

charles river

Microbial Solutions

Products & Services | 2018



Charles River Microbial Solutions

Protecting the integrity of your products demands rigorous quality control, a critical task made easier with the help of a reliable partner. Charles River is that partner, offering innovative, flexible solutions and technical expertise to support you every step of the way. We've purposely built our portfolio to bring you progressive products and services that deliver accurate, relevant, and reliable data to fuel confident decisions on product quality and contamination control.

We lead the market with products and services that meet the diverse needs of the pharmaceutical, home, beauty, dairy, beverage, and food industries. Our unique combination of Endosafe® endotoxin testing, Celsis® rapid microbial detection, and Accugenix® microbial identification and strain typing keeps your manufacturing operations running efficiently and smoothly, lowers your cost to manufacture, and protects your reputation.

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Endotoxin Testing Systems

Endotoxin testing is a critical checkpoint within many industries, in areas ranging from in-process to final lot release.

Our Endosafe® systems simplify endotoxin testing. Flexible solutions meet the needs of every customer regardless of sample volume or industry. From in-process testing to final lot release, our easy-to-use Endosafe® cartridge technology products increase efficiency in the LAL laboratory by delivering rapid, accurate results. Every system we sell is backed by our skilled technical team who can provide training, maintenance, and support.



Endosafe® nexgen-PTS™



The Endosafe® nexgen-PTS™ is a rapid, point-of-use handheld spectrophotometer that uses USP-BET-compliant disposable cartridges for accurate, convenient, and real-time endotoxin testing, glucan concentration determination, and Gram identification. The enhanced features address your needs for decreased assay run time, simplified data entry, reduced user variability, and heightened administration control. The addition of a User Management function allows the system to be 21 CFR Part 11 compliant-ready. The nexgen-PTS™ is the system of choice for small volume, point-of-sample testing on the manufacturing floor.

Endosafe® nexgen-PTS™

Code

Price

Endosafe® nexgen-PTS™ instrument

Ethernet cable

One-year warranty

Power supply

USB cable adapter

Mini-pipettor

Stylus

PTS150K

\$7,500.00





Endosafe® nexgen-MCS™



Clients with higher volume testing needs can choose the Endosafe® nexgen-MCS™. Using the same FDA-licensed cartridges as the nexgen-PTS™, the nexgen-MCS™ features five individual spectrophotometers to test up to five samples at once, with results in just 15 minutes. Readings are sent via Ethernet to a connected desktop computer, where our 21 CFR Part 11 compliant ready EndoScan-V™ software (Version 5.5.5 SP1 and higher) measures and reports endotoxin results.

Endosafe® nexgen-MCS™	Code	Price
Endosafe® nexgen-MCS™ instrument		
Power supply	MCS150K	\$16,275.00
Ethernet cable		
One-year warranty		
Endosafe® nexgen-MCS™ package		
nexgen-MCS™ instrument		
EndoScan-V™ software	MCS650K	\$19,353.00
Power supply		
One-year warranty		
EndoScan-V™ software	M1250	\$ 3,446.00



Endosafe® Nexus™



Recognizing high-throughput challenges in central QC labs, our R&D team developed the first endotoxin testing system capable of testing 48 to 60 samples per automation session with minimal preparation and supervision. Ideal for high volume undiluted testing as well as labor-intensive dilutions, the Nexus™ utilizes LAL cartridge technology, a state-of-the-art liquid handling system, and simple data management to reduce variability and the need for subsequent investigations.

Endosafe® Nexus™	Code	Price
Nexus™ robotic system		
nexgen-MCS™ instrument		
Nexus™ integrated software	MR650	\$91,087.00
Computer		
Anti-static mat		
Nexus™ robotic system		
Nexus™ integrated software	MR550	\$80,371.00
Computer		
Anti-static mat		
Sterilized conductive 300 µL tips case (5,760 per case)	MR300	\$882.00
Sterilized conductive 1 mL tips case (3,840 per case)	MR1000	\$615.00

Endosafe® LAL Cartridges



The Endosafe® cartridge technology is our innovative response to our customers' need for higher sensitivity and faster quantitative results. Designed to optimize and refine our use of LAL, the cartridge technology uses only 1/20th of the raw material required for a traditional test. The cartridge technology eliminates a significant amount of the accessories required for traditional LAL methods while reducing time-consuming preparation and technician variability. For nexgen-MCS™ users, we offer convenient, economical cartridge multi-packs. For planning purposes, please note that cartridges must be used within 2 hours of breaking the pouch seal.



Endosafe® LAL Cartridges	Sensitivity EU/mL	Code	Price
10 single packs of cartridges (FDA-licensed)	0.1	PTS201F	\$367.00
	0.05	PTS2005F	\$367.00
	0.01	PTS2001F	\$404.00
	0.005	PTS20005F	\$425.00
10 single packs of cartridges (unlicensed: for R&D use only)	0.1	PTS201	\$362.00
	0.05	PTS2005	\$362.00
	0.01	PTS2001	\$404.00
Multi-packs of 25 cartridges (5/pouch) (FDA-licensed)	0.05	PTS5505F	\$654.00
	0.01	PTS5501F	\$736.00
	0.005	PTS55005F	\$757.00
10 single packs of inhibition/enhancement screening cartridges*		PTS220	\$362.00

*Inhibition/enhancement screening cartridges are not licensed by the FDA

Endosafe® Glucan Assay and Gram ID Cartridges



Additional rapid testing products that utilize both the original (PTS100/MCS100) and the nexgen (PTS150/MCS150) systems for microbiological testing are available for glucan contamination and Gram determination. With results in less than 30 minutes, the Glucan Assay quantifies β -glucans, leading to better process monitoring and faster out-of-specification resolutions. The Gram ID indicates whether an isolate is a Gram-negative or Gram-positive bacteria, or confirms yeast or mold, in about 3-7 minutes.

Endosafe® Cartridges	Code	Price
Beta-Glucan cartridges (10/pack)	RMMGS1000	\$373.00
Gram ID cartridges (10/pack)	LRMMGI100	\$158.00

Note: The cartridges must be used within two hours of breaking the pouch's seal.

