

Making bacmids by recombination

You will need Lennox LB-agar plates (10 g peptone, 5 g yeast extract, 5 g NaCl, 12 g agar per liter) supplemented with:

- 50 µg/mL kanamycin
- 7 µg/mL gentamicin
- 10 µg/mL tetracycline
- 100 µg/mL Bluo-Gal
- 40 µg/mL IPTG

Step 1: Transposition of pFastBac into DH10Bac plates

- (1) Thaw the DH10Bac competent cells on ice.
- (2) Dispense 30 µL of the cells into a 14-mL round-bottom polypropylene tube.
- (3) Add approximately 5 ng of the donor pFastBac plasmid (maximum 1.5 µL volume) to the cells and gently mix by tapping the side of the tube.
- (4) Incubate in ice for 30 min.
- (5) Heat shock at 42 °C for 45 sec.
- (6) Incubate in ice for 2 min.
- (7) Add 500 µL of SOC.
- (8) Grow the cells in a shaking incubator for **4 h** at 37 °C with medium agitation (225 rpm).
- (9) Plate on 50 µL of the cells on Lennox LB-agar (preferably pre-warmed).
- (10) Incubate the plate upside-down at 37 °C for 2 days. Blue coloring does not fully develop until day 2. White colonies are generally larger than the blue colonies.

Step 2: Pick 2-3 clones (white colonies) and re-streak. After 2 days, pick 1 isolated colony for each clone for a bacmid miniprep.