Transformation of *E. coli* with plasmid

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Oct 16, 2021

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dx.doi.org/10.17504/protocols.io.byz3px8n

iGEM IISER Pune India 2021

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This protocol can be used to transform electrocompetent *E. coli* cells with a plasmid.

DOI

dx.doi.org/10.17504/protocols.io.byz3px8n

sanjana 2021. Transformation of E. coli with plasmid. **protocols.io** https://dx.doi.org/10.17504/protocols.io.byz3px8n

protocol ,

Oct 13, 2021

Oct 16, 2021

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Preparation 30m

1 Wash cuvette with [M]**100 % (v/v)** ethanol and UV in the hood for **00:20:00** 20m

2 Pre-thaw electrocompetent cells and plasmid on wet ice for **00:10:00** 10m

Electroporation 20m 40s

3 Add **1 µL** of plasmid DNA to **50 µL** electrocompetent cells

4 Transfer cell-DNA mixture into the cuvette and add equal amount (**50 µL**) of MilliQ

5 Let the cuvette sit in wet ice for **00:20:00** 20m

6 Place cuvette in BioRad pulser and pulse at 2.5 keV

7 Within **00:00:40** add **100 µL** of 2X LB to the cuvette 40s

Incubation 30m

8 Place cuvette in an incubator at **37 °C** for **00:30:00** 30m

9 Then use a bent pipette tip to spread the cuvette's contents onto a plate made with LB agar and the appropriate antibiotics. Spread until plate is dry

10 Place the plate in an incubator at **37 °C** **Overnight**

11 Make glycerol stocks of transformed cells and store for future use

Citation: sanjana Transformation of E. coli with plasmid https://dx.doi.org/10.17504/protocols.io.byz3px8n