Accessory Products

Endosafe® nexgen-PTS™ Accessories	Code	Price
Endosafe® nexgen-PTS™ power cable UK	PTS112	\$16.03
Endosafe® nexgen-PTS™ power cable EU	PTS113	\$16.03
Ethernet cable	PTS114	\$4.73
USB micro cable adapter	PTS115	\$4.73
Zebra Technologies QLn™ 320 printer kit Zebra printer Power supply and cable USB cable 1 roll printer paper	PTS320K	\$1,261.00
Zebra printer USB cable	PTS321	\$26.27
Zebra printer AC power adapter	PTS322	\$9.46
Zebra printer paper	PTS325	\$2.63
Zebra Symbol barcode scanner	FGD-000012	\$946.00
Stylus	PTS117	\$3.68
nexgen-PTS™ protective reader case	PTS609	\$237.00

PTS™/MCS™ Accessories	Code	Price
Epson® printer cable	PTS311	\$26.27
Ribbon for Epson® printer	PTS312	\$4.01
Paper roll for Epson® printer	PTS313	\$2.44
Continuous roll label for Epson® printer	PTS314	\$13.18
Eppendorf® 25 µL pipettor	PTS700	\$368.00
PTS™ blank cartridges (quantity 2)	PTS200	\$8.63



Endotoxin Testing Instrumentation and Software

Charles River offers kinetic microplate readers that incorporate robust data management with reliable hardware and expert technical support to provide accurate and intuitive data analysis.

Our kinetic LAL instrumentation and software is designed specifically to help reduce variability and increase operational efficiencies by achieving quantitative results and incorporating flexible configuration capabilities.



Charles River Cortex™ Data Management & Analysis Software



Creating Centralized Control for a Decentralized Approach

Maintaining the long-term safety of a manufacturing environment while meeting the demands of compliance is a microbial quality control manager's top priority. The need to investigate out-of-specification (OOS) results continues to be one of the most commonly observed cGMP issues during quality control laboratory inspections. Having access to accurate, relevant, and reliable data is essential to support confident decisions on product quality. Recent FDA warning letters and new global guidance documents communicate the increasing requirements on data integrity, making many organizations aware of existing gaps and deficiencies in their data and reporting.

Charles River Cortex™ provides an integrated solution to securely consolidate, query, and analyze all real-time endotoxin data for necessary internal QA and FDA trending reports. The decentralized, multi-client solution provides complete QA/QC instrument oversight. This allows remote PC access (with Cortex client software installed) to the same results database and server. Customers can compile and manage data from any of the Endosafe® rapid testing platforms, microplate readers, and tube readers into a unified data infrastructure to gain complete insight on their manufacturing operation and process in order to make informed, confident decisions. Cortex allows users to proactively manage and monitor the operational integrity of the entire facility's endotoxin instrument equipment fleet including component effectiveness, calibration schedules, and system readiness within a single, end-to-end risk management environment.

Charles River Cortex™	Code	Price
Charles River Cortex™ Software	M1600	\$3,500.00
Annual Maintenance Contract	AMC1600	\$875.00/per year
Charles River Cortex™ License/Device Authorization per Endosafe®-PTS™ (PTS100K) device	M1601	\$250.00
Charles River Cortex™ License/Device Authorization per Endosafe® nexgen-PTS™ (PTS150K) device	M1602	\$350.00
Charles River Cortex™ License/Device Authorization per Endosafe® MCS™ (MCS100K)	M1603	\$1,250.00
Charles River Cortex™ License/Device Authorization per Endosafe® nexgen-MCS™ (MCS150K)	M1604	\$1,750.00
Charles River Cortex™ License/Device Authorization for Plate Reader/Tube Reader	M1605	\$1,250.00
Charles River Cortex™ IQ/OQ Service	AMC502S	\$2,250.00



EndoScan-V™ Endotoxin-Measuring Software



Enabling accurate, intuitive data analysis, EndoScan-V™ performs endotoxin calculations and generates secure data files and batch reports for product release as required by the FDA. The software's flexible networking configuration works with Microsoft Excel™, your LIMS, or with centralized databases. EndoScan-V™ is also fully compatible with our Cortex™ software, allowing generated data to automatically transfer. The EndoScan-V™ user interface is available in English, French, and German, and includes comprehensive online documentation and IQ/OQ/PQ guidelines.

EndoScan-V™ Software

	Code	Price
Endosafe® EndoScan-V™ software (compatible with BioTek® and Tecan® plate readers, original and nexgen test systems)	M1250	\$3,446.00
EndoScan-V™ software validation package	TS600	\$2,281.00
Electronic signature	M1300	\$1,450.00

Kinetic Plate Readers



We provide compact, multi-use spectrophotometers that offer superior temperature uniformity and excellent optical performance. We also provide technical support for our plate readers, including on-site annual qualification and user training.

BioTek® Kinetic Plate Readers and Accessories

	Code	Price
BioTek® incubating microplate reader (with 340, 405, 450, 490, 630 nm filters)	M200	\$10,984.00
Calibration plate for BioTek® reader	M400	\$1,353.00
Calibration plate recertification (valid for one year) – BioTek®	TS950	\$529.00
BioTek® bulb	M700	\$150.00
Power supply	M800	\$137.00
Power cable	M801	\$30.00

Plate Reader Options

	Code	Price
On-site training on reader/software*	TS400	\$193.00/hour
Computer package – laptop	MCP100	\$2,627.00
Computer package – desktop	MCP200	\$2,627.00

* Travel expenses additional

Contract Endotoxin Testing Services

Our technical services laboratory can help streamline your testing operations for a smooth process to final product release.

Charles River's experienced specialists can help you improve the compliance and efficiency of your endotoxin testing program. Our FDA-registered laboratories offer a variety of cGMP testing and support services to help you achieve control, consistency, and precision in your testing environment.



Contract Endotoxin Testing Services



Method Development

	Code	Price
Method development	TS100	Inquire

Routine Endotoxin Determination

	Code	Price
Routine endotoxin determination, non-regulated, any method PTS™ Gel-clot Kinetic chromogenic Kinetic turbidimetric	TS700	\$145.00

Gel-Clot, Kinetic Chromogenic, and Kinetic Turbidimetric Techniques

	Code	Price
Product validation – 3 lots	TS203	\$857.00
Product validation – 1 lot	TS201	\$356.00
Product release or stability test*	TBET1	\$184.00

* Product validation must be completed prior to finished product release or stability testing.

PTS™ Technique

	Code	Price
Product validation – 3 lots	TS203	\$857.00
Product validation – 1 lot	TS201	\$356.00
Product release or stability test*	TBET1	\$184.00

* Product validation must be completed prior to finished product release or stability testing.



