



# 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 CO<sub>2</sub> in the environment. It catalyzes the irreversible reaction of PEP and CO<sub>2</sub> carboxylation to form oxaloacetate. This enzyme plays an important role in photosynthetic carbon assimilation, respiration and material metabolism. PEPC catalyzes phosphoenolpyruvate (PEP) and CO<sub>2</sub> to produce oxaloacetate, and malate dehydrogenase further catalyzes oxaloacetate and NADH to produce malic acid and NAD<sup>+</sup>. 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.

---