

# AUTOMATION SOLUTION



MP Bio offers a range of automation solutions, which including Fastprep, the sample homogenization system, a wide range of adaptors, MPure, Nucleic acid automation purification system and extraction kits. These will help to boost the lab productivity by getting consistent recovery of your target DNA, RNA, or Protein.



Find your optimal solution for lysing, homogenizing or grinding any environmental sample.

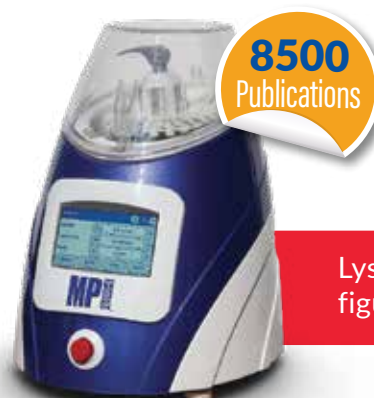
### FastPrep-24™ Classic

Catalogue Number: 116004500



### FastPrep-24™ 5G

Catalogue Number: 116005500



Lysis in 40 secs  
figure 8 motions

FastPrep-24™ Classic	Product	FastPrep-24™ 5G
The most advanced sample prep system available	Description	Time-tested sample prep system
Up to 48	Sample Capacity	Up to 48
Common	Adapters	Common
Yes	Cryogenic Lysis	Yes
LCD/membrane keyboard	Interface	Touch Screen
No	Pre-Defined Protocols	72
5	User Defined Protocols	12
4.0 m/s	Min Speed	4.0 m/s
6.5 m/s	Max Speed	10.0 m/s
<2 sec to max	Acceleration	<2 sec to max
< 2 sec to stop	Deceleration	< 2 sec to stop
Figure 8 Tridimensional	Motion	Figure 8 Tridimensional
40	Typical Lysis Time (s)	20
465 mm (H) x 437 mm (W) x 332 mm (L)	Dimensions	490 mm (H) x 472 mm (W) x 385 mm (L)
17.5 kg (45 lb)	Weight	23.6 kg (52 lb)
70 dB	Loudness	<70 dB
90-250 V AC, 50/60 Hz, 500W	Power requirements	120 VAC/60 Hz, 500W; 230 VAC/50 Hz, 500 W
Automatic	110/230V switch	Automatic

# Sample Holders

## Sample Holders for FastPrep Systems are Flexible, Interchangeable, and Available for Ambient or Cryogenic Sample Types

MP Bio 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 to 250 mL tube size and are built for durability in ambient and cryogenic conditions.

### Ambient Temperature Sample Holders for FastPrep-24 and FastPrep-24 5G Instruments



#### QuickPrep™ Sample Holder

24 x 2 mL tubes (included with FastPrep24™ instrument)

Cat. No. 116002512



#### QuickPrep™ 3 Sample Holder

24 x 2 mL tubes (included with FastPrep24™ 5G instrument)

Cat. No. 116005512



#### BigPrep™ Sample Holder

2 x 50 mL tubes

Cat. No. 116002525



#### TeenPrep™ Sample Holder

12 x 15 mL tubes

Cat. No. 116002525



#### HiPrep™ Sample Holder

48 x 2 mL tubes

Cat. No. 116002527



#### TallPrep™ Sample Holder

24 x 4.5 mL tubes

Cat. No. 116002540

### Cryogenic Temperature Sample Holders for FastPrep-24 and FastPrep-24 5G Instruments

During mechanical lysis, the temperature within the tube can increase and can cause damage to the molecules in your sample.

- Protects thermosensitive molecules from heat degradation due to an innovative design encompassing a cooling chamber.
- Prevents the increase of sample temperature during the homogenization process by maintaining sample temperature at 4°C.
- Ensures a highly effective grinding process of any sample, even the most elastic, by making them brittle.



#### CoolPrep™ Sample Holder

24 x 2 mL tubes

Cat. No. 116002528



#### CoolleenPrep™ Sample Holder

6 x 15 mL tubes

Cat. No. 116002530



#### CoolBigPrep™ Sample Holder

2 x 50 mL tubes

Cat. No. 116002531

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.



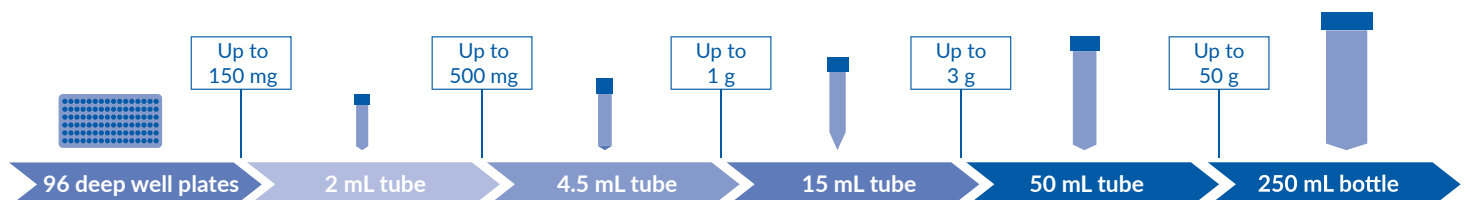
► **No cross-contamination:** Single-use closed Lysing Matrix tubes.



► **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.



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

# Lysing Matrix Tubes Selection Guide

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

Find the Lysing Matrix Tailored to your Application

Sample Type		Lysing Matrix															
Animal & Human Tissues		A	B	C	D	E	F	G	H	I	J	K	M	S	SS	Y	Z
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	•			•												•

## Customize your own protocol

**MPure-32™**

Throughput 1 - 32 Samples

**Accurate Temperature Control System**

Two heating blocks ensure your assay to be run at the optimal temperature for maximum yield, speed, and result consistency

BUILT IN  
UV  
LIGHT**MPure-96™**

Throughput 1 - 96 Samples

**Fully Automated**

- Simultaneous sample processing and purification of nucleic acid
- Independent temperature control modules ensure the optimal assay performance

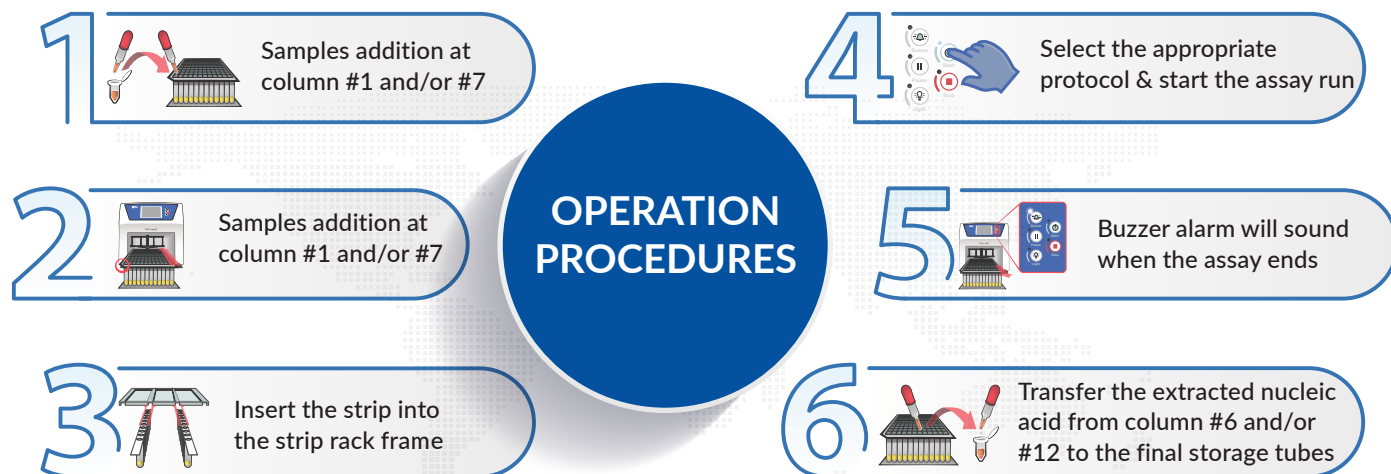
**Whirl Stirring Mixing Technology**

- Enable the sample processing of up to 1,600 µL
- Effective prevention of cross contamination from aerosol

Speed of up to  
**3,000**  
rpm

MPure-32™	Product	MPure-96™
45 ~ 60min	Run Time	25 ~ 60 min
Max 32 Samples	Samples per run	Max 96 Samples
21kg	Weight (NW)	Approx. 95kg
38cm x 35cm x 37cm	Dimensions (WxDxH)	87cm x 57.5cm x 70cm
3.2A 100 - 240V	Power Supply	AC 220-240 V & AC 100-120V*
50µl - 1,000µl	Processing Volume	50µl - 1,600µl
> 4,300 gauss	Magnetic Rod	> 3,900 gauss
1 Set	Temp Control	4 Sets
-	Spin Speed	up to 3,000 rpm
Yes (2pcs)	Heating Block	Yes (4pcs)
RT ~ 70°C	Heating	RT ~ 130°C
UV Lamp	Cleansing Function	UV & HEPA
5.5" Touch Screen	Display	7" Touch Screen

