

Isocitrate Assay Kit

Product Information

Cat

Kit-2465

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Product Overview

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. The 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 $\lambda_{ex}/\lambda_{em}$ = 530/585 nm, is proportional to the isocitrate concentration in the sample.

Storage

-20°C

Shipping

On Ice

Size

100 tests

Detection method FL530/585 nm

Compatible Sample Types

Food, beverage, biological samples (e.g. cell lysate, tissue homogenate, serum, etc.)

Features & Benefits

Fast and sensitive. Linear detection range (20 μ L sample): 0.6 to 500 μ M for 10 min reaction.

Isocitrate Assay Kit

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.

Assay time

10 min

Sensitivity

0.6 μ M
