BR-9272A

BECKMAN COULTER

In 0.88 seconds, we'll save you 6.5 hours.*

OPTIMA™ L-XP

ULTRACENTRIFUGE SYSTEM

A smarter ultracentrifuge. For smarter results.

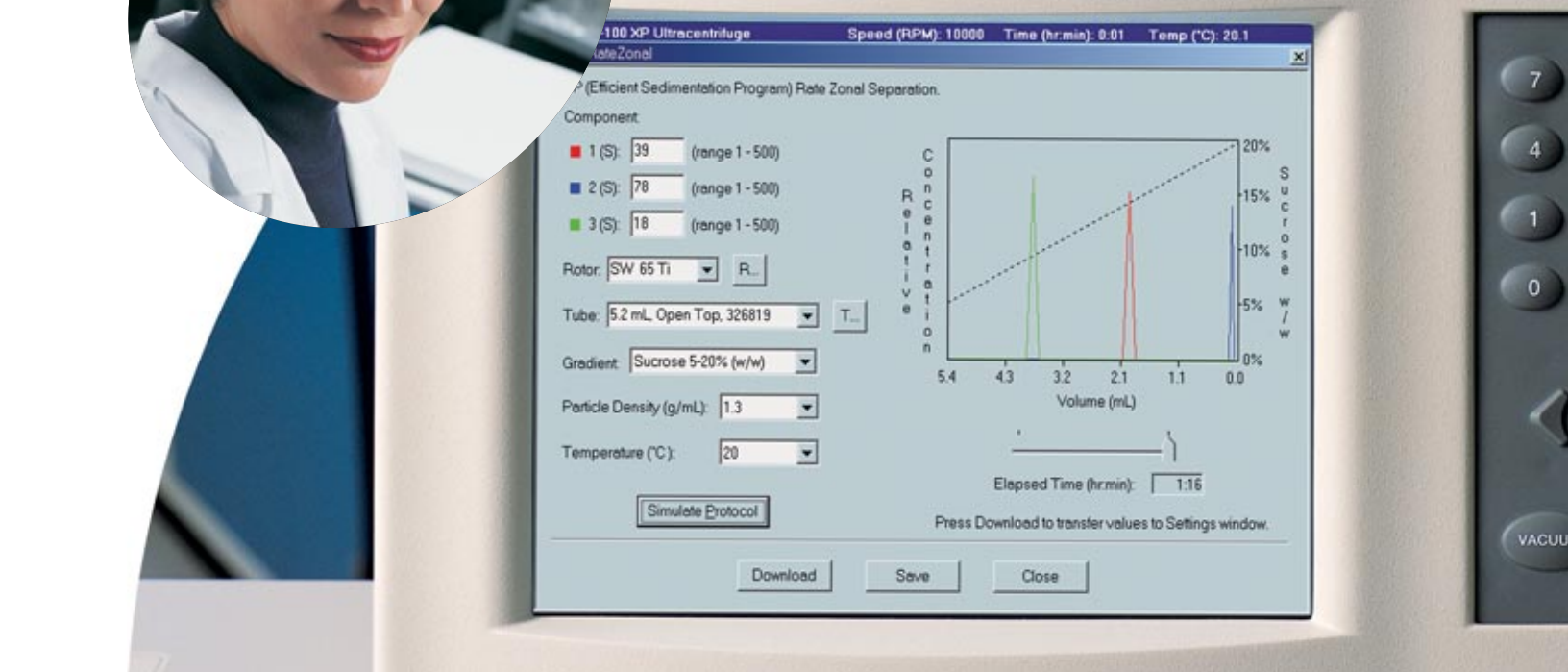
From the world leader in centrifugation comes the most "intelligent" ultracentrifuge system ever. Thanks to a sophisticated on-board computer, enhanced firmware, powerful Optima eXPert™ software and an easy-to-use touch screen, Optima L-XP delivers superior functionality, optimized user efficiencies, far greater capabilities and faster turnarounds than any other ultracentrifuge.

