

The ExPERT DTx™ delivers virtually any molecule, into any cell, for research and discovery applications and high-throughput screening.

Bring the power of MaxCyte electroporation to accelerate your next discovery.



The ExPERT DTx empowers you to transfect primary cells and cell lines with minimal perturbation delivering reproducible, high transfection efficiency and cell viability.

Streamline workflow optimization. Process up to 96 samples in a single, 3-minute run with consistent well-to-well performance that eliminates transfection as an experimental variable.

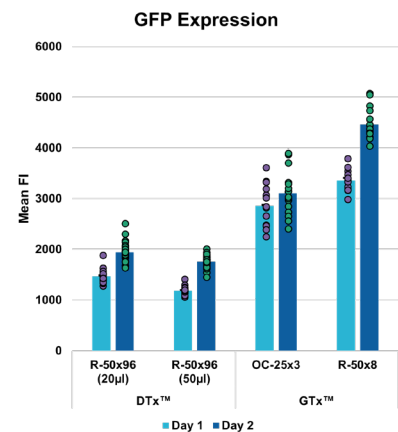
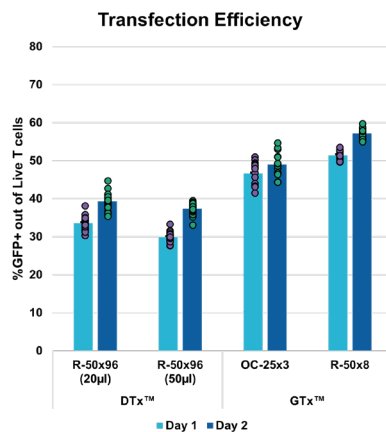
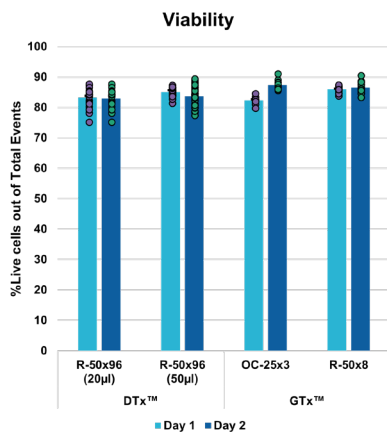
Scale from discovery to manufacturing. Transfer your optimized process to other ExPERT™ instruments for scale-up and cGMP-compliant manufacturing without reoptimization.

Cost-effective screening. The R-50x96™ processing assembly offers the lowest cost-per-well for 96-well electroporation. Independent strip control maximizes flexibility and minimizes waste.

Optimize electroporation parameters. Precise fine-tuning to identify the best conditions for your unique cell and cargo combination.

High cell viability. High cell health and maximum recovery so you get the most from each experiment.

The DTx™ enables reproducible, scalable transfection of activated T cells.



T cells were activated for 48 hours pre electroporation using TransAct™. Cells were harvested and prepared at 1x10⁸ cells/mL in MaxCyte electroporation buffer. Cells were electroporated with 100 µg/mL pEGFP plasmid using the pre-loaded ETC4 protocol. Technical replicates were processed (32 replicates were run on the DTx with the R-50x96 processing assembly; 16 replicates were run on the GTx™ with both the OC-25x3™ and R-50x8™ processing assemblies). *Bars represent the mean of replicates. Individual points represent each technical replicate. Error bars represent SEM of replicates.

The DTx is a modular electroporation instrument consisting of:

Electroporation (EP) Module I generates the energy for electroporation

DTx Processing Assembly Module (PAM) accommodates and delivers the charge to the processing assembly (PA)

Electroporation Module Software controls and monitors the instrument

DTx Designer Software enables users to design an experiment remotely and upload it to the EP Module I

The DTx is compatible with:

R-50x96 Processing Assembly 12x8-well strips in a standard 96-well plate layout for high-throughput electroporation of up to 96 samples in a single, 3-minute run

MaxCyte Electroporation Buffer proprietary, GMP-manufactured buffer for gentle, yet highly efficient transfection of any cell type

ExPERT DTx Instrument Specifications

Item	Specification
DTx Electroporation Module Dimensions	19.6" (498 mm) x 12.6" (320 mm) x 10.7" (273 mm)
DTx Processing Assembly Module Dimensions	9.9" (252 mm) x 11.1" (282 mm) x 4.4" (111 mm)
DTx Instrument Weight (EP Module + PA Module)	47 lbs (21 kg)
DTx Input Power	100-240 VAC, 50-60 Hz, 240 W
Fuse Requirements	2 x 4 A Slow Blow, 250 V, 5 x 20 mm
Operating Humidity	80% max (non-condensing)
Operating Temperature	59° F - 86° F 15°C - 30°C
Storage Temperature	32°F - 113°F 0°C - 45°C
Modes of Operation	Static
Process Volumes	20 µL - 50 µL
Ports Available	3 USB / 1 Ethernet

Standards to which Conformity is Declared:

- IEC 61010-1. Safety requirements for electrical equipment for measurement, control, and laboratory use Part 1: General requirements. IEC 61010-1:2010, IEC 61010-1:2010/AMD1:2016
- EN 61326-1:2020. Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements
- EN61000-3-2:2018, Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)
- EN 61000-3-3:2013/AMD1:2017, Electromagnetic compatibility (EMC) - Part 3-1: Limits - Limitation of voltage changes, voltage fluctuations, and flicker in public low-voltage supply systems, for equipment with rated current ≤ 16 A per phase and not subject to conditional connection

CE Marking: Application of Council Directive(s) 2014/30/EC, 2014/35/EU, 2011/65/EU

