**Transformation of chemically competent cells**

You will need 25 – 50 uL DH5-cells per transformation

- Get the cells from the -80oC freezer

- Thaw the cells on ice (not in your hand, and never vortex!)

- Distribute the cells into 2 mL tubes on ice (25 – 50 uL cells in each)

- Add 1 – 2 uL ligation reaction (or 0.1 uL plasmid) to the cells and flip to mix

- Incubate 45 min on ice

- Heat shock the cells for 30 seconds in the water bath at 42oC

- Put cells on ice for 5 min

- Add 200 uL SO**C** medium

- Incubate for 1 h at 37oC shaking at 180 rpm

- Put 50 uL of the recovered bacteria on an agar plate with the appropriate antibiotic

- Incubate o/n at 37oC

- Save the rest of the bacteria in the fridge in case you need to spread out more bacteria later

For blue/white selection (e.g. when you use pGEM-TEasy):

* Spread 100 uL IPTG solution (fridge) and 50 uL X-Gal solution (freezer) to the plate an hour before you spread out the bacteria
* Blue colonies do NOT contain your insert, the white ones MIGHT contain it