



# FastPrep<sup>®</sup> System

A Complete Solution for Your Sample Preparation



Higher Yields



Consistent Quality



Super Fast



The Ultimate Grinding and Cell Lysis Technology Delivering the Most DNA, RNA and Proteins from Any Sample Type in Just Seconds!

*Fast and easy, everytime.*

[www.mpbio.com](http://www.mpbio.com)



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# Sample Preparation

## Presentation & Workflow

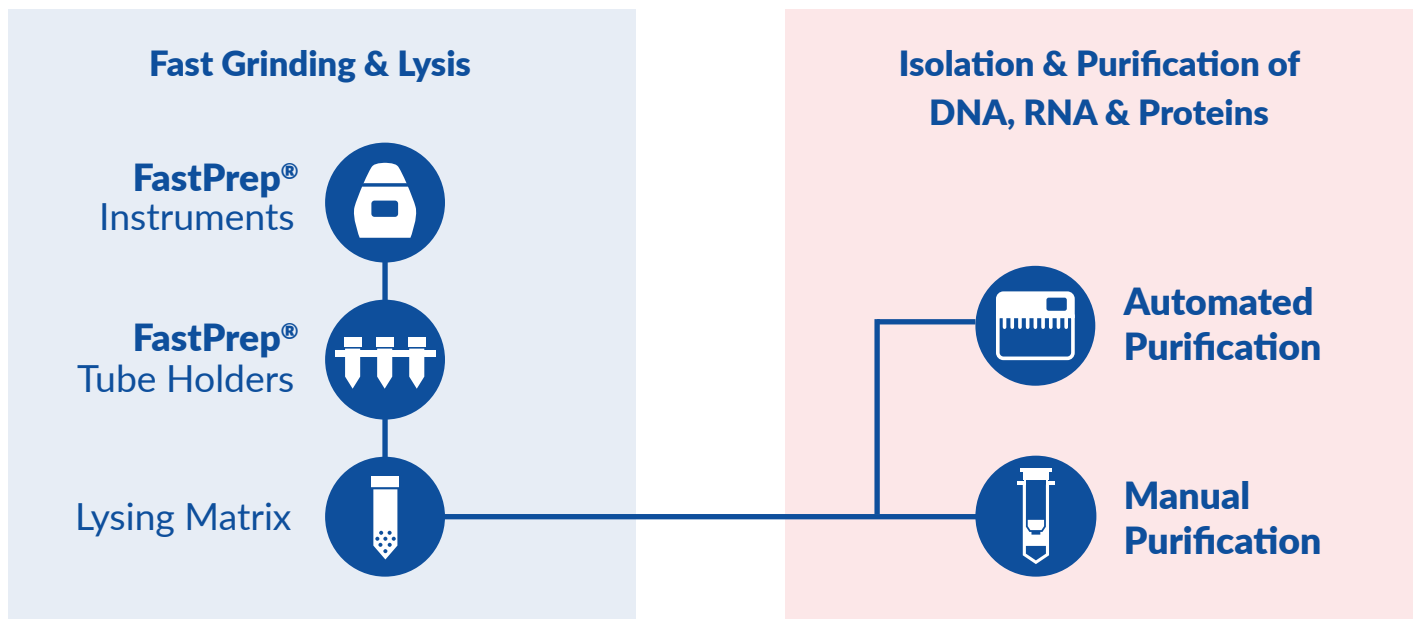
MP Biomedicals, the leader in sample preparation for more than 25 years provides a complete range of high-quality products for all steps of your research experiments. From lysis and extraction through purification of DNA, RNA, and proteins, we offer the best solutions to achieve excellent and reliable results for your applications.

### MP Biomedicals: Dependability Delivered

MP Biomedicals offers a complete sample preparation solution with FastPrep® instruments, Lysing Matrix tubes and extraction kits. Utilizing bead-beating technology, the FastPrep® system provides complete lysis of virtually any sample type and is suitable for a variety of applications from soil analysis to forensics. Mechanical sample homogenization with the FastPrep® system enables the isolation of DNA, RNA, proteins, and other small molecules while eliminating the need for chemicals or enzymes, which can inhibit downstream processes.



### Our Workflow



FastPrep® homogenizers pulverize samples through simultaneous beating of specialized Lysing Matrix beads. Interchangeable sample holders allow unique flexibility in terms of tube 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.



# Sample Preparation

## Protocol

MP Biomedicals, the leader in sample preparation, 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 proteins from even the most resistant sample types in 40 seconds or less.

## MP Biomedicals: Dependability Delivered

FastPrep® instruments, Lysing Matrix tubes, and kits work together to deliver rapid, consistent, and efficient lysis and homogenization, resulting in high yields of purified nucleic acid or protein. A benchtop instrument utilizing bead-beating technology, the FastPrep® provides complete and quantitative lysis of difficult and routine samples and is suitable in all applications that require grinding, lysing, or homogenization.

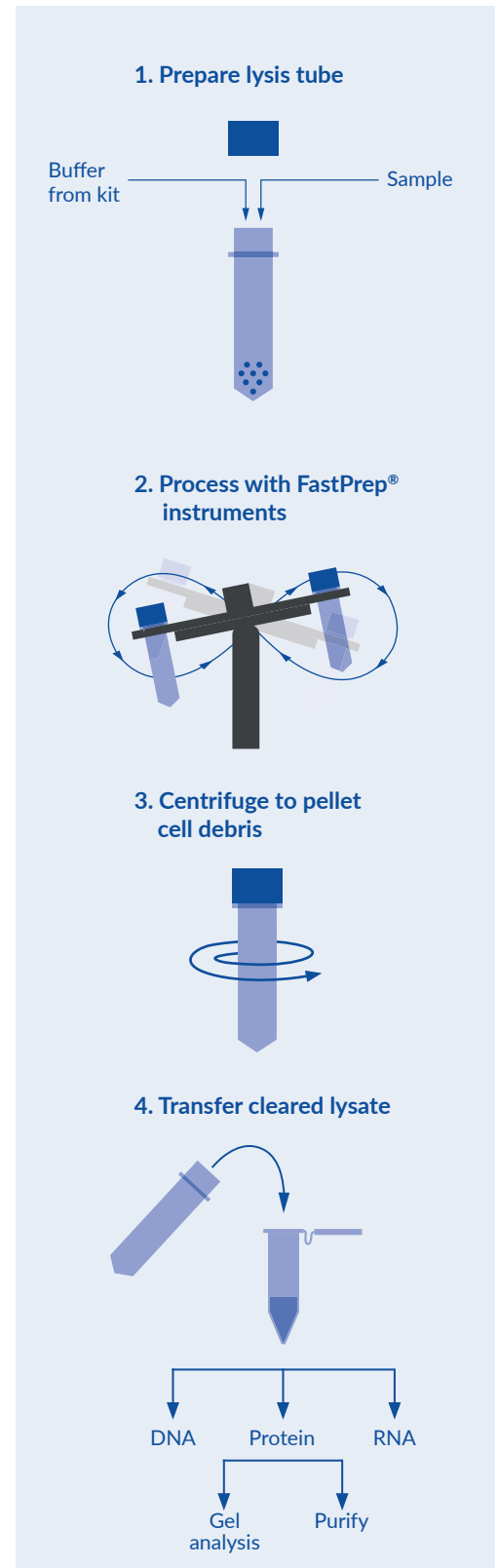
### Examples of sample types include, but are not limited to:

- Plant** – Stems, roots, leaves, buds, flowers, fruits, and seeds
- Animal** – Animal and human samples, including bone, tumors, and skin
- Soil** – Eubacterial spores and endospores, gram-positive bacteria, yeast, algae, nematodes, fungi, clay, sandy, silty, peaty, chalky, and loamy soil samples
- Bacteria** – Gram-positive, gram-negative, eubacterial spores, and endospores
- Feces** – Complex fecal matrices
- Yeast** – Cells and spores

MP Biomedicals offers genomic DNA and total RNA extraction and purification kits and reagents that are optimized to provide maximum yield, purity and integrity from any sample.

### MP Biomedicals extraction and purification kits offer the following benefits:

- Rapid and reproducible sample lysis and purification.
- Closed Lysing Matrix tubes to prevent cross-contamination.
- Increased yields of high-quality DNA and RNA.
- Integrity and size of DNA and RNA are retained.
- Ready-to-use nucleic acids for downstream applications.





# FastPrep® Instruments

Crush, Homogenize, Lyse Efficiently. Nothing Resists FastPrep®



Plants



Animals



Soil



Yeast



Bacteria



Feces



**Super FastPrep-2®**  
Cat. N°: 116012500



**FastPrep-24® Classic**  
Cat. N°: 116004500



**FastPrep-24® 5G**  
Cat. N°: 116005500



**FastPrep-96®**  
Cat. N°: 116010500

Low Throughput /  
Low volumes

High-Throughput /  
High volumes

The FastPrep® family is a comprehensive laboratory solution that optimizes the lysis, grinding, or homogenization process from virtually any sample type. Mechanical lysis disrupts cells and tissues for the isolation of DNA, RNA, proteins, metabolites, and other small molecules, and eliminates the need for chemicals, enzymes, and detergents, which can inhibit some downstream processes.



# FastPrep® Instruments

Find the Right Model

Achieve complete lysis of virtually any sample type with FastPrep® instruments. Known for consistent performance that generates reproducible results, the FastPrep® bead beating system is carefully engineered to maximize mechanical tissue homogenization. As a result, you can efficiently isolate high-quality DNA, RNA, and proteins without the need for chemicals or enzymes, which might inhibit downstream processes.



	<b>Super FastPrep-2®</b> Cat. N°: 116012500	<b>FastPrep-24® Classic</b> Cat. N°: 116004500	<b>FastPrep-24® 5G</b> Cat. N°: 116005500	<b>FastPrep-96®</b> Cat. N°: 116010500
Description	High-Performance, Handheld Field Grinding System	Bench-Top Bead Beating System	Advanced Bench-Top Bead Beating System	High-Throughput, High-Performance Bead Beating System
Sample capacity	2	Up to 48	Up to 48	Up to 192
Adapters	No	Interchangeable	Interchangeable	Interchangeable
Tube Compatibility	2 mL	2 mL, 4.5 mL, 5 mL, 15 mL, 50 mL	2 mL, 4.5 mL, 5mL, 15 mL, 50 mL	2 mL, 4.5 mL, 15 mL, 50 mL, 96 plate, 250 mL
Cryogenic Lysis	No	Yes	Yes	Yes with cryo adapters
Interface	Manual-button	LCD/Membrane keyboard	Touch Screen	VFD/Industrial buttons
Pre-Defined Protocols	No	No	72	No
User Defined Protocols	No	5	12	No
Min Speed	600 CPM*	4.0 m/s	4.0 m/s	800 RPM**
Max Speed	4,800 CPM*	6.5 m/s	10.0 m/s	1,800 RPM**
Acceleration	Ø 500 G	< 2 sec to max	< 2 sec to max	< 2 sec to max
Deceleration	NA	< 2 sec to stop	< 2 sec to stop	< 2 sec to stop
Motion	Reciprocating	Figure 8 Tridimensional	Figure 8 Tridimensional	Linear Vertical
Typical Lysis Time (s)	5 s	40 s	20 s	40 s
Dimensions	117 mm (H) x 86 mm (W) x 330 mm (L)	465 mm (H) x 332 mm (W) x 437 mm (L)	490 mm (H) x 385 mm (W) x 472 mm (L)	700 mm (H) x 440 mm (W) x 660 mm (L)
Weight	2.2 kg	17.5 kg (45 lb)	23.6 kg (52 lb)	49 kg (108 lb)
Loudness	< 90 dB	70 dB	< 70 dB	< 65 dB
Power Requirements	90 - 240 V for battery charger, cordless operation	110 VAC/60 Hz; 230 VAC/50 Hz, 500 W	110 VAC/60 Hz; 230 VAC/50 Hz, 500 W	110 VAC/60 Hz, 5.2A; 220 VAC/50 Hz, 2.6A
110/230V Switch	Battery Loader Spec	Automatic	Automatic	Reversible Manually

\* CPM Cycle Per Minute; \*\* RPM Revolution Per Minute

The FastPrep® instruments are versatile sample disruption and grinding devices that provides the ultimate in speed and performance for the lysis and homogenizing of biological or crushing of inorganic samples.



Most Advanced Lysis, Homogenization, and Grinding System Applicable for Genomics, Proteomics, or Other Chemical Studies and Analysis.

The FastPrep-24<sup>®</sup> 5G instrument is a versatile sample disruption device that provides the ultimate in speed and performance for the lysis of biological or grinding of inorganic samples.

A completely self-contained system, the FastPrep-24<sup>®</sup> 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 particles. Select your sample type from the recommended programs menu, push run, and in 40 seconds or less, your samples are completely lysed. The FastPrep-24<sup>®</sup> 5G also allows for up to 12 custom assays to be manually programmed and saved.



QuickPrep™ 3 tube holder included.  
Capacity: 24 x 2 mL.

Cat. N°: 116005500

## Specifications

Interface	Touch Screen Interface
Programmable Assays	Up to 12 Manual Assays Saved to Memory
Pre-Defined Assay	72 Pre-Defined and Optimized Assay Programs
Run Time	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
Temperature Operating Range	2 to 48 °C (35 to 118 °F)
Data Export	Via USB Cable
Dimensions	Height: 490 mm; Base: 385 mm (W) x 472 mm (L) (Elliptic Shape)
Weight	23.6 kg (52 lb)
Power Requirement	110 VAC/60 Hz; 230 VAC/50 Hz, 500 W

The heartbeat of the FastPrep-24<sup>®</sup> 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 FastPrep-24<sup>®</sup> 5G fast and simple, while high-tech exterior graphics add to the sleek and sophisticated design of the instrument.

- ▶ **Powerful:** Thorough grinding of most difficult samples in just a few seconds.
- ▶ **Intuitive:** Interactive user-friendly interface and touchscreen with more than 60 pre-programmed protocols.
- ▶ **Complete:** High number of ready-to-use Lysing Matrix tubes and a wide range of purification kits for DNA, RNA, and proteins.
- ▶ **Flexible:** Easily interchangeable adapters to process any sample size (2 mL, 4.5 mL, 5 mL, 15 mL or 50 mL tubes) at cryogenic or room temperature.



# FastPrep-24<sup>®</sup> Classic

Bench-Top Bead Beating Lysis System

Grind, homogenize, and lyse any sample in 40 seconds or less.

The FastPrep-24<sup>®</sup> Classic instrument is a high-speed benchtop homogenizer offering the ultimate in speed and performance for the lysis of biological samples. Simultaneous homogenization of up to 24 samples takes place within 40 seconds.

Cat. N°: 116004500

- Consistent results
- Reliable
- Flexible
- Affordable
- 8,500 citations
- High 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 • 16 x 5 mL • 6 x 15 mL • 12 x 15 mL • 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 available

## Specifications

Run 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 Maximum Speed
Deceleration	< 2 Seconds to Stop
Temperature Operating Range	5 - 35 °C (41 - 95 °F)
Dimensions	Height: 465 mm, Oval Base: 332 mm (W) x 437 mm (L)
Weight	17.9 kg (45 lb)
Power Requirements	110/230 VAC, 50/60 Hz, 500 W





# FastPrep-96<sup>®</sup>

## High-Throughput Bead Beating Grinder and Lysis System

Grinding, lysis, and homogenization with the high-throughput FastPrep-96<sup>®</sup> system.

MP Biomedicals FastPrep-96<sup>®</sup> is a versatile high-speed homogenizer offering the ultimate in high-throughput sample preparation.

Developed for resistant samples, the FastPrep-96<sup>®</sup> instrument uses a high-speed linear motion to disrupt thoroughly any tissues and cells in just seconds through the simultaneous beating of specialized Lysing Matrix beads on the sample material.

