



FastPrep® Instruments

Bead Beating Instruments for Sample Preparation

Grind, Homogenize and Lyse Any Sample in 40 Seconds or Less.



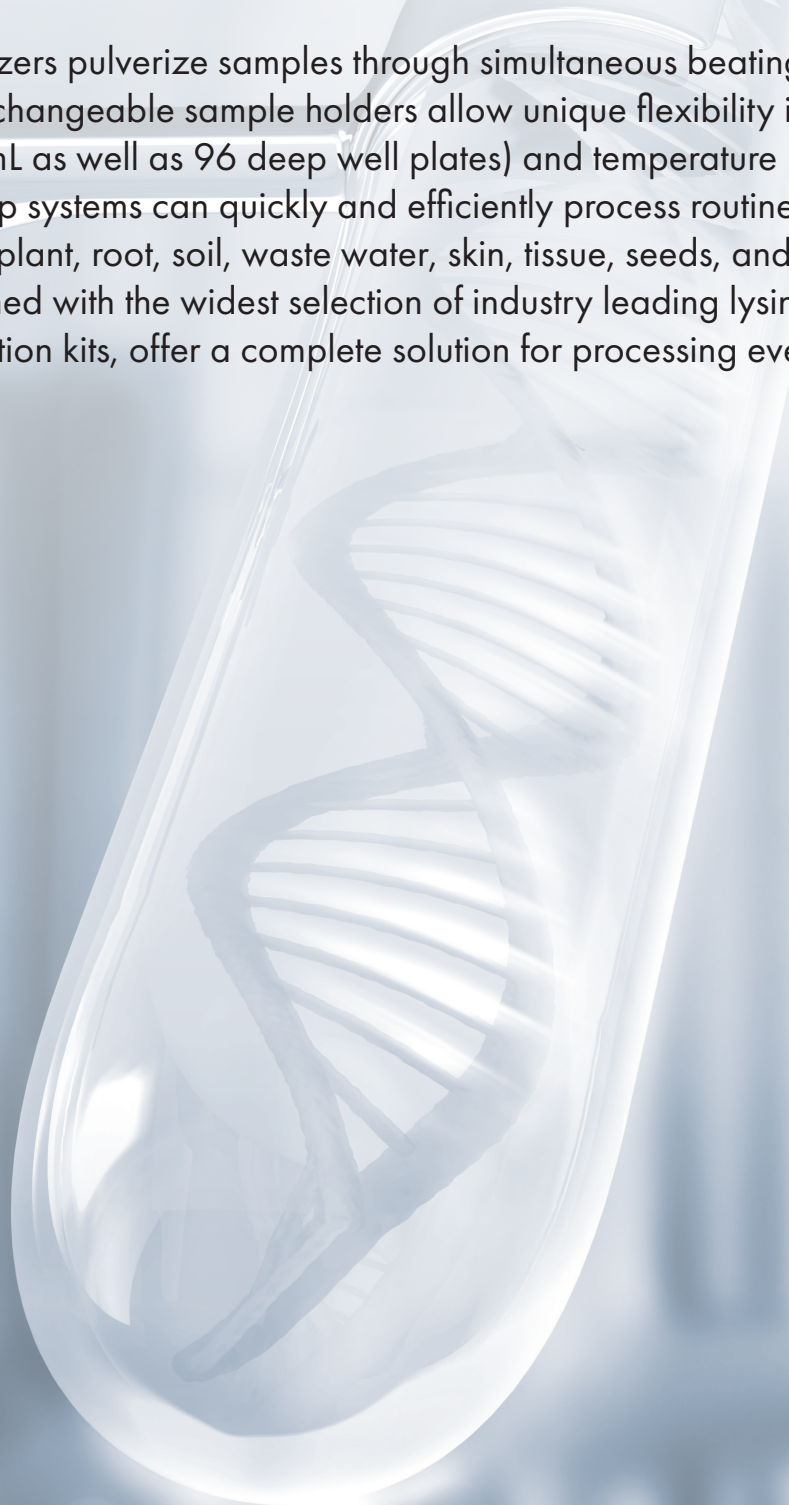
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FastPrep Bead Beating Systems.

