## DNA Mini-Prep V2

- 1) Inoculate 3ml TB or LB + 100μg/mL Amp (or similar selection) with a single transformed bacteria colony. Incubate overnight at 37°C while shaking at 250 rpm.
- 2) Transfer 1.7mL of the overnight culture to a 1.7mL microcentrifuge tube. Pellet cells with a 5,000 rpm spin for 1 minute at room temperature. Aspirate supernatant.
- 3) Add 100µL Solution I and resuspend cells by vortexing. Place cells on ice for 3-4 minutes.
- 4) Add 200µL Solution II. Vortex thoroughly. Place cells on ice for 10 minutes.
- 5) Add 150µL Solution III. Vortex thoroughly. Place cells on ice for 10 minutes (OK to leave longer).
- 6) Pellet cell debris with a 15,000 rpm spin for 12 minutes at room temperature. Transfer supernatant to a new microcentrifuge tube.
- 7) Add  $25\mu$ L 1X TE +  $1\mu$ g/mL RNase. Incubate at room temperature or  $37^{\circ}$ C for 30 minutes followed by 10 minutes in the  $55^{\circ}$ C water bath.
- 8) Add 400µL Phenol:Chloroform:Iso Amyl Alcohol. Vortex thoroughly (0.5 1 minute). Spin at 15,000 rpm for 3 minutes at room temperature.
- 9) Transfer aqueous (top) phase to a new microcentrifuge tube and repeat Step 8.
- 10) Transfer aqueous (top) phase to a new microcentrifuge tube. Add  $40\mu$ L 3M NaAc. Add 1mL cold 100% EtOH. Mix by inverting the tube several times.
- 11) Snap freeze on dry ice or in -80°C for at least 30 minutes.
- 12) Pellet precipitated DNA with a 15,000 rpm spin for 15 minutes at 4°C. Aspirate off supernatant, being careful not to disturb the pellet.
- 13) Wash DNA pellet by adding 1mL 70% cold EtOH and spinning at 15,000 rpm for 5 minutes at room temperature. Make sure tube is in the same orientation as the previous spin.
- 14) Aspirate supernatant. Dry pellet in speed vac (until pellet is dry). Resuspend pellet in 25μL ddH2O. Store at 4°C.