Electro competent Transformation

Aim of the Experiment

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

Materials

- Electro competent cells (various strains, prepared according to protocol)
- SOC Media, see corresponding protocol
- LB-Plates with corresponding antibiotics
- Electroporation cuvettes ()
- Electroporator ()
- DNA (various source)

Procedure

All steps must be done on ice!

1. Thaw cells on ice for 10 min.
2. Add 1 μl of DNA.
3. Wait 1 min.
4. Transfer the complete amount into a prechilled electroporation cuvette.
5. Electroporate and put back on ice immediatly.
6. Add 950 μl SOC Media.
7. Incubate at 37 $^{\circ}\mathrm{C}$ and 250 rpm for 1 h.
8. Spin down for 30 seconds, discard 900 μl and transfer the cells onto the plate by resuspension in the remaining media.

9. Plate with plateing beads by shaking for at least 10 s.
10. Incubate plates overnight at 37 °C.