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Transformation

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This protocol is used to transform plasmid DNA into competent cells by chemical method or electroporation.

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protocol ,

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MicroPulser Electroporator
Electroporator
Bio-Rad laboratories 1652100

Electroporation cuvette

Do not place the competent cells on the the ice for too long time before start.

- 1 Choose one transformation method depending on your requirement of transformation efficiency.

Step 1 includes a Step case.

Chemical transformation

Electroporation

step case

Chemical transformation

- 2 Thaw the competent cells on the ice for 10 min to let the suspension thaw.
- 3 Mix 100µl competent cells with about 10µl DNA.
- 4 Incubate on ice for ~30 min.
- 5 Heat shock at 42°C for 45 seconds in the water bath.
- 6 Incubate on ice for 2~5 min.
- 7 Add 0.5~1ml LB medium into the mixture of cells and DNA and mix well.
- 8 Incubate at 37°C for 1 hour, shaking at 200 rpm.
- 9 Plate on selective LB medium.