This high-performance system saves hours of work during the sample preparation stage and allows for the purification of high yields of intact DNA, RNA, proteins, and other metabolites.



Cat. N<sup>o</sup>: 116010500



Dual Plate tube holder included. Capacity: 2 x 96 deep well plates.

## High-Throughput Bead Beating Grinder and Lysis System

- **High-Throughput** – Process up to 192 samples simultaneously in 2 x 96 deep well plates
- **Exceptional Versatility** – Interchangeable sample holders available: 96 x 2 mL tubes • 48 x 4.5 mL tubes • 20 x 15 mL tubes • 8 x 50 mL tubes • 2 x 250 mL bottles
- **Fast Processing Speed** – up to 1,800 Oscillations/min
- **True Linear Motion** – Eliminates the need to re-orient plates mid-cycle

### Efficiently Lyse:



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	Speed Range 800 - 1,800 Revolutions Per Minutes (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/60 Hz, 5.2 A
Overvoltage Category II	220 VAC/50 Hz, 2.6 A
Temperature Operating Range	2 - 48 °C (36 - 118 °F)
Dimensions	Height: 700 mm; Base: 440 mm (W) x 660 mm (L)



# SuperFastPrep-2<sup>®</sup>

High-Performance, Handheld Field Lysis System

Lysis, homogenization, and grinding at your fingertips.

The SuperFastPrep2<sup>®</sup> is a compact, cordless, hand-held sample disruption instrument designed to quickly and efficiently homogenize, grind, or lyse biological and environmental samples. It can be used at remote locations and in most weather conditions for the immediate collection, processing, and preservation of samples.

SuperFastPrep-2<sup>®</sup> uses a unique mechanism mounted on a rotary tool designed to operate at 600 to 4,800 cycles per minute with a fully charged battery. The self-contained device holds two standard 2 mL screw cap Lysing Matrix tubes optimized for a wide selection of sample types. Included with the unit: a rotary handle, two lithium-ion rechargeable batteries, a charging station, a voltage converter, and a protective carrying case.



Cat. N°: 116012500

- Omni-directional motion with the highest speed.
- Handheld system for lab and field use.
- Compatible with all FastPrep<sup>®</sup> 2 mL Lysing Matrix tubes.

## Specifications

Power Requirements	90 - 240 V for Battery Charger, Cordless Operation
Dimensions	117 mm (H), 86 mm (W), 330 mm (L)
Weight	2.2 kg
Number of Tubes per Run	2
Size of Tube	2 mL Tubes
Maximum Speed	4,800 Cycles Per Minute (CPM)
Minimum Speed	600 Cycles Per Minutes (CPM)
Type of Motion	Reciprocating
Peak-to-Peak Amplitude of Motion	38 mm
Sound at 1ft.	90 dB at 3,300 CPM
Typical Run Time	2 - 15 seconds at 3,300 CPM



# FastPrep<sup>®</sup> Tube Holders

Tube Holders for FastPrep<sup>®</sup> Systems are Flexible, Interchangeable, and Available for Ambient, Cryogenic or Infectious Sample Types



Ambient Temperature



Cryogenic Temperature



Metal



High volumes



Standard tube holders for ambient temperature work



Cryogenic tube holders for temperature sensitive sample



Metal tube holders - sterilizable











High capacity tube holders for large sample volume

MP Biomedicals offers the widest selection of tube holders to best meet your needs in sample preparation. Our tube holders allow for sample sizes ranging from 2 mL to 250 mL tube size and are built for durability in ambient and cryogenic conditions.



# FastPrep® Tube Holders

Adapter for FastPrep® Systems are Flexible, Interchangeable, and Available for Ambient or Cryogenic or Infectious Sample Types

	Application	Tube Size	Tube Capacity	Name	Page
 <p>Low &amp; Medium Throughput <b>FastPrep® 24s</b></p>	 Standard tube holders for ambient temperature work	2 mL tubes	24	QuickPrep™	13
		2 mL tubes	48	HiPrep™	13
		4.5 mL tubes	24	TallPrep™	13
		5 mL tubes	16	MidiPrep™	14
		15 mL tubes	12	TeenPrep™	14
		50 mL tubes	2	BigPrep™	14
 <p>Low &amp; Medium Throughput <b>FastPrep® 24s</b></p>	 Metal tube holders - sterilizable	2 mL tubes	24	Metal QuickPrep™	16
		5 mL tubes	18	Metal MidiPrep™	16
		15 mL tubes	12	Metal TeenPrep™	16
		50 mL tubes	2	Metal BigPrep™	16
 <p>Low &amp; Medium Throughput <b>FastPrep® 24s</b></p>	 Temperature sensitive sample	2 mL tubes	24	CoolPrep™	15
		15 mL tubes	6	CoolTeenPrep™	15
		50 mL tubes	2	CoolBigPrep™	15
 <p>High-Throughput &amp; Volume <b>FastPrep® 96</b></p>	 Standard ambient temperature	96 deep well plates	2 x 96	Dual Plate™	17
		2mL tubes	96	QuickFlex™	17
		4.5 mL tubes	48	TallFlex™	17
		15 mL tubes	24	TeenFlex™	18
		50 mL tubes	8	BigFlex™	18
		250 mL bottles	2	LargeFlex™	18



# Ambient Tube Holders

Ambient Temperature Sample Grinding with FastPrep-24® and FastPrep-24® 5G Instruments

Ambient temperature tube holders for all your classic and routine grinding.



MP Biomedicals offers the widest selection of tube holders to best meet your needs in sample lysis and grinding.

Our tube holders allow for sample sizes ranging from 2 mL to 250 mL and are built for durability in ambient and cryogenic conditions.



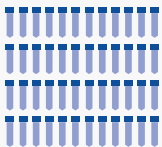
### QuickPrep™ 1

Cat. N°: 116002512  
Capacity: 24 x 2 mL Tubes



### QuickPrep™ 3

Cat. N°: 116005512  
Capacity: 24 x 2 mL Tubes



### HiPrep™

Cat. N°: 116002527  
Capacity: 48 x 2 mL Tubes



Companion product: Blue Ratchet Nut/CamLock (page 19)



### TallPrep™

Cat. N°: 116002540  
Capacity: 24 x 4.5 mL Tubes



Companion product: Blue Ratchet Nut/CamLock (page 19)

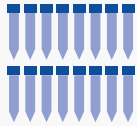




# Ambient Tube Holders

Ambient Temperature Sample Grinding with FastPrep-24® and FastPrep-24® 5G Instruments

Ambient temperature tube holders for all your classic and routine grinding.



## MidiPrep™

Cat. N°: 116002557

Capacity: 16 x 5 mL Tubes



Companion product: Blue Ratchet Nut/CamLock (page 19)



## TeenPrep™

Cat. N°: 116002526

Capacity: 12 x 15 mL Tubes



Companion product: Blue Ratchet Nut/CamLock (page 19)



## BigPrep™

Cat. N°: 116002525

Capacity: 2 x 50 mL Tubes



Companion product: Blue Ratchet Nut/CamLock (page 19)





# Cryogenic Tube Holders

Temperature Sensitive Sample Grinding with FastPrep-24® and FastPrep-24® 5G Instruments

Tube holders for extraction of any sensitive or thermally unstable biological compound.




Cryogenic temperature tube holders for FastPrep-24® Classic and FastPrep-24® 5G instruments. During mechanical lysis, the temperature within the tube can increase and cause damage to the molecules in your sample.

- Protects thermosensitive molecules from heat degradation with cooling chamber.
- Prevents the increase of sample temperature during the homogenization process by maintaining sample temperature at negative temperature.
- Ensures a highly effective grinding process of any sample, even the most elastic, by making them brittle.



## CoolPrep™


Cat. N°: 116002528  
Capacity: 24 x 2 mL Tubes

 Companion product: Blue Ratchet Nut/CamLock (page 19)



## Cool TeenPrep™

Cat. N°: 116002530  
Capacity: 6 x 15 mL Tubes

 Companion product: Blue Ratchet Nut/CamLock (page 19)



## Cool BigPrep™

Cat. N°: 116002531  
Capacity: 2 x 50 mL Tubes

 Companion product: Blue Ratchet Nut/CamLock (page 19)





# Metal Tube Holders

Infectious Sample Grinding with FastPrep-24® Classic and FastPrep-24® 5G Instruments



All metal sample holders are ideally suited for work with highly infectious, pathogenic, or other biologically hazardous samples.

They withstand temperatures up to 450 °C, allowing for sterilization by pyrolysis or autoclaving. Pathogens, including bacteria, viruses, fungi, parasites, viroids, and prions, can be effectively eliminated.

All metal sample holders are also safe to use with most laboratory detergents and sterilization solutions, ensuring easy care and maintenance.



## MetalQuickPrep™

Cat. N°: 116002545

Capacity: 24 x 2 mL Tubes



Companion product: Blue Ratchet Nut (page 19)



## MetalMidiPrep™

Cat. N°: 116002544

Capacity: 18 x 5 mL Tubes



Companion product: Blue Ratchet Nut (page 19)



## MetalTeenPrep™

Cat. N°: 116002546

Capacity: 12 x 15 mL Tubes



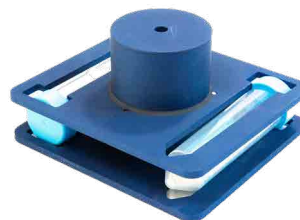
Companion product: Blue Ratchet Nut (page 19)



## MetalBigPrep™

Cat. N°: 116002547

Capacity: 2 x 50 mL Tubes



Companion product: Blue Ratchet Nut (page 19)





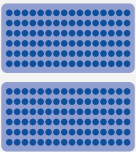
# High Capacity Tube Holders

Ambient Temperature Sample Grinding with FastPrep-96® Instruments



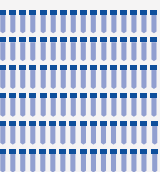
FastPrep-96® offers the widest variety of sample holders (2 x 96 deep well plates, 96 x 2 mL, 48 x 4.5 mL, 24 x 15 mL, 8 x 50 mL and 2 x 250 mL bottles) and a simple, accurate, closed loop control of lysing power and speed.

All this and more make the FastPrep-96® the perfect solution for all of your high volume sample preparation needs.



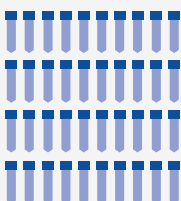
## Dual Plate™

Cat. N°: 119696168  
Capacity: 2 x 96 Deep Well Plates



## QuickFlex™

Cat. N°: 116010570  
Capacity: 96 x 2 mL Tubes



## TallFlex™

Cat. N°: 116010580  
Capacity: 48 x 4.5 mL Tubes





# High Capacity Tube Holders

Sample Holders for FastPrep-96® Instrument

Ambient temperature tube holders for high-throughput and large volume grinding.



## TeenFlex™

Cat. N°: 116010560

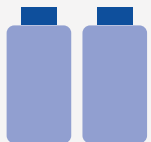
Capacity: 20 x 15 mL Tubes



## BigFlex™

Cat. N°: 116010550

Capacity: 8 x 50 mL Tubes



## LargeFlex™

Cat. N°: 116010590

Capacity: 2 x 250 mL Bottles



## ConeFlex™ Adapter

For use of FastPrep-24® tube holders  
on FastPrep-96®

Cat. N°: 116010595



For all FastPrep-24® tube holders



# Locking Systems

Locking Systems for FastPrep-24® Classic & FastPrep-24® 5G Instruments.



MP Biomedicals offers the widest selection of sample holders to best meet your needs in sample preparation. Our sample holders allow for sample sizes ranging from 2 mL to 250 mL tube size and are built for durability in ambient and cryogenic conditions.

## Ratchet Nut for FastPrep-24® Classic

Cat. N°: 116004510  
For FastPrep-24® Classic

Replacement tightening spoked button used to secure adapters on FastPrep-24® Classic.



## Blue Clickmaster, Ratchet Nut

Cat. N°: 116004525  
For FastPrep-24® Classic or FastPrep-24® 5G

Accessory for FastPrep-24® Classic and FastPrep-24® 5G instruments. Securing knob used to maintain the tube holder adapters on the central axis or 3 step assembly.

Due to its high torque, the Ratchet Nut is particularly recommended for the heaviest adapters, and especially for metal tube holders.



## Camlock

Cat. N°: 116005588  
For FastPrep-24® 5G Instrument

Locking system for the FastPrep-24® 5G instrument.

Modeled after the bike tire quick release, the familiar mechanism allows:

- ▶ Rapid sample exchange.
- ▶ Strong grip.
- ▶ Uniform clamping force.
- ▶ Ease-of-use.

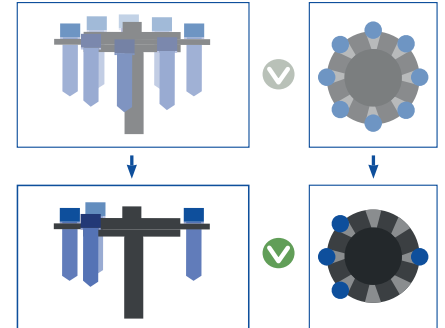




## Should I balance the tubes when using a FastPrep® instrument?

No. The FastPrep® is not a centrifuge and you do not need to balance the tubes on adapters.

However, if you do not fill the tube holders completely, avoid having all your tubes in one location. Place your tubes evenly over all the holes in your adapter. To ensure better stability for the top parts of the adapters, it is important that the adapter rests on more than two points. We recommend using these with a minimum of 4 tubes. Use empty tubes if necessary.



## There is nothing on the display of the FastPrep-24® Classic or FastPrep-24® 5G, but it is powered and turned on?

Each device is shipped with the 'emergency stop' engaged for safety purposes and will not run until the emergency stop is disengaged. Disengage the 'emergency stop' by turning clockwise until it pops out.

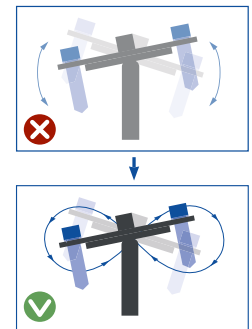


## How do I convert from the m/s used to describe FastPrep® motion to the RPM measurements used by other bead beating systems?

The RPM value used by other bead beating systems refers to rotations per minute. However, FastPrep® instruments do not use a rotating motion but rather a tridimensional motion. The FastPrep®'s m/s refers to the distance traveled by the sample or adapter bottom during one second. To convert from rpm to m/s, compare the number of turns carried out by the axis of the engine against the meter per second below.

- Motor speed at 4 m/s is equivalent to between 3,400 to 4,100 RPM.
- Motor speed at 6.5 m/s is equivalent to between 3,700 to 4,500 RPM.

Note that this conversion depends on the adapter used and the distance from tubes to the axis of the FastPrep®.



## Can I use and leave my FastPrep® in a cold room at 4 °C for a long period of time?

The operating temperature range for the FastPrep® Instruments is from 2 – 48 °C so storing at 4 °C is not a problem. MP Biomedicals has thoroughly tested using and storing a FastPrep® in a cold room and have confirmed with other customers. However, it was built to be used at room temperature so there is a risk of condensed water negatively affecting the motor oil.



## Where can I have more technical information or European declaration of conformity.

On our website [www.mpbio.com/eu/life-sciences/sample-preparation-0/fastprep-bead-beating-systems](http://www.mpbio.com/eu/life-sciences/sample-preparation-0/fastprep-bead-beating-systems) you can download user manual and find all specification.

For certificates, service manual or any other information about MP Biomedicals FastPrep® please address your request through website to our European technical support team. They will be happy to help.