\* A separate model for this voltage is also available



## ESP150

300pcs/carton

(MPure-32/96) 16-base  
(for Autotube) ESP151

## ESP149

1,536pcs/carton

(MPure-32/96)  
6-tube format Autotube

## ESP148

500pcs/carton

(MPure-32) 8-strip A  
(Cover for Magnetic Rod)

## ESP151

100pcs/carton

(MPure-32/96)  
96 Deep-well (Autoplate)



## Order Information

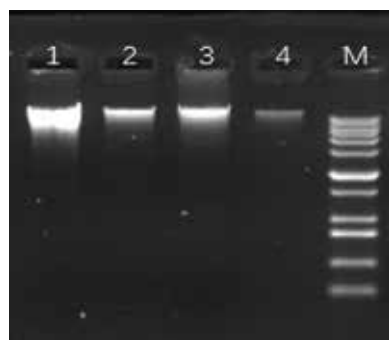
Description	Size/pack	Catalogue No.
(MPure-32/96) 6-tube format Autotube	1,536 pcs / carton	ESP149
(MPure-32/96) 16-base (for Autotube)	300 pcs / carton	ESP150
(MPure-32/96) 96 Deep-well Plate (Autoplate)	100 pcs / carton	ESP151
(MPure-96) 96 Spin Tips (Assembled Box)	80 pcs / carton	ESP152
(MPure-96) Spin Tips	1,000 pcs / bag (20 bags)	ESP153
(MPure-32) 8-strip A (Cover for Magnetic Rod)	24 pcs	ESP181
(MPure-32) 6-tube format Autotube	96 pcs	ESP182
(MPure-32) 16-base (for Autotube)	16 pcs	ESP183
(MPure-32/96) 96 Deep-well Plate (Autoplate)	10 pcs	ESP184
(MPure-96) 96 Spin Tips (Assembled Box)	5 pcs	ESP185
(MPure-96) Spin Tips	1000pcs	ESP186



The performance of MPure-32™ aNAP System has been extensively evaluated with MagBeads FastDNA/ FastRNA Kits. The following data show the high yield and purity of gDNA extracted from various soil samples and feces samples.

gDNA extracted from various soil samples using

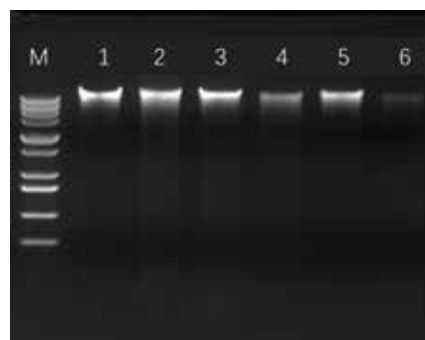
#### MagBeads FastDNA® Kit for Soil



Lane M	1kb plus DNA ladder
Lane 1	Organic Soil 3μL
Lane 2	Flowerbed Soil 8μL
Lane 3	Saline Soil 8μL
Lane 4	Desert Soil 8μL

gDNA extracted from various feces samples using

#### MagBeads FastDNA® Kit for Feces



Lane M	1kb plus DNA ladder
Lane 1	30mg Swine Feces
Lane 2	15mg Mouse Feces
Lane 3	30mg Human Feces
Lane 4	150mg Chicken Feces
Lane 5	150mg Bovine Feces
Lane 6	150mg Elephant Feces



# MagBeads FastDNA™ & FastRNA™

## Nucleic Acid Purification Kits



MagBeads FastDNA™ and FastRNA™ kits employ magnetic beadbased technology to selectively bind DNA or RNA, while eliminating common impurities. Recovered nucleic acids are of high yield and purity and ready-to-use in PCR, qPCR, NGS, and more. Ideal for both manual and automated workflows, these kits provide a quick, easy, and convenient solution for streamlining and scaling-up the sample preparation process.



### FLEXIBLE

Adaptable for mid-  
to highthroughput  
workflows

Optimized kits for diverse  
sample types



### SCALABLE

Designed for manual  
extractions using  
magnetic racks or nucleic  
acid extraction automated  
systems

Compatible with  
FastPrep® homogenizers  
and 96-tube Lysing Matrix  
racks for faster lysis



### EFFICIENT

High-binding capacity  
magnetic beads for  
increased DNA/RNA  
yields

Simple and quick  
procedures for obtaining  
pure, inhibitor-free nucleic  
acids

## DNA Extraction and Purification

### High quality DNA

High concentrations of pure DNA that is free from inhibitors

### Simple protocol

Easy to use, high throughput, and designed for both manual and automated magnetic processors including MPure-32™ and MPure-9™

### Wide applicability

Wide range of applications, suitable for all types of soil samples

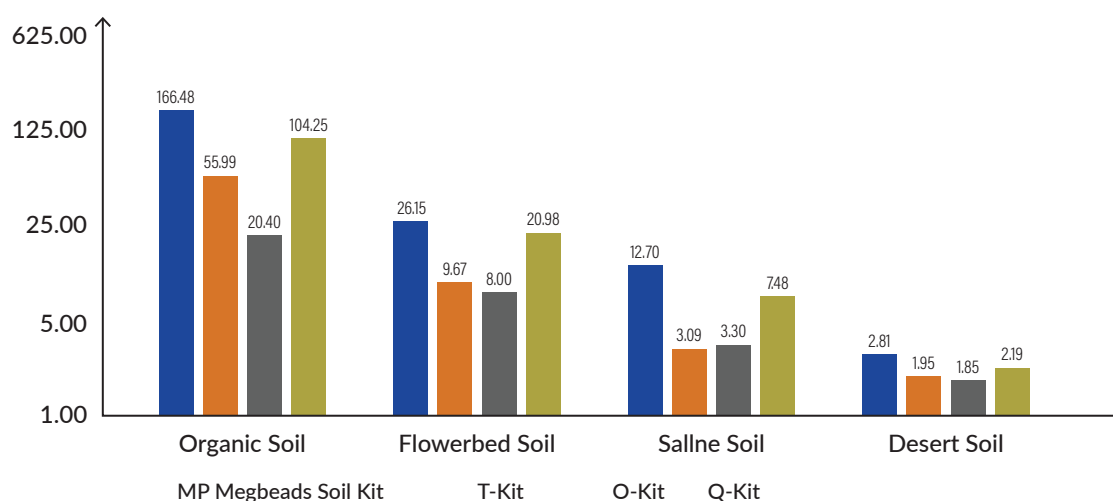
### Environmentally Friendly

No phenol/ chloroform or other toxic chemicals



## Product Comparison

MagBeads FastDNA™ Kit for Soil has the highest yield across different types of samples.



## Order Information

Product Name	Size	Catalogue No.
MagBeads FastDNA® Kit for Soil	50 preps	116561050
MagBeads FastDNA® Kit for Soil (Ready-to-Use for MPure-32)	32 preps	117033100
MagBeads FastDNA® Kit for Soil (Ready-to-Use for MPure-96)	96 preps	117034100

# Magbeads FastDNA™ Kit For Feces

## DNA Extraction and Purification

### High quality DNA

High concentrations of pure DNA that is free from inhibitors

### Simple protocol

Easy to use, high throughput and compatible with many automated instruments especially on MPure-32™ and MPure-96™

### Wide applicability

Wide range of applications, suitable for all types of feces, intestinal content

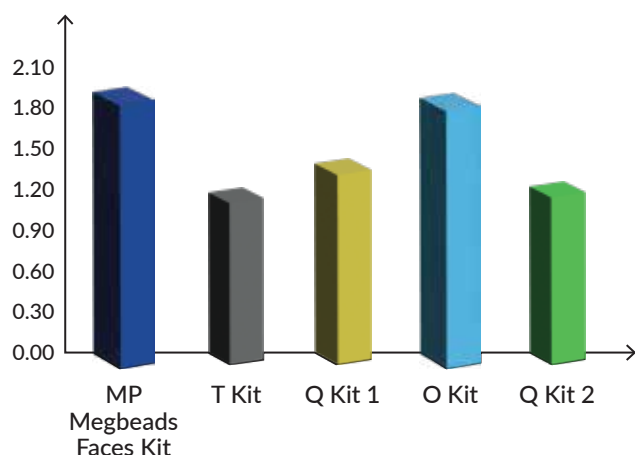
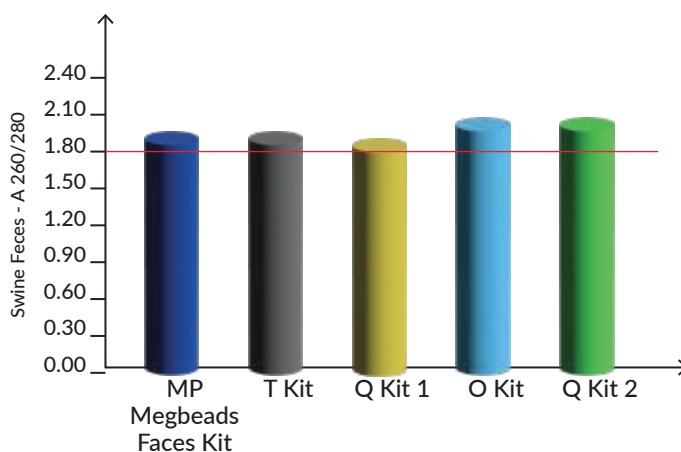
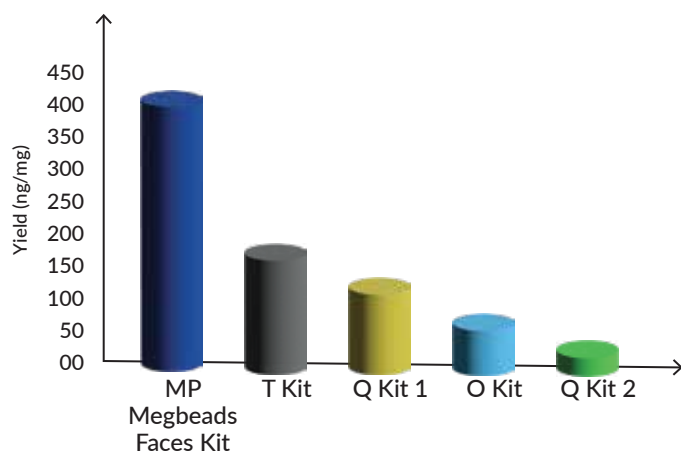
### Environmentally Friendly

No phenol/ chloroform or other toxic chemicals



## Product Comparison

MagBeads FastDNA™ Kit for Soil has the highest yield across different types of samples.