The most advanced grinding solution tailored for any extraction or isolation application.

MP Bio, the leader in sample grinding, provides a complete range of high quality products for all steps of your research experiments. From lysis and extraction through purification of DNA, RNA and proteins, we offer the best solutions to achieve excellent and reliable results for your applications. FastPrep systems deliver high yields of DNA, RNA and protein from even the most resistant sample types in 40 seconds or less.

FastPrep homogenizers pulverize samples through simultaneous beating of specialized lysing matrix beads. Interchangeable sample holders allow unique flexibility in terms of sample size (2 mL to 250 mL as well as 96 deep well plates) and temperature (ambient or cryogenic conditions). FastPrep systems can quickly and efficiently process routine and resistant samples, including plant, root, soil, waste water, skin, tissue, seeds, and feces. FastPrep instruments, combined with the widest selection of industry leading lysing matrix materials and complete isolation kits, offer a complete solution for processing even the most difficult samples.



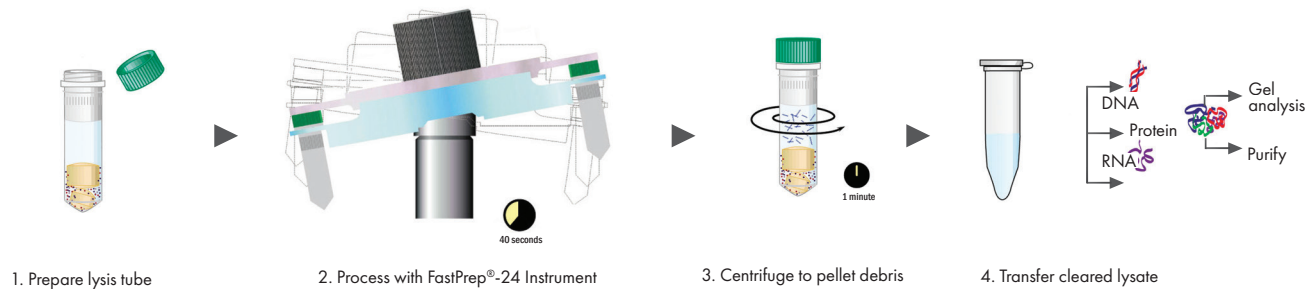
Grind, Homogenize and Lyse Any Sample in 40 Seconds or Less

FastPrep-24™

- Consistent results
 - Dependable
 - Reliable
 - Flexible
 - Affordable
 - 8500 Citations
 - Higher Yields
 - Power to homogenize resistant samples with ease
- Interchangeable sample holders for flexibility in sample size and cryogenic lysis capability: 24 x 2 mL, 48 x 2 mL, 24 x 4.5 mL, 6 x 15 mL, 12 x 15 mL, or 2 x 50 mL
 - High reproducibility with precise setting of lysis time and speed
 - Eliminate cross contamination with single-use lysing matrix tubes
 - Save up to 5 pre-set speed/time parameters
 - Complete purification kits with Lysing Matrix Tubes included



FastPrep-24™ Classic Workflow



Specifications	
Time	1-60 seconds in 1 second increments
Speed	4.0 - 6.5 m/sec in 0.5 m/sec increments
Acceleration	<2 seconds to max speed
Deceleration	<2 seconds to stop
Standard temperature operating range	4-40 °C (39-104 °F)
Dimensions	Height - 270 mm, Oval Base - 425 x 330 mm
Weight	17.5 kg (45 lb)
Power requirements	90-250 V AC, 50/60 Hz, 1,200 W
Product Name	Cat. No.
FastPrep-24™ Instrument	116004500

FastPrep-24[™] 5G

Most Advanced Grinding System
Applicable for Genomics, Proteomics,
Lipogenics or Chemical Studies and
Analysis.



MOST VERSATILE
Often Imitated,
Never Replicated

The FastPrep-24 5G instrument is a versatile sample disruption device giving the ultimate in speed and performance for the lysis of biological or inorganic samples.