Contact us to have more informations:

[techsup.eur@mpbio.com](mailto:techsup.eur@mpbio.com)

[www.mpbio.com](http://www.mpbio.com)



# FastPrep® Lysing Matrix

Experience Unmatched Versatility

For your toughest and most difficult sample types



Plants



Animals



Soil



Yeast and Fungi



Bacteria



Feces



2 mL  
Lysing Matrix tubes



4.5 mL  
Lysing Matrix tubes



15 mL  
Lysing Matrix tubes



50 mL  
Lysing Matrix tubes



250 mL  
Lysing Matrix bottles



96 deep well  
Lysing Matrix plates

FastPrep® Lysing Matrices make difficult-to-lyse samples easy. No matter how tough or resistant your samples are FastPrep® Lysing Matrix tubes will effectively disrupt cell walls, providing the highest yields of nucleic acids and proteins in a matter of seconds. All Lysing Matrix tubes fit any high-speed bead-beating homogenizers. MP Biomedicals offers a wide variety of lysing bead mixes to fit all sample types and applications.








# Standard Lysing Matrix Tubes

Ready-to-use for all your Sample Types

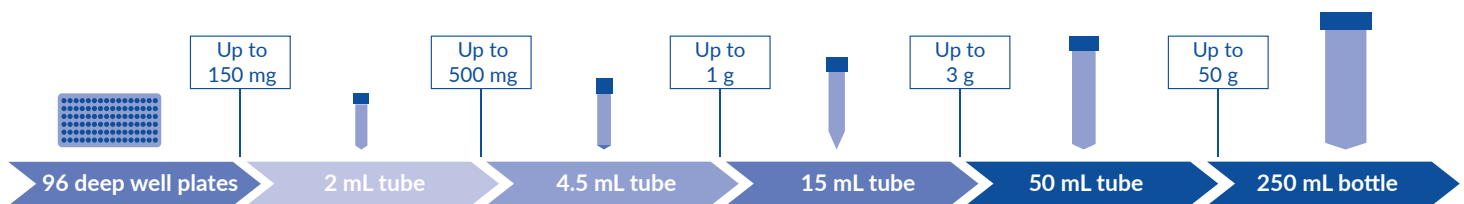
Achieve optimal lysing performance with FastPrep® Lysing Matrix tubes.

FastPrep® Lysing Matrices are critical components of the FastPrep® sample preparation system. Lysing Matrix tubes come in 16 unique matrix compositions to ensure leak and contamination-free homogenization of any sample type.

-  **Optimal cell disruption of any sample:** The size of the beads and their composition are optimized according to the sample and the downstream application.
-  **A solution for any application:** Unmatched versatility with 16 matrix compositions available in 2 mL, 4.5 mL, 15 mL, 50 mL, 250 mL bottles or 96-well plates.
-  **High reproducibility:** Lysing Matrix tubes contain highly controlled size and quantity of Lysing Matrix particles and are certified DNase & RNase free.
-  **No cross-contamination:** Single-use closed Lysing Matrix tubes.
-  **A gold standard for Life Science applications validated with + 9,000 publications:** They fit any high-speed bead-beating machines.

## Because Size Matters

All Lysing Matrix tubes offered come in every size, from 2 mL to 250 mL as well as 96 deep well plates.



Description	Pack Size
2 mL	50, 100 and 500 x 2 mL tubes
4.5 mL	25, 50 and 100 x 4.5 mL tubes
15 mL	25 and 50 x 15 mL tubes
50 mL	10, 50 and 100 x 50 mL tubes
250 mL	10 x 250 mL bottles
96 deep well plates	1 and 10 x 96 deep well plates





# Lysing Matrix Tubes Selection Guide

Find the Lysing Matrix Tailored to your Application

Sample Type		Lysing Matrix																
		A	B	C	D	E	F	G	H	I	J	K	M	S	SS	Y	Z	
Animal & Human Tissues																		
Soft Tissues	Lung, Breast, Kidney, Heart, Intestine, Muscle, Spleen, Liver, Brain	●			●									○	○		●	
	Skin	●			●													
Unique Samples	Nail													○				
	Tail & Ear	●												○				
	Vascular Tissue	●			●												●	
	Hair													○				
	Bone	●											●	●	○	○		
	Tumor	●													○			
	Mammalian Cell	●			●													
	Infected Tissue (isolation of viruses or virus)													●				
Microorganisms		A	B	C	D	E	F	G	H	I	J	K	M	S	SS	Y	Z	
	Bacteria (gram + and -)	●	●				○				●							
	Yeast & Mold	●		●			○	●				●					●	
	Bacterial & Fungal Spore	●	●				○	●		○	●	●			○			
	Algae	●		●				●									●	
	Virus	●	●															
Environmental Samples		A	B	C	D	E	F	G	H	I	J	K	M	S	SS	Y	Z	
	Soil, Marine Sediment, Rhizosphere, Manure, Compost, Sludge, Feces, Wastewater					●		●	●	○								
Plant Tissues		A	B	C	D	E	F	G	H	I	J	K	M	S	SS	Y	Z	
	Leaf	●			●		○	●									●	
	Seed	●					○	●	●	○			●	○	○			
	Root	●					○	●						○				
	Needle	●					○	●					●	○				
	Wood	●					○	●	●	○								
	Stem & Flower	●			●		○	●										●
Insects & Worms		A	B	C	D	E	F	G	H	I	J	K	M	S	SS	Y	Z	
	Tick & Fly	●			●				●	○							●	
	Nematode	●		●	●												●	
	Bee & Mosquito	●			●												●	



# Lysing Matrix Tubes

Experience Unmatched Versatility

Achieve optimal lysing performance with FastPrep® Lysing Matrix tubes.



## Lysing Matrix A

**Composition:** Garnet matrix and one 6.35 mm ceramic sphere

- All sample types
- Animal
- Fungi
- Bacteria
- Yeast
- Plants



## Lysing Matrix B

**Composition:** 0.1 mm silica spheres

- Bacteria
- Spores



## Lysing Matrix C

**Composition:** 1 mm silica spheres

- Yeast
- Fungi
- Algae



## Lysing Matrix D

**Composition:** 1.4 mm ceramic spheres

- Animal tissues
- Plants tissues
- Cultured cells



## Lysing Matrix E

**Composition:** 1.4 mm ceramic spheres, 0.1 mm silica spheres and 4 mm glass bead

- Soil
- Fecal
- Sludge
- Pollen
- Wastewater
- Environmental water



## Lysing Matrix F

**Composition:** 1.6 mm aluminum oxide particles and 1.6 mm silicon carbide particles

- Animal tissues
- Plants tissues
- Bacteria
- Mold & fungi



## Lysing Matrix G

**Composition:** 1.6 mm silicon carbide particles and 2 mm glass beads

- Animal tissues
- Plants tissues
- Yeast
- Fungi



## Lysing Matrix H

**Composition:** 2 mm glass beads and 2 mm yellow zirconium oxide beads

- Animal
- Plants
- Ancient & dried samples
- Very dense soil and clay
- Bacterial aggregates
- Whole insects, ticks & fleas
- Wood & seeds



## Lysing Matrix I

**Composition:** 2 mm yellow zirconia beads and one 4 mm ceramic sphere

- Animal
- Plants
- Coral emulsions
- Molds & fungi
- Fixed samples





# Lysing Matrix Tubes

Experience Unmatched Versatility

Achieve optimal lysing performance with FastPrep® Lysing Matrix tubes.



## Lysing Matrix J

**Composition:** 2 mm yellow zirconia beads and 1.6 mm aluminum oxide particles

- Animal
- Plants
- Ancient & dried samples
- Very dense soil & clay
- Dry fungal spores & rusts
- Whole insects, ticks & fleas
- Wood & seeds



## Lysing Matrix K

**Composition:** 0.8 mm zirconium silicate beads

- Non-viable tissues
- Fungal & yeast spores
- Animal by-products
- Bone
- Preserved tissues



## Lysing Matrix M

**Composition:** one 6.35 mm zirconium oxide ceramic grinding sphere

- All samples
- Tough tissues
- Seed & spores
- Skeletal muscle
- Lung, heart & bone



## Lysing Matrix S

**Composition:** six 3.175 mm stainless steel beads

- All samples
- Tough tissues
- Seed
- Skeletal muscle
- Lung, heart & bone



## Lysing Matrix SS

**Composition:** one 6.35 mm stainless-steel grinding ball

- All samples
- Tough tissues
- Seed
- Skeletal muscle
- Lung, heart & bone



## Lysing Matrix Y

**Composition:** 0.5 mm Yttria-stabilized zirconium oxide beads

- Algae
- Yeast & fungi (inc. spores)



## Lysing Matrix Z

**Composition:** 2.0 mm Yttria-stabilized zirconium oxide beads

- Animal tissues
- Plants tissues



All catalog numbers are available on the index page: 56.



# Lysing Matrix Tubes

Customized Lysing Matrix Tubes

## Customized Lysing Matrix Tubes

MP Biomedicals' extensive experience in producing high-quality Lysing Matrix tubes for more than 20 years enables our production team to manufacture specialized tubes tailored to your specific requirements.

- ▶ Manufactured according to the type of tubes as well as nature, size, and volume of beads you need.
- ▶ Follows the strictest quality controls to fit your project.
- ▶ Guarantees the most competitive pricing.



With a wide range of bead sizes, shapes, and compositions, MP Biomedicals offers a dependable Lysing Matrix for every application.



**Performance:** medium shear, medium to high impaction.  
**Sample Characteristics:** hard, brittle cell wall, large cell size.



**Performance:** high shear, high impaction.  
**Sample Characteristics:** dense, elastic cell wall, medium to large cell size.



**Performance:** low shear, medium impaction.  
**Sample Characteristics:** soft cell wall, small cell size.



**Performance:** low shear, high impaction.  
**Sample Characteristics:** hard, brittle cell wall, small to large cell size.



# Metal Lysing Matrix Tubes

Leakproof - Autoclavable - Unbreakable

Stainless steel 2 mL Lysing Matrix tubes are ideal for grinding, lysis, and homogenization of your most resistant samples.

The stainless steel threaded cap provides a leak-proof closure without the energy-robbing alternatives like plastic flange screw caps or rubber stoppers. A Teflon O-ring prevents leakage and can be cleaned with detergent and/or autoclaving, or replaced entirely between samples. Machined knurls on the cap provide a firm grip for easy opening and closing. Two different impactors are available, a single stainless steel ball, 6.35 mm diameter; or a stainless steel cylinder, 6.35 mm diameter 3.175 mm length.



## Applications

- ▶ Dry grinding very tough or hard samples where heat generated can damage plastic tubes.
- ▶ Cryogenic dry grinding where severe cold temperatures (dry ice or liquid nitrogen) can damage plastic tubes.
- ▶ Milling or grinding non-biological samples where plastic contamination is of concern.
- ▶ Sample processing with solvents or chemicals that are incompatible with plastics.

## Research Areas and Sample Types

- ▶ **Environmental and Agriculture:** Tough seeds such as dried corn, soybeans, wheat, tomato, and chile, wood, bark, roots, animal claws, and hooves.
- ▶ **Forensics:** Bone, teeth, hair, fingernails, non-biological substrates.
- ▶ **Cancer and Disease:** Tough tissues, bone, cartilage, and skin.
- ▶ **Industrial:** Non-biological, rocks and minerals, plastics and composites, printed circuit boards, wood and building materials.

Cat. N°:	Description	Pack Size
116991002	Metal Lysing tube, 2 mL, with grinding ball	2 tubes
116991003		3 tubes
116991006		6 tubes
116992002	Metal Lysing tube, 2 mL, with grinding cylinder	2 tubes
116992003		3 tubes
116992006		6 tubes
116990100	Replacement O-rings for metal Lysing tube, 2 mL	100 O-rings



# Metal Lysing Matrix Tubes

Leakproof - Autoclavable - Unbreakable

## 50 mL Metal Lysing Matrix Tubes

Constructed from titanium, these tubes and grinding matrix are tough enough to stand up to the most demanding mechanical punishment that can cause traditional thermoplastic tubes to crack. The titanium threaded cap provides a leak-proof closure.



Cat. N°:	Description	Pack Size
116957001	Metal Lysing tube, 50 mL, with grinding ball	1 tube
116957002	Metal Lysing tube, 50 mL, with grinding cylinder	1 tube



# Automated Nucleic Acid Purification Systems

For your toughest and most difficult sample types



Plants



Animals



Soil



Yeast and Fungi



Bacteria



Feces



**MPPure-12™ system**  
Cat. N°: 117002200



**MPPure-32™ system**  
Cat. N°: 07EMC043D



**MPPure-96™ system**  
Cat. N°: 07EMC044D

Nucleic acids are an integral part of genome-driven research, and high-quality DNA is essential for several applications, such as pharmacogenomic, genotypic, and clinical diagnostics.

Moreover, automated nucleic acid purification systems increase productivity, improves repeatability, traceability, enhances the productivity of laboratory by minimizing the resource allocation for repetitive tasks and lower operator's health.

There are several technologies that have made inroads to purifying nucleic acids from complex biological samples and have moved life sciences research to newer dimensions.

MP Biomedicals offers a complete range of automates using magnetic bead separation technology for middle or high-throughput.

MP Biomedicals also gives you the possibility to choose between the two most recognized techniques of liquid handling or road pillar in closed or open systems.



# MPure-12™

Superior Extraction - Advanced Liquid Handling

Process up to 12 samples in a true walk away system.

The MPure-12™ allows rapid purification of nucleic acids from a wide variety of any sample using magnetic bead separation technology.

Combined with a uniquely designed magnetic bead processing chamber, the fully integrated and easy-to-use pre-packaged reagent kits offer superior yields of nucleic acids and high-quality results at an affordable price.

Cat. N°: 117002200



- Polygon reaction chamber.
- Designed for increased yields and purity.

- ▶ Fully automated and integrated platform that offers cost and time savings.
- ▶ Reproducibility, lot-to-lot consistency & scalability.
- ▶ Ease-of-use & convenience.
- ▶ Highest quality & yield of DNA & RNA for downstream applications.
- ▶ Flexibility & simplicity: 1 - 12 samples from a wide range of bio-specimens processed in a single cycle.
- ▶ No cross-contamination of samples.
- ▶ Increased safety & efficiency through a closed system.

