Ignite Your Cell Therapy Development With **MaxCyte ExPERT™ Electroporation Platform**

MaxCyte® | eXpert®

Let's Build Better Cells Together.™

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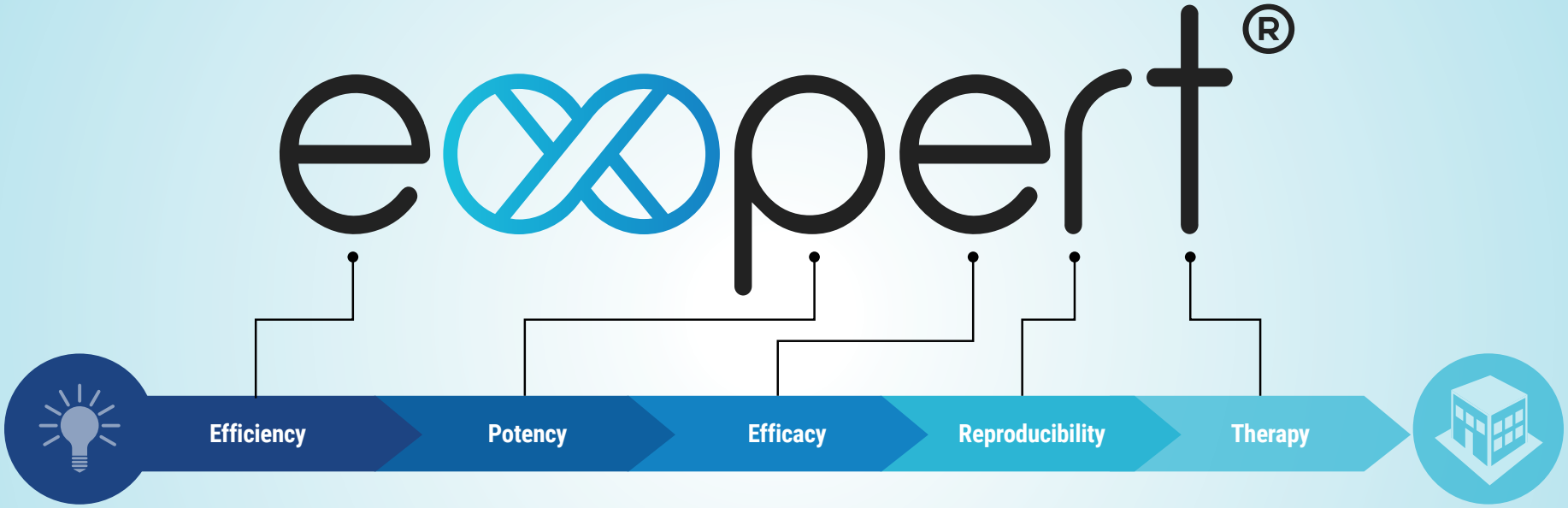
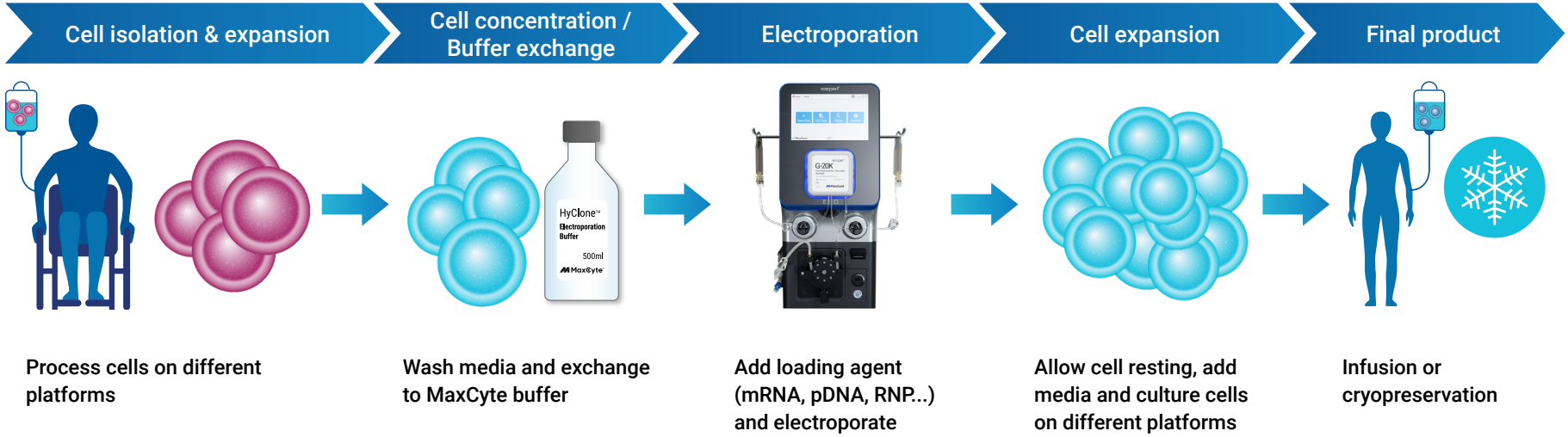

