

Datasheet for ABIN921103

OLR1 ELISA Kit

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Overview

Quantity:	96 tests
Target:	OLR1
Binding Specificity:	AA 60-363
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	31.2-2000 pg/mL
Minimum Detection Limit:	31.2 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse LOX-1/OLR1
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: R60-I363
Specificity:	Expression system for standard: NSO Immunogen sequence: R60-I363
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<1pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target:	OLR1
Alternative Name:	OLR1 (OLR1 Products)
Background:	<p>Protein 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 (By similarity). .</p> <p>Background: Oxidized low-density lipoprotein receptor 1(Ox-LDL receptor 1) also known as lectin-type oxidized LDL receptor 1(LOX-1) is a protein that in humans is encoded by the OLR1 gene. It belongs to the C-type lectin superfamily. The LOX1 gene is mapped to to 12p13-p12. The protein has got the amino acids of 363. It can be detected in various tissues, highly expressed in placenta. This protein may be involved in the regulation of Fas-induced apoptosis and play a role as a scavenger receptor. The standards of this kit are recombinant mouse LOX-1(R60-I363), with molecular weight of 36.3 kDa.</p> <p>Synonyms: Oxidized low-density lipoprotein receptor 1,Ox-LDL receptor 1,Lectin-like oxidized LDL receptor 1,LOX-1,Lectin-like oxLDL receptor 1,Lectin-type oxidized LDL receptor 1,Oxidized low-density lipoprotein receptor 1, soluble form,Olrl,Lox1,</p> <p>Full Gene Name: Oxidized low-density lipoprotein receptor 1</p> <p>Cellular Localisation: Cell membrane, Lipid-anchor . Cell membrane, Single-pass type II</p>

Target Details

	membrane protein . Membrane raft . Secreted . A secreted form also exists. Localization to membrane rafts requires palmitoylation (By similarity)..
Gene ID:	108078
UniProt:	Q9EQ09

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Sequence similarities: Contains 1 C-type lectin domain.
Plate:	Pre-coated
Protocol:	mouse LOX-1 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for LOX-1 has been precoated onto 96-well plates. Standards(NSO, R60-I363) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for LOX-1 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse LOX-1 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL mouse LOX-1 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse LOX-1 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(pg/ml): 176, Standard deviation: 7.57, CV(%): 4.3• Sample 2: n=16, Mean(pg/ml): 748, Standard deviation: 38.9, CV(%): 5.2• Sample 3: n=16, Mean(pg/ml): 1336, Standard deviation: 86.84, CV(%): 6.5,• Sample 1: n=24, Mean(pg/ml): 224, Standard deviation: 12.1, CV(%): 5.4• Sample 2: n=24, Mean(pg/ml): 862, Standard deviation: 52.6, CV(%): 6.1• Sample 3: n=24, Mean(pg/ml): 1428, Standard deviation: 107.1, CV(%): 7.5
Restrictions:	For Research Use only

Handling

Handling Advice:	Avoid multiple freeze-thaw cycles.
Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

Images

