

Product datasheet for **AM26237PU-N**

LOX 1 (OLR1) (71-273) Mouse Monoclonal Antibody [Clone ID: 23C11]

Product data:

Product Type:	Primary Antibodies
Clone Name:	23C11
Applications:	FN, IF
Recommended Dilution:	AP26237PU-N is used in: Flow Cytometry (Ref.1,2): 10 µg/ml antibody used on Human peripheral blood myeloid DC and macrophages. The typical starting working dilution is 1/50. Functional Assays (Ref.1,3): Antibody totally prevented Hsp70 binding to LOX-1-CHO but not mock-transfected CHO cells (Ref.1). Monoclonal antibody 23C11 neutralizes LOX-1 and inhibits Hsp70 binding to dendritic cells and Hsp70-induced antigen cross-presentation. In <i>vivo</i> , targeting LOX-1 with a tumor antigen using anti-LOX-1 antibody 23C11 induces anti-tumor immunity. Immunofluorescence (Ref.2). Positive Control: Human APCs.
Reactivity:	Human, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Fusion protein of extracellular domain (aa 71-273) of Human LOX-1 with Murine Fcγ1 (LOX-1-muFc) produced in PEAK cells.
Specificity:	The monoclonal antibody 23C11 recognizes oxidized low-density lipoprotein receptor-1 (LOX-1).
Formulation:	PBS State: Purified State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% BSA Preservative: None
Concentration:	lot specific
Purification:	Protein G Chromatography
Conjugation:	Unconjugated



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Storage:	Store undiluted at 2-8°C.
Stability:	Shelf life: one year from despatch.
Gene Name:	oxidized low density lipoprotein receptor 1
Database Link:	Entrez Gene 4973 Human P78380
Background:	<p>LOX-1 is a single-pass type II membrane protein (~45 kDa) and belongs to the C-type lectin-like protein superfamily. LOX-1 is expressed at high level in endothelial cells and vascular-rich organs such as placenta, lung, liver, brain aortic intima, bone marrow, spinal cord and substantia nigra. It is also expressed on the surface of dendritic cells.</p> <p>This unique scavenger receptor LOX-1 plays important roles in atherogenesis. LOX-1 mediates the recognition, internalization and degradation of oxidatively modified low density lipoprotein (oxLDL) by vascular endothelial cells. OxLDL is a marker of atherosclerosis, inducing vascular endothelial cell activation and dysfunction, resulting in pro-inflammatory responses, pro-oxidative conditions and apoptosis. LOX-1 associates with oxLDL inducing 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, LOX-1 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. LOX-1 is involved in the inflammatory process, by acting as a leukocyte-adhesion molecule at the vascular interface in endotoxin-induced inflammation. LOX-1 also acts as a receptor for advanced glycation end (AGE) products, activated platelets, monocytes, apoptotic cells and both Gram-negative and Gram-positive bacteria.</p> <p>The LOX-1 gene is a so-called immediate early gene that is dynamically modulated by several factors in vitro and in vivo. LOX-1 expression is induced by stimuli such as inflammatory cytokines, OxLDL, TNF-alpha, TGF-beta, and ANG II in vitro, and several proatherogenic factors in vivo.</p>
Synonyms:	LOX-1, Ox-LDL receptor 1, Ox-LDL receptor 1 soluble form, sLOX1, sLOX-1, CLEC8A