



Cell therapy

## CTS Xenon Electroporation System

Large-volume electroporation system for cell therapy process development and manufacturing

### Key features of the Gibco™ CTS™ Xenon™ Electroporation System

- **High speed, large volume**—transfect up to  $2.5 \times 10^9$  T cells in less than 25 minutes
- **Proven performance and viability**—up to 90% gene knockout and 80% viability
- **Process flexibility**—user-programmable system enables you to create and optimize electroporation protocols for various cell types and payloads, from process development through commercial manufacturing
- **Efficient, nonviral transfection**—can be used to deliver DNA, RNA, and protein payloads
- **Closed-system processing**—Gibco™ CTS™ Xenon™ MultiShot™ Electroporation Cartridge enables sterile welding to PVC or C-Flex™ tubing

**Specifications**
**Gibco™ CTS™ Xenon™ Electroporation Instrument**

Cat. No.	A50301
Recommended cell concentrations	20 x 10 <sup>6</sup> to 100 x 10 <sup>6</sup> cells/mL
Electroporation volumes	1 mL; 5–25 mL
Electroporation chamber volume	1 mL
Run time for 5–25 mL electroporation volume	7–22 min
Electroporation pulse voltage range	500–2,500 V
Electroporation pulse width range	1–30 ms
Electroporation pulse interval range	500–1,000 ms
Number of electroporation pulses	1–10
Supports 21 CFR Part 11 compliance	Yes, with software upgrade (please inquire)
Open Platform Communications–Unified Architecture (OPC-UA) compatibility	Yes
Cloud connect utility	Yes
Cell mixer rotation speed	60 rpm
Precooling technology	Peltier
Precooling temperature setting range	10–30°C
Dimensions (H x W x D), with door fully opened	43.1 x 26.5 x 21.2 in. (109.5 x 67.4 x 53.9 cm)
Weight	154.3 lb (70 kg)
Electrical rating	100–240 V, 1,200 VA
Touch display	8 in. capacitive

**Gibco™ CTS™ Xenon™ SingleShot Electroporation Chamber, 1 mL, 6 pk**

Cat. No.	A50305
Electroporation volume	1 mL
Electroporation plastic chamber material	Tritan™ MX711 copolyester
Sterilization method	Gamma irradiation

**Gibco™ CTS™ Xenon™ Electroporation Cartridge, MultiShot™ Format, 5–25 mL, 1 pk**

Cat. No.	A50306
Electroporation volume per single fill of electroporation chamber	1 mL
Electroporation process volume per electroporation cartridge	5–25 mL
Recommended input volume for targeted electroporated volume, V1 = 5–10 mL	Target volume (V1) + 1 mL
Recommended input volume for targeted electroporated volume, V2 = 11–25 mL	Target volume (V2) + 2 mL
Sterile welding tubing material and dimensions (system supports both material types)	DEHP-free PVC: 2.4 mm ID, 4 mm OD; C-Flex: 3.2 mm ID, 6.4 mm OD
Electroporation plastic chamber material	Tritan MX711 copolyester
Sterilization method	Gamma irradiation

**Gibco™ CTS™ Xenon™ Buffers**

CTS Xenon Electroporation Buffer, 100 mL bottle	A4997901
CTS Xenon Electroporation Buffer, 100 mL bag	A4997902
CTS Xenon Genome Editing Buffer, 100 mL bottle	A4998001
CTS Xenon Genome Editing Buffer, 100 mL bag	A4998002
CTS Xenon Lower Conductivity Electroporation Buffer, 100 mL bottle	A5788001
CTS Xenon Lower Conductivity Electroporation Buffer, 100 mL bag	A5788002

 Learn more at [thermofisher.com/xenon](https://thermofisher.com/xenon)