Contract Endotoxin Testing Services (continued)



Stability Testing

	Code	Price
Stability testing*	TBET1	\$184.00

* Product validation must be completed prior to finished product release or stability testing.

Sample Preparation

	Code	Price
Device extraction preparation or special sample preparation such as heat treatment*	TS700E	\$26.00

* If Charles River prepares the extraction or treats the sample, there is an additional price per sample.

Oven Depyrogenation Validation

	Code	Price
Oven validation/testing of challenge vials (≤ 10 vials)	TS203	\$857.00
Oven validation/testing of challenge vials (> 10 vials)	TS203	Inquire

Additional Services

	Code	Price
Special Certificate of Analysis (COA) testing	TCOA1	\$219.00
On-site training*	TS400	\$193.00/hour
SOP and protocol writing	TS800	\$105.00/hour

* Travel expenses additional

Endosafe® LAL Proficiency Test Program



For information regarding the Proficiency Test Program, email ptp.support@crl.com, or contact us at +33 (0) 474 72 28 53.

LAL Reagents and Accessories

Our team has developed and optimized a range of quantitative and qualitative LAL formulations that provide increased sensitivity, greater linearity, and superior interference resistance.

Charles River's Endosafe® LAL reagents are licensed by the FDA for product release, and all of our accessory products are certified for the appropriate LAL testing requirements. These deliver extreme precision and reliability, minimizing invalid results and the need to retest.



Kinetic Turbidimetric LAL (KTA)



Our FDA-licensed kinetic turbidimetric reagents yield quantitative endotoxin values when used with an incubating reader equipped with endotoxin-measuring software. KTA is licensed for both kinetic and gel-clot analyses and permits a direct correlation between methods. KTA² is a second-generation kinetic turbidimetric reagent that offers faster reaction times and routinely tests to sensitivities of 0.005 EU/mL. Specified accessories and test conditions are required to achieve maximum sensitivity.

Kinetic Turbidimetric LAL [†] 50-Test Vial (5.2 mL)	Sensitivity EU/mL	Code	Pack of 6 Price	Case of 12 Price	Box of 100 Price
KTA ² (used for kinetic testing only)		R19000	\$479.00	\$933.00	\$7,323.00
	0.015	R15015	\$422.00	\$795.00	\$6,298.00
KTA	0.03	R15003	\$394.00	\$757.00	\$5,973.00
	0.06	R15006	\$394.00	\$757.00	\$5,973.00

[†] Reserves of LAL reagents and matching Control Standard Endotoxin (CSE) are offered for a period of one year.

Kinetic Chromogenic LAL (KCA)



Endochrome-K[™] LAL facilitates your endotoxin screening with its ease of use and unique reagent stability. Our optimized KCA LAL offers a 0.001 EU/mL limit of detection and provides greater linearity and superior interference resistance for quantitative endotoxin values. Specified accessories and test conditions are required to achieve maximum sensitivity.

Endochrome-K [™] LAL [†]	Code	Price
Endochrome-K [™] 256-test kit 8 × 3.2 mL vials 2 × 10 ng control standard endotoxin 3 × 30 mL LAL reagent water	R1708K	\$703.00
Endochrome-K [™] 320 tests 10 × 3.2 mL vials	R1710	\$812.00
Endochrome-K [™] 3200 tests 100 × 3.2 mL vials	R17100	\$7,622.00

[†] Reserves of LAL reagents and matching Control Standard Endotoxin (CSE) are offered for a period of one year.

Endpoint Chromogenic Reagents	Code	Price
Endpoint chromogenic kit (140 tests) 5 × 1.4 mL vials of chromogenic LAL 1 × 10 mg vial of chromogenic substrate S-2423 2 × 2 ng vials of endotoxin 2 × 30 mL vials of LAL reagent water 1 × 15 mL 0.05 M vial of Tris buffer	R160K	\$457.00



Endosafe® Gel-Clot LAL



The gel-clot assay is a simple, qualitative method of endotoxin detection, best suited for low-volume laboratories. Endosafe® lysate features a firm gel over a wide range of sensitivities. The reagent is buffered for enhanced interference resistance.

Gel-Clot LAL	Sensitivity EU/mL	Code	Pack of 6 Price	Case of 12 Price	Box of 100 Price
50-test vial (5.2 mL)	0.015	R15015	\$422.00	\$795.00	\$6,298.00
	0.03	R15003	\$394.00	\$757.00	\$5,973.00
	0.06	R15006	\$394.00	\$757.00	\$5,973.00
	0.125	R11012	\$394.00	\$757.00	\$5,973.00
	0.25	R11025	\$394.00	\$757.00	\$5,973.00
10-test vial (1.2 mL)	0.03	R12003	\$121.00	\$217.00	\$1,705.00
	0.06	R12006	\$121.00	\$217.00	\$1,705.00
	0.125	R12012	\$121.00	\$217.00	\$1,705.00
	0.25	R12025	\$121.00	\$217.00	\$1,705.00
Gel-Clot LAL Single-Test Vial (0.2 mL)		Sensitivity EU/mL	Code	Pack of 25 Price	Case of 50 Price
Single-test vial (0.2 mL)	0.03	R13003	\$146.00	\$278.00	
	0.06	R13006	\$146.00	\$278.00	
	0.125	R13012	\$146.00	\$278.00	
	0.25	R13025	\$146.00	\$278.00	
Rapid Single-Test LAL Vials (0.2 mL)*			Sensitivity EU/mL	Code	Price
Rapid single-test vial (50-test)†			0.06 or 0.25	R13500	\$278.00
Rapid single-test vial (50-test)†			0.25 or 1	R13600	\$278.00
Rapid positive product control (50-test)				PC200	\$277.00

* This product line is not licensed by the FDA and may not be used for pharmaceutical release testing.

† Dual sensitivity based on assay run time.

LAL Accessory Products



We provide all the necessary accessory products required to run an LAL test.

Control Standard Endotoxin (CSE) <i>E. coli</i> and Reference Standard Endotoxin (RSE)	Packaging	Code	Price	Box of 100 Price
CSE – 500 ng per vial*	6/pack	E110	\$138.00	\$2,164.00
CSE – 10 ng per vial*	6/pack	E120	\$123.00	\$1,920.00
Positive control (for single test)	25/pack	PC100	\$138.00	
RSE	—	E150	\$325.00	

* Lot-specific Certificate of Analysis included when reagents are purchased together.