## Specifications

Sample Processing	1 to 12 Samples per Batch
Sample Volume	100 to 200 µL
Elution Volume	50 to 300 µL
Processing Time	30 - 45 minutes (see purification kit manual for details)
Heat Block Temperature	60 °C to 70 °C (assuming the room temperature of ~ 25 °C)
Protocol Input	Barcode Reader
Hardware	Integrated Microprocessor (no external PC required)
Dimensions	Height: 510 mm; Base: 470 mm (W) x 680 mm (D)
Weight	43 kg
Input Power	AC 100 - 240 V, 240 VA, 50/60 Hz
Operating Temperature	10 - 40 °C
Operating Humidity	30 - 80%
Display	LCD (20 characters x 4 lines)



# MPure-12™ Nucleic Acid Purification Kits

Widest Possible Choice to meet your Research Needs

		MPure™ Extraction Kit													
Sample Type	Sample Type	Blood DNA 200*	Blood DNA 1200**	Viral Nucleic Acid	Tissue DNA	Cultured Cell DNA	Bacterial DNA	HPV DNA for Swab Samples	TB DNA	FFPE DNA	Forensic DNA	Viral/Pathogen Nucleic Acids A	Viral/Pathogen Nucleic Acids B	Viral RNA	Viral Nucleic Acid 800
Whole Blood Fresh, Frozen & Anticoagulated	gDNA, circulating DNA, viral DNA/RNA	●	●								○				
	Bacteria						●								
	Mycobacteria								●						
Buffy Coat	gDNA	●	●			○									
	Total RNA														
Leukocyte Concentration	gDNA	●	●			○									
	Total RNA														
Clotted & Dried Blood	gDNA				○						●				
Plasma and Serum	Viral DNA/RNA, circulating DNA			●								○			●
	Viral RNA			○								○		●	○
	Virus + Bacteria											●			
	Bacteria						●					○			
Blood Stain	gDNA				●						○				
	Total RNA				●						○				
CFS, Urin & Other Cell-Free Bodily Fluids	Viral DNA/RNA, circulating DNA			●								○			●
	Viral RNA			○								○		●	○
	Virus + Bacteria											●	●		
	Bacteria						●					○			
	Mycobacteria								●						
Cell Culture Supernatant	Viral DNA/RNA			●								○			●
	Viral RNA			○								○		●	○
	Bacteria + Virus											●	●		
	Bacteria						●					○			
Bronchoalveolar Lavage & Aspirates	gDNA					●									
	Bacteria						●								
	Virus + Bacteria												●		
	Mycobacteria								●						
Luquid Sample Transport Media	Viral DNA/RNA			●								○			●
	Viral RNA			○								○		●	○
	HPV virus							●							
	Bacteria						●					○			
Bacterial Culture: Suspension, Plate, Colony	Bacteria (gram+ and gram-)						●							●	
	Mycobacteria								●						

● Recommended Kit

○ Compatible Kit

\*MPure™ Blood DNA Extraction Kit 200 - for whole blood samples 10 - 400 µL volume and white blood cells count less than 2 x 10<sup>4</sup> cells/µL

\*\*MPure™ Blood DNA Extraction Kit 1,200 - for whole blood samples 400 - 1,000 µL volume or white blood cells more than 2 x 10<sup>4</sup> cells/µL





# MPure-12™ Nucleic Acid Purification Kits

Widest Possible Choice to meet your Research Needs

Sample Type	Sample Type	MPure™ Extraction Kit										
		Tissue DNA	Cultured Cell DNA	Bacterial DNA	HPV DNA for Swab Samples	TB DNA	FFPE DNA	Forensic DNA	Viral/Pathogen Nucleic Acids A	Viral/Pathogen Nucleic Acids B	Viral RNA	Viral Nucleic Acid 800
Sputum & Decontaminated Sputum	Bacteria			●								
	Mycobacteria					●						
	Bacteria + Virus									●		
Saliva & Mouthwash	gDNA							●				
	Bacteria			●								
	Bacteria + Virus									●		
Cultured Cells	gDNA		●									
	Total RNA											
Solid Tissue & Biopsy	gDNA	●							○			
	Total RNA											
	Bacteria			●								
Rodent Tails	gDNA	●										
	Total RNA											
FFPE Tissue	gDNA						●					
Cervicovaginal Sample: Scrapes, Smear (Brush, Swab), Lavage	HPV virus				●							
	Bacteria			●						○		
	Bacteria + Virus									●		
Swabs: Nasal, Pharyngeal, Throat, Eye, Buccal, Rectal, Genital, Skin Lesions and Mucosous Membranes Contact Swabs	gDNA	●										
	Bacteria			●						○		
	Bacteria + Virus									●		
	Virus									●		
Stool	Bacteria			●						●		
	Bacteria + Virus									●		
Forensic and Human Identity Samples	gDNA	●						●				
Chewing Gum	gDNA							●				
Cigarette Butts	gDNA							●				
Sperm Stain	gDNA							●				
Stamps & Envelops	gDNA							●				
Finger Nails	gDNA							●				
Hair & Hair Roots	gDNA							●				
Insects, Fish & Shrimps	gDNA	●										
Environmental Sample & Water	Bacteria			●							●	
	Bacteria + Virus										●	

● Recommended Kit

○ Compatible Kit







# MPure-32™

Step Away from the Norm and Experience the Difference in Nucleic Acid Purification

The magnetic rod pillar technology for middle throughput in a flexible open system.

**MPure-32™ aNAP System** is a fully automated magnetic bead-based nucleic acid extraction system. It can process up to 32 samples simultaneously within a short period of time (around 40 to 60 minutes).

The MPure-32™ aNAP System uses magnetic rods to transfer magnetic beads from one well to another. It also uses the strip to mix the solution; by moving the strip up and down to mix the solution, users can get high-yield and quality of purified nucleic acids.

Cat. N°: 07EMC043D



## Specifications

Sample per Run	1 to 32
Run Time	45 - 60 min
Processing Volume	50 µL – 1000 µL
Magnetic Rod	> 4,300 gauss
Temperature Range	RT - 70 °C
UV Lamp	Yes
Weight	21 kg
Dimensions	Height: 370 mm; Base: 380 mm (W) x 350 mm (D)
Power Requirement	100 - 240 V / 60 – 50 Hz; 3,2 A
Display	5.5" Touch Screen
Transmit Interface	USB / RS233

- Smaller footprint.
- Static reagent plate.
- No leaking or plugged tip.

### Superior Purity and Yield with Excellent Repeatability

- ▶ Over 95% magnetic bead recovery.
- ▶ No cross-contamination risk.


### Very Flexible (Open to Customization) Protocol Options

- ▶ Store up to 100 customized extraction protocols.
- ▶ The optimization of magnetic rod and amplitude adjustment technology can easily deal with all kinds of tiny magnetic beads.
- ▶ This instrument can also be used for protein purification or cell separation.

### Safe

- ▶ Use of disposable 8-strip avoiding cross-contamination.
- ▶ UV sterilization lamps to avoid aerosol pollution from different batches.

## Consumables



**8-Strip A**  
(Cover for Magnetic Rod)  
Cat. N°: 117032148  
Pack Size: 500 pcs/box



**6-Tube Format Autotube**  
Cat. N°: 117032149  
Pack Size: 1,536 pcs/box



**16-Base**  
(For Autotube)  
Cat. N°: 117032150  
Pack Size: 300 pcs/box



**96 Deep Well Plate - Autoplate**  
(For Autoplate)  
Cat. N°: 117032151  
Pack Size: 100 pcs/box



# MPure-96™

Step Away from the Norm and Experience the Difference in Nucleic Acid Purification

The magnetic rod pillar technology for universal open high-throughput platform.

The **MPure-96™** is an automated nucleic acid platform designed for high-throughput applications. Specialized spin tips enable efficient mixing of magnetic beads with a larger processing volume.

MPure-96™ product embodies this novel technology and delivers improved performance for applications in Life Sciences and Molecular Diagnostics.

Cat. N°: 07EMC044D



Specifications	
Run Time	25 - 60 min
Max. Throughput	96 Samples per Run
Weight	Approx. 95 kg
Dimensions	700 mm (H) x 870 mm (W) x 575 mm (L)
Power Supply	AC 220 - 240 V
Processing Volume	50 µL - 1,600 µL
Magnetic Rod	> 3,900 gauss
Spin Speed	Up to 3,000 RPM
Temp Control	4 sets
Heating Block	Yes (4 pcs)
Heating	USB / RS233
UV & HEPA	Available
Display	7-inch Touchscreen

- Patented whirl stirring mixing technology.
- Fully automated.
- Easy operation.
- Time saving.

MPure-96™ aNAP System is CE IVD labeled instrument can be used for nucleic acid purification from clinical/non-clinical samples. This instrument can also be used for protein purification or cell separation.

- Up to 96 tests per run, suitable for end users with single day 100 - 400 testing volume.
- Flexibility in samples/run: 6, 12, 18, 24, 30, 36 up to 48 (with single tube).
- Efficient whirl stir mixing approach.
- New design on tip sensor to prevent damage on magnetic rods.
- Speed and precision: 4 independent temperature control modules.
- Support USB barcode scanner.
- High processing volume, up to 1,600 µL, without cross-contamination issue.


## Consumables



**96 Deep Well Plate - Autoplate**  
 Cat. N°: 117032151  
 Pack Size: 500 pcs/box  
 - Processing volume 50 µL - 1,600 µL  
 - Widely used for molecular diagnostics



**96 Spin Tips**  
 (Assembled Box)  
 Cat. N°: 117096152  
 Pack Size: 1,536 pcs/box  
 - 96 pcs of medium (pen-shape) spin tips in one box



**Spin Tips**  
 Cat. N°: 117096153  
 Pack Size: 500 pcs/box  
 - A unique design to maximum mixing efficiency



**6-Tube Format Autotube**  
 Cat. N°: 117032149  
 Pack Size: 300 pcs/box  
 - Special package for single or small number of tests  
 - No reagent loss



**16-Base**  
 (For Autotube)  
 Cat. N°: 117032150  
 Pack Size: 500 pcs/box  
 - Use with 6-tube format Autotube for small number of tests

The plastic consumables are in compliance with the pharmaceutical standards such as GMP, ISO 13485, and ISO 9001.



# Nucleic Acid and Protein Purification Kits

For your toughest and most difficult sample types



Plants



Animals



Soil



Yeast and Fungi



Bacteria



Feces

Ready-to-Use Protocols for DNA, RNA, and Protein Isolation from any Sample!

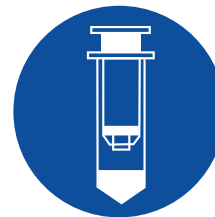
- Rapid and reproducible sample lysis and purification process.
- No cross-contamination with closed Lysing Matrix tubes.
- Increased yields of high-quality DNA, RNA and Proteins.
- Integrity and size of DNA, RNA, and Proteins are retained.
- Nucleic acids and proteins are ready-to-use in downstream applications.



Magnetic Beads



Organic Reagents



Silica Spin Columns





# FastPrep® DNA and RNA Kits

## Selection Chart

Sample Type	Technology	DNA Isolation Kits	RNA Isolation Kits
 <b>Human, Animal Tissues and Cultured Cells</b>	Organic extraction		FastRNA® Pro Green Kit
	Silica in slurry and spin filters	FastDNA® SPIN Kit	
	Silica spin columns	SPINeasy® DNA Kit for Tissue and Bacteria	SPINeasy® RNA Kit for Tissue
	Magnetic beads	MagBeads FastDNA® Kit	MagBeads FastRNA® Kit
 <b>Blood</b>	Silica spin columns	SPINeasy® DNA Kit for Blood	
	Magnetic beads	MagBeads FastDNA® Kit for Blood	
 <b>Formalin-Fixed Paraffin-Embedded Tissues and Cells</b>	Magnetic beads	MagBeads FastDNA® Kit for FFPE	MagBeads FastRNA® Kit for FFPE
 <b>Plant Specimens</b>	Organic extraction		FastRNA® Pro Green Kit
	Silica in slurry and spin filters	FastDNA® SPIN Kit	
	Silica spin columns	SPINeasy® DNA Kit for Plant	
	Magnetic beads		MagBeads FastRNA® Kit
 <b>Gram Positive and Gram Negative Bacteria, Bacterial Spores, Virus</b>	Organic extraction		FastRNA® Pro Blue Kit
	Silica in slurry and spin filters	FastDNA® SPIN Kit	
	Silica spin columns	SPINeasy® DNA Kit for Tissue and Bacteria	SPINeasy® RNA Kit for Bacteria
 <b>Bacteria</b>	Magnetic beads		MagBeads FastRNA® Kit
 <b>Virus</b>	Magnetic beads		MagBeads FastRNA® Kit for Virus
 <b>Yeast, Fungi</b>	Organic extraction		FastRNA® Pro Red Kit
	Silica in slurry and spin filters	FastDNA® SPIN Kit	
	Silica spin columns		FastRNA® SPIN Kit for Yeast
	Magnetic beads		MagBeads FastRNA® Kit
 <b>Microorganisms and other Specimens Found in Soil and other Environmental Samples</b>	Organic extraction and purification with silica spin filters		FastRNA® Pro Soil Direct Kit FastRNA® Pro Soil Indirect Kit
	Silica in slurry and spin filters	FastDNA® Spin Kit for Soil, 50 mL tubes	
	Silica spin columns	SPINeasy® DNA Pro Kit for Soil SPINeasy® DNA Kit for Water	
	Magnetic beads	MagBeads FastDNA® Kit for Soil	
 <b>Microorganisms and other Specimens found in Fecal Samples</b>	Organic extraction and purification with silica spin filters		FastRNA® Pro Soil Direct Kit FastRNA® Pro Soil Indirect Kit
	Silica in slurry and spin filters	FastDNA® SPIN Kit for Feces	
	Silica spin columns	SPINeasy® DNA Pro Kit for Feces	
	Magnetic beads	MagBeads FastDNA® Kit for Feces	
 <b>Any Sample DNA, RNA and Protein from a Single Sample</b>	Silica spin columns	SPINeasy® DNA/RNA/Protein All-In-One Kit	SPINeasy® DNA/RNA/Protein All-In-One Kit





# DNA Isolation & Purification Kits

Multi-samples: Eukaryotes & Prokaryotes

Explore our portfolio of DNA extraction kits to find the right solution for your application.

## Multi-samples: Eukaryotes & Prokaryotes



### FastDNA® SPIN Kit

Cat. N°: 116540600, 100 preps

- ▶ **Thorough, fast, and reproducible sample grinding:** Complete homogenization and cell lysis of most difficult samples in just a few seconds.
- ▶ **High yields of pure DNA:** Unique buffer chemistry combined with a silica-based spin filter method.
- ▶ **Ready-to-use:** Eluted DNA is ideal for PCR, sequencing, genotyping, and other downstream applications.



↓ Silica spin columns

● Lysing Matrix A

The FastDNA® SPIN Kit quickly and efficiently isolates genomic DNA from virtually any sample: plant and animal tissues, cultured cells, bacteria, yeast, fungi, insects, etc.

Up to 200 mg of tissue or cells are added to the provided Lysing Matrix A tubes (mix of garnet and one 6.35 mm ceramic bead) and homogenized with a FastPrep® instrument or another bead beating system. The kit includes 3 different chaotropic buffers for the cell lysis of a wide variety of sample types and the released DNA is purified by a silica-based spin filter method.

Purified DNA is ready for enzyme digestion, electrophoresis, PCR and any, other desired application.



### SPINeasy® DNA Kit for Tissue and Bacteria

Cat. N°: 116532050, 50 preps

- ▶ **Efficient:** Lysis of any human and animal tissue, cells in culture, bacteria, yeast, algae, and fungi with Lysing Matrix A tubes.
- ▶ **Convenient:** Silica spin column method for an easy extraction process.
- ▶ **High-quality:** DNA is ready-to-use for a variety of downstream applications.



↓ Silica spin columns

● Lysing Matrix A

SPINeasy® DNA Kit for Tissue and Bacteria is a silica-membrane spin-column kit that enables quick and convenient purification of total DNA from various human/animal tissues as well as cells in culture, bacteria, yeast, fungi, and algae.

The use of Lysing Matrix A tubes enables highly efficient lysis of tissue samples within seconds. Purified DNA is of high-quality and immediately ready for PCR and other downstream applications.



# DNA Isolation & Purification Kits

Multi-samples: Eukaryotes & Prokaryotes

Explore our portfolio of DNA extraction kits to find the right solution for your application.



## MagBeads FastDNA® Kit

Cat. N°: 116575192, 192 preps

Cat. N°: 117033600, 96 preps (ready-to-use with the MPure-32™ instrument)

Cat. N°: 117034600, 96 preps (ready-to-use with the MPure-96™ instrument)

- ▶ **Simple and reliable:** Rapid extraction of DNA from tissue, cells, blood, saliva, swabs, blood spots, semen, and other clinical samples.
- ▶ **Flexible:** Manual workflow or easily adaptable to automated platforms.
- ▶ **High-quality DNA:** Intact, high yields of DNA ready-to-use for PCR, quantitative PCR, Southern Blot and any other downstream application.
- ▶ **Environmentally friendly:** No toxic chemicals.



Magnetic Beads

MagBeads FastDNA® Kit is based on the purification method of high-binding magnetic particles.

