abcam

Product datasheet

Mouse LOX1 ELISA Kit (OLR1) ab119603

1 References 1 Image

Overview

Product name Mouse LOX1 ELISA Kit (OLR1)

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
1	16	85pg/ml	4.84	= 8.2%
2	16	321pg/ml	17.33	= 5.4%
3	16	767pg/ml	60.59	= 7.9%

Inter-assay

Sample	n	Mean	SD	CV%
1	24	85pg/ml	5.35	= 7.2%
2	24	312pg/ml	22.46	= 7.2%
3	24	750pg/ml	61.5	= 8.2%

Sample type Cell culture supernatant, Serum, Cell Lysate, Hep Plasma, EDTA Plasma

Assay type Sandwich (quantitative)

Sensitivity < 1 pg/ml

Range 31.2 pg/ml - 2000 pg/ml

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Mouse

Product overview Abcam's mouse LOX1 (OLR1) *in vitro* ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the accurate quantitative measurement of mouse LOX1 in cell culture supernatants, cell lysates, serum and plasma (heparin and EDTA)

A LOX1 specific rat monoclonal antibody has been precoated onto 96-well plates. Standards and test samples are added to the wells and incubated. A biotinylated detection polyclonal antibody

from goat specific for LOX1 is then added followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. TMB is then used to visualize the HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is directly proportional to the mouse LOX1 amount of sample captured in plate.

Get better reproducibility in only 90 minutes with Mouse LOX1 ELISA Kit (OLR1) (**ab204521**) from our SimpleStep ELISA® range.

Platform Microplate

Properties

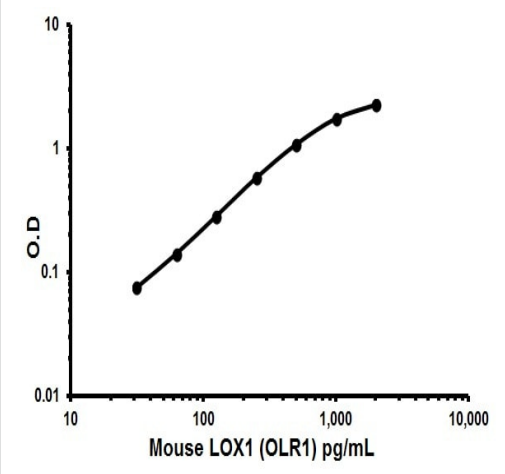
Storage instructions Store at -20°C. Please refer to protocols.

Components	Identifier	1 x 96 tests
ABC Diluent Buffer	Blue Cap	1 x 12ml
Antibody Diluent Buffer	Green Cap	1 x 12ml
Anti-mouse LOX1 antibody Microplate (12 x 8 wells)		1 unit
Avidin-Biotin-Peroxidase Complex (ABC)		1 x 100µl
Biotinylated anti-mouse LOX1 antibody		1 x 100µl
Lyophilized recombinant mouse LOX1 standard		2 x 10ng
Plate Seal		1 x 4 units
Sample Diluent Buffer	Green Cap	1 x 30ml
TMB Color Developing Agent	Amber Bottle	1 x 10ml
TMB Stop Solution	Yellow Cap	1 x 10ml
Wash Buffer (25X)		1 x 20ml

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.
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.
Involvement in disease	Note=Independent association genetic studies have implicated OLR1 gene variants in myocardial infarction susceptibility. Note=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.
Sequence similarities	Contains 1 C-type lectin domain.
Domain	The cytoplasmic region is required for subcellular sorting on the cell surface. The C-type lectin domain mediates the recognition and binding of oxLDL.
Post-translational modifications	The intrachain disulfide-bonds prevent N-glycosylation at some sites. N-glycosylated.
Cellular localization	Cell membrane. Secreted. A secreted form also exists.

Images



Typical Standard Curve

Representative Standard Curve using ab119603

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