



Lipid Extraction Kit (Chloroform Free)

Product Information

Cat.No.

Kit-2121

Product Overview

Lipid Extraction Kit provides a chloroform free protocol of lipid isolation by organic extraction in a phase-free manner. The recovered organic phase can be dried and resuspended for further downstream lipid analysis. This protocol not only overcomes the difficulty of lower phase extraction and the dangers of using chloroform, but also provides for a very efficient and clean lipid extraction. Each kit provides sufficient reagents to isolate up to 50 lipid preparations based on a 25 μ l sample size.

Size

50 assays

Description

Lipids are a group of naturally occurring molecules that include monoglycerides, diglycerides, triglycerides, fats, sterols and others. Lipids define and preserve cellular membrane integrity and play an important role in cellular processes such as membrane trafficking, signal transduction and energy storage. Dysregulation of lipid metabolism is linked to many diseases like cancer, diabetes and heart disease. Traditionally, the Folch method of organic extraction of lipids is preferred, in which lipids are extracted into a bottom organic phase. Isolating the lipids from this lower fraction is tricky and can in part cause isolation of other phases as well. This leads to low purity of lipid samples which might negatively affect or hinder downstream lipid analysis. In addition, this method uses chloroform as the organic phase solvent, which is toxic and long-term exposure to it is hazardous.

Applications

Lipid Extraction for downstream lipid analysis using Assay Kits (e.g. Cholesterol, Triglyceride etc.). Lipid Extraction for downstream lipid analysis with HPLC, MS and Lipidomics. Lipid Extraction for Screening, characterization and analysis of lipids under normal and disease conditions.

Target Species



Lipid Extraction Kit (Chloroform Free)

Mammalian

Storage

Store kit at RT, protected from light. Read entire protocol before performing the assay. Stable for one year.

Kit Components

Lipid Extraction Buffer: 25 ml Lipid Suspension Buffer: 2.5 ml

Compatible Sample Types

Serum, Plasma, Cultured Cells or Tissues.

Features & Benefits

- Avoids the use of chloroform - therefore non-hazardous protocol.
- Phase free lipid extraction - therefore minimized contamination
- Use with numerous downstream applications