Petri Dish Electrode

To electroporate adherent cells or tissue grown in a Petri dish that functions as the electroporation chamber



Applications

- · Adherent mammalian cell transfections
- Plant tissue cell transfections

The Petri Dish Electrode is designed to be used with a 100 mm Petri dish that functions as the electroporation chamber. The Petri Dish Electrode is used to electroporate adherent cells or tissue grown in a Petri dish. To perform electroporation, simply add the exogenous molecule of interest into the electroporation buffer. The buffer can range in volume from 10 ml to 50 ml and is added to the cells grown in the plate. The electrode is lowered into the Petri dish containing the sample and pulsed.

The electrode assembly has a 2 mm gap size. It contains parallel stainless steel electrodes which generate a homogeneous field. The Petri Dish Electrode is compatible with most BTX Generators.

Specifications

Generator Compatibility	Gemini X2, ECM 830, ECM 2001+
Voltage Range	0 to 2000 V
Volume Range	10 to 50 ml
Gap size	2 mm
Autoclavable	No
Field type	Homogeneous
Pulse Length	10 µs to 10 ms

Ordering Information

Item #	Desciption	
45-0100	Petri Dish Electrode, 2 mm Gap, for 100 mm Petri Dish (Model 366)	
Required for connection to ECM 2001+		
45-0088	Female/Female Adapter Set for Banana Plug Cables	

Caliper Electrodes

In vivo style reusable electrodes



Applications

- In Vivo Drug or Gene Delivery
- Transdermal Applications
- Intact Plant Applications

BTX Caliper Electrodes are in vivo style reusable electrodes used for a variety of applications, including drug and gene delivery. The electrodes span the target area and deliver electroporation pulses following injection of the molecule of interest. The electric field introduced by the caliper electrodes cause transient pores to form in the cells of the tissue, allowing uptake of the molecules into the cells.

Caliper electrodes are available in two sizes. Each size consists of a caliper and a pair of electrode plates. The $1.0 \times 1.0 \text{ cm}$ electrode is used in smaller animals with a smaller tissue surface area, while the $2.0 \times 2.0 \text{ cm}$ is used to target slightly larger surface areas. The end plates of the electrode may be adjusted by using the black roller mounted on the caliper. They may be cleaned with a mild detergent and sterilized with ethanol or ethylene oxide. Properly maintained caliper electrodes have an unlimited lifetime.

Specifications

Generator Compatibility	ECM 830, ECM 2001+, Gemini X2	
Voltage Range	0 to 500 V	
Pulse Length Range	10 µs to 99 ms (multiple pulsing permitted)	
Electrode Gap	0.1 to 13 cm	
Electrode Dimensions	1 x 1 cm brass or 1.5 cm x 1.5 cm and 2 x 2 stainless steel	

Ordering Information

Item #	Plate Dimensions	Material		
45-0101	1 x 1 cm	Brass		
45-0102	1.5 x 1.5 cm and 2 x 2 cm	Stainless Steel		
Item #	Desciption			
Required for connection to ECM 2001+				
45-0088	Female/Female Adapter Set for Banana Plug Cables			