Extended CSE (CXE) Dilution Kit*	Code	Price
CXE kit 1 × 10 ng CSE 1 × 60 mL stabilizing solution 1 pack of 11 of 16 × 100 mm capped tubes	E140	\$125.00

* Lot-specific Certificate of Analysis included when reagents are purchased together.

LAL Reagent Water (in plastic bottle)*	Package	Code	Price
30 mL bottle (< 0.001 EU/mL)	12/case	W130	\$99.32
50 mL bottle (< 0.001 EU/mL)	12/case	W120	\$115.00
100 mL bottle (< 0.001 EU/mL)	12/case	W110	\$129.00
500 mL bottle (< 0.001 EU/mL)	6/pack	W150	\$99.32

* Certificate of Quality included.

LAL Accessory Products (continued)



LAL Buffers*	Package	Code	Price
5 mL 0.25 M Tris buffer	6/pack	BT101	\$71.62
30 mL 0.1 M Tris buffer	12/case	BT103	\$186.00
5.5 mL 0.1 M Tris buffer	6/pack	BT105	\$96.19
30 mL 0.05 M Tris buffer	12/case	BT106	\$97.91
4 mL 0.5 M MgSO ₄ , 1 M Tris buffer	6/pack	BC1000	\$71.62
5.2 mL endotoxin-specific buffer	6/pack	BG120	\$129.00
30 mL bio-dispersing agent	12/case	BD100	\$183.00

* Please contact Technical Support before using buffers. Additional buffers are available for specific testing needs.

Endotoxin Indicators*	Code	Individual Price	Case of 12 Price	Box of 100 Price
10,000 EU	EVV10K	—	\$166.00	\$1,344.00
100,000 EU	EVV100K	—	\$166.00	\$1,344.00
1 Million EU	EVV1M	\$42.34	—	—
2.5 Million EU	EVV2.5M	\$63.15	—	—
10 Million EU	EVV10M	\$63.15	—	—

* For dry heat oven validations

Reaction Tubes	Package	Code	Price
10 × 75 mm capped flint glass tubes, boxed	50/pack	T100	\$38.43
10 × 75 mm flint glass tubes, in foil	50/pack	T200	\$21.85
10 × 75 mm borosilicate glass tubes, in foil (appropriate for use with tube readers)	50/pack	T400	\$21.85
8 × 75 mm borosilicate glass tubes, in foil (only for use with tube readers)	50/pack	T500	\$21.85
10 × 75 mm screw-cap borosilicate glass tubes, boxed	50/pack	TL1200	\$68.22



LAL Accessory Products (continued)



Tubes	Package	Code	Price
12 x 75 mm borosilicate glass tubes, in foil	50/pack	TL1000	\$24.31
13 x 100 mm borosilicate glass tubes, in foil	50/pack	T300	\$46.84
16 x 90 mm screw-cap borosilicate glass tubes, boxed	70/pack	TL700	\$107.00
18 x 150 mm borosilicate glass tubes, in foil	14/pack	T600	\$28.23
16 x 160 mm screw-cap borosilicate glass tubes, boxed	100/pack	TL800	\$175.00

Depyrogenated Glass Pipettes	Package of 10	Code	Price
1 mL, in foil	5 packs	P100	\$96.19
2 mL, in foil	5 packs	P200	\$105.00
5 mL, in foil	5 packs	P500	\$120.00
10 mL, in foil	5 packs	P1000	\$131.00

Eppendorf® Pipette Tips	Package	Code	Price
Eppendorf® tips (20-200 μ L,* individually wrapped)	50/pack	D100EA	\$16.52
Eppendorf® tips (20-200 μ L, individually wrapped)	100/pack	D200	\$41.30

* Certificate of Analysis not included.

96-Well Endosafe® Plates (individually wrapped)*	Code	Individual Price	Case of 50 Price
96-well polystyrene plate (certified to 0.005 EU/mL)	M9005	\$6.74	\$293.00

* Tissue culture treated.

Rapid Microbial Detection

Speed products to market while ensuring that they meet quality and safety standards with Celsis® rapid microbial detection.

The proprietary adenosine triphosphate (ATP) bioluminescence technology employed by Celsis® rapid detection systems offers speed and reliability that traditional methods just can't match. Robust, easy-to-use Celsis® systems reduce time to result for quarantined product, achieving shorter production cycles and improved market responsiveness. Early notice of contamination allows for a faster response and recovery time and can reduce inventory hold times resulting in a substantial working capital savings. Furthermore, Celsis® can streamline lab processes, improve data integrity, and minimize lab waste, water usage, and energy consumption.



Celsis Advance II™



Rugged and robust, the Celsis Advance II™ System is designed to meet the needs of busy microbiology labs. Testing up to 120 assays per hour, the luminometer has the high throughput needed for medium to large-scale manufacturing facilities, and the intuitive Advance.im™ software offers a suite of powerful data management tools for tracking and trending results.

	Code	Price
Celsis Advance II™ System	7456004	\$77,080.00

Celsis Accel® System



With a throughput of 30 assays per hour, the Celsis Accel® is well suited for laboratories with small to medium assay volume requirements. A compact version of our reliable Celsis Advance II™ instrument, the Celsis Accel® fits into any microbiology laboratory and includes the intuitive and easy to use Accel.im™ software.

	Code	Price
Celsis Accel® System	7460288	\$37,741.00

Celsis® Microbial Detection Reagents

Our advanced AMPiScreen® reagent technology offers the fastest time to result on the market by using a series of enzyme-based reactions to amplify even the lowest concentrations of microbial ATP.

Primary Reagents	Code	Price
AMPiScreen® Health 800 assay kit	AS1320	\$6,466.00
AMPiScreen® Health 400 assay kit	AS4220	\$3,236.00

Support Reagents and Consumables

Additional reagent kits required for maintenance and support are produced in the same ISO-certified facility to the same standards as our primary reagent kits.

