



Gene Pulser® Electroprotocols

Cell Type Fungal / Yeast

Species Used *Aspergillus* spp.

Molecules Electroporated DNA: *Aspergillus* genomic DNA, 3 to 13 kB.

Before the Pulse

Cell growth medium Czapek + requirement (ATCC#312) medium, Polypeptone -Dextrin medium.

Growth phase at harvest Protoplast

Pre-pulse incubation None

Wash solution 0.8 M Sorbitol

The Pulse

Electroporation Temperature Room temperature, 25 °C

Electroporation Medium 1.1 M sorbitol

Cell Density 2 x 10⁽⁷⁾ / ml

Volume of Cells 2 x 10⁽⁷⁾ / ml

DNA Concentration 5 µg

DNA Resuspension Buffer TE buffer (10 mM Tris, 1 mM EDTA, pH 8.0)

Volume of DNA Not given

Instruments Used Gene Pulser® apparatus & Pulse Controller

Cuvette Gap 0.4 and 0.2 cm

Voltage Not given

Field Strength 4 kV/cm

Capacitor 25 µF

Resistor (Pulse Controller) Not given.

Time Constant 3 to 7 msec

After the Pulse

Outgrowth Medium Czapek + 0.8 M Sorbitol

Relevant Publications and/or Comments

Note: exponential values designated in parentheses.

Outgrowth Temperature 30 °C

Length of Incubation 7 days

Selection Method or Assay Used Can grow on minimal medium

Electroporation Efficiency 10 / µg DNA

Per Cent Survival 10 %

Name of Submitter
Institution Address

Telephone Number

Fax Number

Date Submitted 4/23/91

Survey Number 169

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