

Invertase Assay Kit

Product Information

Cat.No.

Kit-0479

Product Overview

Invertase Assay Kit is a quantitative determination of invertase/sucrase activity.

Description

INVERTASE (β-fructofuranosidase, EC 3.2.1.26) is an enzyme that catalyzes the hydrolysis of sucrose to fructose and glucose. Invertases cleave at the O-C(fructose) bond, whereas a related enzyme sucrase (EC 3.2.1.48) cleaves at the O-C(glucose) bond. A wide range of microorganisms produce invertase and can, thus, utilize sucrose as a nutrient. Invertase assay finds wide applications in environmental (e.g. soil), agricultural and food (confectionery) industry. Invertase Assay Kit provides a convenient and ultra-sensitive colorimetric and fluorimetric means to measure invertase activity. In the assay, invertase cleaves sucrose, resulting in the formation of fructose and glucose, which is determined by a colorimetric (570nm) or fluorimetric method ($\lambda_{em}/ex = 585/530nm$). The assay is simple, sensitive, stable and high-throughput adaptable.

Applications

Invertase and sucrase activity determination in biological and environmental (e.g. soil) samples. Evaluation and screening for invertase inhibitors.

Usage

For research use only (RUO)

Storage

Store 10x Reaction Buffer and Assay Buffer at 4°C and other reagents at -20°C. Shelf life of six months after receipt.

Kit Components

10x Reaction Buffer: (pH 4.5) 12 mL Assay Buffer 10 mL Glucose Standard 1 mL 10x Sucrose 1.5 mL Enzyme Mix 120 μ L Dye Reagent 120 μ L

Invertase Assay Kit

Detection method Colorimetric

Compatible Sample Types

Biological Sample, Environmental (e.g. soil) Sample

Features & Benefits

Safe: Non-radioactive assay. Sensitive and accurate: As low as 0.007 U/L invertase activity can be quantified. Homogeneous and convenient: "Mix-incubate-measure" type assay. No wash and reagent transfer steps are involved. Robust and amenable to HTS: can be readily automated on HTS liquid handling systems for processing thousands of samples per day.
