

## Isocitrate Colorimetric Assay Kit

### Product Information

#### Cat.No.

Kit-0483

#### Product Overview

Isocitrate Assay Kit (Colorimetric) is used for quantitative determination of Isocitrate (Isocitric Acid) using colourmetric 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  $\alpha$ -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. This isocitrate assay measures the NADPH generated from the oxidation of isocitrate. The NADPH converts the dye to an intense violet color with an absorption maximum at 565 nm. The increase in absorbance at 565 nm is directly proportional to the isocitrate concentration.

#### 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  $-20^{\circ}\text{C}$  upon receiving.

#### Kit Components

Assay Buffer 10 mL Enzyme A 120  $\mu\text{L}$  NADP/MTT 1 mL Enzyme B 120  $\mu\text{L}$  Standard 1 mL

**Detection method** Colorimetric

#### Compatible Sample Types



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

## Isocitrate Colorimetric Assay Kit

Beverage, Food, Cell lysate, Serum, Tissue homogenate

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### Features & Benefits

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Fast and sensitive. Linear detection range (2  $\mu$ L sample): 2 to 5  $\mu$ M for 1 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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