



Gene Pulser® Electroprotocols

Cell Type Bacterial, gram negative
Species Used *E. coli*, MV1184, JM 109

Molecules Electroported DNA: pUC-119, *Molluscum contagiosum* fragment

Before the Pulse

Cell growth medium SOC without glucose, LB

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

Pre-pulse incubation 0°C

Wash solution water

The Pulse

Electroporation Temperature 0°C

Instruments Used Gene Pulser® apparatus
Pulse Controller

Electroporation Medium water

Cell Density $2 \times 10^{11} / \mu\text{l}$

Cuvette Gap 0.2 cm

Voltage 2.5 kV

Volume of Cells 1×10^{10} cells / ml

Field Strength 12.5 kV/cm

DNA Concentration Not given

Capacitor 25 μF

DNA Resuspension Buffer Not given

Resistor 400 Ω (Pulse Controller)

Volume of DNA 5 μl

Time Constant 7.1 msec

After the Pulse

Outgrowth Medium SOC without glucose
LB

Relevant Publications and/or Comments

Note: exponential values designated in parentheses.
SOC: 2% Bacto tryptone, 0.5% Bacto yeast extract, 10mM NaCl, 2.5mM KCl, 10 mM MgCl₂, 10 mM MgSO₄, 20 mM glucose.
LB: 1% Bacto tryptone, 0.5% Bacto yeast extract, 0.5% NaCl.

Outgrowth Temperature 37 °C

Length of Incubation 60

Selection Method or Assay Used ABPC (CBPC)

Electroporation Efficiency Compared to the calcium salt method, efficiency is ~100x higher

Per Cent Survival Not given

Name of Submitter
Institution Address

Telephone Number

Fax Number

Date Submitted 8/21/90

Survey Number 040

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