Figures demonstrating DNA yields and absorbance ratios result obtained from feces sample using MagBeads FastDNA kit for Feces and other competitor kits following manufacturer's recommended protocols.

\*Other tested sample: Chicken, bovine, human, dog, mouse, elephant, goat (not shown)

## Order Information

Product Name	Size	Catalogue No.
MagBeads FastDNA® Kit for Feces	50 preps	116570400
MagBeads FastDNA® Kit for Feces (Ready-to-Use for MPure-32)	32 preps	117033200
MagBeads FastDNA® Kit for Feces (Ready-to-Use for MPure-96)	96 preps	117034200

# Performance & Comparison Data

## Environmental Samples

Figure 1. Soil Sample Analysis

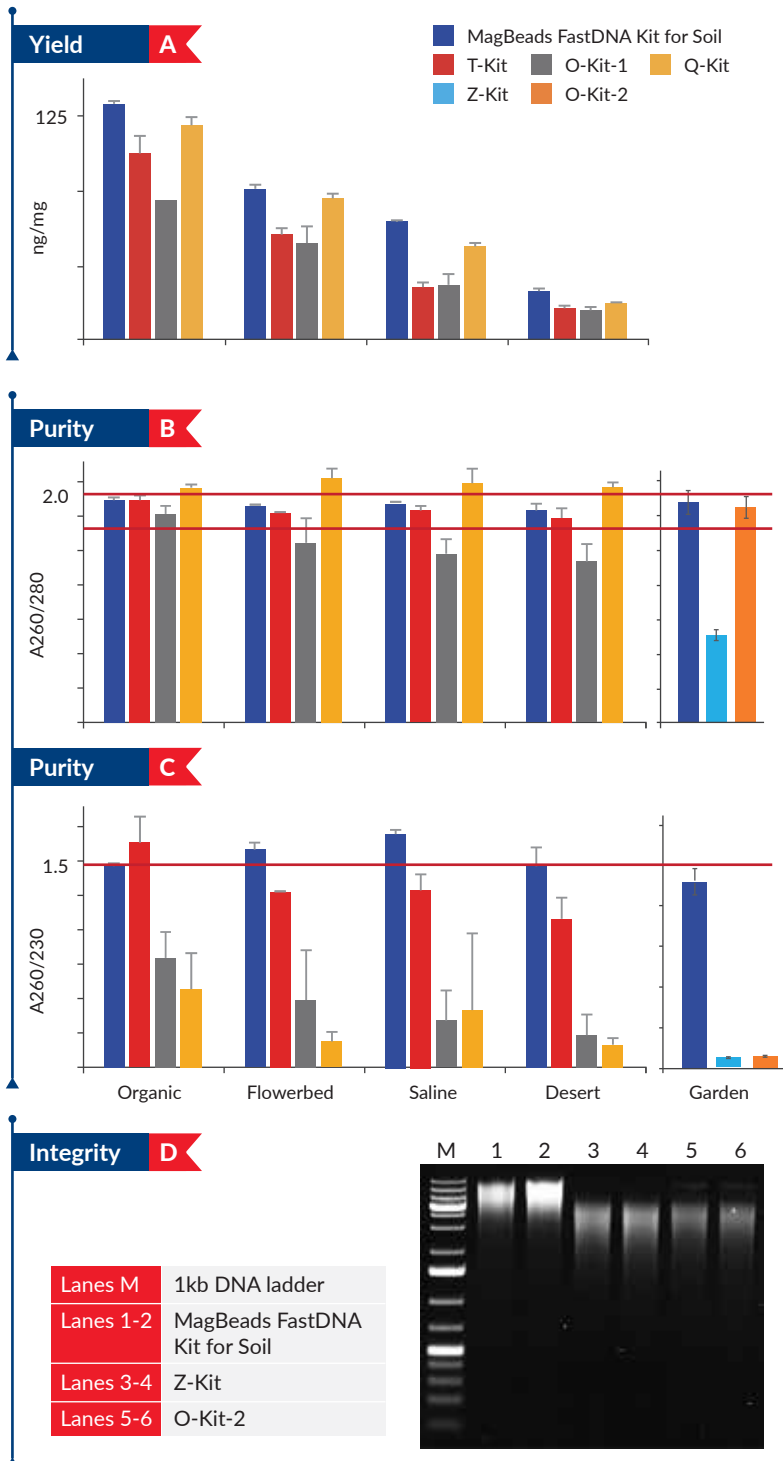


Figure 1. Soil sample DNA analysis using MagBeads FastDNA Kits or competitor kits. (A) DNA yield of various soil sample inputs using MagBeads FastDNA Kit for Soil (blue bars) or competitor kits. (B) A260/280 absorbance ratios or (C) A260/230 absorbance ratios of DNA purified from various soil samples using MagBeads FastDNA Kit for Soil (blue bars) or various competitor kits. A260/230 ratios are often used as an indicator for the presence of contaminating organic compounds. (D) Quality/Integrity of DNA extracted using MagBeads FastDNA Kit for Soil or competitor kits shown by agarose gel electrophoresis.

Figure 2. Feces Sample Analysis

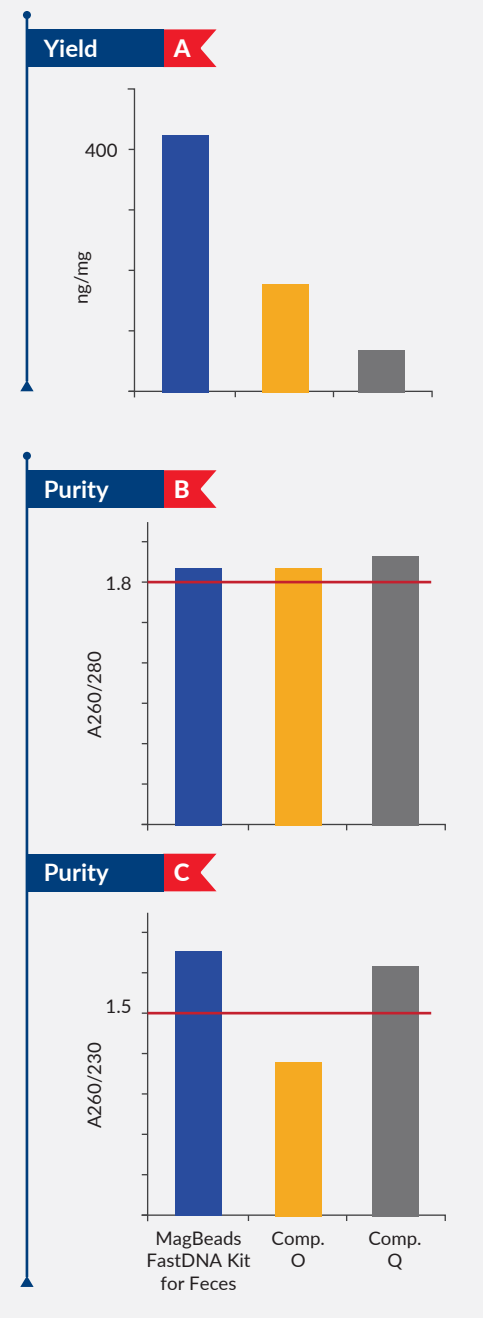


Figure 2. Fecal sample DNA analysis using MagBeads FastDNA Kits or competitor kits. (A) DNA yield of fecal samples using MagBeads FastDNA Kit for Feces (blue bars) or competitor kits. (B) A260/280 absorbance ratios or (C) A260/230 absorbance ratios of DNA purified from fecal samples using MagBeads FastDNA Kit for Feces (blue bars) or various competitor kits. A260/230 ratios are often used as an indicator for the presence of contaminating organic compounds.

# Magbeads FastDNA™ Kit For Blood

MagBeads FastDNA Kit for Blood is intended for purification of total DNA for reliable PCR and Southern blotting. Samples up to 200  $\mu$ L can be processed and total DNA (e.g., genomic, viral, mitochondrial) can be purified from whole blood, plasma, serum, buffy coat, bone marrow, other body fluids, lymphocytes, cultured cells. MagBeads FastDNA Kit for Blood delivers fast and reliable results through the purification method of high binding magnetic particles.

