Transformation in *E. coli* DH5α

Materials

- Sterile 1.5 mL microtubes
- 1 LB agar plate containing the appropriate antibiotic
- Liquid LB
- Competent cells
- Plasmidial DNA

Apparatus

- Laminar flow hood
- Water bath
- Shaker
- Incubator

Method

1. Briefly spin the competent cells to collect all drops and put then on ice.
2. Add the total volume of the ligation mixture (or 50 ng of plasmidial DNA) in a sterile 1.5ml tube.
3. Add 50 µL of competent cells in the same tube and mix by pipetting carefully.
4. Keep the tube on ice for 25min.
5. Heat shock each transformation tube by placing it into a 42°C water bath for 2 min.
6. Put the tube on ice for 5 min.
7. Add 200 µL of liquid LB.
8. Incubate at 37°C/ 250rpm for 1 hour.
9. Plate the suspension on a LB agar plate containing the appropriate antibiotic.
10. Incubate overnight at 37°C.