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## Transformation

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**Protocol status:** Working

**We use this protocol and it's working**

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## Materials

DH5α chemically competent

LB medium



## Safety warnings

⚠ Please wear gloves for the experiment.



- 1 Put DH5 $\alpha$  chemically competent bacterium on ice for melting about 15min.
- 2 Add 50  $\mu$ l DH5 $\alpha$  chemically competent bacterium into 1.5 ml tubes, mix with ligation product or digested product thoroughly, incubate the bacterium on ice for 30 min.
- 3 Heat shock the bacterium for exactly 45 s at 42 °C water bath.
- 4 Place back on ice for 2 min.
- 5 Add 500  $\mu$ l LB medium to each tube, shake the tubes at 37 °C, 200 rpm for 45 min.
- 6 Centrifuge the bacterium at 3000r for 3 min.
- 7 Discard 300  $\mu$ l supernatant and resuspend the sediment.
- 8 Plate 100  $\mu$ l for a reaction product.
- 9 Incubate plates upside down overnight at 37°C.