



# Anti-CU2+-OX LDL polyclonal antibody (DPAB0580)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

| Specificity        | Shows strong reactivity to fully oxidized modifications of LDL including Cu2+-oxidized LDL, MDA-LDL, HOCI-LDL, but not to other oxidized proteins like MDA-HSA, MDA-HDL, HOCI-HSA, HOCI-HDL (below detection limit). The reaction to native LDL was weak, but c                                      |
|--------------------|--|
| Immunogen          | Human Cu2+-oxidized low density protein (LDL)  |
| Isotype            | IgG  |
| Source/Host        | Rabbit   |
| Species Reactivity | Human  |
| Purification       | Not applicable   |
| Conjugate          | Unconjugated   |
| Applications       | Suitable for use in ELISA and related methods (1:500-1:5,000) and Immunohistochemistry (<1:500). Each laboratory should determine an optimum working titer for use in its particular application. Other applications have not been tested but use in such assays should not necessarily be excluded. |
| Format             | Neat, Lyophilized. Reconstitute in 100ul double distilled water.   |
| Concentration      | Not determined   |
| Size               | 100 μΙ   |
| Buffer             | Not applicable   |
| Preservative       | See individual product datasheet   |

45-1 Ramsey Road, Shirley, NY 11967, USA

Email: info@creative-diagnostics.com

Tel: 1-631-624-4882 Fax: 1-631-938-8221

## **BACKGROUND**

#### Introduction

Low-density lipoprotein (LDL) is one of the five major groups of lipoproteins, which in order of size, largest to smallest, are chylomicrons, VLDL, IDL, LDL and HDL, that enable transport of lipids like cholesterol and triglycerides within the water-based bloodstream. Blood tests typically report LDL-C, the amount of cholesterol contained in LDL. In clinical context, mathematically calculated estimates of LDL-C are commonly used to estimate how much low density lipoproteins are driving progression of atherosclerosis. Direct LDL measurements are also available and better reveal individual issues but are less often promoted or done due to slightly higher costs and being available from only a couple of laboratories in the United States. In 28 March 2008, as part of a joint consensus statement by the ADA and ACC, direct LDL particle measurement by NMR was recognized as superior for assessing individual risk of cardiovascular events. Because previous studies showed that higher levels of LDL particles promote health problems and cardiovascular disease, they are often informally called the bad cholesterol particles, (as opposed to HDL particles, which are frequently referred to as good cholesterol or healthy cholesterol particles). A recent study has found that LDL is essential in building muscle during resistance training.

### Keywords

Cu2+ oxidised low density lipoprotein; CU2+-OX LDL; Lipoprotein, Oxidized Low Density CU2+; LDL; Low-density lipoprotein