabbit antibody