Support Reagents and Consumables	Code	Price
ATP Positive Control kit	1291483	\$83.95
Daily Wash & Rinse kit	1290142N	\$151.00
Monthly Maintenance and Cleaning kit	92828	\$182.00



Celsis® Accessories

Accessories	Code	Price
Pipette, 20-200 µL	91184	\$439.00
Pipette, 100-1,000 µL	91192	\$439.00
Pipette, 5-50 µL	91200	\$439.00
Rack, 80 cuvettes	92080	\$29.62
Priming cuvettes, 75 mm (1,000)	1280052	\$79.75
Advance cuvettes (1,000)	1280139	\$79.75
150 mL containers (120 ct)	1280200	\$107.00
ATP-free pipette tips, 200 µL (10 x 96 pcs)	93678	\$178.00
ATP-free pipette tips, 1,000 µL (10 x 100 pcs)	93686	\$185.00
Glass beads, 0.5 mm	AS9001	\$54.12
Antifoam B emulsion	AS9003	\$95.34
Linear shaker, 115V	AS128001	\$2,951.00
Linear shaker, 220V	AS128002	\$3,300.00

Laboratory Services

Charles River offers a variety of laboratory services to support your product evaluation needs, including product suitability and methods development. Please contact your sales representative for additional information.

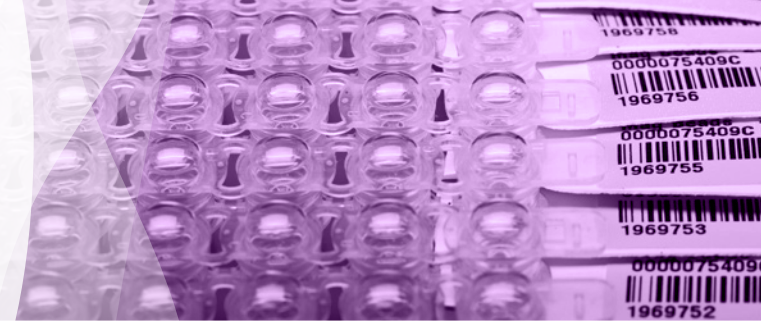


Microbial Identification Services

Our Accugenix® microbial identification services are powered by our industry-leading proprietary libraries.



Superior data lead to superior control. Accugenix® microbial identification and strain typing products and services optimize your environmental monitoring program by providing accurate, rapid, and cost-effective solutions in line with global regulatory standards. Sample identification data is stored on the regulatory-compliant and secure customer web portal that includes complementary tracking and trending features. The Accugenix® customer web portal meets the requirements of 21 CFR Part 11 and complies with GAMP5 standards for validation of automated systems. Our growing list of service laboratories includes locations in the United States, France, Ireland, India, South Korea, and Singapore.



AccuGENX-ID®



Genotypic Identification of Bacteria and Fungi (rDNA Sequencing)

The most accurate and reproducible method for identifying unknown microorganisms, AccuGENX-ID® utilizes comparative DNA sequencing of the 16S rRNA gene in bacteria and the ITS2 rRNA region in fungi through our BacSeq and FunITS identifications. This sequencing method is independent of the health or growth conditions of the isolate; samples can be viable or nonviable cultures, or simply genomic DNA from your microbe. For each sample submitted for identification, the resulting DNA sequence is compared against our validated, highly relevant libraries for bacteria and fungi. Our sequencing services are the most accurate method for identification of unknown microorganisms, which is critical for contamination investigations.

Turnaround Time (TAT)	Test Code Bacteria (16S 500 bp)	Test Code Fungi (ITS2)	Price
Same day	BacSeq-0	FunITS-0	\$247.00
1 day	BacSeq-1	FunITS-1	\$194.00
2 days	BacSeq-2	FunITS-2	\$144.00
5 days	BacSeq-5	FunITS-5	\$114.00

AccuPRO-ID®

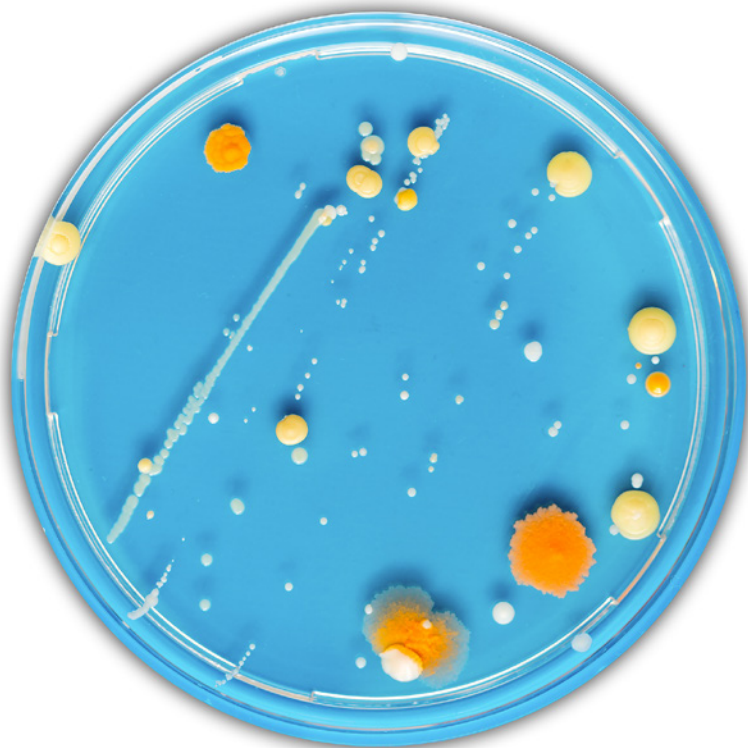


Proteotypic Identification of Bacteria and Yeast (MALDI-TOF Backed by AccuGENX-ID®)

AccuPRO-ID® offers a first-in-industry polyphasic approach to microbial identification utilizing proteotypic MALDI-TOF mass spectrometry technology supported by our AccuGENX-ID® sequencing method at no additional cost. We have been offering this technology for industrial applications since 2010 under our cGMP quality system, longer than any other contract laboratory in the industry, and are also accredited for ISO 17025. We are experts in the identification of isolates from industrial manufacturing environments and provide accurate species-level identifications that can give you a high level of confidence in your ability to effectively track and trend data that are pertinent to your environmental monitoring program.

Turnaround Time (TAT)	Test Code Bacteria	Price
Same day	AccuPRO-ID-0	\$84.00
1 day	AccuPRO-ID-1	\$71.00
2 days	AccuPRO-ID-2	\$67.00
5 days	AccuPRO-ID-5	\$61.00





AccuBLAST®



Analysis & Interpretation of 16S Raw Data Sequence Files (*.ab1)

Exclusively designed for customers who have invested in the MicroSEQ® identification system, this service is provided for users who recognize the value of the more extensive, validated Accugenix® library. The AccuBLAST® service employs our own unrivaled sequence library and expert data analysis to generate meaningful reports, allowing us to deliver accurate reports with very short turnaround times.

