



# Cinnamon Alcohol Dehydrogenase Activity assay kit

## Product Information

### Product Overview

Cinnamyl alcohol dehydrogenase (CAD, EC 1.1.1.195) is a key enzyme in plant secondary metabolism, particularly in lignin synthesis, and is closely related to plant growth, development, and defense against pathogen invasion. This kit provides a simple, sensitive, and rapid method for measuring the activity of CAD. CAD catalyzes the conversion of cinnamyl alcohol and NADP<sup>+</sup> to cinnamaldehyde and NADPH. The product reacts with a specific chromogenic agent to produce a colored substance. By measuring the rate of increase in the colored substance, the activity of the CAD enzyme can be calculated.

### Size

96 Samples

### Storage

4□

### Shipping

Ice pack

### Kit Components

Extraction Solution: Liquid, 120mL × 1 bottle, stored at 4°C.

Reagent 1: Liquid, 5mL × 1 bottle, stored at 4°C.

Reagent 2: Liquid × 1 vial, stored at 4°C.

Reagent 3: Powder, mg × 1 bottle, stored at 4°C.

Before use, add 14mL of Reagent 4 to fully dissolve; any unused reagent should be stored at 4°C.

Reagent 4: Liquid, 15mL × 1 bottle, stored at 4°C.

Standard: Powder, mg × 1 vial, stored at 4°C.

This reagent is used if a new calibration curve needs to be prepared.

### Materials Required but Not Supplied

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