

Preparation of plasmid DNA (by Wizard midi column)

(Day1; Bacteria culture)

Colony (LB / Amp plate) → 50 ml of LB (or 2 x YT) / 50-100 $\mu\text{g}/\text{ml}$ of Ampicillin (Amp) in 300ml conical flask

↓ Culture O/N (16-24 h)

(Day2; Midi-prep)

Bacteria in conical flask

- ↓ to 50 ml tube
- ↓ 5000 rpm, 10 min, 4°C
- ppt (sup → autoclave)
- ↓ add 5 ml of Sol. I
- ↓ suspend by vortex
- ↓ add 5 ml of Sol. II (Lysis buffer)
- ↓ invert 7 times (clear cell lysate)
- ↓ add 5 ml of Sol. III (Neutralization beffer)
- ↓ invert 5 times (become clouded)
- ↓ 8000 rpm, 10 min, 4°C
- sup
- ↓ filtered by KIM WIPE
- ↓ add 6 ml of Midiprep resin (Promega, A7701)
- ↓ to column (Promega, A7651) & vacuum
- ↓ add 17 ml of wash buffer & vacuum
- column
- ↓ cut and to 1.5ml microtube
- ↓ 15000 rpm, 1 min, 4°C
- ↓ to new 1.5ml microtube
- ↓ add 300 μl of TE (65°C)
- ↓ 15000 rpm, 1 min, 4°C

Sol. I
50 mM Tris-HCl (pH 7.5)
10 mM EDTA
50-100 $\mu\text{g}/\text{ml}$ Rnase A

Sol. II
0.2M NaOH
1% SDS

Sol. III
1.32M KOAc (pH 4.8)

Quantification (1 : 100) & cut check