

Cell Type Bacterial, gram negative

Molecules Electroported DNA: cosmids, plasmids up to 50 kB

Species Used *E. coli*, DH5 α , HB101; *Salmonella typhimurium*, *Salmonella senftenberg*

Before the Pulse

Cell Growth Medium LB

Growth Phase at Harvest O.D.(660) = 0.3

Pre-pulse Incubation Minimal

Wash Solution 10% glycerol

The Pulse

Instruments Used Gene Pulser® apparatus & Pulse Controller

Electroporation Temperature +/- 2°C

Electroporation Medium 10% glycerol

Cuvette Gap 0.1 cm

Cell Density 10 (11) cfu / ml

Voltage 1.6 kV

Volume of Cells 50 μ l

Field Strength 16 kV/cm

DNA Concentration 0.5 to 2 μ g / μ lCapacitor 25 μ F

DNA Resuspension Buffer Not given

Resistor (Pulse Controller) 400 Ω Volume of DNA 2 μ l

Time Constant 4 to 8 msec

After the Pulse

Outgrowth Medium SOC

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.

Outgrowth Temperature 35 °C

Length of Incubation 1 hour

Selection Method or Assay Used Antibiotic selection: tetracycline, kanamycin, ampicillin

Electroporation Efficiency Not done (very poor for *S. senftenberg*)

Per Cent Survival approximately 50%

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Survey Number

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