

Isocitrate Fluorometric Assay Kit

Product Information

Cat.No.

Kit-0484

Product Overview

Isocitrate Assay Kit (Fluorometric) is used for quantitative determination of Isocitrate (Isocitric Acid) using fluorometric methods.

Description

ISOCITRATE (ISOCITRIC ACID) is a substrate in the citric acid (TCA) cycle. Isocitrate is formed by the isomerization of citrate catalyzed by the enzyme aconitase. Isocitrate is oxidized by isocitrate dehydrogenase producing α -ketoglutarate and generating NADPH. Isocitrate is commonly found in many fruits and vegetables and their processed products. Industrially, isocitrate is used as a marker to identify the quality and purity of fruit juices. This isocitrate assay measures the NADPH generated from the oxidation of isocitrate. The NADPH reduces a probe into a highly fluorescent product. The fluorescence intensity of this product, measured at λ ex/em = 530/585 nm, is proportional to the isocitrate concentration in the sample.

Applications

Isocitrate determination in food, beverage, biological samples (e.g. cell lysate, tissue homogenate, serum, etc.)

Usage

For research use only (RUO)

Storage

Store all components at -20°C upon receiving.

Kit Components

Assay Buffer 10 mL NADP 500 μ L Standard 1 mL Enzyme A 120 μ L Enzyme B 120 μ L Probe 750 μ L

Detection method Fluorometric

Compatible Sample Types



CREATIVE BIOMART[®]
Assay Kit

Isocitrate Fluorometric Assay Kit

Beverage, Food, Cell lysate, Serum, Tissue homogenate

Features & Benefits

Fast and sensitive. Linear detection range (20 μ L sample): 0.6 to 500 μ M for 10 min reaction. Convenient and high-throughput. Homogeneous "mix-incubate-measure" type assay. Can be readily automated on HTS liquid handling systems for processing thousands of samples per day.

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