eXpert®
Efficiency
Potency
Efficacy
Reproducibility
Therapy

An Enabling Technology to Help Accelerate Translation From Concept to Clinic

MaxCyte stands at the forefront of cell-engineering, providing the leading transfection platform powered by our Flow Electroporation® technology, that is instrumental in the discovery and commercialization of cutting-edge cell-based therapies. In 2024, our ExPERT™ electroporation platform became the first transfection technology to support a commercialized non-viral cell therapy. Coupled with our unparalleled scientific, technical, and regulatory support, we enable the complex engineering required for the creation of innovative cell therapies. As a trailblazer in this field for 25 years, we are committed to transforming the future of medicine and helping improve patient outcomes. Let MaxCyte be your partner in navigating the exciting landscape of cell therapy development.

MaxCyte's Flow Electroporation® technology integrates efficiently within a closed GMP cell therapy workflow.



Process cells on different platforms

Wash media and exchange to MaxCyte buffer

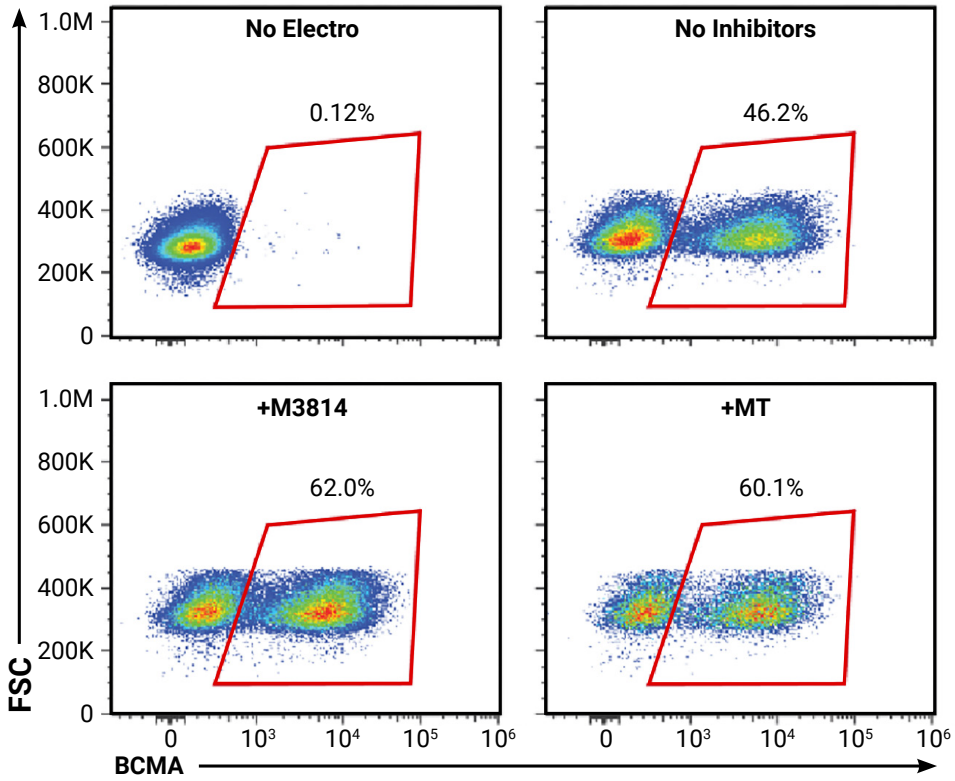
Add loading agent (mRNA, pDNA, RNP...) and electroporate