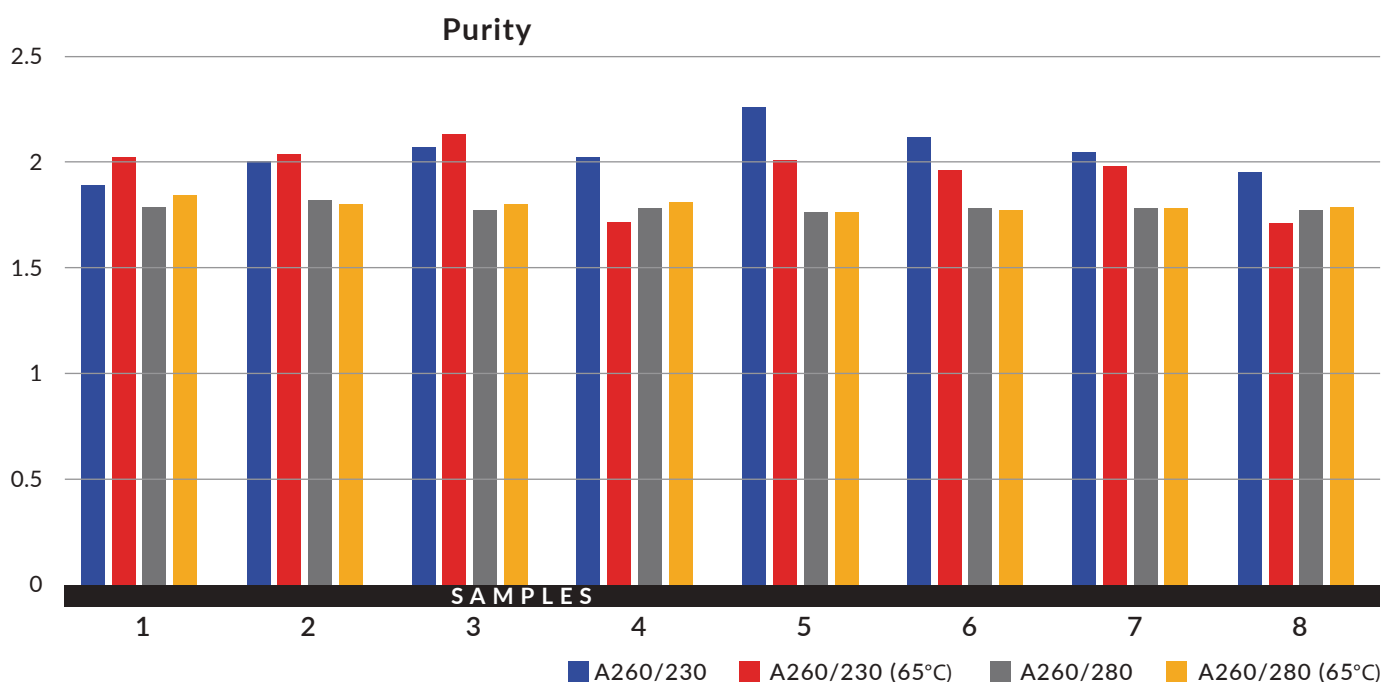


## Features

- High binding affinity to capture DNA from various blood samples
- Save valuable time with polydisperse magnetic beads
- False positive/negative is minimized with proteinase K and RNase A

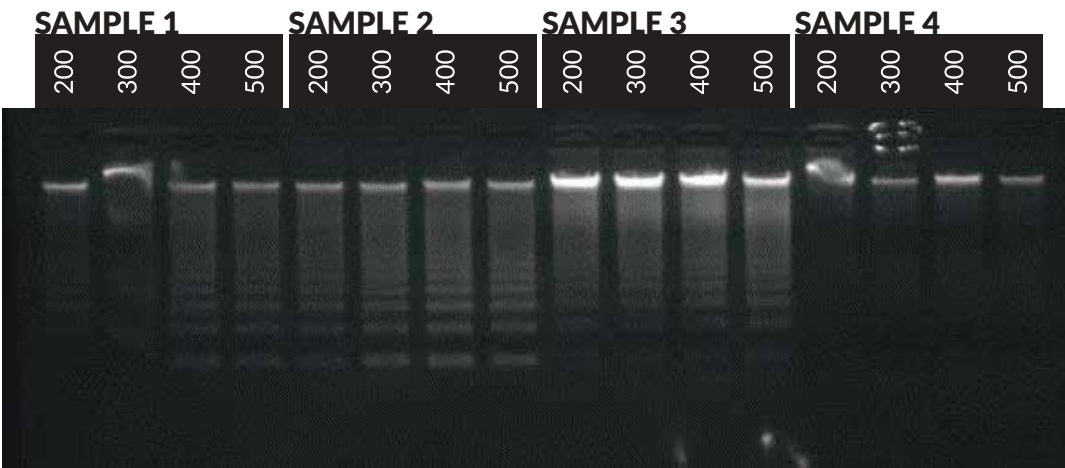
## Performance

DNA Purity of Blood Samples Extracted using MagBeads FastDNA Kit for Blood at Different Temperature.



Total of 8 fresh and frozen samples were subjected to extraction using the MagBeads FastDNA Kit for Blood. Each extraction used 200  $\mu$ L as starting sample. The results show that temperature does not have a significant effect on purity.

DNA Extraction Using MagBeads FastDNA Kit for Blood with Varied Lysis Buffer Volumes.



200µL, 300µL, 400µL, and 500µL of lysis buffer were introduced in addition to the initial 200µL of the sample in each well. The gel electrophoresis results revealed distinct, high-quality DNA bands under all conditions, thereby confirming the effectiveness of lysis buffer volumes ranging from 200µL to 500µL.

Order Information

Product Name	Size	Catalogue No.
MagBeads FastDNA for Blood	96 Preps	116574096
MagBeads FastDNA for Blood (Ready-to-Use for MPure-32)	96 Preps	117033700
MagBeads FastDNA for Blood (Ready-to-Use for MPure-96)	96 preps	117034700

# MagBeads FastDNA™ Kit For FFPE

The MagBeads FastDNA Kit for FFPE is designed for purifying DNA from FFPE samples. The extraction can be accomplished through manual high salt binding, ethanol binding or automated MPure aNAP systems. High-salt binding is effective in removing pigments or polysaccharides from complex FFPE samples, thereby enhancing the purity of nucleic acid, and preventing blockages for further analysis. Ethanol mediated adsorption is optimal for improving nucleic acid yield.

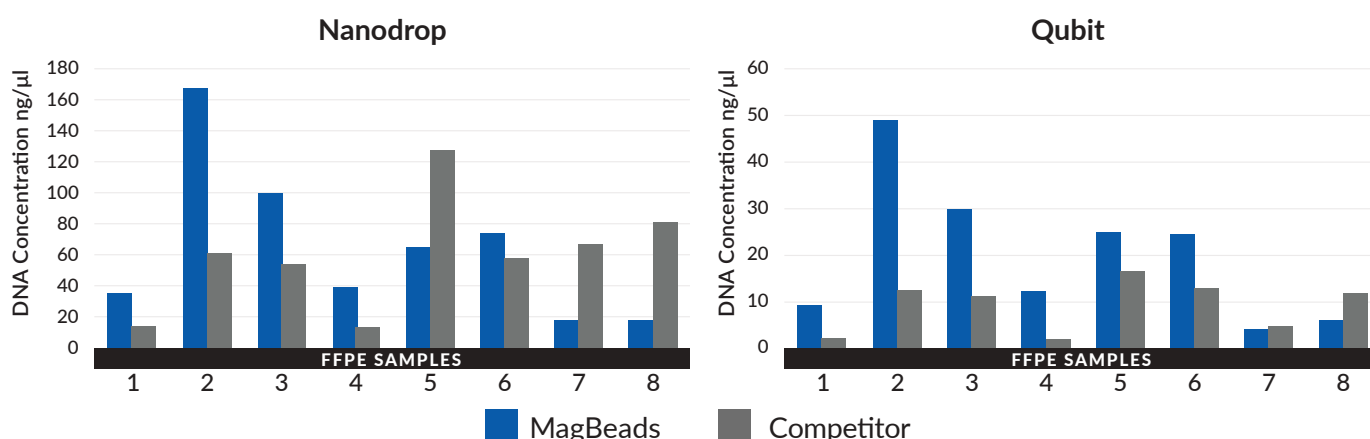


## Features

- High yield of extracted DNA (with recovery rate of up to 90%)
- Various extraction methods are available to ensure the most optimal results
- High purity of extracted DNA (optimal A260/280 and A260/230 ratios)

## Performance

DNA concentration of FFPE samples extracted with MagBeads and competitor kit



DNA extraction was performed using the **MagBeads FastDNA Kit for FFPE** and a competitor kit on 8 FFPE samples.

Subsequently, the extracted DNA concentrations were measured using Nanodrop and Qubit. The data showed that the MagBeads FastDNA kit for FFPE yielded higher amounts of DNA as compared to the competitor kit. The average purity (not shown here) was similar for both kits, MagBeads: 1.815, Competitor: 1.795.



