

Total Cholesterol Fluorometric/Colorimetric Detection Kit

Product Information

Cat.No.

Kit-0221

Product Overview

Cholesterol is a lipid present in the cell membranes of eukaryotes and circulates in the blood stream. It is used in the biosynthesis of hormones, and plays an important role in cell signaling processes. Cholesterol exists as a free acid, as well as, in the esterified form as cholesteryl esters. Elevated levels of cholesterol are indicated in atherosclerosis and heart disease, and are the subject of large amount of research focused on cholesterol metabolism. Fluoro CholesterolTM-Total Cholesterol Detection Kit provides a fluorimetric or colorimetric method for determination of total cholesterol in serum and plasma samples. The assay is based on an enzyme-coupled reaction that detects both free cholesterol and cholesterol esters.

Description

Cholesterol is a lipid present in the cell membranes of eukaryotes and circulates in the blood stream. It is used in the biosynthesis of hormones, and plays an important role in cell signaling processes. Cholesterol exists as a free acid, as well as, in the esterified form as cholesteryl esters. Elevated levels of cholesterol are indicated in atherosclerosis and heart disease, and are the subject of large amount of research focused on cholesterol metabolism. Quantitative determination of cholesterol in experimental samples is central to this research. Total Cholesterol kit is a simple one step assay which can be used either as a Fluorimetric or Colorimetric assay to help detect the level of total cholesterol in samples.

Applications

Absorbance or Fluorescence plate reader

Usage

1. For Research use only. Not for use in diagnostic procedures. 2. Practice safe laboratory procedures by wearing gloves, protective clothing and eyewear. 3. The reaction is not stable in the presence of thiols (DTT or 2-mercaptoethanol). Keep these reactants below 10 μ M. 4. Once the

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vial of Cholesterol probe is opened, it is important that low lighting conditions be used while aliquoting as well as performing the experiment. Direct and prolonged light exposure may increase the background, resulting in compromised linearity.

Storage

1. Long Term Storage: Various-Please see kit components above for specific storage conditions
2. Upon Arrival: Store contents as labeled
3. Store Part 1 of the kit frozen at -20°C upon arrival. 4. The Cholesterol probe should be protected from light. To avoid repeated freeze/thaw cycles, prepare aliquots and freeze. Allow reagents to warm to room temperature, and spin down vials briefly to ensure contents are not lost in caps.

Kit Components

Reagent-Storage Temperature
1. Cholesterol Probe -20°C;2. Enzyme Mix Part -20°C;3. Cholesterol Standard Part -20°C;4. 1X Reaction Buffer 2-8°C;5. DMSO Part 2-8°C

Features & Benefits

1. Detection of Total Cholesterol in Biological Samples.
2. Easy to Use -Simple ONE STEP assay.
3. Used to study the effect of drugs on Cholesterol Metabolism.
4. Highly Sensitive-Detects upto 200nM of Cholesterol.
5. Versatile-Fluorimetric or Colorimetric readout in a 96 well format.