

Electrocompetent transformation

Aim of the Experiment

This protocol can be used to transform Electrocompetent Cells with DNA from various sources such as Ligation, Gibson Assembly or pure plasmid.

Materials

- Electro competent cells (e.g. DH5 α (NEB))
- SOC/LB Media
- LB-Agar Plates with corresponding Antibiotic
- Electroporator
- Electroporation cuvette
- Template DNA

Procedure

All steps must be done on ice!

1. Thaw cells on ice for 10 min.
2. Add 1 μ l of DNA.
3. Wait 1 minute.
4. Transfer the complete mixture into a prechilled electroporation cuvette.
5. Electroporate and put back on ice immediately.
6. Add 950 μ l SOC/LB Media.
7. Incubate at 37°C and 250 rpm for 1 hour.
8. Spin down for 30 seconds, discard 900 μ l and transfer the cells onto the plate by resuspension in the remaining media.
9. Spread the cells with plating beads by shaking for at least 10 seconds.
10. Incubate plates overnight at 37°C.