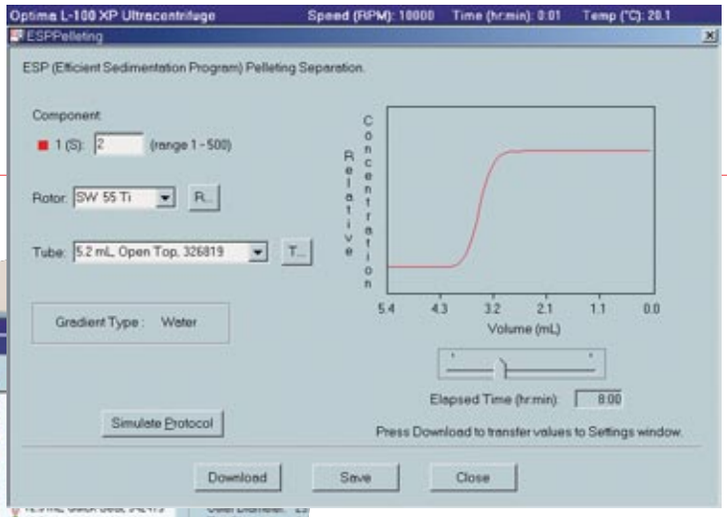
Put an eXPert in your lab.

The advanced Optima eXPert software provides unprecedented centrifugation capabilities, including:

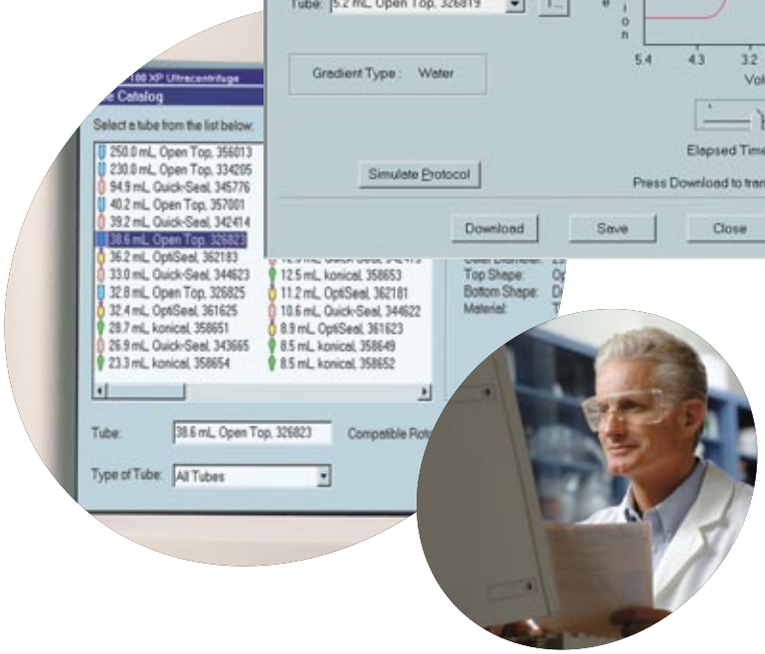
- *Optimized run methods*
- *Run simulation software*
- *Calculation tools*
- *Rotor and tube catalog*
- *Automatic run records*
- *Chemical resistance charts*

Run-time messages keep you constantly informed of key run conditions.





The Windows®-based capabilities of Optima L-XP deliver a simple user interface in a familiar format, allowing for direct access to centrifuge intelligence while standing in front of the instrument.

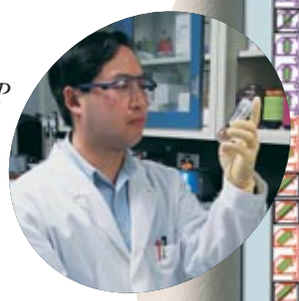


Tap into a new way of thinking.

At the touch of the screen, the Optima L-XP performs the advanced functions, conversions, complex simulations and calculations essential for developing or converting protocols. Simply download and run.

New intelligence went in. So new ideas will keep coming out.

Our expanded ESP™ (Efficient Sedimentation Program) simulation software assists you in developing the most efficient centrifugation methods, selecting the rotor and labware for a given application, then simulating the results before performing separations of proteins and sub-cellular particles. Plus, simulation run parameters can be stored for future recall.



The advanced intelligence built into Optima L-XP helps accelerate research by expediting your daily workflow, and letting you take on a wide range of centrifugation applications.

