

Product datasheet

Anti-LOX 1 antibody [EPR20750] ab214427

Recombinant RabMAb

2 Images

Overview

Product name	Anti-LOX 1 antibody [EPR20750]
Description	Rabbit monoclonal [EPR20750] to LOX 1
Host species	Rabbit
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human LOX 1 aa 50-150. The exact sequence is proprietary. Database link: P78380
Positive control	WB: THP-1 treated with 100 ng/ml phorbol-12-myristate-13-acetate (PMA) for 72 hours whole cell lysate; HUVEC untreated and treated with 100 ng/ml phorbol-12-myristate-13-acetate (PMA) for 8 hours whole cell lysate; Human fetal vessel lysate; Mouse placenta and lung lysates; Rat placenta lysate.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR20750

Isotype IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab214427** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Detects a band of approximately 52 kDa (predicted molecular weight: 31 kDa).

Target

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.

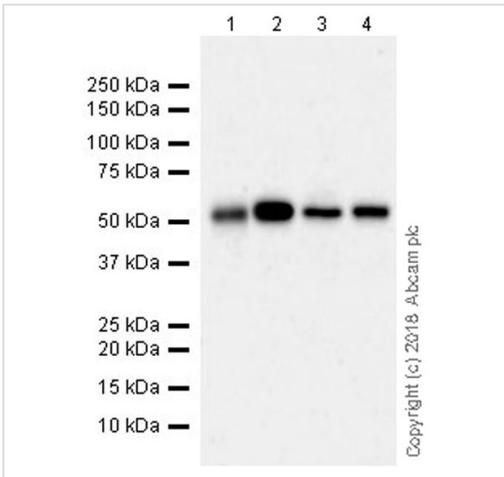
Sequence similarities Contains 1 C-type lectin domain.

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



Western blot - Anti-LOX 1 antibody [EPR20750] (ab214427)

All lanes : Anti-LOX 1 antibody [EPR20750] (ab214427) at 1/1000 dilution

Lane 1 : Human fetal vessel lysate

Lane 2 : Mouse placenta lysate

Lane 3 : Mouse lung lysate

Lane 4 : Rat placenta lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 31 kDa

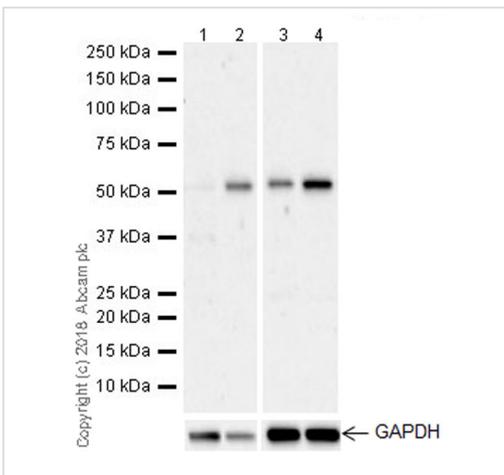
Observed band size: 52 kDa

[why is the actual band size different from the predicted?](#)

Blocking/Dilution buffer: 5% NFD/MTBST.

Exposure time : Lanes 1-4: 3 minutes; Lane 5: 15 seconds.

The expression profile is consistent with what has been described in the literature (PMID: 10692464, PMID: 15016631).



Western blot - Anti-LOX 1 antibody [EPR20750] (ab214427)

All lanes : Anti-LOX 1 antibody [EPR20750] (ab214427) at 1/1000 dilution

Lane 1 : Untreated THP-1 (human monocytic leukemia cell line) whole cell lysate

Lane 2 : THP-1 treated with 100 ng/ml phorbol-12-myristate-13-acetate (PMA) for 72 hours, whole cell lysate

Lane 3 : Untreated HUVEC (human umbilical vein endothelial cell line) whole cell lysate

Lane 4 : HUVEC treated with 100 ng/ml phorbol-12-myristate-13-acetate (PMA) for 8 hours, whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 31 kDa

Observed band size: 52 kDa [why is the actual band size different from the predicted?](#)

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.

The expression profile is consistent with what has been described in the literature (PMID: 10692464, PMID: 15016631).

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

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