



Gene Pulser® Electroprotocols

Cell Type Bacterial, gram negative
Species Used *E. coli*, unspecified strain

Molecules Electroported DNA: pUC 18, including cDNA

Before the Pulse

Cell growth medium LB

Growth phase at harvest O.D. (600) = 0.55

Pre-pulse incubation 5 seconds on ice

Wash solution 10 mM HEPES, pH 7.0

The Pulse

Electroporation Temperature Not given
Electroporation Medium 10% glycerol

Instruments Used Gene Pulser® apparatus
 Pulse Controller
 Capacitance Extender

Cell Density 1×10^{11} cells / ml

Cuvette Gap 0.2 cm

Voltage 2.5 kV

Volume of Cells 40 μ l

Field Strength 12.5 kV/cm

DNA Concentration 20 ng

Capacitor 25 μ F

DNA Resuspension Buffer 2 μ l water

Resistor 200 Ω (Pulse Controller)

Volume of DNA 2 μ l

Time Constant 4.6 to 4.7 msec

After the Pulse

Outgrowth Medium Not given

Relevant Publications and/or Comments

Note: exponential values designated in parentheses.

Outgrowth Temperature 37 °C

LB: 1% Bacto tryptone, 0.5% Bacto yeast extract, 0.5% NaCl.

Length of Incubation 1.5 hours

Selection Method or Assay Used ampicillin

Electroporation Efficiency $2.5 \times 10^{(9)}/\mu$ g pUC18 or $2.5 \times 10^{(6)}/\mu$ g double stranded blunt-end

Per Cent Survival Not given

Name of Submitter
Institution Address

Telephone Number

Fax Number

Date Submitted 8/29/90

Survey Number 044

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