

Datasheet for ABIN1112739 **OLR1 ELISA Kit**



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Overview

Quantity: 96 tests

Target: OLR1

Reactivity: Mouse

Method Type: Sandwich ELISA

Detection Range: 31.2-2000 pg/mL

Minimum Detection Limit: 31.2 pg/mL

Application: ELISA

Product Details

Analytical Method: Quantitative

Detection Method: Colorimetric

Sensitivity: < 1 pg/mL

Components: 1. One 96-well plate pre-coated with anti-Mouse LOX1 antibody 2. Lyophilized Mouse LOX1 standards: 2 tubes (10ng / tube) 3. Sample / Standard diluent buffer: 30ml 4. Biotin conjugated anti-Mouse LOX1 antibody (Concentrated): 130 µl.

Material not included: 1. 37 °C incubator 2. Microplate reader (wavelength: 450nm) 3. Precise pipette and disposable pipette tips 4. Automated plate washer 5. ELISA shaker 6. 1.5ml of Eppendorf tubes 7. Plate cover 8. Absorbent filter papers 9. Plastic or glass container with volume of above 1L

Target Details

Target: OLR1

Target Details

Alternative Name: LOX1 (OLR1 Products)

Background: Oxidized low-density lipoprotein receptor 1 (Ox-LDL receptor 1) also known as lectin-type oxidized LDL receptor 1 (LOX-1) is a 270-amino acid protein that in humans is encoded by the OLR1 gene, which spans approximately 15 kb and contains 6 exons. LOX1 is expressed in vascular-rich organs but not in lymphocytes, and it belongs to the C-type lectin superfamily. This protein binds, internalizes and degrades oxidized low-density lipoprotein. It may be involved in the regulation of Fas-induced apoptosis, and it may also play a role as a scavenger receptor. Mutations of the OLR1 gene have been associated with atherosclerosis, risk of myocardial infarction, and may modify the risk of Alzheimer's disease.

Application Details

Comment: This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-LOX1 polyclonal antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-LOX1 polyclonal antibody was used as detection antibodies. The standards test samples and biotin conjugated detection antibody were added - the wells subsequently and wash with wash buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with wash buffer. TMB substrates were used - visualize HRP enzymatic reaction. TMB was catalyzed by HRP - produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional - the LOX1 amount of sample captured in plate. Read the O.D. absorbance at 450 nm in a microplate reader and then the concentration of LOX1 can be calculated.

Plate: Pre-coated

Reagent Preparation: 1. Before the experiment, centrifuge each kit component for several minutes to bring down all reagents to the bottom of tubes. 2. It is recommend to measure each standard and sample in duplicate. 3. Do NOT let the plate completely dry at any time! Since the dry condition can inactivate the biological material on the plate. 4. Do not reuse pipette tips and tubes to avoid cross contamination. 5. Do not use the expired components and the components from different batches. 6. To avoid the marginal effect of plate incubation for temperature differences (the marginal wells always get stronger reaction), it is recommend to equilibrate the ABC working solution and TMB substrate for at least 30 min at room temperature (37°C) before adding to wells. The TMB substrate (Kit Component 8) is colorless and transparent before use, if not, please contact us for replacement.

Sample Preparation: Preparation of sample and reagents 1. Sample Isolate the test samples soon after collecting, then, analyze immediately (within 2 hours). Or aliquot and store at -20 °C for long term. Avoid

Application Details

multiple freeze-thaw cycles.

Body fluids, tissue lysates and cell culture supernatants: Centrifuge to remove precipitate, analyze immediately or aliquot and store at -20 °C .

Serum: Coagulate the serum at room temperature (about 4 hours). Centrifuge at approximately 2000 × g for 20 min. Analyze the serum immediately or aliquot and store at -20 °C .

Plasma: Collect plasma with heparin or EDTA as the anticoagulant. Centrifuge for 20 min at 2000 x g within 30 min of collection. Analyze immediately or aliquot and store frozen at -20 °C.

citrate can not be used as anticoagulant here. Note: 1. Coagulate blood samples completely, then, centrifuge, and avoid hemolysis and particle. 2. NaN₃ can not be used as test sample preservative, since it is the inhibitor for HRP.

Restrictions: For Research Use only

Handling

Preservative: Sodium azide, Thimerosal (Merthiolate)