



Adipolysis Assay Kit

Product Information

Cat.No.

Kit-0054

Product Overview

Adipolysis Assay Kit is a quantitative colorimetric/fluorimetric assay for adipolysis.

Description

Obesity is a chronic condition that develops from storage of excessive energy in the form of adipose tissue. The resulting adiposity presents a high risk factor for diseases such as type 2 diabetes, cardiovascular diseases, and cancer. ADIPOLYSIS or lipolysis is a highly regulated process in fat metabolism, in which triglycerides are broken down into glycerol and free fatty acids. Rapid, robust and accurate procedures for adipolysis quantification in cell culture are very useful in research and drug discovery. Adipolysis Assay Kit directly measures glycerol released during adipolysis. This homogeneous assay uses a single Working Reagent that combines glycerol kinase, glycerol phosphate oxidase and color reactions in one step. The color intensity of the reaction product at 570nm is directly proportional to glycerol concentration in the sample.

Applications

Direct Assays: adipolysis (glycerol in cell culture media). Drug Discovery/Pharmacology: effects of testing drugs on adipolysis.

Usage

For research use only (RUO)

Storage

The kit is shipped on ice. Store Assay Buffer at 4°C and other reagents at -20°C. Shelf life of 3 months after receipt.

Kit Components

1. Assay Buffer: 24 mL
2. Enzyme Mix: 500 µL
3. ATP: 250 µL
4. Dye Reagent: 220 µL
5. Standard: 100 µL
100 mM Glycerol



Adipolysis Assay Kit

Detection method Colorimetric, Fluorometric

Compatible Sample Types

Cell Culture Medium

Features & Benefits

Sensitive and accurate. Use as little as 10 μ L samples. Linear detection range in 96-well plate: 0.92 to 100 μ g/mL (10 to 1000 μ M) glycerol for colorimetric assays and 0.2 to 5 μ g/mL for fluorimetric assays. Rapid and convenient. The procedure involves addition of a single working reagent and incubation for 20 min at room temperature. Robust and amenable to HTS assays. Potential interference by testing drugs is greatly reduced at 570nm. Compatible with culture media containing phenol red. Assays can be performed in 96 or 384-well plates.