Samples are lysed and digested. DNA is released into the lysate. After the addition of magnetic particles and binding solution, DNA will be adsorbed on the surface of magnetic particles, and impurities such as proteins will be removed without adsorption. The adsorbed particles are washed with washing buffer to remove the proteins and impurities, washed with ethanol to remove salts, and finally, the DNA is eluted with elution buffer.



## Magbeads FastDNA® Kit for FFPE

Cat. N°: 116576096, 96 preps

Cat. N°: 117033800, 96 preps (ready-to-use with the MPure-32™ instrument)

Cat. N°: 117034800, 96 preps (ready-to-use with the MPure-96™ instrument)

- ▶ **Simple and reliable:** DNA extraction from tissue, cells, and blood. A deparaffinization solution is included in the kit for efficient paraffin removal.
- ▶ **Flexible:** Manual workflow or easily adaptable to automated platforms.
- ▶ **High-quality:** DNA is ready for all downstream applications.
- ▶ **Environmentally friendly:** No toxic chemicals.



Magnetic Beads

MagBeads FastDNA® Kit for FFPE is intended for rapid extraction of DNA from FFPE samples. It is based on the purification method of high-binding magnetic particles.

The sample is lysed and digested. DNA is released into the lysate. After the addition of magnetic particles and binding solution, DNA will be adsorbed on the surface of magnetic particles, and impurities such as proteins will be removed without adsorption. The adsorbed particles are washed with washing buffer to remove the proteins and impurities, washed with ethanol to remove salts, and finally, the DNA is eluted with elution buffer.



# DNA Isolation & Purification Kits

Bodily Fluids

Explore our portfolio of DNA extraction kits to find the right solution for your application.

## Bodily Fluids



### SPINeasy® DNA Kit for Saliva

Cat. N°: 116551050, 50 preps

- ▶ **Convenient storage of saliva at room temperature:** A specially formulated Saliva Preservation Solution (SPS) included in the kit preserves saliva samples at room temperature without compromising the DNA quality.
- ▶ **Quick and easy protocol:** Isolation of DNA from fresh, frozen, or SPS-preserved saliva using silica spin-column technology and lysis of the cells with Lysing Matrix Y tubes.
- ▶ **High yields and purity:** Superior performance in both DNA yield and purity, DNA ready for downstream applications.



Silica spin columns

Lysing Matrix Y

The SPINeasy® DNA Kit for Saliva makes saliva sampling easier by using the specially formulated Saliva Preservation Solution (SPS) to preserve the sample at room temperature.

This SPINeasy® Kit is designed for the isolation of DNA from fresh, frozen, or SPS-preserved saliva with a quick and easy protocol, using silica spin-column technology. Purified DNA is recovered with high yield and purity, suitable for various downstream molecular applications.



### SPINeasy® DNA Kit for Blood

Cat. N°: 116552050, 50 preps

- ▶ **Rapid and easy:** Isolation of DNA from blood, plasma, serum, and cells in culture in less than 30 minutes.
- ▶ **Flexible:** DNA extraction from fresh/frozen blood preserved in different anticoagulants (EDTA, heparin, and sodium citrate), serum, plasma, and lymphocytes in culture.
- ▶ **Reliable:** Consistent yields of high-quality DNA ready to use in downstream applications.



Silica spin columns

SPINeasy® DNA Kit for Blood is a high-performance genomic DNA extraction kit including a lysis buffer and proteinase K for the cell lysis step and silica membrane spin columns for the purification of genomic DNA.

This kit enables quick isolation of DNA from whole blood as well as plasma, serum, saliva, and cell culture medium, typically in less than 30 minutes.



# DNA Isolation & Purification Kits

Bodily Fluids

Explore our portfolio of DNA extraction kits to find the right solution for your application.



## SPINeasy® Host Depletion Microbial DNA Kit

Cat. N°: 116545050, 50 preps

- ▶ **Effective depletion of host DNA:** Reduction of the presence of human DNA in saliva samples from >95% (untreated sample) to as low as >1% (treated sample).
- ▶ **Optimal bacterial cell lysis:** Lysing Matrix E tubes ensures the lysis of all the microorganisms for the best representation of the microbiome composition.
- ▶ **DNA ready for microbiome profiling studies:** DNA is used directly for metagenomic sequencing revealing microbial species within environmental & clinical samples.



! Silica spin columns

● Lysing Matrix E

The SPINeasy® Host Depletion Microbial DNA Kit provides an easy-to-use workflow to isolate microbial DNA from samples containing high amounts of host DNA like swabs and bodily fluids.

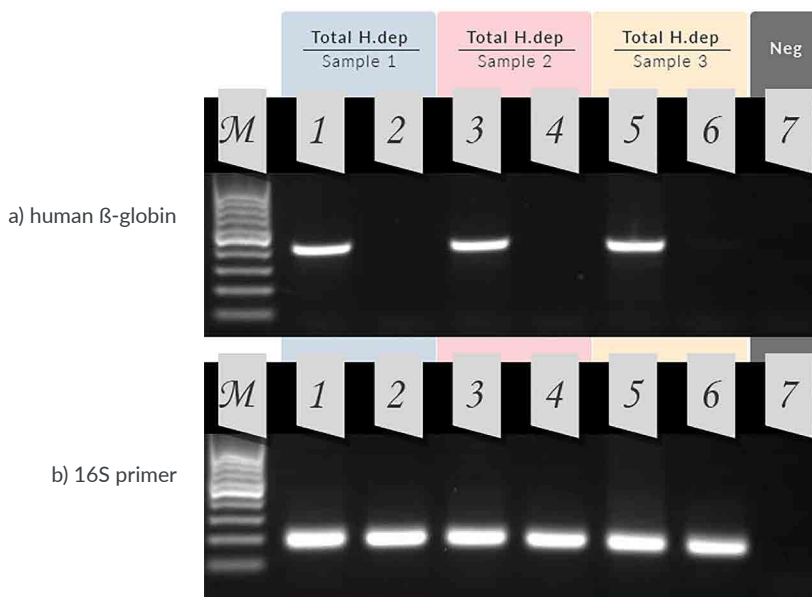
This background reduction of host DNA is achieved through selective lysis of host cells with the specially formulated Host Lysis Buffer. Host DNA, which has been released in the solution, is then removed from the supernatant through centrifugation. A further host depletion treatment provides enzymatic degradation of any remaining host DNA, as well as DNA from dead microbial cells.

Finally, the remaining intact cells are lysed through a combination of specially formulated buffers and highly efficient homogenization using a FastPrep® instrument or another bead beating instrument.

Microbial DNA is purified using a convenient silica-membrane spin-column technology workflow and is ready for downstream molecular applications.

### Extraction Results

SPINeasy® Host Depletion Microbial DNA Kit demonstrates effective host DNA depletion with >90% recovery of microbial DNA.



M: DNA marker

1, 3, 5: Total DNA extracted without performing host depletion steps

2, 4, 6: Host depleted (H. dep) DNA extracted using SPINeasy Host Depletion Microbial DNA Kit

7: PCR negative control

Gel electrophoresis of PCR amplification with DNA extracted from three saliva samples using SPINeasy® Host Depletion Microbial DNA Kit.

a) PCR detection of host DNA using human  $\beta$ -globin primers.

b) PCR detection of bacterial DNA using 16S primers.





# DNA Isolation & Purification Kits

Bodily Fluids

Explore our portfolio of DNA extraction kits to find the right solution for your application.



## MagBeads FastDNA® Kit for Blood

Cat. N°: 116574096, 96 preps

Cat. N°: 117033700, 96 preps (ready-to-use with the MPure-32™ instrument)

Cat. N°: 117034700, 96 preps (ready-to-use with the MPure-96™ instrument)

- ▶ **Quick and reliable:** Isolation of total DNA (genomic, viral, mitochondrial) from whole blood, plasma, serum, buffy coat, bone marrow, lymphocytes, and cultured cells.
- ▶ **Flexible:** Manual workflow or easily adaptable to automated platforms.
- ▶ **High-quality:** DNA is ready for all downstream applications.
- ▶ **Environmentally friendly:** No toxic chemicals.



Magnetic Beads

MagBeads FastDNA® Kit for Blood is intended for the purification of total DNA for reliable PCR and Southern blotting. This kit is based on the purification method of high-binding magnetic particles.

The sample is lysed and digested. DNA is released into the lysate. After the addition of magnetic particles and binding solution, DNA will be adsorbed on the surface of magnetic particles, and impurities such as proteins will be removed without adsorption. The adsorbed particles are washed with washing buffer to remove the proteins and impurities, washed with ethanol to remove salts, and finally, the DNA is eluted with elution buffer.



## MagBeads Fast Circulating DNA Kit

Cat. N°: 116577192, 192 preps

Cat. N°: 117033900, 96 preps (ready-to-use with the MPure-32™ instrument)

Cat. N°: 117034900, 96 preps (ready-to-use with the MPure-96™ instrument)

- ▶ **Quick and reliable:** Purification of high-quality circulating DNA (cfDNA) from cell-free body fluids (such as plasma, and serum).
- ▶ **Flexible:** Manual workflow or easily adaptable to automated platforms.
- ▶ **High-quality:** DNA is suitable for direct use in downstream applications such as PCR, real-time PCR, Biochip analysis, and NGS.
- ▶ **Environmentally friendly:** No toxic chemicals.



Magnetic Beads

MagBeads Fast Circulating DNA Kit is based on the purification method of high-binding magnetic particles.

The sample is lysed and digested. DNA is released into the lysate. After the addition of magnetic particles and binding solution, DNA will be adsorbed on the surface of magnetic particles, and impurities such as proteins will be removed without adsorption. The adsorbed particles are washed with washing buffer to remove the proteins and impurities, washed with ethanol to remove salts, and finally, the DNA is eluted with elution buffer.



# DNA Isolation & Purification Kits

Soil, Environmental & Fecal Samples

Explore our portfolio of DNA extraction kits to find the right solution for your application.

## Soil, Environmental & Fecal Samples



### FastDNA® SPIN Kit for Soil

Cat. N°: 116560200, 50 preps

- ▶ **Efficient sample homogenization:** Thorough lysis in seconds of any microorganism present in environmental samples with Lysing Matrix E tubes.
- ▶ **Consistent DNA Yields:** Excellent reproducibility for an optimum assay-to-assay consistency.
- ▶ **High DNA quality:** Total removal of humic acids and PCR inhibitors for a successful investigation of microbial diversity.
- ▶ **Convenient and rapid protocol:** Ready-to-use DNA for quantitative and qualitative characterization of microbial soil communities.



↓ Silica in slurry and spin filters

● Lysing Matrix E

The FastDNA® Spin Kit for Soil is designed to isolate bacterial, fungal, plant, and animal genomic DNA from soil and other environmental samples. Soil is homogenized by bead beating with Lysing Matrix E tubes designed to efficiently lyse all microorganisms. The released DNA is purified by a silica-based spin filter method and is suitable for PCR analysis and other downstream applications.

Cited in over 10,000 scientific publications, the FastDNA® Spin Kit for Soil delivers the highest DNA yield from any environmental sample including soil, sediments, sludge, compost, manure, rhizosphere, or wastewater. The FastDNA® Spin Kit for Soil contains Lysing Matrix tubes and all the reagents needed to extract DNA in a process that efficiently removes humic acids and other PCR inhibitors.



### FastDNA® Spin Kit for Soil, 50 mL

Cat. N°: 116560600, 10 preps

- ▶ **Thorough sample homogenization and cell lysis:** Lysis of the most difficult cells such as eubacterial spores, endospores, gram (+/-) bacteria, and yeast.
- ▶ **High DNA yields:** Processing of up to 5 g of soil and other environmental samples.
- ▶ **High-quality DNA:** Total removal of humic acids and other inhibitors. DNA is ready-to-use in downstream reactions, including NGS and qPCR.



↓ Silica in slurry and spin filters

The FastDNA® Spin Kit for Soil, 50 mL quickly and efficiently isolates genomic DNA directly from soil samples.

Samples are placed into 50 mL tubes containing garnet Lysing Matrix, a mixture of irregularly shaped garnet particles designed to efficiently lyse all soil organisms. Homogenization in the FastPrep® instrument with garnet Lysing Matrix takes place in the presence of buffers developed to eliminate contaminants and to protect and solubilize nucleic acids upon cell lysis. These reagents work together to facilitate the extraction of genomic DNA with minimal RNA or humic acid contamination.

Following lysis, samples are centrifuged to pellet debris and Lysing Matrix. DNA is purified from the supernatant with a silica-based procedure using spin filter columns. Eluted DNA is ready for any downstream application.



# DNA Isolation & Purification Kits

Soil, Environmental & Fecal Samples

Explore our Portfolio of DNA Extraction Kits to Find the Right Solution for your Application.



## FastDNA® SPIN Kit for Feces

Cat. N°: 116570200, 50 preps

- ▶ **Efficient sample homogenization:** Complete lysis of all the cells included in the stool samples in just a few seconds.
- ▶ **High yields of high-quality DNA:** Efficient removal of any PCR inhibitor. DNA is ready-to-use for qPCR and NGS downstream experiments.
- ▶ **High reproducibility:** Unbias alpha-diversity found on next-generation sequencing outcome.



↓ Silica in slurry and spin filters    ● Lysing Matrix E

The FastDNA® SPIN Kit for Feces quickly and efficiently isolates PCR-ready genomic DNA from fresh or frozen human and animal stool samples.

Host cells, bacteria, fungi, viruses, protists, and other cells present in fecal samples are easily lysed within 40 seconds by bead beating with Lysing Matrix E tubes.

Homogenization takes place in the presence of MT buffer and sodium phosphate buffer, reagents carefully developed to protect and solubilize nucleic acids and proteins upon cell lysis. These reagents work synergistically to allow the extraction of genomic DNA with minimal RNA or humic acid contamination.

Following lysis, samples are centrifuged to pellet cell debris and Lysing Matrix. DNA is purified from the supernatant by a silica-based spin filter method. Eluted DNA is ready for PCR and any other desired application.



## SPINeasy® DNA Pro Kit for Feces

Cat. N°: 116547050, 50 preps

- ▶ **Rapid & efficient:** Thorough sample lysis in seconds of fecal samples with new Lysing Matrix YB tubes.
- ▶ **Superior yield, purity, and DNA integrity:** New inhibitor removal chemistry adopted to effectively remove inhibitors even with highly contaminated samples. Optimized Buffer SF3 enables the specific binding of DNA without co-purification of RNA.
- ▶ **High alpha-diversity:** Unbias alpha-diversity found on next-generation sequencing outcome.



↓ Silica spin columns    ● Lysing Matrix YB

SPINeasy® DNA Pro Kit for Feces is formulated to isolate high-quality DNA from feces. Samples are optimally homogenized by bead beating method using the Lysing Matrix YB. Subsequent treatment with Buffer SF2 effectively removes humic acid and other contaminants. The chemistry included in Buffer SF3 enables the specific binding of DNA without co-purification of RNA, eliminating the need for RNase A treatment.

DNA obtained from heavily contaminated samples showed no inhibition in PCR and was immediately ready to be used for downstream applications, including long fragment PCR, qPCR, and next-generation sequencing (16S and whole genome) without the need for a further inhibitor removal step.



# DNA Isolation & Purification Kits

Soil, Environmental & Fecal Samples

Explore our portfolio of DNA extraction kits to find the right solution for your application.



## SPINeasy® DNA Pro Kit for Soil

Cat. N°: 116546050, 50 preps

- ▶ **Wide sample range:** Kit specifically designed for both complex high biomass samples containing high levels of contaminants as well as low biomass samples.
- ▶ **High DNA yields and purity:** New inhibitor removal chemistry adopted to effectively remove inhibitors even with highly contaminated samples. DNA suitable for a variety of downstream applications.
- ▶ **High alpha-diversity:** Unbias alpha-diversity found on next-generation sequencing outcome.



