CREATIVE BIOMART®
Assay Kit

Phosphoenolpyruvate Carboxylase(PEPC)assay kit

Product Information

Product Overview

Phosphoenolpyruvate carboxylase (PEPC, EC 4.1.1.31) is a key enzyme in photosynthetic carbon metabolism of C4 plants and CAM plants, and plays a role in fixing CO2 in the environment. It catalyzes the irreversible reaction of PEP and CO2 carboxylation to form oxaloacetate. This enzyme plays an important role in photosynthetic carbon assimilation, respiration and material metabolism. PEPC catalyzes phosphoenolpyruvate (PEP) and CO2 to produce oxaloacetate, and malate dehydrogenase further catalyzes oxaloacetate and NADH to produce malic acid and NAD+. The activity of PEPC enzyme can be calculated by measuring the reduction rate of NADH at 340nm.

Size

96 Samples

Storage

-20□

Shipping

Ice pack

Kit Components

Extraction Liquid: Liquid, 100mL × 1 bottle, store at 4°C.
Reagent One: Powder, mg × 2 vial, store at -20°C. Shake or centrifuge before use to bring the reagent to the bottom, then add 1.1mL of distilled water to dissolve. Any unused reagent should be aliquoted and stored at -20□. Do not freeze and thaw repeatedly, and use within three days.
Reagent Two: Liquid, 15mL × 1 bottle, store at 4°C.
Reagent Three: Powder, mg × 1 vial, store at -20°C. Shake or centrifuge before use to bring the reagent to the bottom, then add 2.1mL of distilled water to dissolve for later use.

Materials Required but Not Supplied

Microplate reader, 96-well plate, benchtop centrifuge, adjustable pipette, mortar, ice, and distilled water.

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