



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: linear and circular plasmids,
Species Used	Mouse, 32d, J558L, myeloma	Electroporated	4-12 kB in size

Before the Pulse

Cell growth medium	RPMI, 10% Fetal Calf Serum GIBCO/BRL, Sigma)	Growth phase at harvest	log
Wash solution	log	Pre-pulse incubation	10 minutes ice

The Pulse

Electroporation Temperature	(ice) 0 °C	Instruments Used	Gene Pulser® apparatus & Capacitance Extender, and Pulser Controller
Electroporation Medium*	RPMI, 10% Nu-serum	Cuvette Gap	0.4 cm
Cell Density	10 (7) cells / μ l	Voltage	0.20 to 0.40 kV
Volume of Cells	800 μ l	Field Strength	0.5 to 1.0 kV/cm
DNA Concentration	1 mg / ml	Capacitor	960 μ F
DNA Resuspension Buffer	TE (10 mM Tris, 1 mM EDTA, pH 8.0)	Resistor	(Pulse Controller) none Ω
Volume of DNA	20 to 40 μ l	Time Constant	17 msec

After the Pulse

Outgrowth Medium	Not given	Relevant Publications and/or Comments	
Outgrowth Temperature	Not given	Note:	exponential values designated in parentheses.
Length of Incubation	Not given		
Selection Method or Assay Used	G418; Hygromycin B		
Electroporation Efficiency	Not given		
Per Cent Survival	Not given		

Name of Submitter
Institution Address

Telephone Number
Fax Number
Date Submitted 3/5/91
Survey Number 134
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