

Cardiolipin Assay Kit (Fluorometric)

Product Information

Cat

Kit-1013

Common Name

Cardiolipin

Cat.No.

Kit-1013

Description

Cardiolipin (CL) is a very important phospholipid present in the inner mitochondrial membrane and constitutes about 20% of its total lipid composition. It has a dimeric structure comprised of two phosphatidic acid residues linked by a glycerol bridge. It is essential for several mitochondrial functions such as maintaining activity of the electron transport chain complexes, and other mitochondrial processes including biogenesis, fission, fusion and protein transport. It is involved in apoptosis where it helps alter the mitochondrial membrane structure and aids in the release of cytochrome c. Condition such as diabetes and heart failure are linked to changes in levels of cardiolipin and it is also depleted during aging. Exposure to toxicants like cigarette smoke and organophosphates may cause an alteration in cardiolipin levels and composition, thus adversely affecting health. Cardiolipin Assay is a fluorometric assay that makes use of a proprietary probe that fluoresces on association with cardiolipin but not with any other lipids such as phosphatidylcholine and sphingomyelin, making it highly specific. Fluorescence can be recorded at Ex/Em 340/480 nm. The kit includes purified cardiolipin as standard and can detect as low as 0.2 nmol of cardiolipin.

Applications

This assay provides a convenient and non-ELISA alternative to detect cardiolipin amount in biological samples.

Storage

-20°C

Cardiolipin Assay Kit (Fluorometric)

Shipping

Gel Pack

Size

100 assays

Kit Components

CL Assay Buffer; Probe; Cardiolipin (5 mM)

Target Species

Mammalian

Detection method Fluorescence (Ex/Em 340/480 nm)

Features & Benefits

Simple, fast, does not require lengthy incubation times