

DB3.1 Chemically Competent Cell

Product specification

Catalog Number	Specification
CS04010	10×100μL

Product introduction

DB3.1 belongs to the Escherichia coli clone strain, and the DB3.1 Escherichia coli strain genome contains gyrA462 gene, conferring resistance to the ccdB toxicity gene of the lambda bacteriophage, and is particularly suitable for the construction or expansion of a plasmid vector containing a ccdB gene (e.g. a GATEWAY System Vector), this strain has the chain Kanamycin resistance. DB3.1 needs to be cultured at aerobic temperature of 37, and 30% glycerol can be used to preserve bacteria at -80°C. The plasmid can be transformed by the Escherichia coli at 42 degrees of heat shock.

Protocol

1. Take the DB3.1 competent cells from -80 °C, inserted rapidly in the ice, waiting for 5 minutes for the fungus block to melt, add the target DNA (plasmid or connection product) and then gently blowing it with pipette, place in the ice for 5 minutes.
2. Heat shock 90 seconds in 42 °C water bath, quickly put back on ice and put it aside for 5 minutes.
3. Add 500 μL of antibiotic-free sterile medium (SOC or LB medium) to the centrifuge tube and mix for 37 minutes at 200 °C for 60 minutes.
4. 3000 RPM instantaneous centrifugal harvesting bacteria, with a total of 100 μL left and to gently blow the resuspension bacteria and smear it to the LB medium containing the selected plasmid with screening antibiotics
5. Upside down the plate and place it in a 37 °C incubator over night.

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.