



Gene Pulser® Electroprotocols

* We recommend adapting this protocol to use the Gene Pulser electroporation buffer (catalog #165-2676, 165-2677), which increases cell viability and transfection efficiency in mammalian cell lines.

Cell Type	Mammalian, suspension	Molecules	DNA: fos, jun (insert sizes are 4.2 and 1.8 kb using different vectors), linear
Species Used	Mouse, WEHI-3B, myelomonocytic leukemia	Electroporated	

Before the Pulse

Cell growth medium	McCoy's 5A (GIBCO/BRL, Sigma)	Growth phase at harvest	Exponential
Wash solution	Phosphate Buffered Saline	Pre-pulse incubation	10 min at room temperature

The Pulse

Electroporation Temperature	Room temperature	Instruments Used	Gene Pulser® apparatus & Capacitance Extender
Electroporation Medium*	Phosphate Buffered Saline	Cuvette Gap	0.4 cm
Cell Density	1 x 10 ⁽⁷⁾ cells / ml	Voltage	0.25 kV
Volume of Cells	0.8 ml	Field Strength	0.625 kV/cm
DNA Concentration	15 µg / 10 µg	Capacitor	500 µF
DNA Resuspension Buffer	Phosphate Buffered Saline	Resistor	(Pulse Controller) Ω none
Volume of DNA	10 µl	Time Constant	14 msec

After the Pulse

Outgrowth Medium	McCoy's 5A	Relevant Publications and/or Comments	
Outgrowth Temperature	37 °C	Note:	exponential values designated in parentheses.
Length of Incubation	2 weeks		
Selection Method or Assay Used	G-418		
Electroporation Efficiency	Not done		
Per Cent Survival	50 to 75 %		

Name of Submitter
Institution Address

Telephone Number
Fax Number
Date Submitted 8/20/90
Survey Number 138
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