JM109 Chemically Competent Cell

Product specification

Catalog Number	Specification
CS03010	10×100μL

Product introduction

The JM109 competent cells produced by the company are competent cells that is treated by the special procederes of strain of e. coli JM109, which can be used for the chemical transformation of DNA.When using PUC19 plasmid to detect, the conversion efficiency can up to 10^8, the efficiency of conversion will not change after several moths store below at-80℃ .JM109 is a kind of F 'recombinant defective strains of Amber-inhibited.Support the growth of M13 phage vector, modifying the DNA of transfection, but do not has an fffect of restriction.F 'in the strain with lacZ Δ M15, which is complementary to the amino terminus of β-galactosidase encoded in λZAP, which is useful for blue-white screening.

Protocol

1.Take the JM109competent cells from - 80 ℃, inserted rapidly in the ice, waiting for 5 minutes for the fungus block to melt, add the target DNA (plasmid or ligation product) and then gently blowing it with pipette ,place in the ice for 5 minutes.

2. Heat shock at exactly 42°C for exactly 90 seconds. Place on ice for 5 minutes.

3. Pipette 500 µl of room temperature SOC into the mixture.

4. Place at 37°C for 60 minutes. Shake vigorously (200 rpm) or rotate. Warm selection plates to 37°C.

5. The instant centrifuge at 3000rpm, and the 100µl was left to gently blow the refundulation and coated it to the LB medium with the antibiotics for plasmid screening.

6. Incubate overnight at 37°C.

Notes

1. It is better to slowly melt competent cells in the ice, not to place cells in the ice too long , long storage will reduce the conversion efficiency.

2. Gentle operation should be performed when mixing the plasmid.

3. Conversion of high concentration of plasmids can reduce the amount of bacteria that will eventually be used for coating.