

Bacterial transformation

Plasmid amplification is easily done in *E. coli Mach1* using the following guidelines. For curing see E.Z.N.A or QIA miniprep guide.

Plates

For this everything needs to be kept on ice throughout the process.

- Create the appropriate number of LB agar plates w. ampicillin (or other appropriate antibiotic)
- Take competent cells from -80°C and place on ice.
- Mix $1\ \mu\text{L}$ plasmid and $\sim 25\ \mu\text{L}$ aliquot of cells.
- Let the mixture stand for 5-10 mins.
- Place mixture on agar plate and spread in an even layer across the plate using a plate spreader.
- Incubate the plate overnight at 37°C .

Liquid

For this everything needs to be kept on ice throughout the process.

- Take competent cells from -80°C and place on ice.
- Mix $\sim 5\ \text{mL}$ LB medium with $10\ \mu\text{L}$ ampicillin (or other appropriate antibiotic) in a falcon tube.
- Mix $1\ \mu\text{L}$ plasmid and $\sim 25\ \mu\text{L}$ aliquot of cells.
- Let the mixture stand for 5-10 mins.
- Add the cell mixture to the falcon tube and mix by inverting it a few times.
- Incubate overnight at 37°C .