

### C. Electroporation

1	The Preparation of Competent Cells(glycerin)	<ul style="list-style-type: none"> <li>a. Add 100µl pKD46-transformed E.coli BW25113 to 7ml liquid LB medium, along with 7µl ampicillin solution, shaking overnight at 30°C.</li> <li>b. Take 5% of bacterium solution into 30ml no resistant liquid LB medium within 30µl ampicillin solution, cultivating at 30°C shaker.</li> <li>c. Detect OD600 each hour until it is between 0.3 and 0.4.</li> <li>d. Add L-Arabinose until its concentration is 30mmol/L. Then shake it at 30°C for 1h.</li> <li>e. Take all of the bacterium solution into 1.5ml centrifuge tubes, ice bath for 10min.</li> <li>f. Centrifuge the bacterium solution in the conditions of 5000rpm and 4°C for 10min, abandoning the supernatant.</li> <li>g. Suspend the sediment with pre-cooling 50% sterile glycerin till 1ml, centrifuging in the conditions of 5000rpm and 4°C for 2min, repeat for 3 times.</li> <li>h. Suspend the sediment with 300µl glycerin.</li> </ul>
2	Electroporation	<ul style="list-style-type: none"> <li>a. Take 100µl bacterium solution and 10µl kan targeting vector into 1.5ml sterile centrifuge tube, mix, then adding into a pre-cooling electroporation cup with no bubbles.</li> <li>b. The size of electroporation cup:1mm or 2mm.</li> <li>c. Electroporation parameters: 2000kV, 25µF, controller 200Ω</li> </ul>
3	Follow- up	<ul style="list-style-type: none"> <li>a. Add 1 ml no resistant liquid LB medium immediately after electroporation, mix.</li> <li>b. Suck all the liquid out of the electroporation cup into a new sterile 1.5ml centrifuge tube, shaking it at 30°C, 180rpm for 1-1.5h.</li> <li>c. Coat the ampicillin resistant solid LB medium with the bacterium solution, cultivated overnight at 37°C.</li> </ul>