Silica spin columns

Lysing Matrix YB

The SPINeasy® DNA Pro Kit for Soil has been carefully designed for the isolation of pure microbiome genomic DNA from challenging soil types including those with low biomass or those highly contaminated.

Lysing Matrix YB effectively lyses various microbiome population, including bacteria, fungi, viruses, and protists.

Isolated DNA products showed no inhibition in PCR and were immediately ready to be used for downstream applications, including qPCR, and next-generation sequencing (16S and whole genome) without the need of further inhibitor removal steps.

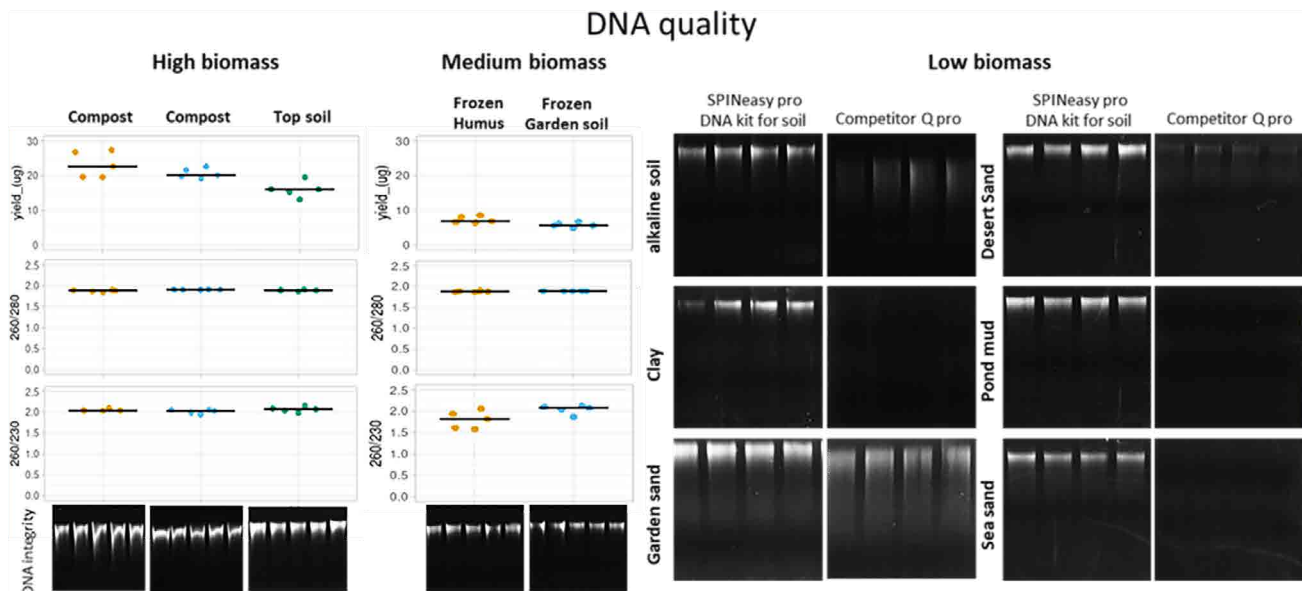


Figure 1. DNA quality. Soil samples with various biomass/ contaminant content (250 mg each) were processed with SPINeasy® DNA Pro Kit for Soil and/or competitor kit. The medium biomass group include samples stored at -20 °C for 12 - 24 months which may negatively affect the yield and integrity of the isolated DNA. The DNA yield and purity (A260/280 and A260/230 ratio) were assessed using spectrophotometer in quadruplicate when the samples were within the detection range. Each dot of the plot represents a single extraction. The horizontal bars indicate the median value. The DNA integrity was assessed using DNA gel. For low biomass samples, similar proportion of DNA eluates were loaded to compare the performance of SPINeasy® DNA Pro Kit for Soil and competitor kit (Q pro).



# DNA Isolation & Purification Kits

Soil, Environmental & Fecal Samples

Explore our portfolio of DNA extraction kits to find the right solution for your application.



## MagBeads FastDNA® Kit for Soil

Cat. N°: 116561050, 50 preps

Cat. N°: 116564384, 384 preps

Cat. N°: 117033100, 96 preps (ready-to-use with the MPure-32™ instrument)

Cat. N°: 117034100, 96 preps (ready-to-use with the MPure-96™ instrument)

- ▶ **Quick and reliable:** Effective DNA extraction from many types of environmental samples.
- ▶ **Flexible:** Manual workflow or easily adaptable to automated platforms.
- ▶ **High-purity:** Uniquely formulated inhibitor removal solution to ensure a high level of purity, increased A260/230 ratio, and extracted pure DNA is suitable for downstream applications.
- ▶ **Environmentally friendly:** No toxic chemicals.



Magnetic Beads Lysing Matrix E

Magbeads FastDNA® Kit for Soil is designed to provide high-throughput isolation of genomic DNA from environmental samples. Samples are first placed into Lysing Matrix E tubes and processed with a FastPrep® instrument to effectively lyse host cells as well as bacteria, fungi, viruses, protists, and other cells present in soil samples.

This kit uses magnetic beads with a high binding capacity to effectively extract DNA via manual or automated methods.

It includes as well specially formulated reagents to eliminate humic acid, polysaccharides, phenolic compounds, and enzyme inhibitors from soil and thus allows for extraction of highly pure genomic DNA ready for PCR, restriction digestion, electrophoresis, and other desired applications.



## MagBeads FastDNA® Kit for Feces

Cat. N°: 116570400, 50 preps

Cat. N°: 116570384, 384 preps

Cat. N°: 117033200, 96 preps (ready-to-use with the MPure-32™ instrument)

Cat. N°: 117034200, 96 preps (ready-to-use with the MPure-96™ instrument)

- ▶ **Quick and simple:** Manual extraction in one hour from human and animal feces, intestinal contents.
- ▶ **Flexible:** Manual workflow or easily adaptable to automated platforms.
- ▶ **High-quality DNA:** Intact, high yield, and free from inhibitors.
- ▶ **Environmentally friendly:** No toxic chemicals.



Magnetic Beads Lysing Matrix E

MagBeads FastDNA® Kit for Feces enables quick isolation of DNA from fecal samples.

These samples are first placed into Lysing Matrix E tubes and processed with a FastPrep® instrument to effectively lyse host cells as well as bacteria, fungi, viruses, protists, and other cells present in feces.

Specially formulated buffers are used to effectively remove various contaminants such as proteins, humic substances, polyphenols, polysaccharides, etc. The kit includes as well proprietary magnetic beads with high binding capacity and selectivity for DNA. The high-quality DNA isolated with the MagBeads FastDNA® Kit for Feces is suitable for a broad range of applications including real-time PCR and next-generation sequencing.



# DNA Isolation & Purification Kits

Water Samples

Explore our portfolio of DNA extraction kits to find the right solution for your application.

## Water Samples



### SPINeasy® DNA Kit for Water

Cat. N°: 116536050, 50 preps

- ▶ **Simple and fast extraction:** Kit supplied with sterile filters to filtrate water samples. Rapid and efficient lysis of microorganisms retained on the filter with 5 mL Lysing Matrix E tubes.
- ▶ **High-quality DNA:** Proprietary buffers designed for the removal of contaminants significantly improves the purity of extracted DNA.
- ▶ **Wide range of applications:** Suitable for various types of water samples such as river water, pond water, seawater, and sewage.



Silica spin columns

Lysing Matrix E

SPINeasy® DNA Kit for Water is a high-performance water DNA extraction kit based on silica-membrane spin column technology. This kit enables quick isolation of DNA from water in less than 30 min.

The kit is supplied with sterile 0.22 µm filter membranes designed to filtrate water samples and collect cells included in the sample as well as Lysing Matrix tubes designed to effectively lyse various types of cells.

The combination of components specifically developed for sample preparation from water samples allows the extraction of DNA of high yield and purity that is ready for downstream analyses such as PCR, restriction digestion, and sequencing.

### High-quality components



FILTER MEMBRANE

- ▶ Sterile 0.22 µm filter membranes.
- ▶ Fast filtration and less contaminants.



OPTIMIZED 5 ML  
LYSING MATRIX E TUBES

- ▶ Unique mixture of 3 different beads.
- ▶ Easy placement of filter membrane.
- ▶ Provides more space for effective cell lysis.
- ▶ Prevents loss of microorganisms.



HIGH-PERFORMANCE  
SPIN COLUMNS

- ▶ Optimal DNA binding capacity.
- ▶ High selectivity for DNA.



# DNA Isolation & Purification Kits

Plant Specimens

Explore our portfolio of DNA extraction kits to find the right solution for your application.

## Plant Specimens



### SPINeasy® DNA Kit for Plant

Cat. N°: 116535050, 50 preps

- ▶ **Efficient and reliable sample homogenization:** Thorough lysis of tough fibrous plant tissues such as leaf, stem, seed, root, needle, and wood with Lysing Matrix A tubes.
- ▶ **High-quality DNA:** Extraction of high yields of pure DNA, totally free from inhibitors even from polysaccharides and polyphenolic-rich plants.
- ▶ **Ready-to-use DNA:** DNA is ready for any application including genetic engineering, genome sequencing, and PCR.



Silica spin columns

Lysing Matrix A

SPINeasy® DNA Kit for Plant is a silica-membrane spin-column kit that enables quick and convenient isolation of genomic DNA from various plant tissues, such as leaf, stem, and seed. High-quality DNA can be extracted from polysaccharides and polyphenolic-rich plants. The use of the specially formulated Lysis Buffer PD and Lysing Matrix A tubes in combination with a FastPrep® instrument enables highly efficient lysis of various types of samples within seconds. For DNA purification, Column PD and kit buffers are designed to deliver DNA extracts of high yield and purity which are compatible with downstream molecular biology applications such as PCR and sequencing.

### Kit performance

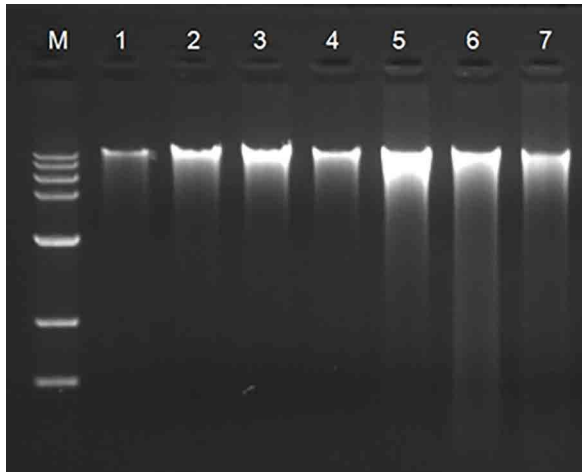


Figure 1 (left): gDNA extracted from various samples using SPINeasy® DNA Kit for Plant, analyzed using agarose gel electrophoresis.

M: DNA marker; Lane 1: Pothos leaf; Lane 2: Tomato leaf; Lane 3: Chili leaf; Lane 4: Tobacco leaf; Lane 5: Pine needle; Lane 6: Corn leaf; Lane 7: Corn kernel.

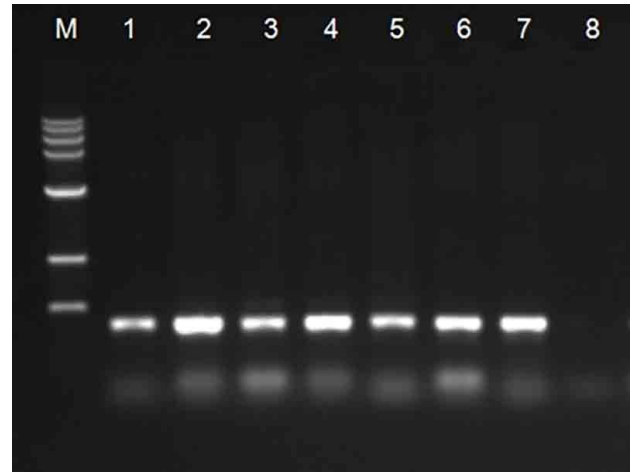


Figure 2 (right): PCR amplification of gDNA extracted from various samples using SPINeasy® DNA Kit for Plant.

M: DNA marker; Lane 1: Pothos leaf; Lane 2: Tomato leaf; Lane 3: Chili leaf; Lane 4: Tobacco leaf; Lane 5: Pine needle; Lane 6: Corn leaf; Lane 7: Corn kernel; Lane 8: Negative control



# RNA Isolation & Purification Kits

Animal & Plant Tissues

Explore our portfolio of RNA extraction kits to find the right solution for your application.

MP Biomedicals supplies a complete range of organic-based, spin column-based as well as magnetic beads-based extraction kits for the isolation of high-quality DNA-free RNA.

Efficient lysis of the starting material and simultaneous inactivation of endogenous RNases is achieved by mixing the sample with the lysis buffer in a 2 mL tube containing Lysing Matrix beads that is then processed in a FastPrep® homogenizer or equivalent bead beater.

After a centrifugation step to pellet the Lysing Matrix beads and cell debris, the RNA is purified with the reagents supplied in the kit using a ready-to-use protocol. Total RNA isolated with MP Biomedicals kits has a high-purity and is ready-to-use for a broad panel of downstream applications: Next-Gen sequencing, RT-PCR, cDNA-library, TaqMan® analysis, and array technologies, Northern Blot, RNA dot blots, and *in-vitro* translation.

## Animal & Plant Tissues



### FastRNA® Pro Green Kit

Cat. N°: 116045050, 50 preps

- ▶ **Efficient:** Lysis of human, animal, and plant tissues with Lysing Matrix D tubes.
- ▶ **Consistent Yields:** RNA isolation with the single reagent RNAPro solution.
- ▶ **High-quality:** RNA is ready-to-use for a variety of downstream applications.



Organic Extraction

Lysing Matrix D

The FastRNA® Pro Green Kit is optimized for the purification of total RNA from human, animal, and plant samples. Add 50 - 300 mg of tissue to a 2 mL tube containing Lysing Matrix D and the proprietary RNAPro solution. After one 40 second run in the FastPrep® instrument, total RNA is isolated via chloroform extraction and ethanol precipitation.



### SPINeasy® RNA Kit for Tissue

Cat. N°: 116543050, 50 preps

- ▶ **Efficient:** Lysis of any human, animal, plant tissue, or cell culture sample with Lysing Matrix A tubes.
- ▶ **Convenient:** Silica spin column method for an easy extraction process.
- ▶ **High-quality:** RNA is ready-to-use for a variety of downstream applications.
- ▶ **Environmentally friendly:** No toxic chemicals.



Silica Spin Columns

Lysing Matrix A

SPINeasy® RNA Kit for Tissue is a silica-membrane spin-column kit that enables quick and convenient purification of total RNA from various human/ animal tissues, plant tissues, and tissue cultures. The use of Lysing Matrix A tubes enables highly efficient lysis of tissue samples within seconds. Purified RNA is of high-quality and immediately ready for RT-PCR and other downstream applications.





# RNA Isolation & Purification Kits

Animal & Plant Tissues

Explore our portfolio of RNA extraction kits to find the right solution for your application.



## MagBeads FastRNA® Kit

Cat. N°: 116572096, 96 preps

Cat. N°: 117033400, 96 preps (ready-to-use with the MPure-32™ instrument)

Cat. N°: 117034400, 96 preps (ready-to-use with the MPure-96™ instrument)

- ▶ **Quick and simple:** RNA extraction from animal and plant tissues, cells in culture, as well as bacteria and yeast in one hour.
- ▶ **Flexible:** Manual workflow or easily adaptable to automated platforms.
- ▶ **High-quality:** RNA is ready for all downstream applications including RT-PCR and Next-Gen sequencing.
- ▶ **Environmentally friendly:** No toxic chemicals.



