

Petri Pulser™

MODEL PP35-2P
TECHNICAL SPECIFICATIONS



The Petri Pulser™ PP35-2P is a reusable electroporation applicator designed to fit into each single well of a 6-well plate or an individual 35 mm diameter petri dish. The PP35-2P consists of an electrode assembly embedded in a polyurethane holder with high voltage electrode cables. The thin electrodes are gold plated and designed to maximize the surface area of electroporation.

The high voltage cables are connected with a BTX Pulse Generator, and the electrode head inserted into the dish or well containing the sample. An electroporation pulse may then be delivered.

The entire applicator may be cleaned with mild detergent, and the electrodes may be sterilized with ethanol and dried with acetone.

APPLICATIONS

General Applications

The Petri Pulser PP35-2P is designed for the electroporation of adherent cells *in situ* or as an alternative to cuvette electroporation for larger volumes or multiple cell samples. The use of the electrode for the electroporation of adherent cells *in situ* eliminates the need for trypsinization or mechanical removal of cells from their growth substrate. This eliminates associated problems including low plating efficiencies following electroporation, interruption of cell cycle and interruption of intercellular communication.

Mammalian Cell Protein/Drug Electroincorporation

The Petri Pulser PP35-2P supplements our Model 366 Petri Dish Electrode designed for 100 mm petri dishes, as the ideal electrode for *in situ*

The Electroporation Experts

BTX®

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electroincorporation of protein into mammalian cells.^{1,2,3} This electrode has been used for electroincorporation of peptides and proteins in CHO cells⁴ and vascular smooth muscle cells⁵.

Mammalian Cell Transfections/Gene Therapy

The Petri Pulser PP35-2P is capable of supporting transfection protocols developed for our larger Model 366 Petri Dish Electrode, including protocols for BHK and HUVEC.⁶ The electrode itself has been used for the transfection of 3T3-L1, Rat adipose cells, SF295 human neuroglioblastoma and Cos 7 cells.⁷

Plant, Yeast and Bacterial Electroporation Applications

Applications involving plant, yeast and bacterial electroporation may be carried out using the Petri Pulser. Scale up and multiple sample processing.

TECHNICAL SPECIFICATIONS

Standard Capabilities

Voltage Range:	0 - 300V
Pulse Length Range:	1 - 35 msec in PBS
Volume Range:	0.5 - 3.0 ml

Physical Characteristics

Weight:	6 oz
Number of Electrodes:	13
Electrode Thickness:	0.5 mm
Electrode Material:	Gold Plated.

Generator Compatibility

ECM 830, 630, 600, 399, 395, T 820

Monitoring

Enhancer 400 Recommended

ORDERING INFORMATION

System Model Number	Available Configurations
PP35-2P	Petri Pulser PP35-2P Petri Dish Electrode, and Instruction Sheet
Accessory Model Number	Description
4001	Enhancer™ 400 Graphic Pulse Monitor with Computer and Printer Interfaces

REFERENCES

1. **Marrero et al.**, Journal of Biological Chemistry, 270 (26): 15734-15738 (1995)
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3. **Marrero et al.**, Journal of Biological Chemistry, 272 (39): 24684-24690 (1997)
4. **Lobo, Errol**, University of California, San Francisco, Personal Communication (1998)
5. **Fukai, Masuko**, Emory University, Personal Communication (1998)
6. BTX Protocols PR0165 and PR0330 (1998)
7. BTX Protocols PR0290, PR00286, PR0359, PR0360, PR0364 (1998)