Allow cell resting, add media and culture cells on different platforms

Infusion or cryopreservation

Advanced Electroporation Technology

At MaxCyte, we apply 25 years of innovation and optimization to bring you best-in-class electroporation technology across a wide array of cell types including fragile patient cells.



ExPERT electroporation enabled high knock-in efficiency of BCMA-CAR into the TRAC locus during T cell engineering.

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Achieve Highly Efficient Electroporation

Whether you're developing allogeneic or autologous cell therapies, efficient transfection is an essential catalyst in progressing from discovery to clinic.

With the ExPERT platform you can rely on high transfection efficiency with any cell type or transfected molecule:

- Load DNA, RNA, proteins, RNPs, or small molecules into target cells
- Transfect a wide range of cell types including difficult-to-transfect cells such as:
  - Primary cells
  - Immortalized mammalian cells
  - Hematopoietic cells
  - Stem cells

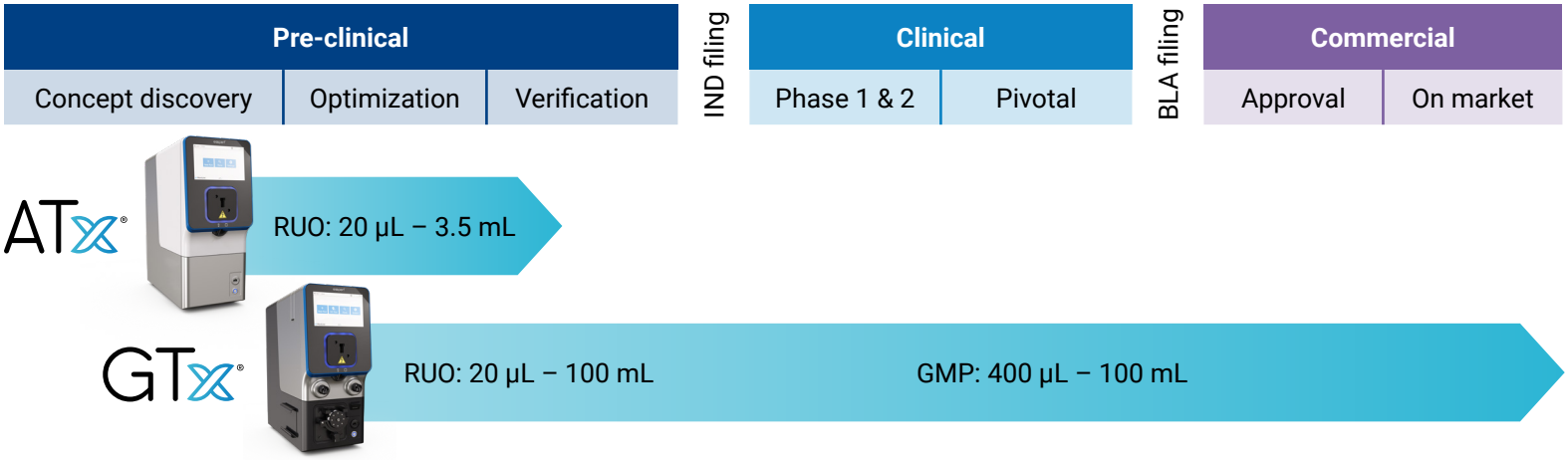
Continuous Scalability

MaxCyte's state-of-the-art electroporation platform provides continuous scalability. It supports the entire spectrum of cell therapy development, from initial research through process development and into manufacturing on one platform. By using a single transfection technology and consistent protocols across all stages, we ensure a smooth transition from concept to clinic and manufacturing.

