

Ex vivo/In Vitro Transfection of PC-12 Cells

Cells Used: Adrenal Gland Pheochromocytoma PC-12 [PC12] (ATCC CRL-1721)
Growth: Loosely adherent
Culture: Hams F12 K medium with 15% Horse Serum and 2.5% FBS
Reference: Rich Jarvis, Associate Scientist, Ambion, Inc., Austin Texas

Cell Preparation

Harvest: Log phase growth
Washing: Wash cells twice (three centrifugations) in CytofusTM Medium LCM-C

EP Buffer: Cyto Pulse CytofusTM Medium LCM-C

Cell Density: 6×10^6 cells/ml

Transfectant:

I. siRNA: 100 nM GAPDH siRNA, Ambion catalog # 4602

Electroporation

System: Cyto Pulse PA-4000 Advanced Electroporation System

Electrode: 2 mm gap standard cuvette

Volume: 100 μ l

Temperature: Room Temperature

Electroporation Protocol:

Electric field: 2000 V/cm (400 v)

Pulse Width: 0.400 ms

Number of Pulses: 1

Interval between pulses: 0.125 s

Post Electroporation Treatment

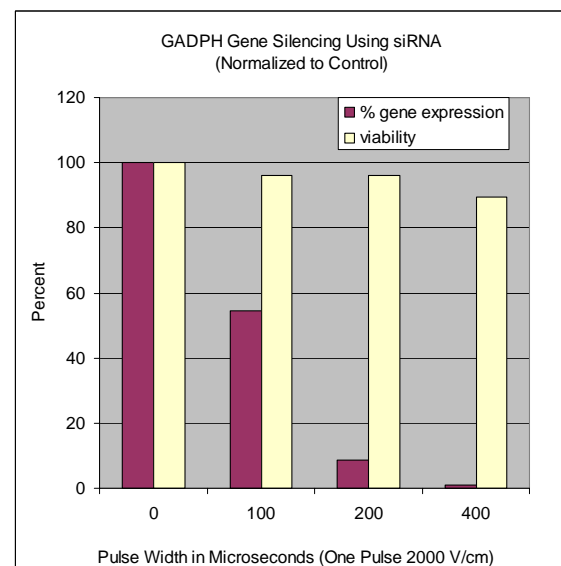
Incubate at 37°C, 5% CO₂ for 48h
 in complete culture medium

Results

Assay I: RT-PCR

Reduction: 98.9%

Viability: 89.6%



Cyto Pulse Electroporation
 and Electrofusion Systems for:
 In vivo therapeutic delivery
 Gene therapy
 Immunotherapy
 Hybridoma production
 Vaccine delivery
 Nuclear transfer

mRNA delivery
 siRNA delivery
 plasmid delivery



Headquarters:
 810 Cromwell Park Drive
 Suite T
 Glen Burnie, MD 21061, USA
 Voice: 410-787-1890
 Fax: 410-787-1891
 Web: www.cytopulse.com