Introducing the WiEP



Wireless Electroporation



The First Wireless Electroporation device for a wide range of cell therapy applications

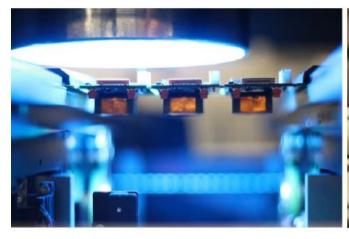
Key features of the WiEP Electroporation Device

- Highly accurate pulsing allows precise and consistent results
- Intuitive user interface remarkably simplifies protocol creation
- Pulse over current protection guarantees a secure electroporation experience
- Changeable electrode head enables seamless integration with standard electroporation electrodes and cuvette holders
- Long battery life ensures reliable pulse delivery across numerous experimental points





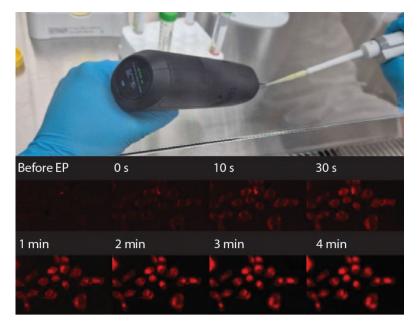
Specifications	
Pulse polarity	Monopolar pulses
Pulse shape	Rectangular
Pulse voltage	from 50 to 500 V
Pulse resolution	1 V
Precision	99 %
Pulse duration	from 1 µs to 1000 µs
Pulse resolution	1 μs
Pulse duration accuracy	99 %
Pause duration	1 µs
Treatment duration	< 3 ms
Load resistance	≥ 20 Ω
User interface	Touch screen
Operating temperature	5 °C to +40 °C
Weight	0.8 kg
Power supply	Battery
Charging	USB C interface







Wireless In Vitro Electoransfection



Significantly increased propidium iodide electrotransfer

Fig. 1. Dynamics of propidium iodide electrotransfer. The image is magnified 200 times.

Highly precise pulse parameters for reliable electrotransfection

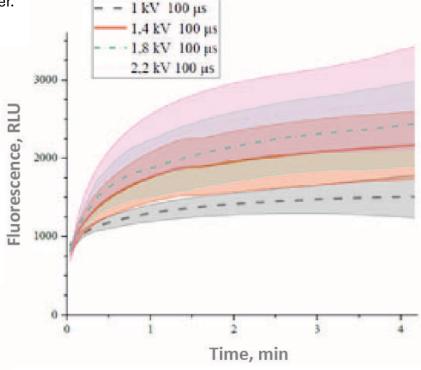
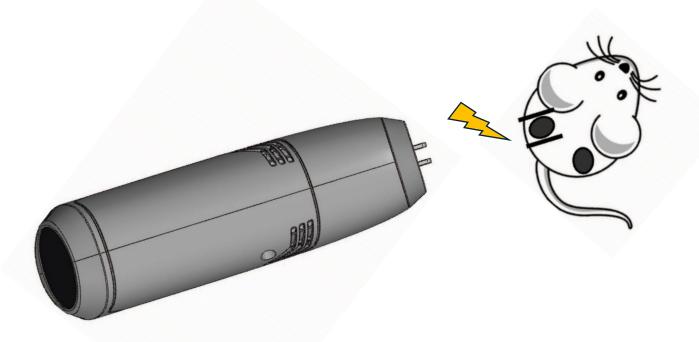


Fig. 2. The relationship between propidium iodide electrotransfer and electric field parameters. The curves represent the mean fluorescence, expressed in relative units, with the shaded areas indicating the standard deviation. n = 40.



Wireless In Vivo Electoransfection



Statistically significant decrease in tumor volume

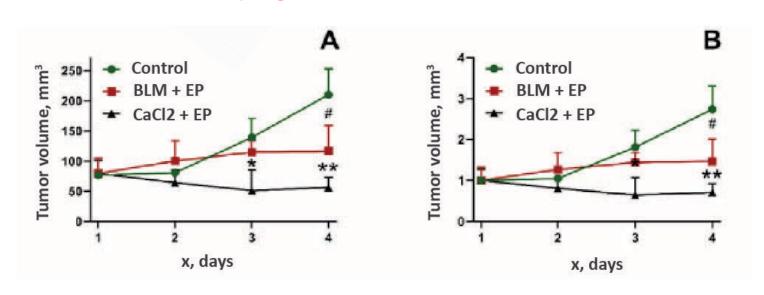


Fig. 3. Tumor growth dynamics in the control group following bleomycin electrotransfer and calcium electroporation treatment. **A** – tumor volume change, **B** – tumor volume changes relative to day one.