

**DESCRIPTION**

Tribo™ E. coli Stable Competent Cells are an E. coli strain that provides high transformation efficiencies for plasmids containing repeat DNA sequences. The E. coli cells are deficient in the genes involved in the rearrangement and deletion of DNA.

**APPLICATIONS**

- 1) General cloning and subcloning.
- 2) Plasmid DNA amplification.
- 3) Plasmid isolation.

**TRANSFORMATION EFFICIENCY (CFU/UG)**

$>1 \times 10^9$

**BLUE-WHITE SCREENING**

No

**REDUCES RECOMBINATION**

Yes

**IMPROVES PLASMID QUALITY**

Yes

**recA DEFICIENT:**

Yes

**KIT CONTENTS FOR 10 TESTS**

Name	Size (10 tests)
Competent Cells	10 x 50 µL
pUC19	20 µL
SOC	1.5 mL

**Storage conditions**

Store the competent cells at -80°C. Shelf life: 6 months.

**Note**

This E. coli strain has kanamycin, chloramphenicol and tetracycline resistances.

**PROCEDURES**

1. When needed, transfer a tube of competent cells from the -80°C freezer to an ice bath. Keep the tube on ice for 10 minutes to thaw the cells.
2. Add the transforming DNA (about 25 ng per 50 µL of competent cells) in a volume of less than 2.5 µL (5% of the volume of competent cells). Set up both negative control (no plasmid DNA) and positive control (pUC19, the kit provides). Place the tubes on ice for 30 minutes.
3. Transfer the tubes to a rack in a 42°C water bath for 90 seconds without shaking the tubes.
4. Quickly transfer the tubes to an ice bath to cool the cells for 2 minutes.
5. Add 150 µL of SOC medium to each tube. Incubate the cultures in a 37°C shaking incubator for 45 minutes.
6. Transfer 50 µL of the transformed competent cells onto LB agar containing appropriate antibiotic.
7. Spread the cell liquid evenly on the agar plate and keep the plates at room temperature until the liquid is absorbed.
8. Keep 10-15 min from light at room temperature for drying plate.
9. Invert the plates and incubate the plates at 37°C for 12-16 hours. Pick up single colony for downstream application.

**RELATED PRODUCTS**

DH5α Competent Cell Transformation Kit (TBS8041)  
Transfection Reagent Maxi (TBS8042)  
DH10 Competent Cell Transformation Kit (TBS8043)  
BL21 Competent Cell Transformation Kit (TBS8044)  
Plasmid DNA prep min (TBS6011)  
Plasmid DNA Rapidprep Midi Ki (TBS6014)  
Endotoxin-free plasmid DNA prep min (TBS6015)  
Low Endotoxin Plasmid DNA Mini (TBS6017)  
PCR magnetic Cleanup (TBS6029)  
Endotoxin-free plasmid DNA prep Maxi (TBS6037)  
PCR DNA purification (TBS6031)  
Gel DNA purification (TBS6033)

**This product is for research use only.**