

Heat Shock Transformation

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Abstract

Purpose of this protocol is to introduce plasmid DNA into E. coli cells

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Protocol

Step 1.

Thaw desired E. coli strain on ice for 10 minutes.

Step 2.

Add 5 uL of ligated DNA or 10 ng of miniprepplasmid DNA to 50 uL of E. coli cells. Incubate on ice for 20-30 minutes.

Step 3.

Incubate bacteria for 45 seconds at 42°C.

Step 4.

After heat shock, let rest on ice for 10 minutes.

Step 5.

Add 250 uL LB Broth to E. coli solution.

Step 6.

Incubate, shaking, at 37°C for 1 hour.

Step 7.

After 1 hour, plate bacteria onto LB Agar+antibiotic plates, spreading solution evenly.

Step 8.

Incubate for 18-24 hours at 37°C.