### Cross Contamination Test for MagBeads FastDNA Kit for FFPE

Sample Type	96-Well	SRY Gene Ct Value	Sample Type	96-Well	SRY Gene Ct Value
Male	A1	22.7	Male	A7	23.6
Female	B1	None	Female	B7	None
Male	C1	23.2	Male	C7	18.9
Female	D1	None	Female	D7	None
Male	E1	25.3	Male	E7	24.8
Female	F1	None	Female	F7	None
Male	G1	23.2	Male	G7	19.6
Female	H1	None	Female	H7	None

8 male and female tumor FFPE tissue samples were extracted using **MagBeads FastDNA Kit for FFPE**.

Male and female samples were purposely cross added during automated extraction. PC detection shows no amplification for SRY gene in female samples, hence no cross contamination was detected.

## Order Information

Product Name	Size	Catalogue No.
MagBeads FastDNA Kit for FFPE	96 Preps	116576096
MagBeads FastDNA Kit for FFPE (Ready-to-Use for MPure-32)	96 Preps	117033800
MagBeads FastDNA Kit for FFPE (Ready-to-Use for MPure-96)	96 preps	117034800

# Magbeads FastDNA™ Kit

The MagBeads FastDNA Kit is a versatile and comprehensive solution for a wide range of sample types. MagBeads FastDNA Kit is intended for rapid extraction of DNA from tissue, cells, blood, saliva, swabs, blood spots, semen, and other clinical samples. Extracted DNA can be used directly for PCR, quantitative PCR, Southern Blot, detection of viral DNA and so on.

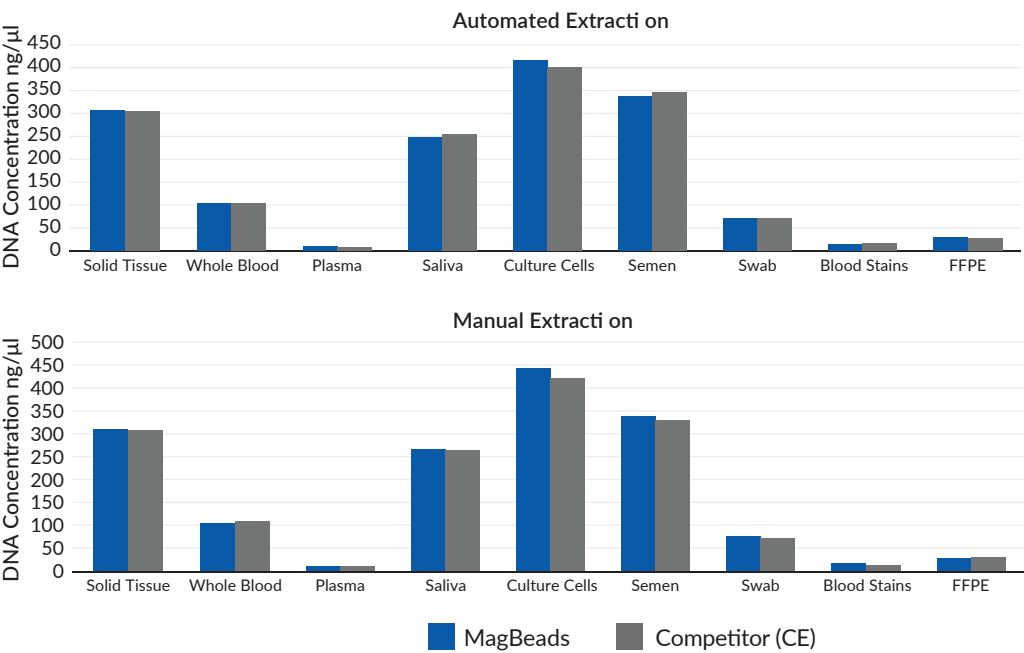


## Features

- Great versatility - suitable for a wide range of sample types
- High yield and purity, repeatable and consistent results
- High DNA integrity, even from samples that are hard-to-process

## Performance

Automated and Manual Extraction of various sample types using MagBeads FastDNA Kit



MagBeads FastDNA Kit can extract DNA from multiple types of biological samples, and is compatible for manual operation or nucleic acid extraction machine.

The extraction efficiency is comparable to competitor product A which is CE certified.

## Order Information

Product Name	Size	Catalogue No.
MagBeads FastDNA Kit	96 Preps	116575192
MagBeads FastDNA Kit (Ready-to-Use for MPure-32)	96 Preps	117033600
MagBeads FastDNA Kit (Ready-to-Use for MPure-96)	96 preps	117034600

Circulating DNA or cfDNA are fragments of nucleic acids that flow into the bloodstream due to cell death. They typically carry important genetic information from the originated cells. Thus, making them invaluable resources to cancer diagnosis, liquid biopsy, patient organ health, and more. MagBeads Fast Circulating DNA Kit is designed for purification of high-quality circulating DNA (cfDNA) from cell-free body fluids (such as plasma and serum).



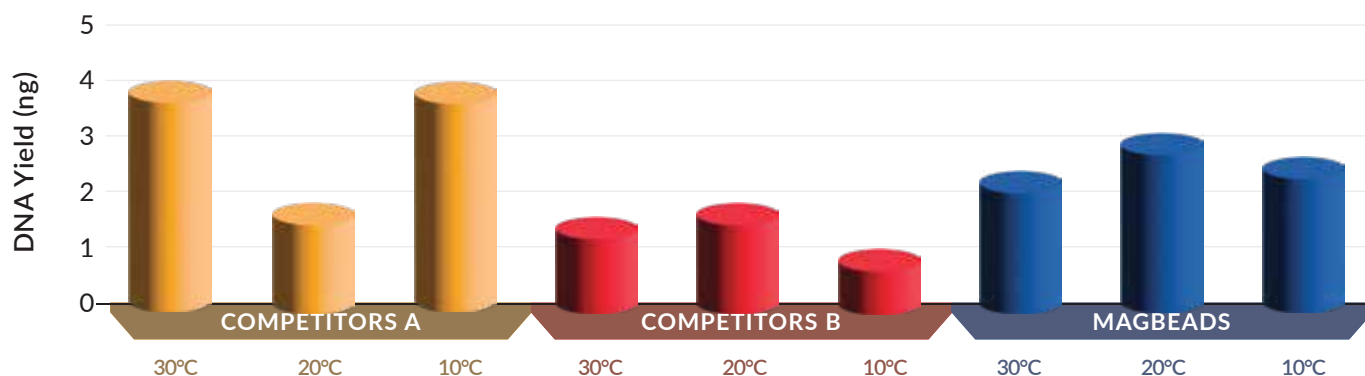
## Features

- Wide range sample processing volume of 0.2 – 0.6 mL
- Flexibility to choose either automated or manual purification workflow
- High quality carrier RNA to help with DNA stability and yield

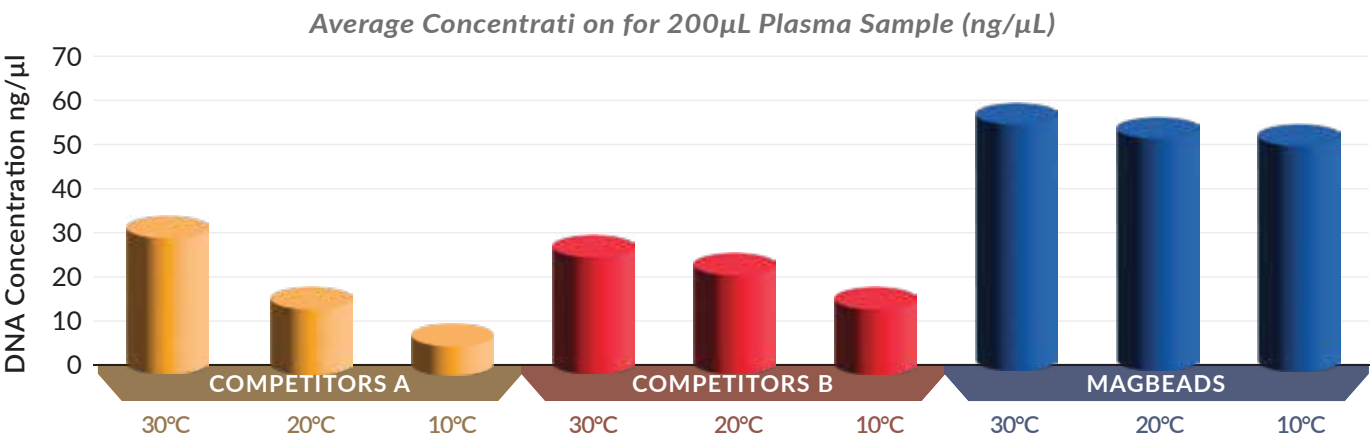
## Performance

Comparison of yield and concentration of extracted DNA among Competitor A, Competitor B, and MagBeads Fast Circulating DNA kit.

