

Steatosis Colorimetric Assay Kit

Product Information

Cat.No.

Kit-0806

Product Overview

Steatosis Colorimetric Assay Kit provides a method for evaluating steatosis risk of drug candidates using Oil Red O to stain neutral lipids in hepatocytes.

Description

Steatosis, also known as fatty liver, is a pathological process characterized by abnormal accumulation of lipid within cells. There are two distinct patterns of steatosis: macrovesicular and microvesicular. The former is frequently seen in alcohol-induced liver injury, as a complication of metabolic syndrome such as obesity and type II diabetes, and is a marker of the hepatotoxic side effect of certain drugs. Microvesicular steatosis is more commonly related to mitochondrial dysfunction and defects in β -oxidation responsible for fatty liver seen in pregnancy and Reye's syndrome. While simple steatosis may not be associated with significant impairment of liver function, extensive fat accumulation can lead to cirrhosis and even liver failure. Studies on alcohol-induced steatosis revealed a set of transcription factors which are thought to be involved in the process, including SREBP1, PPAR α , and Erg-1. The mechanism of non-alcoholic steatosis formation is poorly understood and little information is available on the pathway(s) responsible for progressive hepatocellular damage following lipid accumulation.

Usage

For research use only (RUO)

Storage

Fixative (10X) Room Temperature Wash Solution Room Temperature Oil Red O Solution 4°C Dye Extraction Solution Room Temperature Chloroquine Positive Control (25 mM) 4°C Steatosis Assay Hematoxylin Room Temperature This kit will perform as specified if stored as directed and used before the expiration date indicated on the outside of the box.

Kit Components

Steatosis Colorimetric Assay Kit

Fixative (10X) 1 vial/10 ml Wash Solution 6 vials/30 ml Oil Red O Solution 1 vial/25 ml Dye Extraction Solution 1 vial/30 ml Chloroquine Positive Control (25 mM) 1 vial/100 µl Steatosis Assay Hematoxylin 1 vial/30 ml
