



## Isocitrate Assay Kit

### Product Information

**Cat**

Kit-2465

**Cat.No.**

Kit-2465

### 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  $\alpha$ -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  $\mu$ L sample): 0.6 to 500  $\mu$ M for 10 min reaction.



CREATIVE **BIOMART**<sup>®</sup>  
Assay Kit

## 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.

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**Assay time**

10 min

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**Sensitivity**

0.6  $\mu$ M

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