

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			▪	
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 Links	<p>UniProt: P78380 Related reagents</p> <p>Entrez Gene: 4973 OLR1 Related reagents</p>
Synonyms	CLEC8A, LOX1
RRID	AB_567324
Specificity	<p>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.</p> <p>Sheep anti LOX-1 antibody (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.</p> <p>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.</p> <p>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 et al.)(Sawamura, T. et al.) and inflammatory diseases such as atherosclerosis (Murphy 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.).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ 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. <i>et al.</i> (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.

Guarantee

12 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](#), [HRP](#)

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