



Gene Pulser® Electroprotocols

Cell Type Other Cell Types

Species Used Chicken, HD11, macrophage

Molecules Electroported

DNA: linearized DNA used for stable transfections.

Before the Pulse

Cell growth medium DMEM, 8% Fetal Calf Serum (FCS), 2% Chicken Serum (GIBCO/BRL, Sigma)

Growth phase at harvest 50 to 70% confluency

Pre-pulse incubation 4° C, 10 min.

Wash solution Wash two times in electroporation buffer

The Pulse

Electroporation Temperature Room temperature
Electroporation Medium Phosphate Buffered Saline

Instruments Used Gene Pulser® apparatus & Capacitance Extender

Cell Density 5 x 10⁽⁵⁾ cells/pulse, stable transfection

Cuvette Gap 0.4 cm

Volume of Cells 0.5 ml

Voltage 0.270 kV

DNA Concentration 10 µg / pulse

Field Strength 0.675 kV/cm

DNA Resuspension Buffer Not given; pulse volume: 0.8 ml

Capacitor 960 µF

Volume of DNA Not given; pulse volume: 0.8 ml

Resistor (Pulse Controller) Ω none

Time Constant 28 msec

After the Pulse

Outgrowth Medium DMEM, 8% Fetal Calf Serum (FCS), 2% Chicken Serum

Relevant Publications and/or Comments

Note: exponential values designated in parentheses.

PBS: 1x = 8g NaCl, 0.2g KCl, 0.2g KH₂PO₄, 1.15g Na₂HPO₄

Outgrowth Temperature 37 °C

Length of Incubation 48 to 72 hrs.

Selection Method or Assay Used G418 (stable transfections)

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 186

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