

### Mouse LOX1 ELISA Kit (OLR1) ab204521

リコンビナント SimpleStep ELISA

画像数 7

#### 製品の概要

製品名 Mouse LOX1 ELISA Kit (OLR1)

検出方法 Colorimetric

再現性 Intra-Assay (同時再現性)

サンプル	N	平均値	SD	CV%
Mouse serum	8			2.8%

Inter-Assay (日差再現性)

サンプル	N	平均値	SD	CV%
Mouse serum	3			8.9%

サンプルの種類 Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

アッセイタイプ Sandwich (quantitative)

検出感度 7.9 pg/ml

検出範囲 62.5 pg/ml - 4000 pg/ml

添加回収試験 特定サンプルでの回収試験

サンプルの種類	平均 %	測定範囲
Serum	87	86% - 88%
Cell culture media	109	108% - 110%
Hep Plasma	106	99% - 111%
EDTA Plasma	108	100% - 113%
Cit plasma	113	103% - 119%

全工程の試験時間 1h 30m

ステップ One step assay

## 種交差性

交差種: Mouse

非交差種: Goat, Cow, Pig

## 製品の概要

Mouse LOX1 ELISA Kit (OLR1) (ab204521) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of LOX1 (OLR1) protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse LOX1 (OLR1) with 7.9 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (**ab203359**) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

## 特記事項

Mouse Lectin like oxidized low density lipoprotein receptor 1 (LOX1), also known as oxidized low density lipoprotein receptor 1 (OLR-1), is a type II transmembrane receptor belonging to the C type lectin family. The mouse LOX1 gene encodes a 363 amino acid (aa) residue protein with a short N-terminal intracellular domain, a transmembrane domain, and a C-type lectin like domain which is required for ligand recognition. Mouse LOX1 has 57% and 79% identity to Human and Rat LOX1, respectively.

LOX1 is a 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. The association of LOX1 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, LOX1 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. Finally, LOX1 also acts as a receptor for advanced glycation end (AGE) products, activated platelets, monocytes, and apoptotic cells.

## 試験プラットフォーム

Pre-coated microplate (12 x 8 well strips)

## 製品の特性

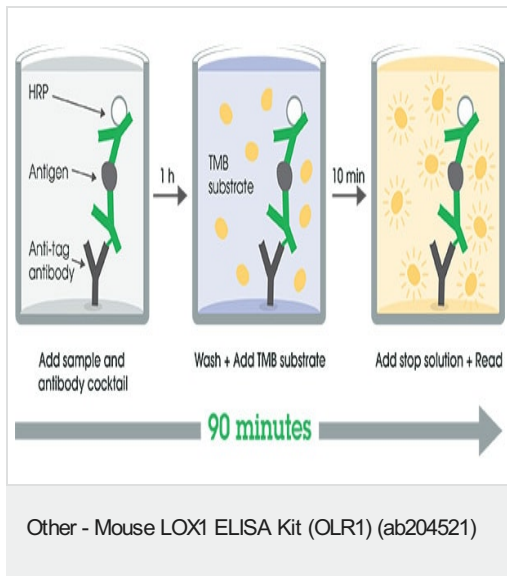
### 保存方法

Store at +4°C. Please refer to protocols.

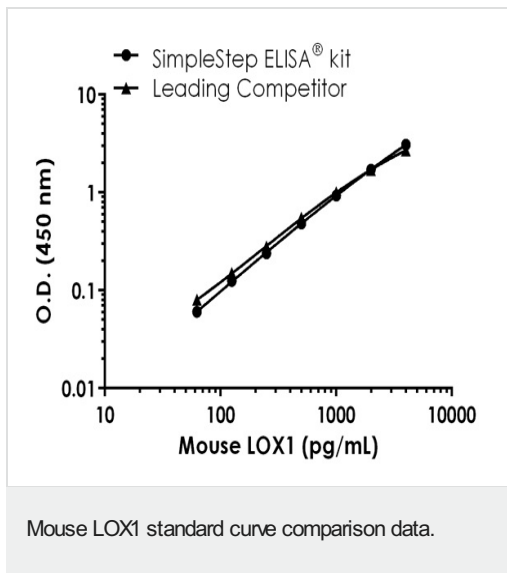
内容	1 x 96 tests
10X Mouse LOX1 Capture Antibody	1 x 600µl

内容	1 x 96 tests
10X Mouse LOX1 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 5BI	1 x 6ml
Mouse LOX1Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