Key features include:

- Pre-optimized protocols: These ensure seamless scalability and facilitate a swift transition from small-scale to large-scale manufacturing, eliminating the need for re-optimization.
- GMP-compliant, ready for manufacturing: The platform is Good Manufacturing Practice (GMP) compliant, ensuring quality and safety. Its compact footprint allows for seamless integration into clean room operations.
- The ExPERT ATx® electroporation instrument and RUO processing assemblies can process 100K to 700M cells.
- The ExPERT GTx® electroporation system is compatible with our broad range of RUO (100K to 20B cells) and GMP (2M to 20B cells) processing assemblies.
- Process optimization support: Our team of Field Applications Scientists supports the cell engineering process through scale up.

With MaxCyte, scaling your cell therapy development becomes a streamlined and efficient process.



Electroporation Instruments for Cell Therapy Development and Manufacturing

ATx®

Advance your research and discovery and demonstrate proof of concept with an electroporator designed for reproducible, high-efficiency transfection of 100 thousand to 700 million cells.

GTx®

The first and only non-viral cell engineering platform supporting an approved cell therapy. Clinically validated and GMP compliant for product development through clinical trials and commercialization. Safely and efficiently transfect up to 20 billion cells with the only clinically-validated electroporator developed with cell therapy in mind.

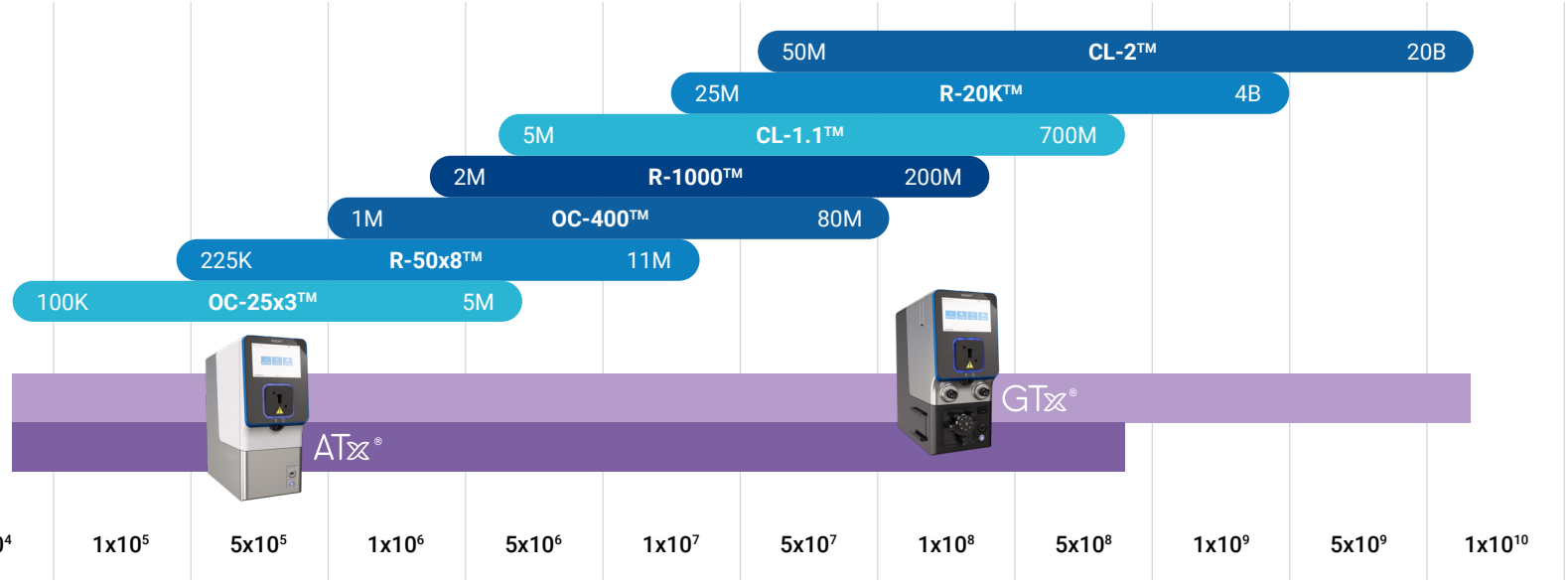
Cell Therapy Consumables

MaxCyte processing assemblies were designed to simplify your cell therapy development, enabling you to transfect the number of cells you need, from early-stage discovery to large-scale manufacturing under Good Manufacturing Practice (GMP) conditions.

We've got your cell therapy development covered with consumables in multiple sizes and formats, supporting both static and Flow Electroporation®, so that you can smoothly scale up without compromising efficiency.

These products are regularly updated based on customer feedback and are all designed to help you reach your destination and bring new therapies to patients quickly and efficiently.

ExPERT Platform Scalability



Processing Assemblies (PAs)

