# Transformation

KIT-Kyoto

## Price of the Materials

	Price (JPY)	Price (USD)
Sample, 10μℓ	depends on species	depends on species
Competent cells (DH5α E.coli), 20μℓ	¥400	\$4
Ice	¥0	\$0

### Protocol

#### Procedure

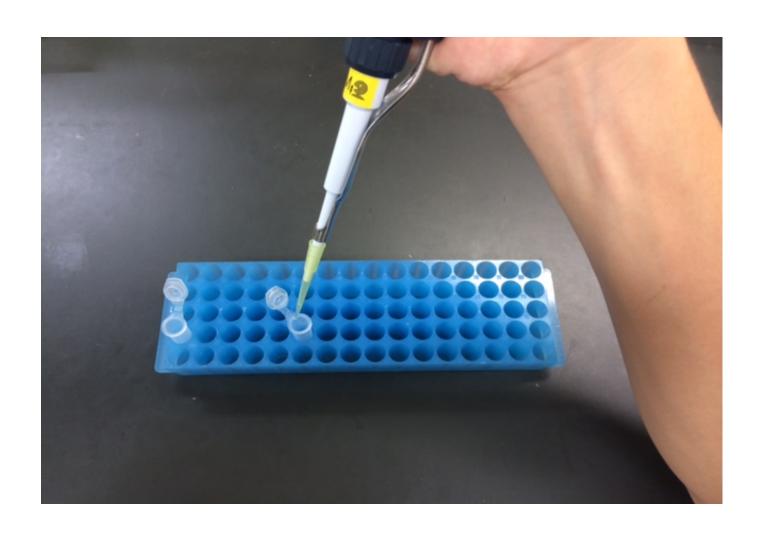
- 1. Thaw the competent cells on ice.
- 2. Add  $10 \mu \ell$  of sample into thawed competent cells.
- 3. Cool an Eppendorf tube, which contains competent cells and samples, with ice for one hour, then Heat shock the cells by immersion in pre-hearted water bath at 41°C for 30 seconds.
- 4. Place the tube on ice for 2 minutes to cool it down.
- 5. At clean bench, add 1.0 ml of LB medium into the tube and suspend it.
- 6. Incubate at 37°C for 35 minutes.
- 7. Harvest the cells by centrifuge.
- 8. Seed the transformed competent cells onto the agar plate and incubate it at 37°C overnight.

### Procedure

1. Thaw the competent cells on ice.



2. Add  $10\mu\ell$  of sample into thawed competent cells.



3. Cool an Eppendorf tube, which contains competent cells and samples, with ice for an hour, then Heat shock the cells by immersion in pre-heated water bath at 41°C for 30 seconds.



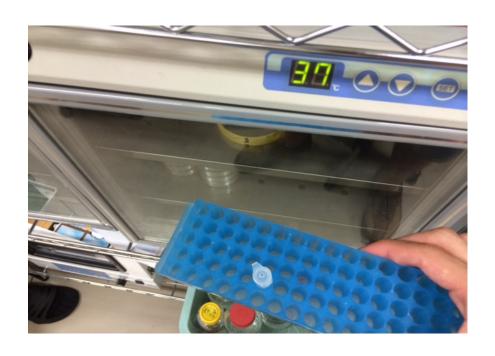
4. Place the tube on ice for 2 minutes to cool it down.

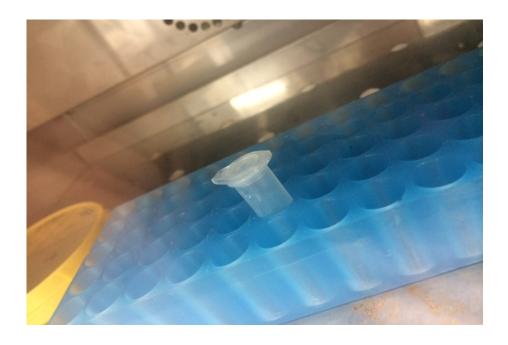


5. At clean bench, add 1.0 ml of LB medium into the tube and suspend it.

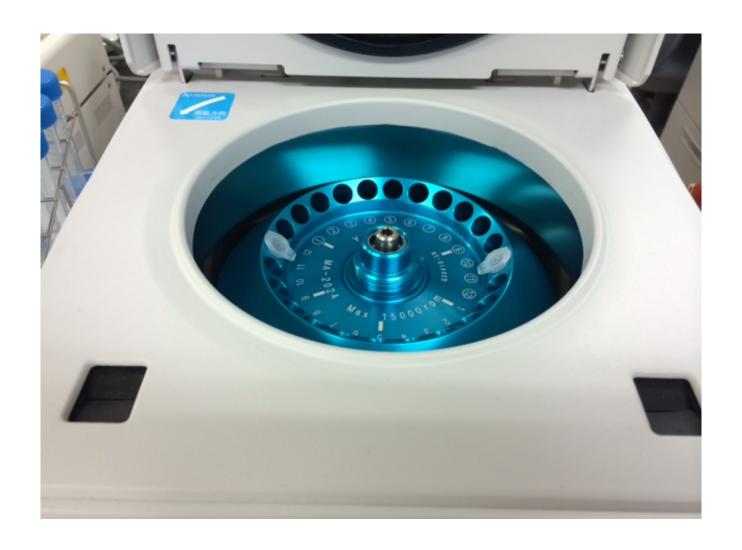


6. Incubate the tube on at 37°C for 35 minutes.





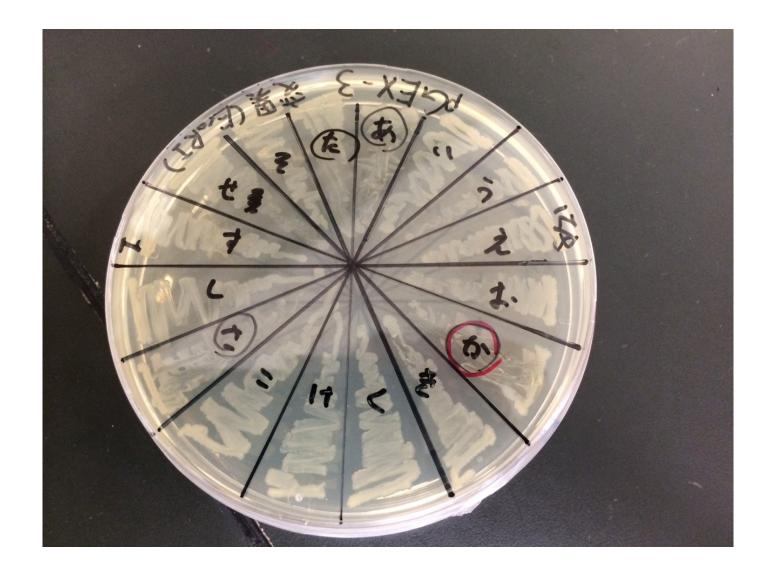
### 7. Harvest the cells by centrifuge.



8. Seed the transformed competent cells onto the plate and incubate it at 37°C overnight.



## Result



Colonies are identified in 16 sections.