

High-density lipoprotein cholesterol (HDL-C) assay kit

Product Information

Product Overview

After chemical modification, cholesterol esterase (CHER) and cholesterol oxidase (CHOD) exhibit reduced enzymatic reactivity towards LDL, VLDL, and chylomicrons, reacting selectively with HDL cholesterol. In the first step of the reaction, LDL, VLDL, and chylomicrons are combined with glucose sodium sulfate and a cyclic thioether dextrin complex. In the second step, chemically modified CHER and CHOD are used to directly measure HDL cholesterol without the need to separate other lipoproteins. The chemically modified CHER catalyzes the hydrolysis of cholesterol esters to produce free cholesterol (FC), which is oxidized by CHOD to generate 4-cholestenone and H₂O₂. This is followed by a reaction with 4-aminoantipyrine and other reagents to form a red quinone compound, which has a characteristic absorption peak at 546 nm. By measuring the absorbance value at 546 nm, the HDL-C content can be determined.

Size

96 Samples

Storage

4°C

Shipping

Ice pack

Kit Components

Reagent 1: Liquid, 18mL × 1 bottle, stored at 4°C.

Reagent 2: Liquid, 6mL × 1 bottle, stored at 4°C.

Standard: Liquid, 0.1mL × 1 vial, stored at 4°C with a concentration of 1.19mmol/L.

Materials Required but Not Supplied

Microplate reader, 96-well plate, adjustable pipette, water bath, ethanol, centrifuge, mortar, distilled water.