Feature	OC-25x3	R-50x3	R-50x8	OC-100x2	OC-100	OC-400	R-/G-1000	CL-1.1	R-/G-20K	CL-2
PA Type										
Well Type										
Volume	20 – 25 µL	45 – 55 µL	45 – 55 µL	50 – 100 µL	50 – 100 µL	200 – 400 µL	400 µL – 1 mL	1 – 3.5 mL	5 – 20 mL	10 – 100 mL
# Samples	3	3	8	2	1	1	1	1	1	1
Cell Number	$1x10^5$ – $5x10^6$	$2.25x10^5$ – $1.1x10^7$	$2.25x10^5$ – $1.1x10^7$	$2.5x10^5$ – $2x10^7$	$2.5x10^5$ – $2x10^7$	$1x10^6$ – $8x10^7$	$2x10^6$ – $2x10^8$	$5x10^6$ – $7x10^8$	$2.5x10^8$ – $4x10^9$	$5x10^7$ – $2x10^{10}$
ATx®	●	●	●	●	●	●	●	●		
GTx®	●	●	●	●	●	●	●	●	●	●

Processing Assemblies for Static Electroporation

Single Well (RUO and GMP)	Multi-well (RUO only)
R/G-1000	OC-25x3
CL-1.1	R-50x3
Single Well (RUO only)	R-50x8
OC-100	OC-100x2
OC-400	

Processing Assemblies for Flow Electroporation®

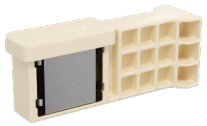
(RUO and GMP)
R/G-20K
CL-2

Processing Assemblies for Static Electroporation

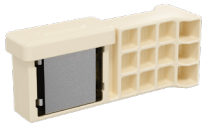
During static electroporation, cells in individual processing chambers are exposed to a series of brief electrical pulses, creating temporary membrane perturbations which allow the entry of molecules such as nucleic acids into the cell.

Multi-well processing assemblies: Available for Research Use Only (RUO), multi-well PAs allow sample multiplexing at lower volume, ideal for early discovery and low throughput screening experiments.

Single-well processing assemblies: Available in both RUO and GMP formats, single-well static PAs enable scale up and transition from RUO to GMP while maintaining efficiency and viability as you move through development.



OC-100™: The OC-100 is ideal for small volume transfection of individual samples. It offers the flexibility to process volumes ranging from 50 µL to 100 µL while accommodating up to 20 million cells.



OC-400™: The OC-400 is well-suited for small scale-up studies. It can handle sample volumes ranging from 200 µL to 400 µL, accommodating up to 80 million cells.

R-1000™ / G-1000™: The R/G-1000 is a highly efficient and versatile PA designed for low-scale clinical applications and process development optimization. It can handle sample volumes ranging from 400 µL to 1 mL, accommodating up to 200 million cells, which makes it an ideal bridge to higher clinical scales.

