

# BL21 (DE3) pLysS Chemically Competent Cell

## Product specification

Catalog	Specification
CP02010	10×100μL
CP02020	20×100μL

## Product Introduction

This chemically competent cell was treated by a special process which can be used for DNA thermal transformation. The strain carries the pLysS plasmid, which has chloramphenicol resistance and is suitable for expression of toxic and non-toxic proteins. pLysS contains the gene that expresses T7 lysozyme, which can reduce the background expression level of the target gene and can not interfere with the expression of the target protein. Using pUC19 plasmid detection, conversion efficiency of up to  $10^7$ .

## Protocol

1. Thaw a tube of BL21(DE3) Competent E. coli cells on ice until the last ice crystals disappear. Add the target DNA (plasmid or ligation product) to the cell mixture. Place the mixture on ice for 30 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 containing 12.5-25 μg/ml chloramphenicol and the antibiotics for plasmid screening.
6. Incubate overnight at 37°C.

## Notes

1. Competent cell are best to slowly melt on the ice.
2. Mix the plasmid gently.
3. BL21 (DE3) pLysS strain carrying pLysS plasmid, the culture medium should contain 12.5-25 μg / ml chloramphenicol, to prevent plasmid loss.