



Gene Pulser® Electroprotocols

Cell Type Bacterial, gram positive
Species Used *Enterococcus hirae*

Molecules Electroported DNA: linear; plasmids: 5 to 15 kb, supercoiled or relaxed.

Before the Pulse

Cell growth medium M-17 (very rich broth)

Growth phase at harvest O.D. (600) = late log

Pre-pulse incubation none

Wash solution water

The Pulse

Electroporation Temperature 25 °C

Instruments Used Gene Pulser® apparatus

Electroporation Medium water

Cell Density 1 - 2 x 10⁽¹⁰⁾ cells / ml

Cuvette Gap 0.1 cm

Volume of Cells 120 µl

Voltage 2.5 kV

Field Strength 25 kV/cm

DNA Concentration 1 pg to 1 µg

Capacitor 25 µF

DNA Resuspension Buffer water

Resistor (Pulse Controller) See Comments

Volume of DNA 1 µl

Time Constant 65 msec

After the Pulse

Outgrowth Medium M-17

Relevant Publications and/or Comments

Note: exponential values designated in parentheses.

Outgrowth Temperature 37 °C

Resistor Setting: 3000 Ω serial resistor

Length of Incubation 30 min

References: *Biochemie* 72: 279-83 (1990),
TIBS 15: 175-77 (1990).

Selection Method or Assay Used erythromycin resistance

Electroporation Efficiency 5 x 10⁽⁶⁾ transformants / µg DNA

Per Cent Survival 70 %

Name of Submitter
Institution Address

Telephone Number

Fax Number

Date Submitted 4/3/91

Survey Number 061

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