**Automated Yield for 200µL Plasma Sample (ng)**

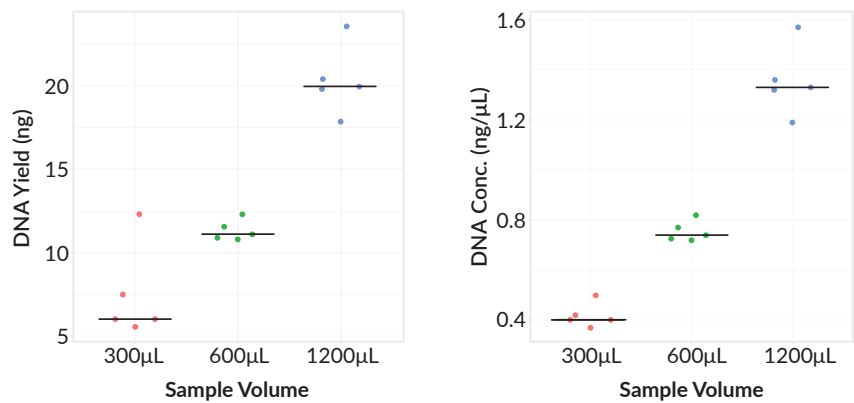


# Magbeads Fast Circulating DNA Kit



The figure shows the DNA yield (top) and concentration (bottom) results from 200µL plasma samples from pregnant women. The concentration of extracted DNA was significantly higher for MagBeads Fast Circulating DNA Kit at three working temperatures (10°C, 20°C, and 30°C).

## Relationship between DNA Amount/Concentration and Sample Volume (extracted using MagBeads Fast Circulating DNA Kit)



cfDNA from five pregnant women's plasma sample were extracted using MagBeads Fast Circulating DNA Kit. DNA amounts from 300µL, 600µL, and 1.2mL sample volumes were eluted with 15µL buffer. Results show a reliable linear relationship between the DNA yield/concentration and the sample volumes (300µL and 600µL and 1.2mL).

## Order Information

Product Name	Size	Catalogue No.
MagBeads Fast Circulating DNA Kit	192 Preps	116577192
MagBeads Fast Circulating DNA Kit (Ready-to-Use for MPure-32)	96 Preps	117033900
MagBeads Fast Circulating DNA Kit (Ready-to-Use for MPure-96)	96 preps	117034900

Circulating DNA or cfDNA are fragments of nucleic acids that flow into the bloodstream due to cell death. They typically carry important genetic information from the originated cells. Thus, making them invaluable resources to cancer diagnosis, liquid biopsy, patient organ health, and more. MagBeads Fast Circulating DNA Kit is designed for purification of high-quality circulating DNA (cfDNA) from cell-free body fluids (such as plasma and serum).



### Features

- High yield of extracted DNA/RNA
- Reliable extraction from low-copy viral samples
- Extraction time is under 40 minutes, process can be speeded up with MPure aNAP system
- Safe - does not contain hazardous chemicals, e.g., phenol chloroform

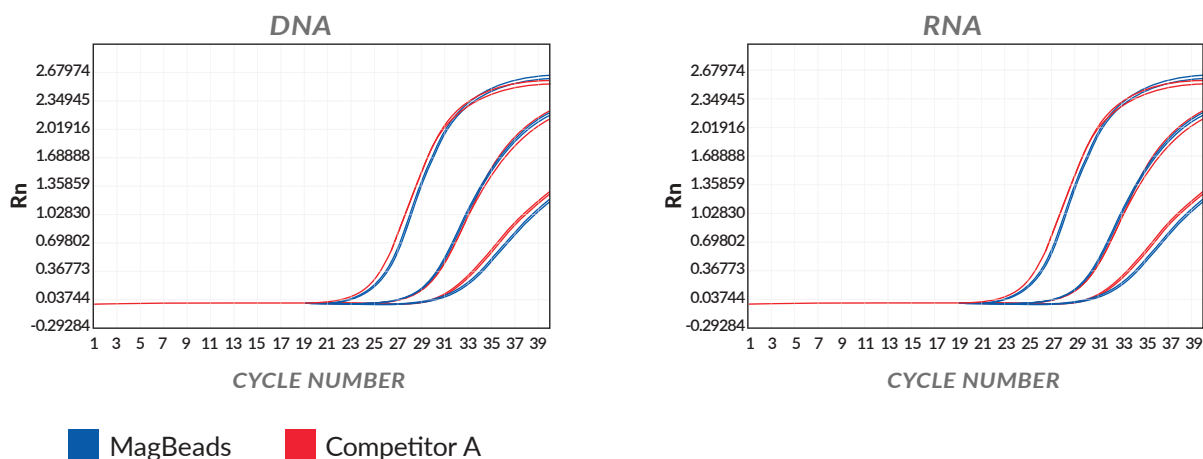
### Sample Types

- Body fluids
- Serum/plasma
- Soaking solutions
- Tissue homogenate supernatant
- Culture supernatant

### Performance

Comparison of Ct Values from Viral DNA/RNA extracted using MagBeads FastDNA/RNA Kit for Virus and Competitor A.

#### Manual Extraction

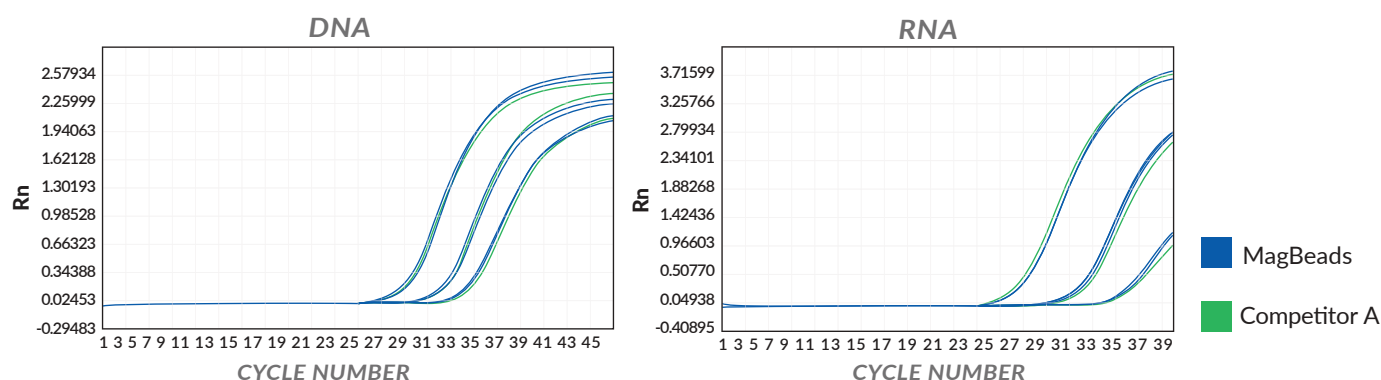


# Magbeads FastDNA/RNA Kit For Virus

Samples	Ct of Viral DNA	Ct of Viral RNA
Competitor A (CE Certified) - $10^5$	26.10	23.67
	26.60	23.56
Competitor A (CE Certified) - $10^4$	29.61	28.55
	30.03	28.61
Competitor A (CE Certified) - $10^3$	32.94	31.04
	32.75	31.19

Samples	Ct of Viral DNA	Ct of Viral RNA
MagBeads FastDNA/RNA Kit for Virus- $10^5$	26.45	24.11
	26.59	24.19
MagBeads FastDNA/RNA Kit for Virus- $10^4$	29.81	28.40
	30.05	28.62
MagBeads FastDNA/RNA Kit for Virus- $10^3$	33.22	31.67
	33.73	31.50

## Automated Extraction



Samples	Ct of Viral DNA	Ct of Viral RNA
Competitor A (CE Certified) - $10^5$	26.19	24.84
Competitor A (CE Certified) - $10^4$	29.77	30.91
Competitor A (CE Certified) - $10^3$	32.13	35.01

Samples	Ct of Viral DNA	Ct of Viral RNA
MagBeads FastDNA/RNA Kit for Virus- $10^5$	26.03	25.13
	26.42	25.23
MagBeads FastDNA/RNA Kit for Virus- $10^4$	29.47	30.70
	29.78	30.33
MagBeads FastDNA/RNA Kit for Virus- $10^3$	31.62	34.70
	31.90	34.46

The extraction efficiency of MagBeads FastDNA/RNA Kit for Virus is comparable to that of competitor A, which is CE certified. The extraction results were measured using both an automated nucleic acid purification system and manual sample preparation. When compared with competitor A, MagBeads FastDNA/RNA Kit for Virus demonstrated compatibility with both methods and the ability to successfully extract viral DNA/RNA from viral samples with concentrations as low as 103 copies/mL.

## Order Information

Product Name	Size	Catalogue No.
MagBeads FastDNA/RNA Kit for Virus	192 Preps	116571192
MagBeads FastDNA/RNA Kit for Virus (Ready-to-Use for MPure-32)	96 Preps	117033300
MagBeads FastDNA/RNA Kit for Virus (Ready-to-Use for MPure-96)	96 preps	117034300

# Magbeads Fast RNA Kit For Virus

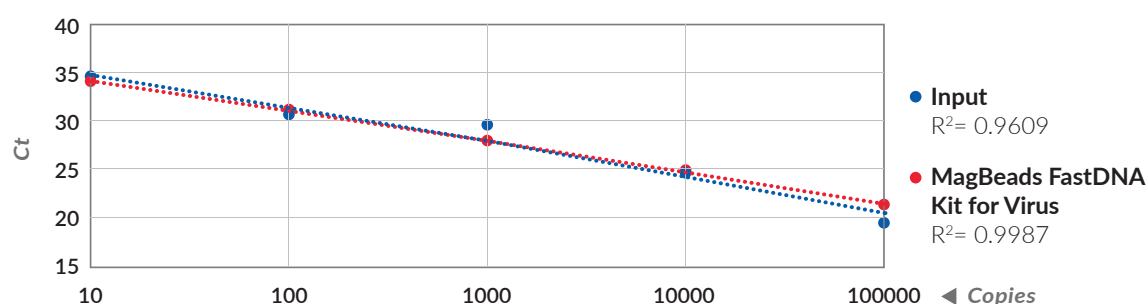
The study of viruses is critical for understanding their impact on human health and disease. In order to conduct research on these infectious agents, scientists rely on high-quality isolation and purification of viral RNA. One of the key challenges in studying viruses is the isolation and purification of high-quality viral RNA, which is essential for downstream molecular analyses. This process is often time-consuming, tedious, and requires a high level of expertise. To overcome these challenges, the MagBeads FastRNA Kit for Virus has been designed to provide researchers with a fast, efficient, and reliable method for extracting viral RNA from various sample types.

