

## Data Sheet

# HUMAN CU<sup>2+</sup>-OXIDIZED LOW DENSITY LIPOPROTEIN (CU<sup>2+</sup>-OX-LDL)

## ANTIBODY, POLYCLONAL

<b>Catalog no.:</b>	AT1002.1 / AT1002.2
<b>Immunogen:</b>	Human Cu <sup>2+</sup> -oxidized LDL
<b>Host:</b>	Rabbit
<b>Matrix:</b>	Serum
<b>Specificity:</b>	Human and murine Cu <sup>2+</sup> -oxidized LDL.

The antiserum shows strong reactivity to fully oxidized modifications of LDL including Cu<sup>2+</sup>-oxidized LDL, MDA-LDL, HOCL-LDL, but not to other oxidized proteins like MDA-HSA, MDA-HDL, HOCL-HSA, HOCL-HDL (below detection limit). The reaction to native LDL was weak, but clearly detectable (approx. 20%). Minimally oxidized LDL gave a strong binding signal (> 80%)

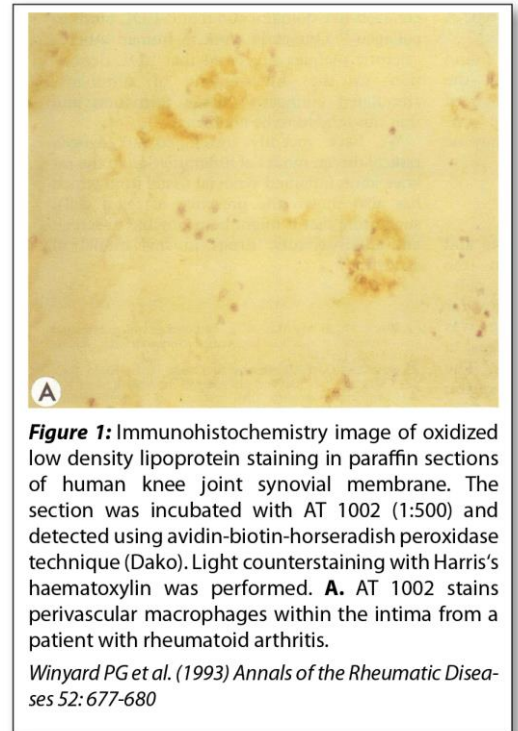
<b>Contents:</b>	20 µl / 100 µl (lyophilized) Resuspend in 20 µl / 100 µl aqua bidest.
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<b>Known applications:</b>	ELISA and related methods (1:500-1: 5.000) <sup>1</sup> ; immunohistochemistry (paraffin sections, <1:500; cryosections, 1:400-2000) <sup>1, 2, 3, 4, 5, 6, 7</sup>
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This antibody has not been tested for use in all applications. This does not necessarily exclude its use in non-tested procedures. The stated dilutions are recommendations only. End users should determine optimal dilutions in their system using appropriate negative/positive controls.

<b>Store at:</b>	2-8 °C (lyophilized); - 20 °C (dissolved) Repeated thawing and freezing must be avoided
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<b>References:</b>	<ol style="list-style-type: none"> <li>1. Winyard PG, Tatzber F, Esterbauer H, Kus ML, Blake DR, Morris CJ (1993). Presence of foam cells containing oxidised low density lipoprotein in the synovial membrane from patients with rheumatoid arthritis. <i>Ann Rheum Dis</i> <b>52</b>(9): 677-680.</li> <li>2. Bobryshev YV, Lord RSA, Watanabe T, Ikezawa T (1998). The cell adhesion molecule E-cadherin is widely expressed in human atherosclerotic lesions. <i>Cardiovasc Res</i> <b>40</b>(1): 191-205.</li> <li>3. Ekmekcioglu C, Mehrabi MR, Glogar HD, Jucewicz M, Volf I, Spieckermann PG (2000). Oxidized low-density lipoprotein is localized in the ventricles of hearts from patients with coronary heart disease. <i>Int J Clin Lab Res</i> <b>30</b>(3): 133-140.</li> </ol>
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**Figure 1:** Immunohistochemistry image of oxidized low density lipoprotein staining in paraffin sections of human knee joint synovial membrane. The section was incubated with AT 1002 (1:500) and detected using avidin-biotin-horseradish peroxidase technique (Dako). Light counterstaining with Harris's haematoxylin was performed. **A.** AT 1002 stains perivascular macrophages within the intima from a patient with rheumatoid arthritis.

Winyard PG et al. (1993) *Annals of the Rheumatic Diseases* **52**: 677-680



4. Mehrabi MR, Sinzinger H, Ekmekcioglu C, Tamaddon F, Plesch K, Glogar HD, Maurer G, Stefenelli T, Lang IM (2000). Accumulation of oxidized LDL in human semilunar valves correlates with coronary atherosclerosis. *Cardiovasc Res* **45**(4): 874-882.
5. Schlittenhardt D, Schober A, Strelau J, Bonaterra GA, Schmiedt W, Unsicker K, Metz J & Kinscherf R (2004). Involvement of growth differentiation factor-15/macrophage inhibitory cytokine-1 (GDF-15/MIC-1) in oxLDL-induced apoptosis of human macrophages in vitro and in arteriosclerotic lesions. *Cell Tissue Res.* **318**: 325–333.
6. Bobryshev YV (2005). Intracellular localization of oxidized low-density lipoproteins in atherosclerotic plaque cells revealed by electron microscopy combined with laser capture microdissection. *J Histochem Cytochem* **53**(6): 793-797.
7. Sun L, Ishida T, Yasuda T, Kojima Y, Honjo T, Yamamoto Y, Yamamoto H, Ishibashi S, Hirata K, Hayashi Y (2009). RAGE mediates oxidized LDL-induced pro-inflammatory effects and atherosclerosis in non-diabetic LDL receptor-deficient mice. *Cardiovasc Res* **82**(2): 371-381.

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**For research use only**

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