

## **Monoclonal Antibodies which Discriminate Between Native and Oxidized Low Density Lipoproteins.**

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**Introduction:** Atherosclerosis is a chronic inflammatory disorder and oxidation of low density lipoproteins (LDL) is thought to play a central role in atherogenesis. Now it is accepted that the oxidized LDL levels is a predictor of the degree of coronary artery diseases.

**Objectives:** Describe the obtention and characterization of two monoclonal antibodies that react specifically with oxidized and native low density proteins.

**Materials and methods:** The monoclonal antibodies were obtained from hybridomas generated from naive Balb/C mice. Selected hybridomas that bind preferentially to copper oxidized LDL or native LDL were cloned by limiting dilution.

**Results:** The specificity and recognition of the monoclonal antibodies were measured using different ELISA methods. 1G10 monoclonal antibody (IgM) preferentially recognizes oxidized LDL meanwhile, 2F3 monoclonal antibody (IgM) reacts only with nLDL. **Conclusions:** 1G10 and 2F3 mAbs, due to their recognition characteristics might be useful to develop an immunoassay for the quantitative determination of human oxLDL in serum or plasma.

**Keywords:** Monoclonal Antibodies, Low Density Lipoproteins, hybridomas