



DATA SHEET

Dil-LABELED OXIDIZED LOW DENSITY LIPOPROTEIN, HUMAN

Catalog No: YB-0010

Lot No: lot specific

Quantity: 500ug(micrograms)Protein/vial

Concentration: lot specific (mg/ml Protein)

Introduction

Yiyuan Biotechnologies Dil-Ox-LDL, oxidized Low Density Lipoprotein, labeled with 1,1'-dioctadecyl – 3,3,3',3'-tetramethyl-indocarbocyanine perchlorate, labels both vascular endothelial cells and macrophages. It can be used to identify and/or isolate these cells from mixed cell populations and investigate uptake of modified LDL by different cell types. When cells are labeled with Dil-Ox-LDL, the lipoprotein is degraded by lysosomal enzymes and the Dil (fluorescent probe) accumulates in the intracellular membranes. Labeling cells with Dil-Ox-LDL has no effect on cell viability. Pure cultures of vascular endothelial cells can be isolated from complex primary cultures using fluorescent activated cell sorting based on their increased metabolism of the Dil-Ox-LDL. Contaminating cell types (fibroblasts, smooth muscle, pericytes, epithelial cells) are not labeled. Macrophages can be differentiated from mixed cell populations (including endothelial cells) because they are more brightly labeled. Labeling endothelial cells with Dil-Ox-LDL has many advantages over labeling other endothelial cell associated antigens. The labeling procedure is one step, and once the cells are labeled, the fluorescent probe (Dil) is not removed by Trypsin. Both low density and confluent cultures of vascular endothelial cells are effectively labeled. No other cell type (other than macrophages) is labeled to the same level as vascular endothelial cells. Each lot of Dil-Ox-LDL is evaluated for the specific labeling of bovine aortic endothelial cells and murine macrophages to assure consistent results. A complete labeling protocol is included with each shipment.

Storage & Stability:

This product is stable for **6** weeks after receipt when handled aseptically and stored at 2-8°C. ***PROTECT FROM LIGHT AND NEVER FREEZE.***

****Special Note:*** After prolonged storage, some precipitate may be observed. This is normal for this product. Clarify out the aggregates by spinning in a microfuge for 10 minutes over 5000g.

****Preparations of Dil-Ox-LDL are fairly unstable; plan your experiments in advance and use fresh material. Before using, spin the vial in a microfuge for 3 minutes over 1500*g.***