Turnaround Time (TAT)	Test Code (16S)	Price
Same day	AccuBLAST-0	\$71.00
1 day	AccuBLAST-1	\$66.00
2 days	AccuBLAST-2	\$62.00

AccuGENX-ST®



Sequence-Based Strain Typing

Root cause analysis in production facilities often requires differentiating microorganisms at the strain level. Strain typing allows you to ascertain how closely related an organism is to other isolates from the same species observed in past events. Strain typing can also be used for production strain verification, especially for verification of master cell bank (MCB) and working cell bank (WCB) strains.

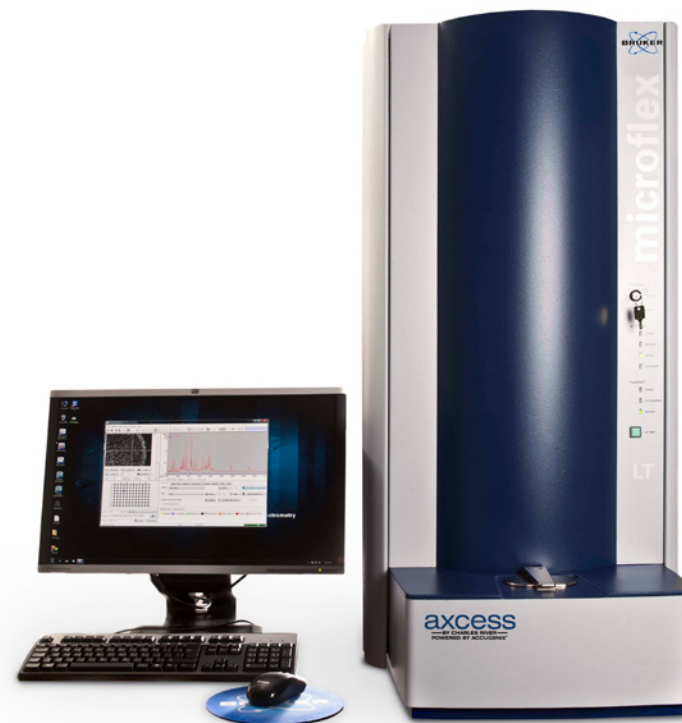
Turnaround Time (TAT)	Test Code	Price
5 days	AccuGENX-ST-5	\$328.00

Axcess® System for Microbial Identification



The Axcess® system pairs the precision of the MALDI Biotyper instrument with the industry-leading Accugenix® proprietary microbial library through a secure online network. While conventional identification methods are time-consuming and often require ancillary tests, the Axcess® system allows for nearly instantaneous identification of isolated colonies from a plate. Subscription fees for the Accugenix® MALDI-TOF Reference Library are determined based on expected annual usage. The Axcess® Premium Plan offers a worry free solution that includes AccuGENX-ID® backup service while the Axcess® Basic Plan allows flexibility to choose when additional sequencing identification is needed.

Axcess® MALDI Biotyper-CM System	Code	Price
Axcess® MALDI Biotyper-CM package Starter Kit for MALDI-TOF MS Barcode scanner for MALDI Biotyper Reference Physiocare Pack (tips and pipettes) Software Package MALDI Biotyper 4.0 SR1 MALDI SW Security Pack for SW 4.0	AXC550	Inquire
Axcess® MALDI Biotyper Smart CM System	Code	Price
Axcess® MALDI Biotyper Smart CM package Starter Kit for MALDI-TOF Smart MS Barcode scanner for MALDI Biotyper Reference Physiocare Pack (tips and pipettes) Software Package MALDI Biotyper 4.0 SR1 MALDI SW Security Pack for SW 4.0	AXC650	Inquire
Axcess® Plans	Code	Price
Axcess® Basic plan	AXCB01	Inquire
Axcess® Premium plan Includes a No Match Sample Guarantee for samples with no ID	AXCP01	Inquire



High Volume Accessories	Code	Price
MBT Galaxy System (GP)	AXC81655	\$60,100.00
MBT Pilot System (GP)	AXC81880	\$7,532.00

Axcess® MALDI Biotyper-CM Reagents	Code	Price
Bacterial test standard (BTS)	AXC110	\$502.00
Matrix HCCA	AXC150	\$285.00
MSP 96 steel target plate	AXC9600	\$488.00
MSP adapter for MALDI Biotarget	AXC4800AD	\$346.00
MALDI Biotarget 96 disposable target plate (20/pack)	AXC9600D	\$1,353.00

Required with Purchase	Code	Price
Initial qualification MBT (IQ/OQ-PV) (Bruker performs)	AXC403B	\$8,560.00
Software qualification/Methods validation	AXC502	\$4,295.00
Axcess® authorization	AXC-SL1000	Inquire

Annual Instrument Service Agreement Options	Code	Price
Complete CARE	AXC900	\$21,877.00
Complete CARE Priority	AXC1000	\$28,443.00
Warranty Plus CARE (available first year only)	AXC700	\$7,800.00
Annual OQ/PV with service agreement	AXC400B	\$3,497.00
Annual OQ/PV without service agreement	AXC404B	\$10,440.00



QC Custom Solutions

Our partnership with Microbiologics, an industry leader in the production of QC microorganisms, offers characterization, preservation, and manufacturing solutions for your USP testing. Isolates are supplied in a convenient, ready-to-use format for QC testing. Please contact your sales representative for additional information.

	Price
QC Custom Solutions	Inquire

Instrument Service and Support

Every purchase of our Endosafe® and Celsis® products is backed by the experts within our Service Contract and Support team.

From regular maintenance and annual calibration to on-demand service contracts, our dedicated professionals are a single point of contact for all of your service requirements, providing superior, timely service delivery and a simple, streamlined process for obtaining support. Choose from the plans below, or contact our team for a program tailored to your needs.

