

Transformation of plasmid DNA into competent E. Coli cells

Reagents:

SOC:

2% Tryptone

0.5% Yeast Extract

10mM NaCl

10mM MgSO₄

10mM MgCl₂

PROTOCOL:

1. Thaw competent cells on ice. 20–200µL per tube
2. Add max of 2 µL of a ligation reaction
3. Mix very gently!
4. Incubate the tubes on ice for 30 min
5. Heat shock the cells for 30 seconds at 42°C
6. Place the tubes immediately on ice for 2 min.
7. Add 250 µL of SOC medium to each tube
8. Incubate for 1 hour at 37°C on a shaker.
9. Spin down briefly and remove most supernatants
10. Resuspend cell pellet with the rest SOC medium in the tube by pipetting
11. Plate out the suspension on a LB agar plate containing the appropriate antibiotic.
12. Incubate the plates overnight at 37°C