Isolation of bacmid DNA

Day 1: inoculate bacterial cultures

- 1. Using a sterile pipette tip, inoculate a single, isolated DH10Bac *E. coli* colony into 5 ml of LB medium containing (same as agar, but omitting bluo-gal and IPTG):
 - 50ug/ml kanamycin
 - 7ug/ml gentamicin
 - 10ug/ml tetracycline
- 2. Grow the cultures at 37°C with shaking at 240 rpm for ~17 hours.

Day 2: isolate bacmid DNA

- 3. Prepare a glycerol stock of each recombinant bacterial clone by mixing 0.5 ml of overnight culture with 0.2 ml of sterile 50% glycerol in a cryovial. Store glycerol stocks at -80°C.
- 4. Spin down the remaining volume of cells 5 min, 4000 \times g, 4 \circ C, and discard the supernatant
- 5. Resuspend in 300 μL P1 buffer
- 6. Add 300 μL P2 buffer and mix
- 7. Add 300 $\mu L\,\textbf{P3}$ buffer and mix. Precipitate should form.
- 8. Centrifuge 10 minutes at maximum speed in microfuge
- 9. Transfer supernatant to new tube, spin again 10 minutes
- 10. Transfer supernatant to new tube
- 11. Add 800 μL isopropanol, invert several times, store on ice for ten minutes
- 12. Centrifuge the sample for 15 minutes at maximum speed, 4°C
- 13. Carefully remove the supernatant, taking care to not disturb the pellet.
- 14. Add 1ml of 70% ethanol and invert the tube several times to wash the pellet
- 15. Centrifuge for 1 minute, 4°C and discarding supernatant
- 16. Repeat wash and discarding supernatant
- 17. Spin again for 1 minute and remove additional liquids
- 18. Open tube in TC hood and let dry for 30 minutes. Do not over-dry the pellet.
- 19. Dissolve the DNA pellet in 100ul of sterile water. To avoid shearing, do not mechanically resuspend the DNA. Allow the solution to sit in the tube with occasional gentle tapping of the bottom of the tube.
- 20. Spin at max speed in cold microfuge. Small pellet will form. Bacmid is in the supernatant. Transfer to a new tube, measure concentration, and label
- 21. Proceed with insect cell transfection or store the bacmid at either -20 or -80