

Low-density lipoprotein cholesterol (LDL-C) assay kit

Product Information

Product Overview

In a cholesterol assay system involving cholesterol esterase (CHER) and cholesterol oxidase (CHOD), a specific surfactant is added to selectively dissolve LDL-C for the measurement of LDL cholesterol. Other lipoproteins (HDL, VLDL, chylomicrons) do not react due to the obstruction by the surfactant and sugar compounds. The esterase catalyzes the hydrolysis of cholesterol esters to generate free cholesterol (FC), which is then oxidized by cholesterol oxidase to produce 4-cholestenone and H₂O₂. Subsequently, a reaction with 4-aminoantipyrine and other reagents forms a red quinone compound, which has a characteristic absorption peak at 546 nm. By measuring the absorbance value at 546 nm, the LDL-C content can be determined.

Size

48 Samples

Storage

4°C

Shipping

Ice pack

Kit Components

Reagent 1: Liquid, 27mL × 1 bottle, stored at 4°C.

Reagent 2: Liquid, 9mL × 1 bottle, stored at 4°C.

Standard: Liquid, 0.1mL × 1 vial, stored at 4°C with a concentration of 3mmol/L.

Materials Required but Not Supplied

Visible spectrophotometer, 1mL glass cuvette (optical path 1cm), adjustable pipette, water bath, ethanol, centrifuge, mortar, distilled water.