The MagBeads FastRNA Kit for Virus is specifically optimized for viral RNA extraction, providing high yield and purity. The extracted RNA can be directly used for downstream applications such as RT-PCR, qPCR, and sequencing; hence, enabling researchers to better understand viral infections and develop effective treatments. With its simple protocol and fast processing time, the MagBeads FastRNA Kit for Virus is an essential tool for isolation of viral RNA from a wide variety of viruses. The intended use of this kit is for general utilization; its performance may exhibit variability depending on the type of virus sample.

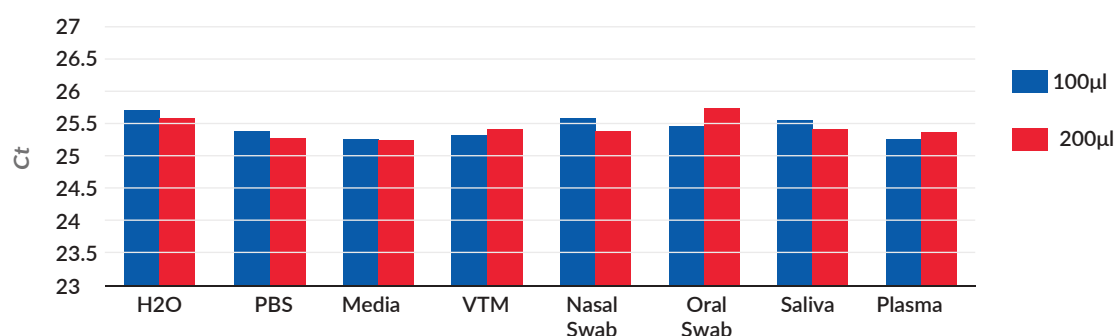


## Performance

Real time RT-PCR of 101 to 105 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  $\mu$ L or 200  $\mu$ L 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.



## Order Information

Product Name	Size	Catalogue No.
MagBeads FastRNA Kit for Virus	50 Preps	116578050
MagBeads FastRNA Kit for Virus (Ready-to-Use for MPure-32)	96 Preps	117035100
MagBeads FastRNA Kit for Virus (Ready-to-Use for MPure-96)	96 preps	117036100



# MagBeads Fast RNA Kit For FFPE

Formalin-fixed paraffin-embedded (FFPE) tissue section is one of the most challenging sample types for genetic or transcriptome analysis. However, it has become an important tool for researchers to use as a long-term preservation for tissue samples in histopathology. The quality and quantity of extracted nucleic acid can be significantly influenced by the process of fixation, embedding, and storage. MagBeads FastRNA Kit for FFPE provides a solution for this. The kit uses silica gel column purification technology and a unique solution system to efficiently extract purified RNA from complex FFPE tissue samples.

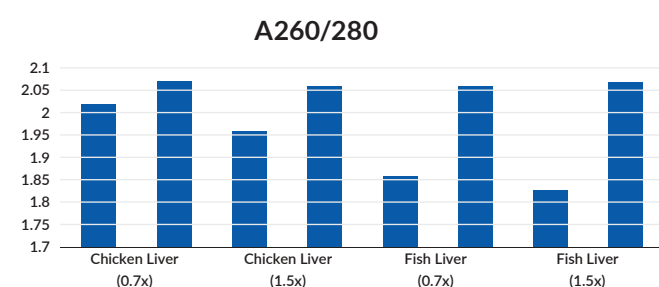


## Features

- Numerous challenging tissue samples tested
- DNA-free RNA is obtained through unique DNase digestion process
- Safety guaranteed without the use of hazardous chemical
- Less than 2 hours of processing time to obtain highly purified RNA for RT-PCR

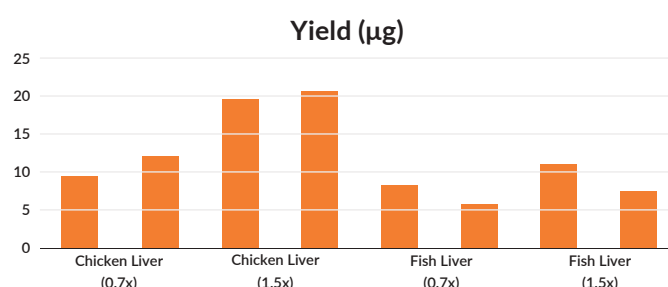
## Performance

RNA Purity was tested using Fish and Chicken Liver samples. RNA was extracted with MagBeads FastRNA Kit for FFPE at different ethanol concentration.



5 mg paraffin-embedded chicken and fish liver samples, preserved for a year, underwent RNA extraction using the MagBeads FastRNA Kit for FFPE. Different isopropanol concentrations (0.7x and 1.5x) were used for extraction of total and micro RNA.

RNA Yield was tested using Fish and Chicken Liver samples. RNA was extracted with MagBeads FastRNA Kit for FFPE at different ethanol concentration.



Around 5 µg to 20 µg of RNA were successfully extracted from all samples. The separation of large molecule RNA and small molecule RNA can be easily achieved by changing the concentration of ethanol.

## Order Information

Product Name	Size	Catalogue No.
MagBeads FastRNA Kit for FFPE	192 Preps	116573192
MagBeads FastRNA Kit for FFPE (Ready-to-Use for MPure-32)	96 Preps	117033500
MagBeads FastRNA Kit for FFPE (Ready-to-Use for MPure-96)	96 preps	117034500

MagBeads FastRNA Kit – your ultimate solution for simple and rapid extraction of total RNA from tissue and cell culture samples. This kit is specifically designed to offer researchers a quick and easy method for RNA purification, without the need for phenol-chloroform extraction or alcohol precipitation. Based on superparamagnetic particle purification technology, the MagBeads FastRNA Kit allows for the efficient isolation of pure and intact RNA in just minutes, using MPure-96™ aNAP System.



The purified RNA obtained from this kit is suitable for a wide range of downstream applications such as RT-PCR, viral RNA testing, and more. Experience the convenience and efficiency of the MagBeads FastRNA Kit in your RNA purification workflow today.

### Features

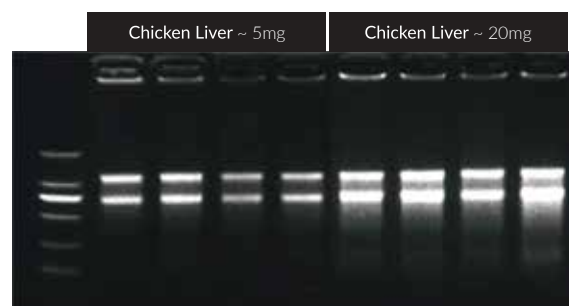
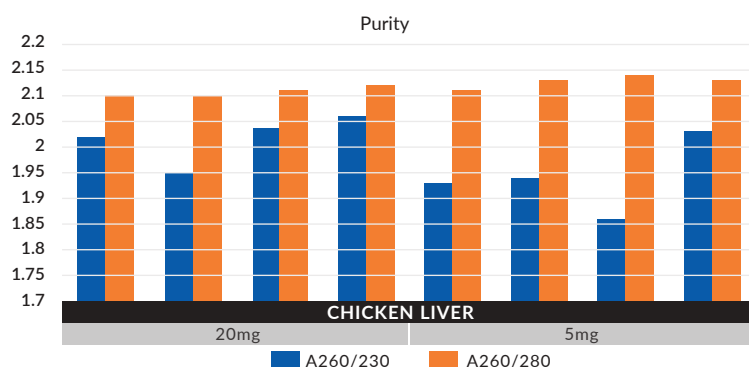
- Extraction process is less than 60 minutes
- Compatible with multiple sample sources including animal/plant cells and tissues
- Wide applicability across various automated systems

### Sample Types

- **Cell:**  $1 \times 10^7$
- **Yeast cell:**  $\leq 5 \times 10^6$
- **Animal Tissue:**  $\leq 20$  mg
- **Plant Tissue:**  $\leq 100$  mg

### Performance

Purity of extracted RNA from chicken liver sample using MagBeads FastRNA Kit



Gel electrophoresis of total RNA extracted from 5 mg and 20 mg of chicken liver samples. The intact and bright bands indicated the high quality of extracted RNA.