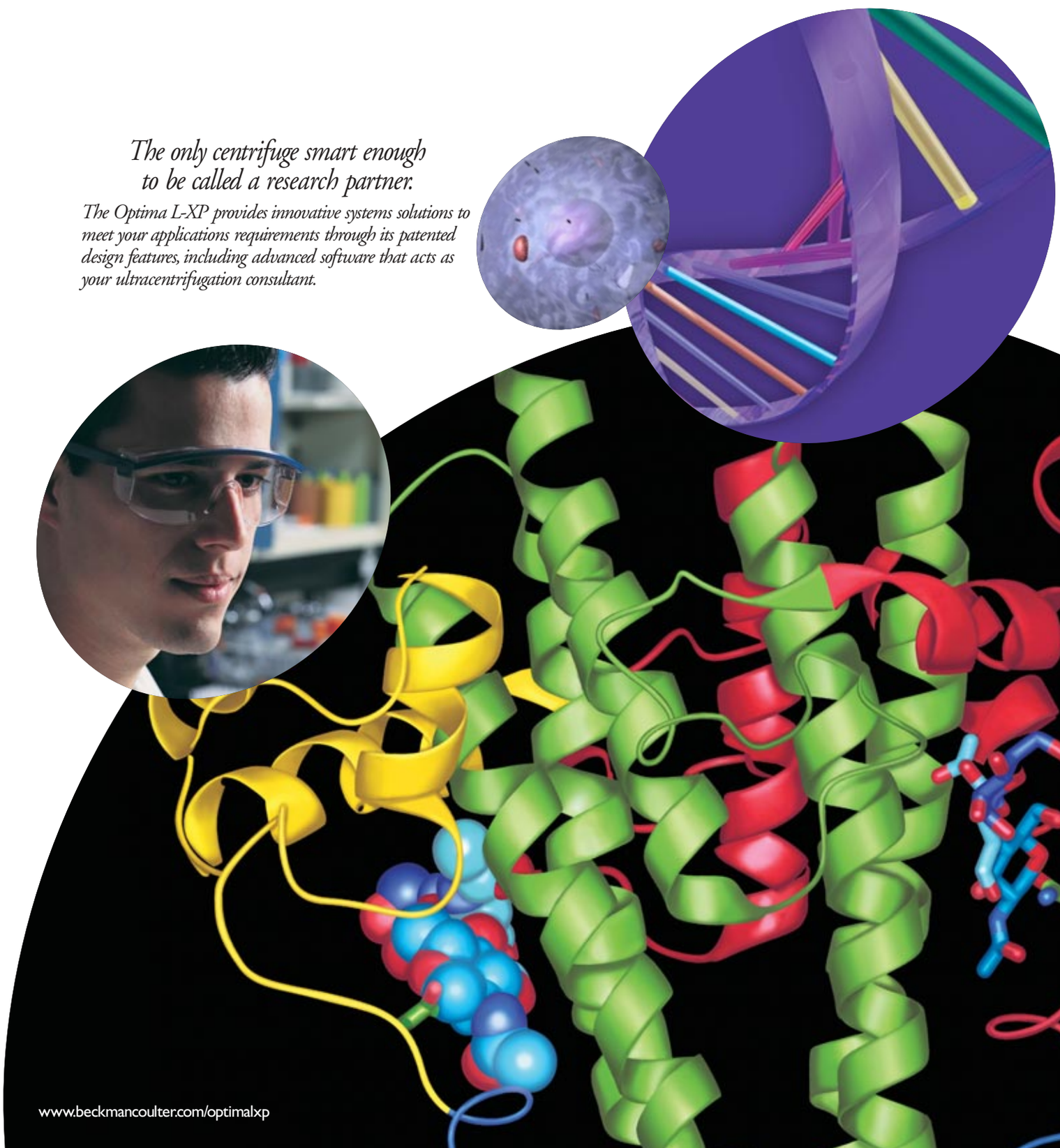
The eXPert software in Optima L-XP has features that calculate sedimentation coefficients, speed reductions for dense or precipitating solutions, concentration measures, pelleting times and rotor substitution parameters. And offers simulations of pelleting, rate zonal, and plasmid separations using patented methods, and more.

Helping the world of science turn faster than ever.

The exciting worlds of protein and genetic research, and cellular analysis are moving forward at extreme speeds. So it's critical that your scientific tools keep pace. That's why we designed the Optima L-XP with the industry's most advanced capabilities, intelligence and hardware. All to help you get an inside track into tomorrow's promising new breakthroughs.

The only centrifuge smart enough to be called a research partner.

The Optima L-XP provides innovative systems solutions to meet your applications requirements through its patented design features, including advanced software that acts as your ultracentrifugation consultant.



www.beckmancoulter.com/optimalxp

Ultracentrifuge Rotor Recommendations

Cytomics

Separation of subcellular particles and viruses	< Lowest to highest speed >			
Largest volume for pelleting	Type 45 Ti	Type 70 Ti	Type 100 Ti Type 90 Ti	
Fastest rate-zonal separation	SW 41 Ti	SW 55 Ti	SW 60 Ti	
Largest volume rate-zonal separation	SW 28	SW 32 Ti		

The right tool for the right job.

