

# Pseudomonas putida

Multiporator/Eppendorf Eporator®

## Transformation Protocol

Protocol No. 4308 915.529 – 01/2002

<b>Microorganism</b>	<i>Pseudomonas putida</i> P8
<b>Cell type</b>	Bacteria, gram negative
<b>Molecules injected</b>	Plasmid DNA
<b>Growth medium</b>	Standard 1-medium
<b>Washing solution</b>	10% glycerol
<b>Electroporation solution</b>	10% glycerol
<b>Outgrowth medium</b>	Standard 1-medium
<b>Cuvette</b>	2 mm gap width
<b>Reference</b>	Prof. Friedhelm Meinhardt • Universität Münster • Corrensstraße 3 • D-48149 Münster e-mail: meinhar@uni-muenster.de

### Making electrocompetent cells:

1. Inoculate 50 ml standard-1 medium with 7 ml of a fresh overnight culture of *Pseudomonas putida*. Grow cells at 30 °C to a density of O.D. of 0.8.
2. Harvest by centrifugation.
3. Wash twice with 50 ml ice-cold glycerol, centrifuge.
4. Resuspend cells in 0.8 ml ice-cold glycerol, keep on ice.

### Electroporation of cells:

1. Add 4 µl plasmid DNA (1 µg) to 40 µl of electrocompetent cells. Homogenize by gently mixing with pipette several times. Transfer mixture into a prechilled cuvette.
2. Wipe moisture from the cuvette and insert the cuvette into the device.
3. Electroporation:

<b>Mode</b>	Prokaryotes "O"
<b>Voltage (V)</b>	2,400 V
<b>Time constant (τ)</b>	5 ms

4. Immediately add 1 ml standard 1-medium. Incubate 2 hours at 30 °C.
5. Plate cells on selective plates.

### Expected results:

Transformation efficiency up to  $2 \times 10^4$  transformants/µg of DNA.

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