A completely self-contained system, the FastPrep-24 5G Instrument eliminates the risk of cross-contamination and time-consuming clean-up associated with manual lysis methods.

Samples and buffers are simply added to a Lysing Matrix tube containing specialized Lysing Matrix beads. The homogenization speed and duration times are manually programmed using a touchscreen visual display. After setting your speed and time just push run, and in less than a minute your samples are completely lysed.

Specifications

Interface	Touch Screen Interface
Programmable Assays	12 Programmable Assay Locations
Pre-Defined Assays	73 Pre-Defined and Optimized Assay Programs
Time Range	1 to 120 seconds in 1 second Increments
Speed Range	4 to 10 m/sec in 0.5 m/sec Increments
Cycles	1 to 9 Cycles
Pause Time	1 to 300 Second Pause Between Cycles in 1 Second Increments (Default: 300 Seonds)
Data Export	Via USB
Acceleration	< 2 Seconds to Maimum Speed
Deceleration	< 2 Seconds to Stop
Dimensions	Height: 490 mm; Base: 472 mm x 385 mm (Eliptic Shape)
Weight	23.6 kg (52 lb)
Power Requirement	120 VAC/60Hz, 500W; 230 VAC/50 Hz, 500 W
Maximum Sound Level	< 70 dB

The heartbeat of the 5G is a microprocessor control interfaced to a touch screen display. The large, 7-inch HD monitor allows assay parameters to be set with the touch of a button. Hi-def graphics and intuitive software make programming the 5G fast and simple, while high-tech exterior graphics add to the sleek and sophisticated design of the instrument.

Product Name

FastPrep-24[™] 5G Instrument

Cat. No.

116005500

FastPrep-96™

Grinding, Lysis and Homogenization with the High-Throughput FastPrep-96™ System

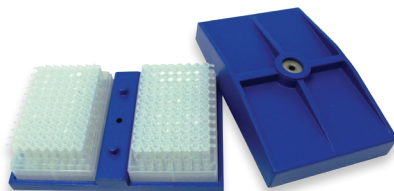
The FastPrep-96 system delivers high-throughput sample homogenization, grinding and lysis with the highest efficiency, quality and reproducibility. Perform your DNA, RNA, protein and small molecule extractions from the most difficult, dirty, tough, large or tiny samples. With the highest power settings available, FastPrep-96 utilizes high-speed linear motion to disrupt any tissues or cells thoroughly through the simultaneous beating of specialized lysing matrix particles.

The Ultimate in High-Throughput Sample Preparation

- High Throughput - Process up to 192 samples simultaneously in 2 x 96 deep well plates (included)
- Exceptional Versatility - Interchangeable sample holders available: 96 x 2 mL tubes, 48 x 4.5 mL tubes, 24 x 15 mL tubes, 8 x 50 mL tubes, and 2 x 250 mL flasks
- Fast Processing Speed - 1800 Oscillations/min
- True Linear Motion - Eliminates the need to re-orient plates mid-cycle

Efficiently Lyse:

- Human and animal tissues, tumors, bones, cells in culture
- Bacteria (gram + or -)
- Yeast, fungi, spores
- Plants, seeds, roots, leaves
- Feces, soil, sediment
- Food samples



2 x 96 well plate sample holder included with instrument



Specifications

Controls	Programmable run time and speed; display readout
Time Range	1-360 seconds; 1-60 seconds in 1 second increments 60 - 360 seconds in 30 second increments
Speed Range	800 - 1800 revolutions per minute (rpm) Programmable in 200 RPM increments
Acceleration	<2 seconds to maximum speed
Deceleration	<2 seconds to stop
Weight	49 kg (108 lb)
Power Requirement	110 VAC/60Hz, 5.2 A
Over voltage Category II	220 VAC/50Hz, 2.6A
Operating range	2-48 °C (35-100 °F) / 30-55% Humidity
Dimensions	44 cm wide x 66 cm deep x 70 cm high

Product Name

FastPrep-96™ Instrument (includes 2 x 96 well plate sample holder)

Cat. No.