No matter what your application, our wide selection of rotors guarantees that you'll always get maximum performance.

Proteomics

Rate-zonal separation of proteins in sucrose gradient	< Lowest to highest speed >			
Largest volume	SW 28	SW 32 Ti	SW 60 Ti	
Greatest interband distance	SW 28.1*	SW 41 Ti*	SW 60 Ti*	SW 55 Ti*
	SW 32.1 Ti*			

*In order of greatest interband distance

Separation of lipoproteins	< Lowest to highest speed >			
Fastest differential flotation (D.F.)	Type 70.1 Ti	Type 90 Ti	Type 100 Ti	
Largest number of samples for D.F.	Type 42.2 Ti	Type 50.4 Ti		
Largest volume for D.F.	Type 50.2 Ti	Type 70 Ti	Type 90 Ti	
Greatest interband space (density)	SW 41 Ti	SW 55 Ti	SW 60 Ti	
Fastest density gradient separation	V Ti 50	V Ti 65.1	V Ti 90	
		V Ti 65.2		
	NVT 65	NVT 65.2	NVT 100	
			NVT 90	

Genomics

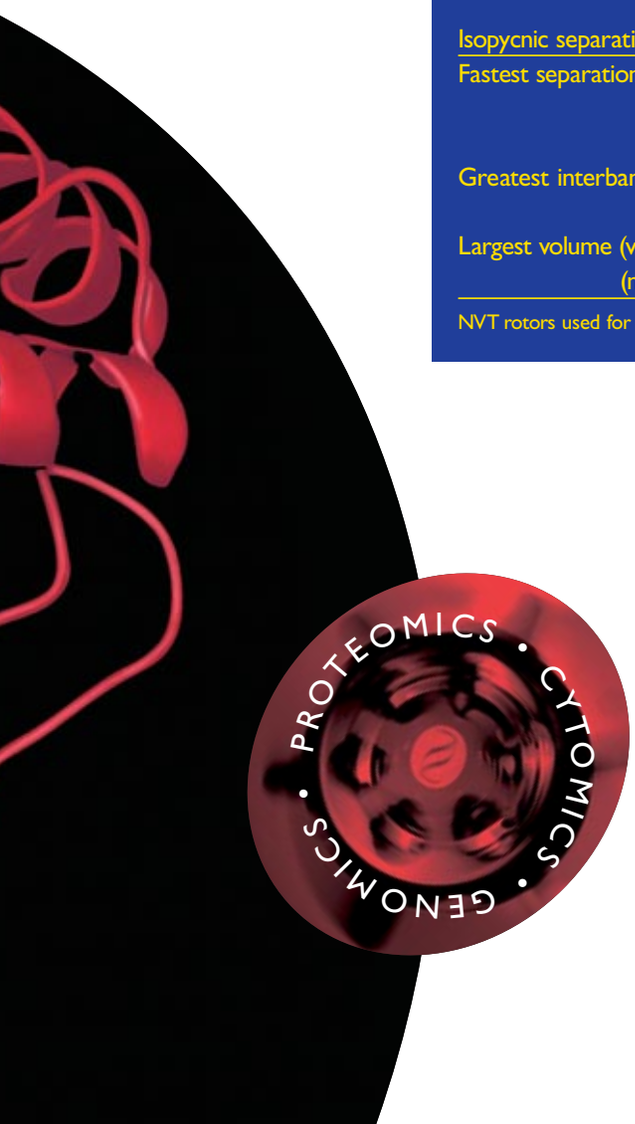
Pelleting RNA through a CsCl gradient	< Lowest to highest speed >			
Fastest separation	SW 41 Ti	SW 55 Ti	SW 60 Ti	
Largest volume	SW 28	SW 32 Ti		

Isopycnic separation of plasmid DNA	< Lowest to highest speed >			
Fastest separation (vertical)	V Ti 65.2		V Ti 90	
(near-vertical)	NVT 65	NVT 65.2	NVT 90	NVT 100
Greatest interband distance	Type 100 Ti*		Type 90 Ti*	
			Type 70.1 Ti*	
Largest volume (vertical & FA)	V Ti 50	VTi 65.1	Type 90 Ti	
(near-vertical)	NVT 65	NVT 65.2		

NVT rotors used for plasmid applications.

