

## **Plasmid Making** (After trial and error)

### **PCR Purification**

Purify 4 tubes of pcr product (450-500ng/uL) using Thermo kit-> yields 138ng/ul.

### **RE digest and purification**

Run RE digest of plasmid, and PCR product for 2 hrs.

Run gel with cut plasmid and gfp. Cast gel with big wells (use comb with orange tape).  
100V for 45min.

### **Gel extraction with Promega kit**

Combine all digested product into one tube -> yield of about 30ng/uL

### **Ligation**

Do a 6X reaction according to the kit instructions. Remember to adjust vector and insert concentrations according to NEB online calculator.

ligate O/N in pcr machine at 16deg hold

### **Transformation and selection**

Transform plasmid into competent *E coli* according to standard kit (DH5a).

Plate 20, 40 and 100ul of transformed cells on LB+antibiotic for selection.

Plate 20ul on LB as a control.

Perform colony PCR on colonies grown

Select 2 positive clones for growth (one colony in 3mL LB+Antibiotic, min 16hours) and perform miniprep, send plasmid samples for sequencing

If clone is correct, keep glycerol stocks (30-50% glycerol with stationary culture of bacteria. Update in online registry)