Magnetic Beads

The MagBeads FastRNA® Kit combines the speed and efficiency of silica-based technology with the convenient handling of magnetic particles for purification of total RNA.

Samples are lysed and RNA is purified from lysates in one step through its binding to the silica surface of the particles in the presence of a chaotropic salt. The particles are separated from the lysates using a magnet and DNA is removed by treatment with RNase-free DNase. The magnetic particles are efficiently washed, and RNA is eluted in RNase-free water.



## MagBeads FastRNA® Kit for FFPE

Cat. N°: 116573192, 192 preps

Cat. N°: 117033500, 96 preps (ready-to-use with the MPure-32™ instrument)

Cat. N°: 117034500, 96 preps (ready-to-use with the MPure-96™ instrument)

- ▶ **Simple and reliable:** RNA extraction from tissue, cells, and blood. A deparaffinization solution is included in the kit for efficient paraffin removal.
- ▶ **Flexible:** Manual workflow or easily adaptable to automated platforms.
- ▶ **High-quality:** RNA is ready for all downstream applications including RT-PCR and Next-Gen sequencing.
- ▶ **Environmentally friendly:** No toxic chemicals.



Magnetic Beads

The MagBeads FastRNA® Kit for FFPE is based on the purification method of high-binding magnetic particles. The sample is lysed and digested. RNA is released into the lysate.

After the addition of magnetic particles and binding solution, RNA will be adsorbed on the surface of magnetic particles, and impurities such as proteins will be removed without adsorption. The adsorbed particles are washed with washing buffer to remove the proteins and impurities, washed with ethanol to remove salts, and finally, the RNA is eluted with elution buffer.



# RNA Isolation & Purification Kits

Animal & Plant Tissues

Explore our portfolio of RNA extraction kits to find the right solution for your application.



## MagBeads FastRNA® Kit for Virus

Cat. N°: 116578050, 50 preps

Cat. N°: 117035100, 96 preps (ready-to-use with the MPure-32™ instrument)

Cat. N°: 117036100, 96 preps (ready-to-use with the MPure-96™ instrument)

- ▶ **Simple and reliable:** Isolation of viral RNA from cell-free/low-cell content biological samples such as body fluids, serum, and plasma, as well as culture supernatant.
- ▶ **Flexible:** Manual workflow or easily adaptable to automated platforms.
- ▶ **High-Quality:** Viral RNA is suitable for a variety of downstream applications.
- ▶ **Environmentally friendly:** No toxic chemicals.



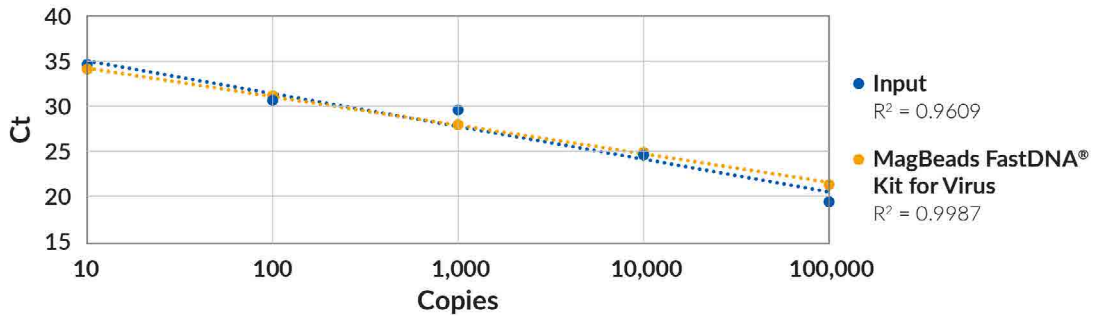
Magnetic Beads

The MagBeads FastRNA® Kit for Virus is specifically optimized for viral RNA extraction, providing high yield and purity.

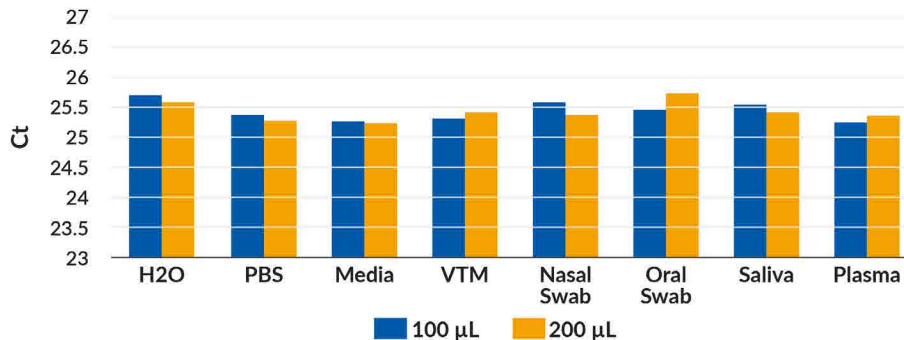
With its simple protocol and fast processing time, the MagBeads FastRNA® Kit for Virus is an essential tool for the isolation of viral RNA from a wide variety of viruses. The extracted RNA can be used for downstream applications such as RT-PCR, qPCR, and sequencing.

### Performance

Real time RT-PCR of  $10^1$  to  $10^5$  copies of Quantitative Genomic RNA from Influenza B virus (ATCC VR-1883DQ). High RNA recovery is achieved, with  $R^2 = 0.9987$  for RNA extracted using MagBeads FastRNA® Kit for Virus.



Real time RT-PCR of RNA extracted from various virus-spiked samples. The same amount of Influenza B virus is spiked into 100 µL or 200 µL of various samples, followed by RNA extraction using MagBeads FastRNA® Kit for Virus. Similar Ct is obtained for the different samples. This kit is suitable for viral RNA extraction using samples from cell culture media, swabs, and bodily fluids.





# RNA Isolation & Purification Kits

Bacteria

Explore our portfolio of RNA extraction kits to find the right solution for your application.

## Bacteria



### FastRNA® Pro Blue Kit

Cat. N°: 116025050, 50 preps

- ▶ **Efficient:** Lysis of any gram-positive and gram-negative bacteria with Lysing Matrix B tubes.
- ▶ **Consistent yields:** RNA isolation with the single-reagent RNAPro solution.
- ▶ **High-quality:** RNA is ready-to-use for a variety of downstream applications.



Organic Extraction

Lysing Matrix B

The FastRNA® Pro Blue Kit is optimized for the purification of total RNA from both gram-positive and gram-negative bacteria. Add a pellet of up to  $10^{10}$  cells in suspension to a 2 mL tube containing Lysing Matrix B and the proprietary RNAPro solution. After one 40-second run in the FastPrep® instrument, total RNA is isolated via chloroform extraction and ethanol precipitation.



### SPINeasy® RNA Kit for Bacteria

Cat. N°: 116541050, 50 preps

- ▶ **Efficient:** Lysis of any gram-positive and gram-negative bacteria with Lysing Matrix B tubes.
- ▶ **Consistent yields:** Silica spin column method for an easy extraction process.
- ▶ **High-quality:** RNA is ready-to-use for a variety of downstream applications.
- ▶ **Environmentally friendly:** No toxic chemicals.



Silica Spin Columns

Lysing Matrix B

SPINeasy® RNA Kit for Bacteria is a silica-membrane spin-column kit that enables quick and convenient purification of total RNA from gram-positive and gram-negative bacteria. A specially formulated RNASS solution that stabilizes and protects RNA in bacteria samples is included in the kit.

The use of Lysing Matrix B tubes in combination with a FastPrep® instrument enables highly efficient lysis of bacterial samples within seconds.

Total RNA of high-quality is purified within 40 minutes and is immediately available for RT-PCR and other downstream applications.



# RNA Isolation & Purification Kits

Yeast & Fungi

Explore our portfolio of RNA extraction kits to find the right solution for your application.

## Yeast & Fungi



### FastRNA® Pro Red Kit

Cat. N°: 116035050, 50 preps

- ▶ **Efficient:** Lysis of yeast and fungi with Lysing Matrix C tubes.
- ▶ **Consistent yields:** RNA isolation with the single-reagent RNAPro solution.
- ▶ **High-quality:** RNA is ready-to-use for a variety of downstream applications.



Organic Extraction

Lysing Matrix C

The FastRNA® Pro Red Kit is optimized for the purification of total RNA from yeast and fungi. Add a pellet of up to  $10^{10}$  cells in suspension to a 2 mL tube containing Lysing Matrix C and the proprietary RNAPro solution.

After one 40-second run in the FastPrep® instrument, total RNA is isolated via chloroform extraction and ethanol precipitation.



### FastRNA® SPIN Kit for Yeast

Cat. N°: 116030050, 50 preps

- ▶ **Efficient:** Lysis of yeast and fungi with Lysing Matrix Y tubes.
- ▶ **Convenient:** Purification of intact high-quality total RNA with the use of specialized spin columns.
- ▶ **High-quality:** RNA is ready-to-use for a variety of downstream applications.
- ▶ **Environmentally friendly:** No toxic chemicals.



Silica Spin Columns

Lysing Matrix Y

The FastRNA® SPIN Kit for Yeast quickly and efficiently isolates high-quality, total RNA from tough-to-lyse yeast strains and fungi in approximately 30 minutes using Lysing Matrix Y tubes for cell lysis and spin columns for the purification process. High-quality total RNA is eluted with RNase-free water.

Both large and small RNA species are recovered with this protocol.



# RNA Isolation & Purification Kits

Soil, Environmental & Fecal Samples

Explore our portfolio of RNA extraction kits to find the right solution for your application.

## Soil, Environmental & Fecal Samples

The FastRNA® Pro Soil-Direct and Indirect kits are designed to efficiently isolate total RNA from organic material found in soil samples, soil supernatants, or any other environmental samples.

The direct method consists of extracting nucleic acid from microorganisms and other biological specimens directly from soil. The indirect method utilizes an initial separation of microorganisms and other biological specimens from the soil followed by lysis of the organisms and RNA purification. FastRNA® Pro Soil kits purify RNA in a process that removes humic substances and other inhibitors and efficiently inactivates cellular RNases during homogenization to prevent RNA degradation. Purified RNA is thus suitable for RT-PCR analysis and other downstream applications.



### FastRNA® Pro Soil Direct Kit

Cat. N°: 116070050, 50 preps

- ▶ **Rapid & efficient:** Thorough sample lysis in seconds of any soil and environmental sample with Lysing Matrix E tubes.
- ▶ **High-purity:** 2 levels of purification to remove efficiently humic acids and other inhibitors.
- ▶ **Reliable:** Cellular RNases are inactivated during homogenization to prevent RNA degradation.



Organic Extraction Silica Spin Columns Lysing Matrix E

The FastRNA® Pro Soil-Direct is designed to efficiently isolate total RNA from organic material found in soil samples. Following processing with Lysing Matrix E in the FastPrep® instrument, samples are extracted with chloroform and cleaned with RNAMATRIX and other proprietary reagents. Purified RNA is suitable for RT-PCR analysis, Next-Gen Sequencing, and other downstream applications.



### FastRNA® Pro Soil Indirect Kit

Cat. N°: 116075050, 50 preps

- ▶ **Clean:** Initial separation of microorganisms and other biological specimens from soil.
- ▶ **Rapid & efficient:** Thorough sample lysis in seconds of any microorganism present in soil and environmental samples with Lysing Matrix E tubes.
- ▶ **Consistent:** Efficient removal of PCR inhibitors and inactivation of cellular RNases during the homogenization step.



Organic Extraction Silica Spin Columns Lysing Matrix E

The FastRNA® Pro Soil Indirect Kit is designed to efficiently isolate total RNA from organic material found in soil samples or soil supernatants.

Following processing with Lysing Matrix E in the FastPrep® instrument, samples are extracted with chloroform and cleaned with RNAMATRIX and other proprietary reagents. Purified RNA is suitable for RT-PCR analysis, Next-Gen Sequencing, and other downstream applications.



# Protein Isolation & Purification Kits

FastProtein™ Matrix - Bacteria and Yeast

## FastProtein™ Matrix - Bacteria and Yeast

- ▶ Save time by reducing sample lysis time to seconds.
- ▶ Quickly and consistently lyse samples from different time points or induction conditions.
- ▶ Proteins extract is ready for immediate electrophoresis or purification.



### FastProtein™ Blue

For lysis of gram-positive and gram-negative bacteria.

Cat N°: 116550400, 50 preps

Cat N°: 116550500, 100 preps

The FastProtein™ Blue matrix is optimal for lysing gram-positive and gram-negative bacteria. These fine glass beads are designed for use with gram-positive bacteria or any difficult microorganism. Cells, resuspended in either 1X PBS or your own expression buffer, are added to the Lysing Matrix and processed in the FastPrep® instrument or another bead beater for 20 – 40 seconds.

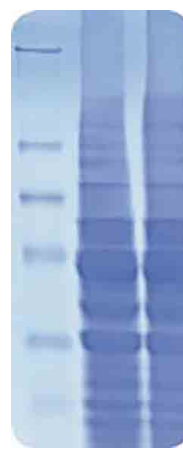
Bacteria



**Figure 1**

12% SDS PAGE of lysate of BL21 cells expressing the GST protein resulting from homogenization with the FastProtein™ Blue Matrix.

Yeast



**Figure 2**

12% SDS PAGE of lysate of yeast cells resulting from homogenization with FastProtein™ Red.



### FastProtein™ Red

For lysis of yeast cells

Cat. N°: 116550600, 50 preps

Cat. N°: 116550700, 100 preps

The FastProtein™ Red matrix is used to lyse yeast cells. Cells, resuspended in either Yeast Breaking Buffer (YBB-supplied with the kit) or your own expression buffer, are added to the small glass beads of this Lysing Matrix and processed in the FastPrep® instrument or another bead beater for 20 – 40 seconds.





# Simultaneous Isolation & Purification of DNA, RNA, and Proteins

Explore our portfolio of extraction kits to find the right solution for your application.

## Simultaneous Purification of RNA, DNA, and Proteins



### SPINeasy® DNA/RNA/Proteins All-In-One

Cat. N°: 116544050, 50 preps

- ▶ **Rapid:** Isolate DNA/RNA/Protein from a single sample in one hour.
- ▶ **Efficient:** Lysis of any resistant sample with Lysing Matrix A tubes.
- ▶ **Convenient:** Easy-to-use silica spin column method for the DNA and RNA extraction process.
- ▶ **High-quality:** DNA, RNA, and proteins are suitable for a variety of downstream applications.
- ▶ **Environmentally friendly:** No toxic chemicals.



Silica Spin Columns

Lysing Matrix A

SPINeasy® DNA/RNA/Protein All-In-One Kit utilizes a convenient workflow and silica-membrane spin columns to isolate DNA, RNA, and protein components from the same sample.

After efficient cell lysis by bead beating with Lysing Matrix A tubes, DNA is adsorbed onto the first spin column, while the flow-through is collected and used for RNA purification. The second spin column captures RNA and the flow-through from this step is used for protein extraction. DNA and RNA are bound on the first and second columns, respectively, and then washed and eluted.

In the final extraction, proteins are precipitated out of solution, pelleted down by centrifugation, washed, and resuspended. Each molecular component is then immediately available for their respective downstream applications.

Sample	Starting Amount (mg)	Extraction Results						
		DNA			RNA			Protein
		Yield (µg/mg sample)	A <sub>260/280</sub>	A <sub>260/230</sub>	Yield (µg/mg sample)	A <sub>260/280</sub>	A <sub>260/230</sub>	
Kidney	17.7	1.28	1.83	2.42	1.30	2.04	2.23	14.12
Spleen	12.4	1.81	1.84	2.45	1.81	2.04	2.22	20.81
Liver	17.0	1.09	1.84	2.89	3.48	2.07	2.17	10.16

Table 1: Quantity and quality of DNA, RNA and protein extracted from animal tissues using SPINeasy® DNA/RNA/Protein All-In-One Kit.

