Transformation

Reagent

Competent cells (Synbio Tech Co., Ltd,)

LB broth (Synbio Tech Co., Ltd,)

LB agar plate (with antibiotics) (Synbio Tech Co., Ltd.)

Plasmid DNA solution

Procedure

- 1. Obtain 50μl of competent cells in the 1.5mL centrifuge tube, labeling them and keeping on ice until thawed.
- 2. Finger flick to be sure cells are in suspension
- 3. Pipette $10\mu L$ of the plasmid DNA solution to the tube. Mix the tube gently.
- 4. Incubate the tubes on ice for additional 20 min.
- 5. Heat pulse the cells for 90 seconds at 42°C.
- 6. Return the tubes onto to ice quickly and incubate the tubes on ice for 5 minutes.
- 7. Keep LB broth on ice to cool it down.
- 8. Pipette 700uL/tube of cooled down LB broth to the tubes and shake for 45 minutes at 37°C.
- 9. Label LB agar plates (with antibiotics) at backs of Petri dishes.
- 10. Centrifuge the tubes at 800rpm for 5min.
- 11. Discard half of the upper liquid and re-suspend the cells.
- 12. Plate 70 µL from the tube labeled onto corresponding plate.
- 13. Spread the cell suspension on the plates using a glass rod.
- 14. Place the plates inverted (lid down) in the 37°C incubator overnight.