CL-1.1™: The CL-1.1 is purpose-built for low- to mid-range clinical scales. It features a closed-chamber design with a luer lock syringe port, facilitating the processing of sample volumes spanning from 1 mL to 3.5 mL, handling up to 700 million cells.

Processing Assemblies for Flow Electroporation® Technology

Our Flow Electroporation technology is uniquely designed to allow cells to flow through the processing chamber where discrete volumes are electroporated, then collected on a continual basis. This pioneering innovation makes clinical scale genetic engineering a reality.

Available in both RUO and GMP formats, PAs compatible with our Flow Electroporation technology enable a sterile closed cell engineering process to help improve safety and de-risk production.

R/G-20K: The new R-20K™ and G-20K™ processing assemblies used with our Flow Electroporation deliver high cell viability and exceptional cell recovery, making them ideal for therapeutic development initiatives that rely on precious patient samples ranging from 5 mL to 20 mL in volume.

CL-2™: The CL-2 (RUO and GMP) processing assembly allows cell therapy development and manufacturing scale from 10 mL to 100 mL, processing up to 20 billion cells in 30 minutes, supporting both autologous and allogeneic processes with high efficiency and viability, while minimizing sample loss.

Accessories & Reagents

Our reagents and supporting products have been developed and optimized to assist you with streamlining your transfection workflows.

Electroporation buffer:
MaxCyte electroporation buffer enables gentle, yet highly efficient transfection of any cell type. Its proprietary formulation has been optimized to work with all of our instruments and processing assemblies at any scale.

Closed process buffer bag:
MaxCyte's electroporation buffer in a closed process compatible format facilitates seamless, sterile buffer exchange for automated cell concentration upstream of electroporation.

Accessories and kits:
Racks simplify holding, loading, managing, and transporting processing assemblies securely in your lab.

Accessories and starter kits provide the necessary components for use with the ExPERT platform to easily set up and manage your workflow.

MaxCyte Product List

Instruments

Name	Description	Catalog Number	
ExPERT ATx® Electroporation System	ExPERT ATx® is a research-focused, high-performance electroporation platform for small- to medium-scale transfection. Volume range from 20 µL to 3.5 mL.	E-ATx	
ExPERT GTx® Electroporation System	ExPERT GTx® is the cell & gene therapy industry's leading clinically-validated electroporation platform for non-viral delivery of expression and editing molecules to achieve complex cellular engineering. GMP compliant, 21CFR Part 11-enabling software, ISO-certified, CE-marked. Volume range from 20 µL to 100 mL	E-GTx	

Accessories

Name	Description	Catalog Number	
Px5 Workflow Rack	Static processing assembly holding and transport rack, 1 to 5 processing assembly holding capacity, pack of 2	RKPA5-02	
3.5Kx3 Loading Rack	CL-1.1 closed processing assembly holding and transport rack, 1 to 3 processing assembly capacity, single pack	RK3K3-01	
ExPERT™ Docking Station	Instrument adapter for strip processing assemblies, single pack	DKS01-01	
Px6s Workflow Rack	Strip processing assembly holding rack, 1 to 6 strip processing assembly capacity, pack of 2	RKS06-02	
Px12s High Throughput Rack	Strip processing assembly holding rack, 1 to 12 strip processing assembly capacity, pack of 2	RKS12-02	
R-50x8 Starter Pack	Starter kit containing 3 R-50x8 multi-well processing assemblies, 1 ExPERT docking station, 2 Px6s workflow racks, and 100 mL electroporation buffer	SP050U8-03	

Reagents

Name	Description	Catalog Number	
Electroporation Buffer, Small	100 mL electroporation buffer, clear plastic bottle	EPB-1	
Electroporation Buffer, Large	500 mL electroporation buffer, clear plastic bottle	EPB-5	
Closed Process Electroporation Buffer, GMP, 500 mL	Electroporation buffer in closed bag with PVC tubing, clinical grade, 500 mL fill volume	CBG500M-01	
Closed Process Electroporation Buffer, GMP, 1 Liter	Electroporation buffer in closed bag with PVC tubing, clinical grade, 1 L fill volume	CBG001L-01	