To request information on our discounted annual payment plans or extended 3-year and 5-year service agreement options (available for most products), please email us at: MicroinstruRFQ@crl.com



Instrument Service and Support



Endosafe® -PTS™	Code	Price
Annual calibration certification	PTS500	\$610.00
Annual calibration certification: Full service	PTS500FS	\$1,671.00
IQ/OQ/PQ kit	PTS502	\$359.00
IQ/OQ/PQ on-site	PTS502S	\$1008.00
On-demand repair services: Labor only	PTS503	\$259.00/hour
Annual calibration certification: On-site service	PTS505	\$1,221.00
Annual calibration certification: On-site full service	PTS505FS	\$2,281.00
Each additional unit for annual calibration certification	PTS506	\$530.00
Each additional unit for annual calibration certification: Full service	PTS506FS	\$1,061.00
Endosafe® nexgen-PTS™	Code	Price
Annual calibration certification	PTS900	\$796.00
Annual calibration certification: Full service	PTS900FS	\$1,857.00
IQ/OQ/PQ kit	PTS902	\$359.00
IQ/OQ/PQ on-site	PTS902S	\$1,061.00
On-demand repair services: Labor only	PTS903	\$259.00/hour
Annual calibration certification: On-site service	PTS905	\$1,591.00
Annual calibration certification: On-site full service	PTS905FS	\$2,652.00
Each additional unit for annual calibration certification	PTS906	\$530.00
Each additional unit for annual calibration certification: Full service	PTS906FS	\$1,061.00

Instrument Service and Support (continued)



Endosafe® -MCS™	Code	Price
IQ/OQ/PQ document	MCS575	\$1008.00
IQ/OQ/PQ service and kit	MCS502	\$2,652.00
On-demand repair services: Labor only	MCS503	\$259.00/hour
Annual qualification service	MCS500	\$2,403.00
Annual on-site qualification service plus on-site basic service	MCS505	\$5,161.00
Annual qualification: Full service	MCS505FS	\$7,400.00
Each additional unit for annual qualification service	MCS506	\$1,883.00
On-site full service	MCS506FS	\$3,766.00
Endosafe® nexgen-MCS™	Code	Price
IQ/OQ/PQ document	MCS975	\$1,310.00
IQ/OQ/PQ service	MCS902	\$3,448.00
IQ/OQ/PQ kit	MCS902K	\$420.00
On-demand labor	MCS903	\$259.00/hour
Annual qualification service	MCS900	\$3,124.00
Annual on-site qualification service plus on-site basic service	MCS905	\$5,161.00
Annual qualification: Full service	MCS905FS	\$7,400.00
Additional units for annual calibration certification	MCS906	\$2,448.00
Additional units for annual qualification plus on-site basic service	MCS906A	\$3,124.00
Additional units for annual calibration certification: Full service	MCS906FS	\$4,877.00

Instrument Service and Support (continued)



Endosafe® Nexus™	Code	Price
IQ/OQ/PQ service	MR502	\$6,069.00
IQ/OQ/PQ kit	MR502K	\$2,971.00
On-demand repair services: Labor only	MR503	\$259.00/hour
On-site basic service	MR505	\$9,018.00
Annual service	MR500	\$5,517.00
Annual service: Full service	MR500FS	\$19,892.00
Charles River Cortex™	Code	Price
IQ/OQ service	AMC502S	\$2,250.00
Annual maintenance	AMC1600	\$875.00/per year
Kinetic Plate Readers	Code	Price
On-site training for readers/software: Half day	SVSTRNG-H	\$773.00
On-site training for readers/software: Full day	SVSTRNG-F	\$1,545.00
Qualification of reader/software	TS500	\$2,403.00
Each additional qualification of reader/software	TS506	\$1,883.00
BioTek® reader/software annual qualification with bulb	TS500BF	\$2,573.00
BioTek® reader/software additional qualification	TS506BF	\$2,074.00
Microplate reader IQ/OQ/PQ (document only)	TS550	\$1,008.00
Microplate reader IQ/OQ/PQ on-site	TS502	\$2,403.00
EndoScan-V™ software validation package	TS600	\$2,281.00
Calibration plate recertification Biotek® (valid for one year)	TS950	\$529.00
Additional calibration plate recertification Biotek® (valid for one year)	TS956	\$419.00
Kinetic reader service contract	TS2700	\$4,328.00

Instrument Service and Support (continued)



Celsis Accel®	Code	Price
On-site basic preventive maintenance only	RD500B	\$3,902.00
On-site standard	RD500S	\$6,569.00
On-site premier	RD500P	\$11,698.00
Celsis Advance™	Code	Price
On-site preventive maintenance only	RD600B	\$3,631.00
On-site standard	RD600S	\$6,569.00
On-site premier	RD600P	\$11,698.00
Celsis Advance II™	Code	Price
On-site preventive maintenance only	RD700B	\$3,631.00
On-site standard	RD700S	\$6,569.00
On-site premier	RD700P	\$11,698.00
Celsis Innovate®	Code	Price
On-site preventive maintenance only	RD800B	\$3,535.00
On-site standard	RD800S	\$4,873.00
On-site premier	RD800P	\$8,126.00
Celsis® Mini	Code	Price
In-house preventive maintenance only	RD200MINI	\$834.00
Celsis® Cellscan	Code	Price
In-house preventive maintenance only	RD200CSCAN	\$834.00

Instrument Service and Support (continued)



Auto Sampler

	Code	Price
On-site basic	RD900B	\$26,523.00
On-site standard	RD900S	\$37,132.00
On-site pro	RD900P	\$53,045.00

Miscellaneous

	Code	Price
Billable service loaner rate	RDLOAN	\$2,258.00
Standard hourly labor rate	LABOR	\$259.00/hour
Standard hourly travel rate (50% of standard labor rate)	TSTRAVEL	\$129.00/hour
On-site training: Half day	CSVSTRNG-H	\$773.00
On-site training: Full day	CSVSTRNG-F	\$1,545.00



Resources

With a growing list of laboratory and agent locations in North America, Europe, South Korea, Australia, India, and Singapore, the Charles River Microbial Solutions team serves customers in over 100 countries, providing customer support in 46 languages across 24 time zones.



Ordering Information



Charles River Endotoxin and Microbial Detection Products and Services

1023 Wappoo Road, Suite 43-B
Charleston, SC 29407

Phone: 1.843.402.4900
Toll Free: 1.800.762.7016
Fax: 1.843.766.7576

Charles River Microbial Identification Products and Services

614 Interchange Boulevard
Newark, DE 19711

Phone: 1.302.292.8888
Toll Free: 1.800.886.9654
Fax: 1.302.292.8468

To obtain product literature or technical documentation, please visit our website:
www.criver.com/microbialsolutions

Endosafe® customer service & sales:
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Accugenix® technical support:
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Endosafe® technical support:
endo-comments@crl.com

Celsis® products and services:
celsis.support@crl.com

For all general inquiries: askcharlesriver@crl.com

Wako Reagents and Instrumentation

Charles River is proud to offer trusted technologies from Wako Chemicals USA, Inc.