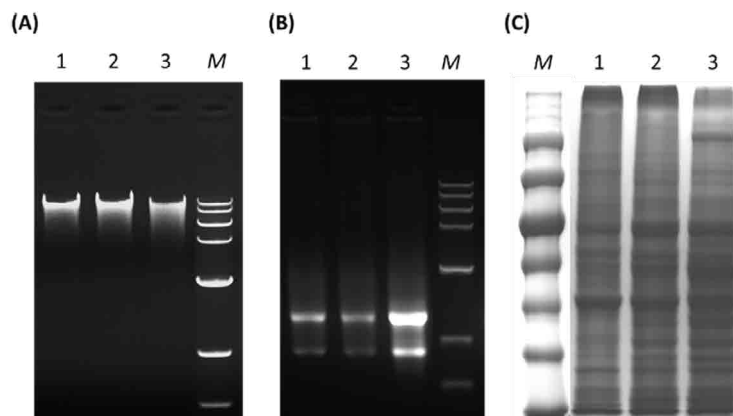


Figure 1 (left): (A) DNA; (B) RNA; (C) protein extracted from each animal tissue using SPINeasy® DNA/RNA/Protein All-In-One Kit, analyzed using gel electrophoresis.

M: DNA marker; Lane 1: Kidney; Lane 2: Spleen; Lane 3: Liver



## FastPrep® Instrument

Product Name	Sample Capacity	Catalog Number	Page
FastPrep-24® 5G	Up to 48	116005500	6
FastPrep-24® Classic	Up to 48	116004500	6
FastPrep-96®	Up to 192	116010500	6
Super FastPrep-2®	2	116012500	6



## FastPrep® Tube holders

Subcategory	Product Name	Capacity	Catalog Number	Page
Ambient Tube Holders	QuickPrep™ 1	24 x 2 mL Tubes	116002512	13
	QuickPrep™ 3	24 x 2 mL Tubes	116005512	13
	HiPrep™	48 x 2 mL Tubes	116002527	13
	TallPrep™	24 x 4.5 mL Tubes	116002540	13
	MidiPrep™	16 x 5 mL Tubes	116002557	14
	TeenPrep™	12 x 15 mL Tubes	116002526	14
	BigPrep™	2 x 50 mL Tubes	116002525	14
Cryogenic Tube Holders	CoolPrep™	24 x 2 mL Tubes	116002528	15
	Cool TeenPrep™	6 x 15 mL Tubes	116002530	15
	Cool BiPrep™	2 x 50 mL Tubes	116002531	15
Metal Tube Holders	MetalQuickPrep™	24 x 2 mL Tubes	116002545	16
	MetalMidiPrep™	18 x 5 mL Tubes	116002544	16
	MetalTeenPrep™	12 x 15 mL Tubes	116002546	16
	MetalBigPrep™	2 x 50 mL Tubes	116002547	16
High Volumes Tube Holders	Dual Plate™	2 x 96 Deep Well Plates	119696168	17
	QuickFlex™	96 x 2 mL Tubes	116010570	17
	TallFlex™	48 x 4.5 mL Tubes	116010580	17
	TeenFlex™	20 x 15 mL Tubes	116010560	18
	BigFlex™	8 x 50 mL Tubes	116010550	18
	LargeFlex™	2 x 250 mL Bottles	116010590	18
	ConFlex™ Adapter	-	116010595	18
Locking Systems	Ratchet Nut for FastPrep-24® Classic	-	116004525	19
	Blue Clickmaster, Ratchet Nut	-	116004525	19
	Camlock	-	116005588	19





## FastPrep® Lysing Matrix

Product Name	Capacity	Pack Size	Catalog Number	Page
● Lysing Matrix A	2 mL	50	116910050	24
		100	116910100	24
		500	116910500	24
	4.5 mL	25	116970025	24
		50	116970050	24
		100	116970100	24
	15 mL	5	116930005	24
		25	116930025	24
		50	116930050	24
	50 mL	10	116950010	24
		50	116950050	24
		100	116950100	24
		500	116950500	24
	96 Deep Well Plates	1	116980001	24
		10	116980010	24
● Lysing Matrix B	2 mL	50	116911050	24
		100	116911100	24
		500	116911500	24
	4.5 mL	25	116971025	24
		50	116971050	24
		100	116971100	24
	15 mL	5	116931005	24
		25	116931025	24
		50	116931050	24
	50 mL	10	116951010	24
		50	116951050	24
		100	116951100	24
		500	116951500	24
	96 Deep Well Plates	1	116981001	24
		10	116981010	24
● Lysing Matrix C	2 mL	50	116912050	24
		100	116912100	24
		500	116912500	24
	4.5 mL	25	116972025	24
		50	116972050	24
		100	116972100	24
	15 mL	5	116932005	24
		25	116932025	24
		50	116932050	24
	50 mL	10	116952010	24
		50	116952050	24
	96 Deep Well Plates	1	116982001	24
		10	116982010	24





## FastPrep® Lysing Matrix

Product Name	Capacity	Pack Size	Catalog Number	Page
● Lysing Matrix D	2 mL	50	116913050	24
		100	116913100	24
		500	116913500	24
	4.5 mL	25	116973025	24
		50	116973050	24
		100	116973100	24
	15 mL	5	116933005	24
		25	116933025	24
		50	116933050	24
	50 mL	10	116953010	24
		50	116953050	24
		100	116953100	24
		500	116953500	24
	96 Deep Well Plates	1	116983001	24
10		116983010	24	
● Lysing Matrix E	2 mL	50	116914050	24
		100	116914100	24
		500	116914500	24
	4.5 mL	25	116974025	24
		50	116974050	24
		100	116974100	24
	15 mL	5	116934005	24
		25	116934025	24
		50	116934050	24
	50 mL	10	116954010	24
		50	116954050	24
		100	116954100	24
	96 Deep Well Plates	1	116984001	24
		10	116984010	24
○ Lysing Matrix F	2 mL	50	116915050	24
		100	116915100	24
		500	116915500	24
	15 mL	25	116935025	24
		50	116935050	24
● Lysing Matrix G	2 mL	50	116916050	24
		100	116916100	24
● Lysing Matrix H	2 mL	50	116917050	24
		100	116917100	24
	4.5 mL	25	116997025	24
		50	116997050	24
		100	116919100	24





## FastPrep® Lysing Matrix

Product Name	Capacity	Pack Size	Catalog Number	Page
○ Lysing Matrix I	2 mL	50	116918050	24
		100	116918100	25
● Lysing Matrix J	2 mL	50	116919050	25
		100	116919100	25
	15 mL	5	116936005	25
		25	116936025	25
		50	116936050	25
		50	116920050	25
● Lysing Matrix K	2 mL	100	116920100	25
		50	116923050	25
● Lysing Matrix M	2 mL	100	116923100	25
		500	116923500	25
		25	116949025	25
	4.5 mL	50	116949050	25
		100	116949100	25
		25	116939025	25
	15 mL	50	116939050	25
		10	116959010	25
	50 mL	50	116959050	25
		50	116925050	25
○ Lysing Matrix S	2 mL	100	116925100	25
		500	116925500	25
		25	116945025	25
	4.5 mL	50	116945050	25
		100	116945100	25
		5	116938005	25
	15 mL	25	116938025	25
		50	116938050	25
		10	116943010	25
	50 mL	50	116943050	25
		1	116925001	25
	96 Deep Well Plates	10	116925010	25





## FastPrep® Lysing Matrix

Subcategory	Capacity	Pack Size	Catalog Number	Page	
○ Lysing Matrix SS	2 mL	50	116921050	25	
		100	116921050	25	
		200	116921500	25	
	15 mL	5	116942005	25	
		25	116942025	25	
		50	116942050	25	
	50 mL	10	116941010	25	
		50	116941050	25	
		100	116941100	25	
	● Lysing Matrix Y	2 mL	50	116960050	25
			100	116960100	25
			500	116960500	25
4.5 mL		25	116977025	25	
		50	116977050	25	
		100	116977100	25	
15 mL		5	116975005	25	
		25	116975025	25	
		50	116975050	25	
50 mL		10	116976010	25	
		50	116976050	25	
96 Deep Well Plates		1	116960001	25	
		10	116960010	25	
● Lysing Matrix Z		2 mL	50	116961050	25
			100	116961100	25
	500		116961500	25	
	4.5 mL	25	116985025	25	
		50	116985050	25	
		100	116985100	25	
	15 mL	5	116978005	25	
		25	116978025	25	
		50	116978050	25	
	50 mL	10	116979010	25	
		50	116979050	25	
	96 Deep Well Plates	1	116961001	25	
		10	116961010	25	
	Metal Lysing Tube with Grinding Ball	2 mL	2 each	116991002	27
			3 each	116991003	27
6 each			116991006	27	
Metal Lysing Tube with Grinding Cylinder	2 mL	2 each	116992002	27	
		3 each	116992003	27	
		6 each	116992006	27	
Replacement O-rings for metal Lysing tube		100 O-rings	116990100	27	
Metal Lysing Matrix Tubes	50 mL	1 Tube	116957001	28	
		1 Tube	116957002	28	





## Automated Nucleic Acid Purification

Product Name	Pack Size	Catalog Number	Page
MPure-12™	1	117002200	30
MPure-32™	1	07EMC043D	33
MPure-96™	1	07EMC044D	34

Subcategory	Product Name	Pack Size	Catalog Number	Page
	<b>MPure-12™</b>	1	117002200	30
MPure-12™ Purification Kits	MPure™ Blood DNA Extraction Kit 200	48 Preps	117022100	31
	MPure™ Blood DNA Extraction Kit 1200	48 Preps	117022200	31
	MPure™ Viral Nucleic Acid Extraction Kit	48 Preps	11722300	31
	MPure™ Tissue DNA Extraction Kit	48 Preps	117022400	31, 32
	MPure™ Cultured Cell DNA Extraction Kit	48 Preps	117022500	31, 32
	MPure™ Bacterial DNA Extraction Kit	48 Preps	117022600	31, 32
	MPure™ HPV DNA Extraction Kit for Swab Samples	48 Preps	117022700	31, 32
	MPure™ TB DNA Extraction Kit	48 Preps	117022800	31, 32
	MPure™ FFPE DNA Extraction Kit	48 Preps	117022900	31, 32
	MPure™ Forensic DNA Extraction Kit	48 Preps	117022110	31, 32
	MPure™ Viral/ Pathogen Nucleic Acids Extraction Kit A	48 Preps	117022120	31, 32
	MPure™ Viral/ Pathogen Nucleic Acids Extraction Kit B	48 Preps	117022130	31, 32
	MPure™ Viral RNA Extraction Kit	48 Preps	117022140	31, 32
	MPure™ Viral Nucleic Acid Extraction Kit 800	48 Preps	117022170	31, 32

	<b>MPure-32™</b>	1	07EMC043D	33
MPure-32™ Consumables	8-strip A	500	117032148	33
	6-tube Format Autotube	1536	117032149	33
	16-Base for Autotube B	300	117032150	33
	96 Deep-Well Plate	100	117032151	33

	<b>MPure-96™</b>	1	07EMC044D	34
MPure-96™ Consumables	96 Deep-Well Plate	500	117032151	34
	96-Spin Tips Box	1536	117096152	34
	6-tube Format Autotube	300	117032149	34
	16-Base for Autotube B	500	117032150	34
	Spin Tips	500	117096153	34





## Nucleic Acid Purifications Kits

Subcategory	Product Name	Pack Size	Catalog Number	Page	
<b>Manual Nucleic Acid and Protein Purification : DNA Isolation &amp; Purification Kits</b>					
Multi-samples: Eukaryotes & Prokaryotes	FastDNA® SPIN Kit	100 Preps	116540600	37	
	SPINeasy® DNA Kit for Tissue and Bacteria	50 Preps	116532050	37	
	MagBeads FastDNA® Kit		192 Preps	116575192	38
		(ready-to-use with the MPure-32™ instrument)	96 Preps	117033600	38
		(ready-to-use with the MPure-96™ instrument)	96 Preps	117034600	38
	Magbeads FastDNA® Kit for FFPE		96 Preps	116576096	38
		(ready-to-use with the MPure-32™ instrument)	96 Preps	117033800	38
(ready-to-use with the MPure-96™ instrument)		96 Preps	117034800	38	
Body Fluids	SPINeasy® DNA Kit for Saliva	50 Preps	116551050	39	
	SPINeasy® DNA Kit for Blood	50 Preps	116552050	39	
	SPINeasy® Host Depletion Microbial DNA Kit	50 Preps	116545050	40	
	MagBeads FastDNA® Kit for Blood		96 Preps	116574096	41
		(ready-to-use with the MPure-32™ instrument)	96 Preps	117033700	41
		(ready-to-use with the MPure-96™ instrument)	96 Preps	117034700	41
	MagBeads Fast Circulating DNA Kit		192 Preps	116577192	41
(ready-to-use with the MPure-32™ instrument)		96 Preps	117033900	41	
(ready-to-use with the MPure-96™ instrument)		96 Preps	117034900	41	
Soil & Environmental Samples	FastDNA® SPIN Kit for Soil	50 Preps	116560200	42	
		10 Preps	116560600	42	
	FastDNA® SPIN Kit for Feces	50 Preps	116570200	43	
	SPINeasy® DNA Pro Kit for Feces	50 Preps	116547050	43	
	SPINeasy® DNA Pro Kit for Soil	50 Preps	116546050	44	
	MagBeads FastDNA® Kit for Soil		50 Preps	116561050	45
			384 Preps	116564384	45
		(ready-to-use with the MPure-32™ instrument)	96 Preps	117033100	45
		(ready-to-use with the MPure-96™ instrument)	96 Preps	117034100	45
	MagBeads FastDNA® Kit for Feces		50 Preps	16570400	45
			384 Preps	116570384	45
(ready-to-use with the MPure-32™ instrument)		96 Preps	117033200	45	
(ready-to-use with the MPure-96™ instrument)		96 Preps	117034200	45	
Water Samples	SPINeasy® DNA Kit for Water	50 Preps	116536050	46	
Plant Specimens	SPINeasy® DNA Kit for Plant	50 Preps	116535050	47	





## Nucleic Acid Purifications Kits

Subcategory	Product Name	Pack Size	Catalog Number	Page	
<b>RNA Isolation &amp; Purification Kits</b>					
Animal & Plant Tissues	FastRNA <sup>®</sup> Pro Green Kit	50 Preps	116045050	48	
	SPINeasy <sup>®</sup> RNA Kit for Tissue	50 Preps	116543050	48	
	MagBeads FastRNA <sup>®</sup> Kit	(ready-to-use with the MPure-32™ instrument)	96 Preps	116572096	49
		(ready-to-use with the MPure-96™ instrument)	96 Preps	117033400	49
		(ready-to-use with the MPure-96™ instrument)	96 Preps	117034400	49
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	FastRNA <sup>®</sup> SPIN Kit for Yeast	50 Preps	116030050	52	
Soil & Environmental Samples	FastRNA <sup>®</sup> Pro Soil Direct Kit	50 Preps	116070050	53	
	FastRNA <sup>®</sup> Pro Soil Indirect Kit	50 Preps	116075050	53	
<b>Protein Isolation &amp; Purification Kits</b>					
FastProtein Matrix - Bacteria and Yeast	FastProtein™ Blue	50 Preps	116550400	54	
		100 Preps	116550500	54	
	FastProtein™ Red	50 Preps	116550600	54	
		100 Preps	116550700	54	
<b>Simultaneous Isolation &amp; Purification of DNA, RNA, and Proteins</b>					
Simultaneous Isolation & Purification of DNA, RNA, and Proteins	SPINeasy <sup>®</sup> DNA/RNA/Proteins All-In-One	50 Preps	116544050	55	



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