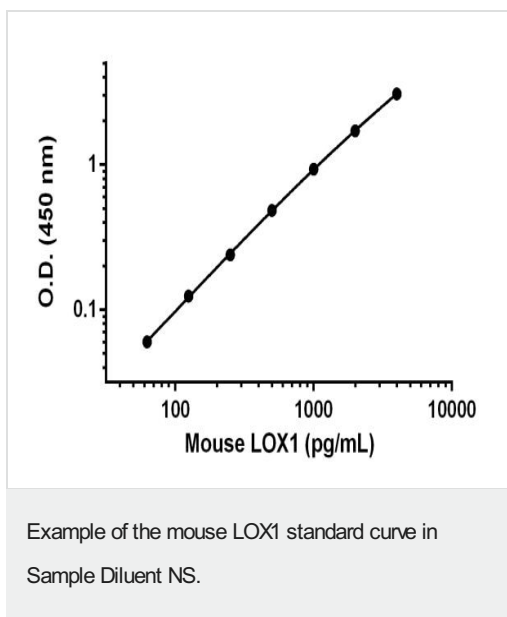
<b>機能</b>	Receptor that mediates the recognition, internalization and degradation of oxidatively modified low density lipoprotein (oxLDL) by vascular endothelial cells. OxLDL is a marker of atherosclerosis that induces vascular endothelial cell activation and dysfunction, resulting in pro-inflammatory 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.
<b>組織特異性</b>	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.
<b>関連疾患</b>	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.
<b>配列類似性</b>	Contains 1 C-type lectin domain.
<b>ドメイン</b>	The cytoplasmic region is required for subcellular sorting on the cell surface. The C-type lectin domain mediates the recognition and binding of oxLDL.
<b>翻訳後修飾</b>	The intrachain disulfide-bonds prevent N-glycosylation at some sites. N-glycosylated.
<b>細胞内局在</b>	Cell membrane. Secreted. A secreted form also exists.



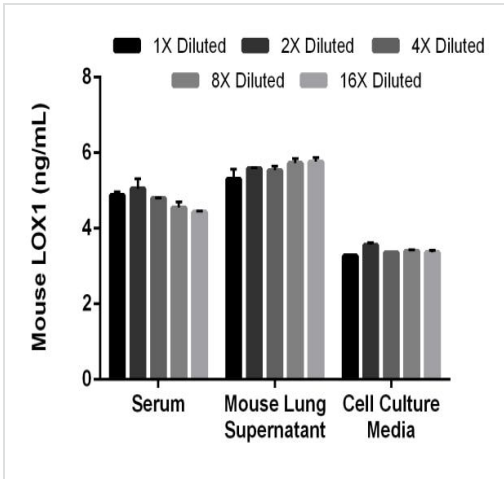
SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



Standard curve comparison between mouse RBP4 SimpleStep ELISA<sup>®</sup> kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows comparable sensitivity with shorter protocol time.

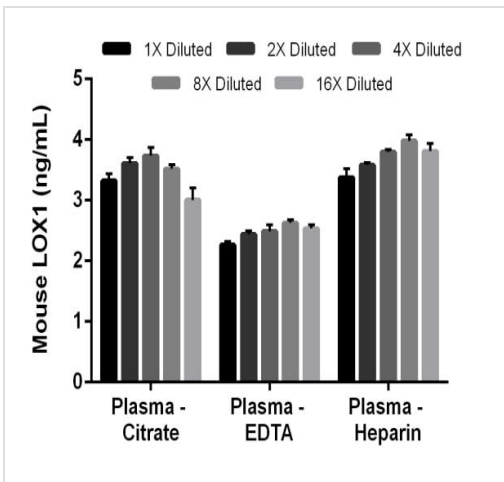


Background-subtracted data values (mean +/- SD) are graphed.



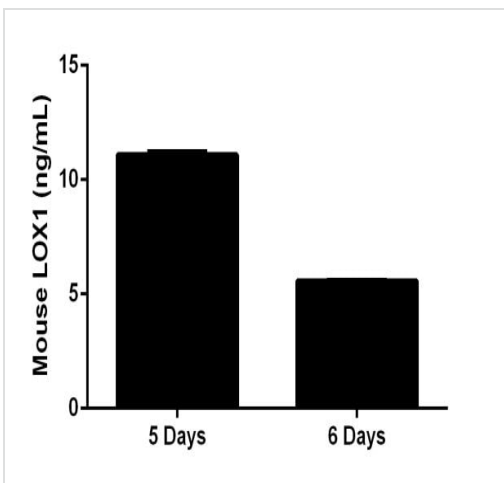
Linearity of dilution of mouse LOX1 in serum, mouse lung supernatants, and cell culture media.

Native mouse LOX1 was measured in 50% mouse serum and 50% mouse lung supernatants (lung cultured 6 days in RPMI + 10% Fetal Bovine Serum) diluted in a 2-fold dilution series in Sample Diluent NS. Recombinant mouse LOX1 was spiked into 10% cell culture media and diluted in a 2-fold dilution series in Sample Diluent NS. The concentrations of mouse LOX1 were measured in duplicate and interpolated from the mouse LOX1 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are graphed (mean +/- SD).



Linearity of dilution of mouse LOX1 in plasma samples.

Native mouse LOX1 was measured in 25% mouse plasma citrate, 100% mouse plasma EDTA, and 50% mouse plasma heparin diluted in a 2-fold dilution series in Sample Diluent NS. The concentrations of mouse LOX1 were measured in duplicate and interpolated from the mouse LOX1 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are graphed (mean +/- SD).



Native signal of Mouse LOX1 in mouse lung supernatants.

Separate sections of mouse lung were cultured for either 5 or 6 days in RPMI + 10% Fetal bovine serum. The concentrations of mouse LOX1 were measured in duplicate in 25% mouse lung supernatants and interpolated from the mouse LOX1 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are graphed (mean +/- SD).

Powered by  
recombinant antibodies



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Sandwich ELISA - Mouse LOX1 ELISA Kit (OLR1)  
(ab204521)

To learn more about the advantages of recombinant antibodies see [here](#).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors