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LOX-1 Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10497

Specification

LOX-1 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P78380
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**30959**

LOX-1 Antibody - Additional Information

Gene ID 4973

Application & Usage	**Western blotting (0.5-4 µg/ml), detecting the pro- (~50 kDa) and the mature (~30 kDa) forms of Lox-1 in samples from human, mouse and rat origins. Other applications have not been determined.**

Other Names
LOK, Lymphocyte Oriented Kinase, STK10, STK-10, Serine/Threonine Kinase 10

Target/Specificity
LOX-1

Antibody Form
Liquid

Appearance
Colorless liquid

Formulation
100 µg (0.5 mg/ml) affinity purified rabbit anti-LOX-1 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.

Handling
The antibody solution should be gently mixed before use.

Reconstitution & Storage
-20 °C

Background Descriptions

Precautions
LOX-1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

LOX-1 Antibody - Protein Information

Name OLR1

Synonyms CLEC8A, LOX1

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.

Cellular Location
Cell membrane; Lipid-anchor. Cell membrane; Single-pass type II membrane protein. Membrane raft. Secreted. Note=A secreted form also exists. Localization to membrane rafts requires palmitoylation

Tissue Location
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.

LOX-1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

LOX-1 Antibody - Images

LOX-1 Antibody - Background

Lectin-like oxidized low-density-lipoprotein receptor-1 (LOX-1), also known as oxidized low-density-lipoprotein receptor-1 (OLR-1), belongs to the C-type lectin family. LOX-1 binds and supports the internalization of multiple structurally unrelated macromolecules including oxidized LDL, advanced glycation end products (AGE), activated platelets, bacteria, apoptotic or aged cells, and heat shock proteins. Human LOX-1 gene encodes a 273 amino acid residues (aa) protein with a short N-terminal intracellular domain, a transmembrane domain, an extracellular stalk/neck region followed a C-type lectin-like domain (CTLD). The expression of LOX-1 is induced by proinflammatory

or proatherogenic stimuli, as well as by oxidized LDL itself and hemodynamic or oxidative stress. LOX-1-dependent oxidized LDL uptake also induces apoptosis by inducing the expression of the pro-apoptotic Bax and downregulation of the anti-apoptotic Bcl-2.