116010500

Super FastPrep-2™

Powerful, Portable, Sample Lysis at your Fingertips

FastPrep technology is now available in a lightweight, compact, hand-held format. An innovation in the sample lysis industry, the Super FastPrep-2™ is a portable, omni-directional bead beating system with a unique, patent-pending balanced crankshaft-slider mechanism.

When compared to traditional homogenization methods such as vortexing, ultrasonication, rotor-stator homogenizers, grinding with a mortar and pestle, or chemical or enzymatic lysis, the Super FastPrep-2 will save hours of work. Lyse any tough or frozen sample in 5 seconds while still maintaining high yields of intact DNA, RNA and proteins.

A completely self-contained system, Super FastPrep-2 eliminates the risk of cross-contamination and time-consuming clean-up associated with manual lysis methods. Simply add sample and buffers to the Lysing Matrix tube containing specialized beads specific for your application. The ergonomic design ensures ease in loading sample tubes, which remain securely sealed during processing.

Specifications	
Disruption Principle	Bead Beating
Power Requirements	90-240V for Lab Version, Cordless Operation for Field Version
Overall Length	13"
Overall Width	3.4"
Overall Height	4.6"
Weight	2.2 kg
Number of Tubes per Run	2
Size of Tube	Std 2 mL (screw cap), Skirted or Non-Skirted
Maximum Speed	4,900 rpm (AC powered) 4,400 cpm (Chordless)
Minimum Speed	1,000 cpm (AC powered) 500 cpm (Chordless)
Type of Motion	Reciprocating
Peak to Peak Amplitude of Motion	1.5"
Peak Acceleration	Up to 500 G
Sound at 1ft.	100 dB at 4,900 cpm 90 dB at 3,300
Typical Run Time	2-15 seconds at 3,300 cpm



Lyse your samples in 5 Seconds

- Omnidirectional motion with the highest speed
- Handheld system for lab and field use
- Uses standard 2 mL screw cap tubes for lysis
- Compatible with all FastPrep 2 mL Lysing Matrix tubes

Product Name	Cat. No.
Super FastPrep-2	116012500

FastPrep - 24™ Sample Holders

FastPrep - 96 Sample Holders

Product Name	Tube Capacity	Cat. No.	
QuickPrep™ Sample Holder	24 x 2 mL tubes (included with FastPrep-24™ and FastPrep-24™ 5G Instrument)	116002512	
TeenPrep™ Sample Holder	12 x 15 mL tubes	116002526	
BigPrep™ Sample Holder	2 x 50 mL tubes	116002525	
Metal BigPrep™ Sample Holder	2 x 50 mL tubes (Autoclavable sample holders)	116002547	
Metal QuickPrep™ Sample Holder	24 x 2 mL tubes (Autoclavable sample holders)	116002545	
HiPrep™ Sample Holder	48 x 2 mL tubes	116002527	
Metal TeenPrep™ Sample Holder	12 x 15 mL tubes (Autoclavable sample holders)	116002546	
CoolPrep™ Sample Holder	24 x 2 mL tubes under cryogenic conditions	116002528	
TallPrep™ Sample Holder	24 x 4.5 mL tubes	116002540	
CoolTeenPrep™ Sample Holder	6 x 15 mL tubes under cryogenic conditions	116002530	
CoolBigPrep™ Sample Holder	2 x 50 mL tubes under cryogenic conditions	116002531	
BigFlex™ Sample Holder	80 x 50 mL	116010550	
TeenFlex™ Sample Holder	24 x 15 mL	116010560	
QuickFlex™ Sample Holder	96 x 2 mL	116010570	
TallFlex™ Sample Holder	48 x 4.5 mL	116010580	
LargeFlex™ Sample Holder	1 x 250 mL	116010590	
ConeFlex™ Sample Holder	Adapter	116010595	



Our Products. Your Answers.

- Apoptosis
- Cell Biology
- Culture Growth Media
- FastPrep[®] Sample Prep
- Immunology
- Molecular Biology
- Adsorbents
- Biochemicals
- Fine Chemicals
- Labware
- Radiochemicals
- Research Diets
- SafTestTM Food Quality
- Diagnostics
- Drugs of Abuse
- Infectious Disease
- EIA/RIA

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