Transformation Procedure

Introduction

If you are able to do so, make fresh compotent cells on the day of this procedure.

Materials

- Compotent Cells
- SOC Medium
- Microfuge tubes
- Ice-water bath
  - Styrofoam container
  - Float(s)
- DNA
- Beaker
- Thermometer
- Plates
- Alcohol
- Disposable/ metal spreader

Procedure

Preliminary Steps

- [ ] 1. X= the number of transformations you are doing
- [ ] 2. Place SOC medium (from fridge door) in the incubator
- [ ] 3. Also place X plates in the incubator

  with appropriate antibiotic resistance (preferably "built-in")
- [ ] 4. Make an ice-water bath in a styrofoam container
- [ ] 5. Obtain X MCF tubes and a float

Main Procedure

- [ ] 6. Add 50 λ of compotent cells

7. Add 2 λ of the DNA
8. Place in ice-water bath for 2 minutes
9. While waiting...

    turn on sink's hot water
    Obtain a 400 ml beaker
    Add hot water
    Using a thermometer, adjust water to 42° C
10. Place tubes in 42° C bath for 30 seconds
11. Another 2 minutes on ice
12. Add 1 mL of warm SOC medium (from the incubator)

    Place in fridge after this step
13. Place each tube in the incubator (37° C) for 1 hour
14. After the hour, carefully label each plate
15. Spin down and pour out most of the supernatant
16. Pour the appropriate tube onto the plate

    Use the bar / disposable spreaders to spread evenly
17. Place the plates back in the incubator overnight
18. Dispose of MCF tubes and other trash properly.