

## Basic Information

Product Name	Anti-OLR1 Antibody
Gene Name	OLR1
Source	Rabbit
Isotype	IgG
Species Reactivity	human
Tested Application	WB
Contents	500 ug/ml antibody with PBS , 0.02% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , 1 mg BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human LOX-1/OLR1 (162-197aa SFNWEKSQEKCLSLDAKLLKINSTADLDFIQQAISY), different from the related rat sequence by thirteen amino acids.
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	31KD
Dilution Ratios	Western blot(WB):1:500-2000

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

OLR1(oxidized low density lipoprotein (lectin-like) receptor 1) also called CLEC8A, LOX-1, SCARE1, is a receptor protein which belongs to the C-type lectin superfamily. The OLR1 gene encodes a cell-surface endocytosis receptor for oxidized low density lipoprotein (OxLDL). This gene is mapped on 12p13.2. Incubation of the cells with LDL had no effect on LOX1 expression, but incubation with OxLDL resulted in a dose-dependent increase in LOX1 mRNA and protein expression; however, very high concentrations of OxLDL caused a decrease in OxLDL expression, perhaps indicating toxic effects on endothelial cells. LOX1 was also expressed in macrophages, but not in vascular smooth muscle cells. The findings suggested a role for LOX1 in the pathophysiology of atherosclerotic cardiovascular disease. LOX1 expression was detected in all choroidal neovascular membranes, regardless of structure, whereas there was no evidence of LOX1 within the posterior segments of normal eyes. LOX1 plays an active role in the pathogenesis of choroidal neovascularization, especially in ARMD.

## Selected Validation Data