



Gene Pulser® Electroprotocols

Cell Type Other Cell Types
Species Used Chicken, primary hepatocytes

Molecules Electroported DNA: supercoiled DNA used for transient transfections.

Before the Pulse

Cell growth medium Not given

Growth phase at harvest 50 to 70% confluency

Pre-pulse incubation 4° C, 10 min. (optional: add 50 µl FCS if using HeBS as electroporation media; 50 µl salmon sperm DNA for transient transfections).

Wash solution Wash two times in electroporation buffer.

The Pulse

Electroporation Temperature Room temperature

Instruments Used Gene Pulser® apparatus & Capacitance Extender

Electroporation Medium HEPES Buffered Saline, 6mM glucose, (optional: add 50 µl FCS, 50 µl salmon sperm DNA).

Cell Density 5 x 10⁽⁶⁾ cells / pulse

Cuvette Gap 0.4 cm

Volume of Cells 0.5 ml

Voltage 0.250 kV

Field Strength 0.625 kV/cm

DNA Concentration 10 µg / pulse

Capacitor 960 µF

DNA Resuspension Buffer Not given; pulse volume: 0.8 ml

Resistor (Pulse Controller) Ω none

Volume of DNA Not given; pulse volume: 0.8 ml

Time Constant 25 msec

After the Pulse

Outgrowth Medium Not given

Relevant Publications and/or Comments

Note: exponential values designated in parentheses.

HBS: 10mM HEPES, pH 7.2, 150 mM NaCl, 5 mM CaCl₂

Outgrowth Temperature 37 °C

Length of Incubation 48 to 72 hrs.

Selection Method or Assay Used Transient assays

Electroporation Efficiency Not given

Per Cent Survival about 50 %

Name of Submitter
Institution Address

Telephone Number

Fax Number

Date Submitted 7/1/90

Survey Number 188

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