

Low-Density Lipoprotein Cholesterol Content Assay kit

Low-density lipoproteins (LDL) are the major carriers of cholesterol in humans, responsible for supplying cholesterol to tissues with the highest sterol demands. Low-density lipoprotein cholesterol (LDL-C) concentrations positively correlate with the incidence of coronary heart disease and a reduction of LDL-C decreases the risk of coronary. Therefore, accurate and precise measurements of patients' LDL-C concentrations are necessary to appropriately identify individuals with atherosclerosis, coronary heart disease and hypertension. Cholesterol of chylomicrons (CM), very-low-density lipoproteins (VLDL), high-density lipoproteins (HDL) is specifically dissociated by one surfactant, but LDL-C is not dissociated by the surfactant. Cholesterol ester and cholesterol oxidase can catalyze the hydrolysis of dissociated cholesterol to produce H₂O₂, which cannot form colored compounds without chromogenic agents. Cholesterol is specifically dissociated by another surfactant from undissociated LDL. Esterase can catalyze the hydrolysis of cholesterol ester to produce free cholesterol (FC) and free fatty acid (FFA), thus transforming cholesterol ester into FC; Furthermore, cholesterol oxidase can catalyze FC to form 4-cholesterone and H₂O₂; Finally, peroxidase can catalyze the oxidation of 4-aminoantipyrine and phenyl amines by H₂O₂ to form purple quinones. It has a characteristic absorption peak at 546 nm, and its color depth is directly proportional to cholesterol content

Catalog No.	250533
Size	50 Assays / 100 Assays
Product Category	Colorimetric Assay
Storage/Stability	2-8°C/6 months
Shipping	Gel Packs