abcam

Product datasheet

Anti-LOX 1 antibody [EPR18837-109] - BSA and Azide free (Detector) ab242787

Recombinant RoloWAb

2 Images

Overview

Product name Anti-LOX 1 antibody [EPR18837-109] - BSA and Azide free (Detector)

Description Rabbit monoclonal [EPR18837-109] to LOX 1 - BSA and Azide free (Detector)

Host species Rabbit

Tested applications Suitable for: Sandwich ELISA

Species reactivity Reacts with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

General notes ab242787 is a BSA and Azide Free antibody supplied in an unconjugated format and it is suitable for sandwich ELISAs to quantify Human LOX1. The recommended pair for sandwich ELISA is:

> Capture: ab242539, Human LOX1 Capture Antibody (unconjugated) Detector: ab242787, Human LOX1 Detector Antibody (unconjugated)

The reference range value is 7.81 - 500 pg/ml.

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

The recommended antibody orientation is based on internal optimization for ELISA-based assays. Antibody orientation is assay dependent and needs to be optimized for each assay type. Please note that the range provided for this antibody is only an estimation based on the performance of the product using the recommended antibody pair. Performance of the antibody pair will depend on the specific characteristics of your assay. We guarantee the product works in sandwich ELISA, but we do not guarantee the sensitivity or dynamic range of the antibody in your assay.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information **see here**.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C.

Storage buffer Constituent: 100% PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal

Clone number EPR18837-109

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab242787 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
Sandwich ELISA		Use at an assay dependent concentration. Can be paired for Sandwich ELISA with PE / R-Phycoerythrin Conjugation Kit - Lightning-Link® (ab102918) and Biotinylation Kit / Biotin Conjugation Kit (Fast and Type A) - Lightning-Link® (ab201795) and Rabbit monoclonal [EPR18837-47] to LOX 1 - BSA and Azide free (Capture) (ab242539).

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 proinflammatory 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.

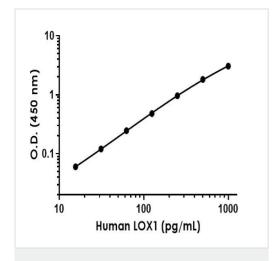
The C-type lectin domain mediates the recognition and binding of oxLDL.

Post-translational The intrachain disulfide-bonds prevent N-glycosylation at some sites.

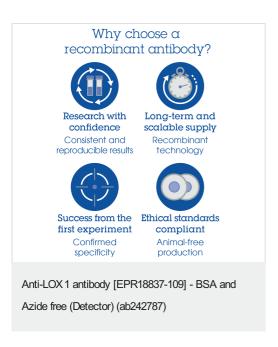
modifications N-glycosylated.

Cellular localizationCell membrane. Secreted. A secreted form also exists.

Images



Sandwich ELISA - Anti-LOX 1 antibody [EPR18837-109] - BSA and Azide free (Detector) (ab242787) Representative standard curve from corresponding SimpleStep ELISA® Kit (ab212161).



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