### Order Information

Product Name	Size	Catalogue No.
MagBeads FastRNA Kit	96 Preps	116572096
MagBeads FastRNA Kit (Ready-to-Use for MPure-32)	96 Preps	117033400
MagBeads FastRNA Kit (Ready-to-Use for MPure-96)	96 preps	117034400

# MagBeads FastDNA™ & FastRNA™ Extraction and Purification Kits

Sample Type	Name	Size	Cat. No.
Genomic DNA Extraction			
Animal tissues, plant tissues, cultured cells, saliva, swabs, semen, FFPE tissue, and other clinical samples	MagBeads FastDNA Kit	192 preps	116575192
Whole blood, plasma, serum, buffy coat, bone marrow, other body fluids, lymphocytes, cultured cells	MagBeads FastDNA Kit for Blood	96 preps	116574096
Soil samples including sand, organic, flowerbed soil, sediment	MagBeads FastDNA Kit for Soil	50 preps	116561050
Fecal samples of human and animal origin, intestinal content	MagBeads FastDNA Kit for Feces	50 preps	116570400
Plasma, serum, and other bodily fluids	MagBeads Fast Circulating DNA Kit	192 preps	116577192
RNA Extraction			
Animal tissues, plant tissues, fungi, cultured cells	MagBeads FastRNA Kit	96 preps	116572096
Plasma, PBS, saliva, swabs, cell culture media	MagBeads FastRNA Kit for Virus	50 preps	116578050
DNA/RNA Extraction			
Bodily fluids, serum, plasma, soaking solution, tissue homogenate, culture supernatant	MagBeads FastDNA/RNA Kit for Virus	192 preps	116571192

## Related Products

Name	Size	Cat. No.
Microcentrifuge Tubes, 1.5 mL	500 tubes	115081500
Microcentrifuge Tubes, 2 mL	500 tubes	115083500
96-well Deep Well Plates	50 plates	115095050
MP Magnetic Rack 8	1 each	116570426
MP Magnetic Rack 24	1 each	116570413
MP Magnetic Rack 96	1 each	116570429
FastPrep-96 Homogenizer	1 each	116010500
Lysing Matrix A, 96-tube Rack	1 rack	116980001
Lysing Matrix D, 96-tube Rack	1 rack	116983001
Lysing Matrix E, 96-tube Rack	1 rack	116984001

## Selection Guide

MagBeads FastDNA™ & FastRNA™ Extraction and Purification Kits

Learn more at  
[mpbio.com](http://mpbio.com)

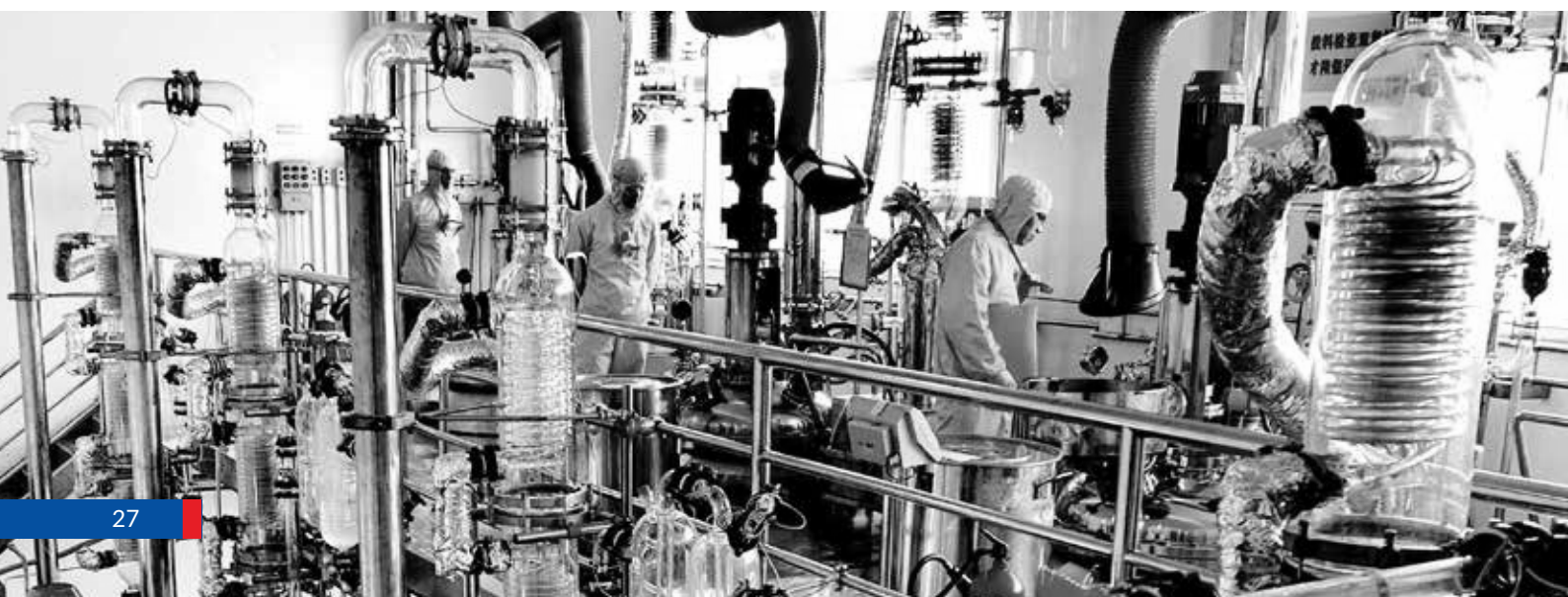


Sample Type		Kit Name	Genomic DNA Extraction						RNA Extraction		DNA/RNA Extraction
			MagBeads FastDNA Kit	MagBeads FastDNA Kit for Blood	MagBeads Fast Circulating DNA Kit	MagBeads FastDNA Kit for Soil	MagBeads FastDNA Kit for Feces	MagBeads FastRNA Kit	MagBeads FastRNA Kit for Virus	MagBeads FastDNA/RNA Kit for Virus	
Animal Tissues, Clinical Samples, & Cultured Cells	Fresh/Frozen Tissues	•							•		
	FFPE Tissue	•									
	Swabs	•							•		
	Cultured Cells	•	•						•		
	Cell Culture Media									•	•
Blood & Other Fluids	Lymphocytes		•			•			•		
	Whole Blood	•	•	•					•	•	•
	Serum		•	•	•				•	•	•
	Plasma		•	•	•				•	•	•
	Buffy Coat		•						•	•	
	Bone Marrow		•						•		
	Semen	•	•								•
	Saliva	•	•	•					•	•	•
	Soaking Solution/PBS		•	•	•				•	•	•
	Sediment					•					
Environmental & Stool Samples	Sand				•						
	Organic Soil				•						
	Flowerbed Soil				•						
	Saline Soil				•						
	Dessert Soil				•						
	Fresh/Frozen Feces						•				
Plants & Microbes	Intestinal Content						•				
	Plant Tissues	•							•		
	Fungi				•				•		
	Bacteria				•				•		
	Protists				•				•		
	Viruses				•					•	•
Cat. No.		116575192	116574096	116577192	116561050	116570400	116572096	116578050	116571192		

## Reagent Kits

MP Biomedicals offers a range of reagent kits for various types of biological samples. User has the flexibility to self-assemble the reagents with the relevant consumables for maximum cost-effectiveness or purchase the pre-filled reagent kits for greater convenience.

Catalog No.	Product Name	Pack Size
116561050	MagBeads FastDNA® Kit for Soil	50 preps
116570400	MagBeads FastDNA® Kit for Feces	50 preps
116571192	Magbeads FastDNA/RNA Kit for virus	192 preps
116572096	Magbeads FastRNA Kit	96 preps
116573192	Magbeads FastRNA Kit for FFPE	192 preps
116575192	Magbeads FastDNA Kit	192 preps
116574096	Magbeads FastDNA Kit for Blood	96 preps
116576096	Magbeads FastDNA Kit for FFPE	96 preps
116577192	Magbeads Fast Circulating DNA Kit	192 preps
116578050	MagBeads FastRNA Kit for Virus	50 preps
117033100	(MPure-32) MagBeads FastDNA® Kit for Soil (Ready-to-Use)	96 preps
117033200	(MPure-32) MagBeads FastDNA® Kit for Feces (Ready-to-Use)	96 preps
117033300	(MPure-32) MagBeads FastDNA/RNA Kit for Virus (Ready-to-Use)	96 preps
117033400	(MPure-32) MagBeads FastRNA Kit (Ready-to-Use)	96 preps
117033500	(MPure-32) MagBeads FastRNA Kit for FFPE (Ready-to-Use)	96 preps
117033600	(MPure-32) MagBeads FastDNA® Kit (Ready-to-Use)	96 preps
117033700	(MPure-32) MagBeads FastDNA Kit for Blood (Ready-to-Use)	96 preps
117033800	(MPure-32) MagBeads FastDNA Kit for FFPE (Ready-to-Use)	96 preps
117033900	(MPure-32) MagBeads Fast Circulating DNA Kit (Ready-to-Use)	96 preps
117035100	(MPure-32) MagBeads FastRNA Kit for Virus (Ready-to-use)	96 preps





## A World of Sample Preparation Products.



Drawing on years of manufacturing and laboratory experience, MP Biomedicals provides a premium and complete workflow solution for molecular biology research studies.



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