Wako Toxinometer®

The Wako Toxinometer® is a versatile tube reader that performs kinetic turbidimetric, gel-clot, and kinetic chromogenic assays within one instrument using LAL reagents. The test is performed in reaction tubes that are exclusive to Wako.

Tube Reader Sterilized Consumables	Packaging	Code	Price
Toxinometer® ET-6000/U, Part 11 set	1 unit	293-33509	\$22,502.00
Toxinometer® ET-6000/U, Expansion Module	16 wells	297-33529	\$14,000.00
Toxinometer® ET-6000/U, Non-Part 11 set	1 unit	293-33989	\$18,601.00



The PYROSTAR™ ES-F Series

The PYROSTAR™ ES-F series of reagents is an endotoxin-specific line of LAL products that are formulated to be used either qualitatively as a gel-clot reagent or quantitatively as a kinetic-turbidimetric reagent. Quantitative sensitivities range from 0.01-10 EU/mL for 0.03-0.25 gel clot and 0.001-10 EU/mL for 0.015 gel clot.

PYROSTAR™ ES-F Multi Kit (2 mL)	Sensitivity EU/mL	Code	Price
80-test PYROSTAR™ kit 4 vials x 20 tests and (1) 500 ng CSE vial	0.015	WPEK4-20015	\$206.00
	0.03	WPEK4-20003	\$206.00
	0.06	WPEK4-20006	\$206.00
	0.125	WPEK4-20125	\$206.00
	0.25	WPEK4-20025	\$206.00
PYROSTAR™ ES-F Multi Kit (5.2 mL)	Sensitivity EU/mL	Code	Price
200-test PYROSTAR™ kit 4 vials x 50 tests and (1) 500 ng CSE vial	0.015	WPEK4-50015	\$283.00
	0.03	WPEK4-50003	\$283.00
	0.06	WPEK4-50006	\$283.00
	0.125	WPEK4-50125	\$283.00
	0.25	WPEK4-50025	\$283.00
PYROSTAR™ ES-F Multi (2 mL)	Sensitivity EU/mL	Code	Price
20-test PYROSTAR™ vial x 100	0.015	WPEM-20015	\$3,075.00
	0.03	WPEM-20003	\$3,075.00
	0.06	WPEM-20006	\$3,075.00
	0.125	WPEM-20125	\$3,075.00
	0.25	WPEM-20025	\$3,075.00

PYROSTAR™ ES-F Multi (5.2 mL)		Sensitivity EU/mL	Code	Price
50-test PYROSTAR™ vial x 100		0.015	WPEM-50015	\$6,798.00
		0.03	WPEM-50003	\$6,798.00
		0.06	WPEM-50006	\$6,798.00
		0.125	WPEM-50125	\$6,798.00
		0.25	WPEM-50025	\$6,798.00
PYROSTAR™ ES-F Single Test		Sensitivity EU/mL	Code	Price
Single-test PYROSTAR™ kit (25 tests) KTA quantitative range [EU/mL] 0.001 to 10, and (1) 500 ng CSE vial		0.015	WPESK-0015	\$232.00
PYROSTAR™ ES-F/Plate (2 mL)		Sensitivity EU/mL	Code	Price
PYROSTAR™ ES KTA quantitative range [EU/mL] 0.001 to 10, and (1) 500 ng CSE vial		0.015	WPEPK4-20015	\$206.00
Limulus Color KY Test (colorimetric/chromogenic assay)			Code	Price
Color KY single-test kit 25 tests and (1) 500 ng CSE vial			291-53601-HS	\$550.00
Color KY kinetic kit 60 tests and (1) 500 ng CSE vial			291-53101-HS	\$594.00

Limulus PS Single Test

The Limulus PS Single Test is a kit composed of LAL endotoxin-specific reagent and an affinity resin suspension known as Pyrosep™, designed to overcome any product interference by adsorbing potential endotoxin in samples while washing away the inhibitory components.

Limulus PS Test	Packaging	Code	Price
Limulus PS single test	20-test kit	299-54501-HS	\$1,105.00
PS accessory kit	1 kit	294-33311-HS	\$210.00

Accessories

Endotoxin Extracting	Packaging	Code	Price
Endotoxin extracting solution	4 x 10 mL	293-51601-HS	\$169.00

Tube Reader Sterilized Consumables	Packaging	Code	Price
BioClean® tip Wako 200 II	200 µL x 100 pcs	291-35021	\$41.44
BioClean® tip Wako 1000 II	1,000 µL x 100 pcs	298-35031	\$44.08
BioClean® tip Wako extend S II	200 µL x 100 pcs	294-35011	\$71.75
Limulus test tube, sterile w/aluminum cap (12 x 75 mm)	80 pcs	292-32751	\$149.51
Limulus test tube, sterile (12 x 75 mm)	100 pcs	293-26551	\$112.20
Aluminum cap, sterile (14.7 x 18 mm)	100 pcs	293-28251	\$101.00
13 x 100 mm dilution tubes	50 tubes/box	DL-13100	\$40.80
BioClean® 96 well microplate <0.01 EU/mL	50/box	293-35221	\$255.00
Toximaster® QC7 MPR software package		298-35391	\$2,550.00
10 x 75 mm pyrogen-free gel clot reaction tubes	200 tubes/case	CT-1075	\$58.07
10 x 75 mm pyrogen-free gel clot reaction tubes with aluminum caps	50 sets/case	CT-1075C	\$27.68

Control Standard Endotoxin	Packaging	Code	Price
Control standard endotoxin, 500 ng	1 pack/6 vials	CSE4037-5006	\$27.68

Lysate Reagent Water	Packaging	Code	Price
Lysate reagent water, 30 mL	20 x 30 mL	LRW-2030	\$154.00
Lysate reagent water, 100 mL	12 x 100 mL	LRW-12100	\$114.00

With a global footprint, decades of experience, and a commitment to partnership, Charles River Microbial Solutions delivers state-of-the-art technologies with unmatched service and expertise.

For our General Terms and Conditions of Sale, please reference our dedicated web page here: www.criver.com/microbialgroupters



1.800.762.7016 | askcharlesriver@crl.com | www.criver.com

