

# **Transformation (adapted from New England Biolabs Protocol C2988)**

## **Materials (1 transformation):**

- Competent cells (50 µl)
- Plasmid DNA (2 µl)
- SOC/LB media (950 µl) - use SOC media for more efficient transformations
- Agar plate with correct antibiotic (~20 ml agar, ~20 µl antibiotic)

## **Protocol:**

1. Thaw competent cells for testing on ice (~30 mins for 0.2ml aliquots).
2. Aliquot 50µl competent cells into pre-labeled microcentrifuge tubes.
3. Add 2µl of DNA to the competent cells.
4. Incubate on ice for 30 mins.
5. Heat shock cells at 42C for 2 minutes.
6. Immediately incubate on ice for 5 minutes.
7. Add 950µl of SOC media to each tube and incubate at 37C for 1 hour.
8. Prepare agar plates.
9. Pellet cells at 10,000 rpm for 5 minutes.
10. Remove 700µl of supernatant and resuspend the pellet gently.
11. Plate all 300µl of each transformation onto the correctly labelled CAM plate.
12. Incubate in a static incubator for 16-18 hours at 37C.