*In order of greatest interband distance

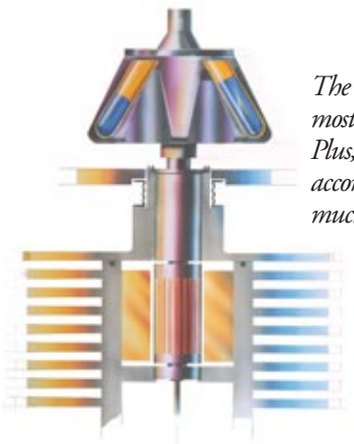
By serving as an extension of your thinking, Optima L-XP helps take your research further than ever before.



As activity intensifies in genetic and protein research–as well as drug discovery–scientists and researchers are increasingly demanding tools that accelerate the process. The efficiency and productivity of these researchers in unraveling the mystery of proteins and cells is greatly enhanced by our focus on systems solutions–Beckman Coulter's strategy of providing instrument systems and complementary products that simplify and automate laboratory processes throughout the biomedical testing world. By helping harness the power of genomics and proteomics, our Life Science tools are advancing the state of human health.

Putting a smart new spin on your research.

The innovative rotors, tubes and accessories we've built for the Optima L-XP are designed, manufactured and tested as a system from the inside out to make sure you get the highest quality of separation in the shortest possible time–safely and reliably.



Innovative drive technology.

The air-cooled, patented design of our drives delivers the most energy-efficient ultracentrifugation system ever made. Plus, the imbalance-tolerant Optima L-XP drive safely accommodates tubes that are under- or over-filled by as much as 10%. And its unique design allows "eye-balancing."

Top-loading SW 32 Ti rotor.

The increased efficiency of our SW 32 Ti series rotors can reduce run times, or they can be used as direct substitutes for SW 28 and SW 28.1 rotors. The top-loading design of the SW 32 Ti series rotors provides improved performance and ease-of-use for subcellular separations.

The Optima L-XP is environmentally-friendly, meeting today's CFC-free specifications.

It's thinking ahead. At 100,000 rpm.

Optima L-XP utilizes the most advanced materials and technology to achieve the high performance needed for extending the boundaries of proteomics and genomics.

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Innovative near-vertical tube (NVT™) rotors.

With a slight angle that positions contaminants away from the bands of interest, our patented NVT rotors deliver the highest purity in the shortest possible time. All of which makes them ideal for nucleic acid isolations.

One-touch sealing.

The design of our OptiSeal™ System has an easy-fill mouth and delivers fast, reliable sealing without difficult or time-consuming tools, heat, or closure verification. Just insert the plug and press into place, and the centrifugation process itself provides guaranteed protection for your samples.

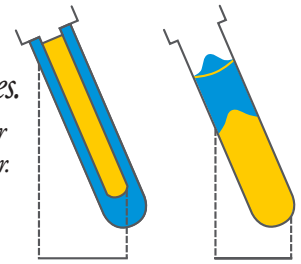
The best place for your samples.

Since they're specially designed for innovative application solutions, our patented tubes deliver improved efficiencies, including:

- *konical™ seal for the most concentrated pellet*
- *Quick-Seal® for biocontainment*
- *g-Max™ for the greatest volume efficiency*
- *OptiSeal™ for the easiest sealing*

Maximize performance with g-Max™ tubes.

Our patented g-Max tubes adapt small samples to larger rotors without sacrificing the maximum force of the rotor. The resulting lower k factors produce shorter separation times by up to 50 percent.



Path length with conventional adapter

Shorter path length with g-Max system

Service and support.

Our highly-trained customer support technicians help you get the most out of your Optima L-XP. And our Field Rotor Inspection Program brings Beckman Coulter specialists to your site for regular service and inspection. Plus, all servicing is made quick and easy by Optima's easy-access front panel.

The Optima L-XP is one important part of a broad continuum of Beckman Coulter products, including automated liquid handling, capillary electrophoresis, centrifugation and ultracentrifugation, chromatography data systems, DNA sequencing, electrochemistry, HPLC, integrated core systems, laboratory data management, scintillation counting, and spectrophotometry.

*Based on a representative rate zonal simulation with a SW 32 Ti rotor. †All trademarks are the property of their respective owners.

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BECKMAN COULTER™

Innovate SIMPLIFY Automate

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B2002-5239-DP-20K

Printed in U.S.A. on recycled paper.