

Datasheet: AHP952

Description:	SHEEP ANTI HUMAN LOX-1
Specificity:	LOX-1
Other names:	OLR1
Format:	Purified
Product Type:	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	50 µg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/10
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			Neat
Western Blotting	▪			1/10 - 1/100
Immunofluorescence	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species Human

Product Form Purified IgG - liquid

Antiserum Preparation Antisera to human LOX-1 were raised by repeated immunisations of sheep with highly purified antigen. Purified IgG was prepared by affinity chromatography.

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide
Stabilisers 1% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 0.1 mg/ml

Immunogen Recombinant human extracellular domain LOX-1 protein from bacteria.

External Database **UniProt:**

Links

[P78380](#) [Related reagents](#)

Entrez Gene:

[4973](#) OLR1 [Related reagents](#)

Synonyms

CLEC8A, LOX1

Specificity

Sheep anti LOX-1 antibody recognizes the type II membrane glycoprotein LOX-1 (lectin-like oxidized LDL receptor-1), a 40-50kDa class E scavenger receptor, expressed by endothelial cells, macrophages, activated platelets and smooth muscle cells. LOX-1 binds to a wide range of ligands, including oxidized low-density lipoprotein (oxLDL), hypochlorite modified high-density lipoprotein (HDL), aged/apoptotic cells, activated platelets and bacteria, reflecting its versatile physiological functions.

AHP952 will detect LOX-1 on transfected cells and in recombinant protein reconstitution assays. LOX-1 levels are low in normal resting human tissues so may fall below detectable levels.

Expression of the LOX-1 gene is upregulated by oxLDL and the binding of LOX-1 to oxLDL results in the activation of NF-kappaB. Furthermore, LOX-1 antibodies have been shown to suppress the oxidized HDL (oxHDL) activation of NF-KappaB in endothelial cells, suggesting that this activation may be due to the binding of oxHDL to LOX-1.

Angiotensin II and the inflammatory cytokine Tumour Necrosis Factor alpha (TNFalpha) also invoke an increase in LOX-1 gene expression and studies have focused on its role in endothelial dysfunction ([Chen, M. et al.](#))([Sawamura, T. et al.](#)) and inflammatory diseases such as atherosclerosis ([Murphy, J.E. et al.](#)) and rheumatoid arthritis, as well as its affect on CD40/CD40L signaling in both atherosclerosis and human coronary artery endothelial cells (HCAECs) ([Li, D. et al.](#)).

Flow Cytometry

Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

Immunohistology

For the best results Bio-Rad recommend [HISTAR](#) detection kits..

Western Blotting

Sheep anti LOX-1 antibody detects intact &'126;50 kDa LOX-1 and also a prominent ~32 kDa proteolytic fragment in western blotting.

References

1. Murphy, J.E. *et al.* (2006) LOX-1 scavenger receptor mediates calcium-dependent recognition of phosphatidylserine and apoptotic cells. [Biochem J. 393 \(Pt 1\): 107-15.](#)

Further Reading

1. Chen, M. *et al.* (2002) LOX-1, the receptor for oxidized low-density lipoprotein identified from endothelial cells: implications in endothelial dysfunction and atherosclerosis. [Pharmacol Ther. 95 \(1\): 89-100.](#)
2. Li, D. *et al.* (2003) LOX-1, an oxidized LDL endothelial receptor, induces CD40/CD40L signaling in human coronary artery endothelial cells. [Arterioscler Thromb Vasc Biol. 23 \(5\): 816-21.](#)
3. Morawietz, H. *et al.* (1999) Angiotensin II induces LOX-1, the human endothelial receptor for oxidized low-density lipoprotein. [Circulation. 100 \(9\): 899-902.](#)
4. Sawamura, T. *et al.* (1997) An endothelial receptor for oxidized low-density lipoprotein. [Nature. 386 \(6620\): 73-7.](#)
5. Yoshida, H. *et al.* (1998) Identification of the lectin-like receptor for oxidized low-density lipoprotein in human macrophages and its potential role as a scavenger receptor. [Biochem J. 334 \(Pt 1\): 9-13.](#)

Storage Store at +4°C or at -20°C if preferred.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life 18 months from date of despatch.

Health And Safety Information Material Safety Datasheet documentation #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Sheep IgG (H/L) (5184-2304...) [Biotin](#)

Donkey Anti Sheep IgG (STAR88...) [DyLight@488](#), [DyLight@549](#), [DyLight@649](#),
[FITC](#), [HRP](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

'M318446:180718'

Printed on 01 Aug 2018

© 2018 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)