Mouse Low Density Lipoprotein (Mouse LDL)

Catalog Number：OM770288

Product Description

Low-density lipoprotein (LDL) is derived from very-low-density lipoprotein (VLDL). Its primary function is to transport cholesterol to cells throughout the body and to the liver for bile acid synthesis. LDL is widely used in studies of receptor-mediated endocytosis, particularly in research related to diseases such as atherosclerosis. Plasma-derived LDL is also employed to investigate the oxidative modifications of LDL and its roles in function and metabolism.

LDL is a large protein complex with a molecular weight of approximately 3,500 kDa and a diameter of 25.8 nm. It consists of 20–25% protein and 75–80% lipids. The lipid component comprises approximately 9% free cholesterol, 42% cholesteryl esters, 20–24% phospholipids, and 5% triglycerides.

Mouse Low-Density Lipoprotein (Mouse LDL) is isolated from plasma of healthy mice and purified by ultracentrifugation. Its homogeneity and purity are verified by agarose gel electrophoresis. This product is provided in sterile packaging and can be directly diluted for use.

Product Information

Quantity 0.5 mg

Product Specifications

Purity (by Agarose Gel)	>98%
Protein Concentration	1.0–4.0 mg/mL
Appearance	Milky liquid
Buffer Composition	0.2 mM EDTA-Na_2 in PBS, pH 7.4

Storage Conditions

Store at 2–8°C, protected from light and under sterile conditions. Shelf life: 6 weeks. Do not freeze! Always use aseptic technique during handling.

Instructions for Use

Dilute with PBS or cell culture medium according to experimental requirements.

Notes

Diluted working solutions are highly unstable; prepare fresh immediately before use.

Precipitation may occur after prolonged storage—this is normal. Centrifuge before use (1000 × g, 3 min).

Binding of LDL to its receptor requires Ca^{2+} and Mn^{2+}; excess EDTA may inhibit this interaction.

For research use only.

For your safety and health, wear a lab coat and disposable gloves during operation.