GMP Consumables

Name	Description	Volume Range	Cell Number Range*	Catalog Number
G-1000	Static processing assembly, clinical grade, single well, 1,000 µL volume, pack of 10	400 µL – 1 mL	$2x10^6$ – $2x10^8$	EG001M1-10
CL-1.1 GMP	Closed processing assembly, clinical grade, single chamber, 3.5 mL volume, single pack	1 mL – 3.5 mL	$5x10^6$ – $7x10^8$	GCL-1
G-20K	Processing assembly for Flow Electroporation®, clinical grade, 20 mL volume, sample and collection PVC bags with luer locking syringe ports, closed system, bioweldable tubing, single pack	5 mL – 20 mL	$2.5x10^8$ – $4x10^9$	EG020M1-01
CL-2 GMP	Processing assembly for Flow Electroporation®, clinical grade, 100 mL volume, sample and collection PVC bags with luer locking syringe ports, closed system, bioweldable tubing, single pack	10 mL – 100 mL	$5x10^7$ – $2x10^{10}$	GCL-2

**Cell numbers are approximate based on MaxCyte's standard recommended protocols at the high and low volumes. Cell type, along with both delivery agent and cell concentration, will determine final cell numbers that can be loaded in each PA.*

RUO Consumables

Name	Description	Volume Range	Cell Number Range*	Catalog Number
OC-25x3™	Static processing assembly, research grade, 3 wells, 25 µL per well volume, pack of 10	20 µL– 25 µL	$1x10^5$ – $5x10^6$	SOC-25x3
R-50x3™	Static processing assembly, research grade, 3 wells, 55 µL per well volume, pack of 10	45 µL – 55 µL	$2.25x10^5$ – $1.1x10^7$	ER050U3-10
R-50x8™	Static processing assembly, research grade, 8 wells, 55 µL per well volume, pack of 3	45 µL – 55 µL	$2.25x10^5$ – $1.1x10^7$	ER050U8-3
OC-100™	Static processing assembly, research grade, single well, 100 µL volume, pack of 10	50 µL – 100 µL	$2.5x10^5$ – $2x10^7$	SOC-1
OC-100x2™	Static processing assembly, research grade, 2 wells, 100 µL per well volume, pack of 10	50 µL – 100 µL	$2.5x10^5$ – $2x10^7$	SOC-1x2
OC-400™	Static processing assembly, research grade, single well, 400 µL volume, pack of 10	200 µL – 400 µL	$1x10^6$ – $8x10^7$	SOC-4
R-1000™	Static processing assembly, research grade, single well, 1 mL volume, pack of 10	400 µL – 1 mL	$2x10^6$ – $2x10^8$	ER001M1-10
CL-1.1 RUO™	Closed processing assembly, research grade, single chamber, 3.5 mL volume, single pack	1 mL – 3.5 mL	$5x10^6$ – $7x10^8$	SCL-1
R-20K™	Processing assembly for Flow Electroporation®, research grade, 20 mL volume, sample and collection PVC bags with luer locking syringe ports, closed system, bioweldable tubing, single pack	5 mL – 20 mL	$2.5x10^8$ – $4x10^9$	ER020M1-01
CL-2 RUO™	Processing assembly for Flow Electroporation®, research grade, 100 mL volume, sample and collection PVC bags with luer locking syringe ports, closed system, bioweldable tubing, single pack	10 mL – 100 mL	$5x10^7$ – $2x10^{10}$	SCL-2

**Cell numbers are approximate based on MaxCyte's standard recommended protocols at the high and low volumes. Cell type, along with both delivery agent and cell concentration, will determine final cell numbers that can be loaded in each PA.*

ORDERS & ENQUIRIES

To place an order in North America and Europe (except Czech Republic), contact your sales representative, send an email to **orders@maxcyte.com**, or call (+1) 301-944-1700. For all other regions, please contact your local authorized distributor using the QR code or visiting **www.maxcyte.com/distributors**.

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