

K599 Chemically Competent Cell



Cat. No. ACC-121

Lot. No. (See product label)

Product Name

K599 Chemically Competent Cell

Product Overview

The genotype of K599 Chemically Competent Cell is *Agrobacterium rhizogenes* (str R) pRi2659 (agropine type). *Agrobacterium rhizogenes* is a Gram-negative soil bacterium that can infect most dicotyledons, a few monocotyledons and some gymnosperms. The K599 *Agrobacterium rhizogenes* strain contains pRi2659 *agrobacterium*-type Ri plasmid with a broad host range (cucurbitaceae, leguminosae, solanaceae, etc.) and streptomycin resistance.

Applications

K599 Chemically Competent Cell is suitable for transgenic operations of cucurbitaceae, leguminosae, solanaceae and other plants.

Notes

1. Volume of DNA from ligation mix should not exceed 1/10 of the cell mixture; DNA for transformation should be purified and free of organic substances such as ethanol.
2. Do not pipette or vortex cells.
3. Plating volume can be adjusted accordingly.

Kit Components

K599: 100 µL/tube * 10 tube/50 tube/100 tube.

Assay Protocol

1. Thaw *Agrobacterium* competent cells at room temperature or in the palm, and place in ice bath.
2. Add 0.01-1 µg of plasmid DNA to 100 µL of competent cells. Carefully flick the tube to mix cells and DNA. Do not pipette or vortex.
3. Place the tube on ice for 5 minutes, in liquid nitrogen for 5 minutes, in 28°C or 37°C water bath for 5 minutes, and in ice bath for 5 minutes.
4. Add 700 µL of antibiotic-free TY liquid medium to the mixture and shake for 2 to 3 hours at 28°C.
5. Centrifuge culture at 6000 rpm for 1 minute and dispose ~700 µL supernatant. Resuspend cell pellet in the rest 100 µL medium.
6. Spread 50-100 µL cell suspension to TY plate containing proper antibiotics and incubate at 28°C for 2 - 4 days.

Transformation efficiency

Transformation efficiency of K599 Chemically Competent Cell using pCAMBIA2301 plasmid with 50 µg/mL kan is $>10^4$ cfu/µg DNA.

Storage

Store at - 80 °C for 12 months.

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY