

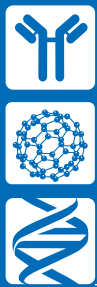
**FastPrep-96™**

# Molecular Biology Sample Preparation System

Systems and Kits for the Most Advanced, High Throughput, Rapid and Thorough Lysis and Extraction of DNA, RNA and Proteins.



**MP**



™

# FastPrep-96™

## Molecular Biology Sample Preparation System

### Crushing Lysis Efficiency

Nothing Resists Grinding, Lysis and Homogenization Using the High-Throughput FastPrep-96™ System for the Most Advanced, Rapid, and Thorough Extraction of DNA, RNA, Proteins and other Metabolites.

The FastPrep-96™ system delivers high-throughput sample homogenization, grinding and lysis with the highest efficiency, quality and reproducibility. Perform your DNA, RNA, protein and small molecule extractions from the most difficult, dirty, tough, large or tiny samples.

With the highest power settings available, FastPrep-96™ utilizes high-speed linear motion to disrupt any tissues or cells thoroughly through the simultaneous beating of specialized lysing matrix particles.

FastPrep-96™ offers the widest variety of sample adapters (2 x 96 deep well plates, 96 x 2 mL, 48 x 4.5 mL, 24 x 15 mL, 8 x 50 mL and 1 x 250 mL tubes) and a simple, accurate, closed loop control of lysing power and speed. All this and more make the new FastPrep-96™ the perfect solution for all of your high volume sample preparation needs.



Soil samples lysed at 1600 rpm for 60 seconds in 96 well plate with lysing matrix E provides yield of ~1.5 µg DNA per well

Join thousands of users worldwide and get the next generation of the proven FastPrep® system today!



# FastPrep-96™

## Molecular Biology Sample Preparation System

### FastPrep-96™ System and Adapters

Lyse Efficiently Any Dirty, Tiny or Tough Sample!



- Human and animal tissues, tumors, cells in culture
- Leaves, seeds, stems, roots
- Bacteria gram + or -
- Yeast, fungi, spores
- Feces, turd, soil, sediments, food samples

### FastPrep-96™ Systems Features

- **High Throughput**  
Process up to 192 samples simultaneously in 2 x 96 deep well plates
- **Exceptional Versatility**  
Interchangeable adapters available for 2 x 96 deep well plates, 96 x 2 mL tubes, 48 x 4.5 mL tubes, 24 x 15 mL tubes, 8 x 50 mL tubes, and 1 x 250 mL flask
- **Excellent Reproducibility**  
Consistent lysis results in every well with automated feedback control
- **Fast Processing Speed**  
1800 Oscillations/min and 1.5-inch stroke — highest available
- **True Linear Motion**  
Eliminates the need to re-orient plates mid-cycle

### Instrument and Adapters

Description	Size
116010-500	FastPrep-96™ Instrument
116010-550	Big Flex™ Adapter 8 x 50 mL
116010-560	Teen Flex™ Adapter 24 x 15 mL
116010-570	Quick Flex™ Adapter 96 x 2 mL
116010-580	Tall Flex™ Adapter 48 x 4.5 mL
116010-590	Large Flex™ Adapter 1 x 250 mL



### New Kits on the Block

Introducing new FastDNA-96™ SPIN kits in 96 well plate format

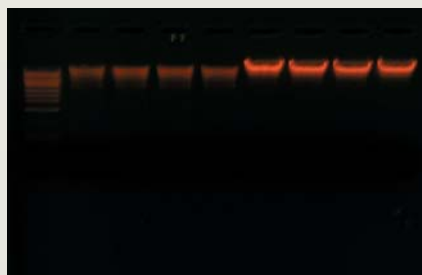
Description	Size
119696200	FastDNA-96™ Soil Microbe DNA Kit
119696300	FastDNA-96™ Fungal/Bacterial DNA Kit
119696400	FastDNA-96™ Fecal DNA Kit
119696500	FastDNA-96™ Tissue & Insect DNA Kit
119696600	FastDNA-96™ Plant/Seed DNA Kit



The FastDNA-96™ series of kits are designed for the simple and rapid isolation of high purity, PCR-ready DNA from human, animal and plant tissues, microbes and yeast, soil and other samples. This series of products can be used to isolate DNA from tough-to-lyse samples as well as from dirty (i.e. highly contaminated) samples such as forensic samples, bacteria, fungi, protozoa, and algae.

The purification step removes all of the PCR inhibitors, which are commonly found in a variety of dirty and difficult samples such as in wastewater, fecal materials, soils, sediments and others. Samples are rapidly ground, homogenized and lysed. Cells are efficiently lysed by bead beating inside FastPrep-96™ system, utilizing our state of the art, ultra-high density Lysing Matrix series of beads, prepackaged in the deep 96 well plate format.

FastSpin plate and other standard format technology is then used to isolate the DNA, which, if necessary is subsequently filtered to remove humic acids and polyphenols which can inhibit PCR. The procedure can be performed in minutes. There is no need for organic denaturants or proteinases.



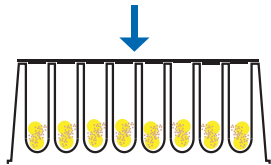
Example of microbe DNA extractions using the FastPrep-96™ homogenization system and FastDNA-96™ Fungal/Bacterial DNA kit. Total of 20 mg wet weight *E. coli* pellet per sample (n=4 samples each) were loaded, each into a FastDNA-96™ Lysing Matrix™ B 96-well plate (right 4 lanes) and other set of 4 samples into a leading competitor kit bead beating 96 well plate (left 4 lanes). All samples were processed in the FastPrep-96™ at 1600 rpm for a single cycle at 60 seconds each. Superior DNA yields results (8.5 ug/well of DNA) were obtained from MP Biomedicals FastDNA-96™ kit vs 4.25 ug/well of DNA for the leading competitor kit. Furthermore exceptional DNA purity was obtained from samples processed with FastDNA-96™ kit with an average A260/280 absorption ratio of 2.01.

# FastPrep-96™

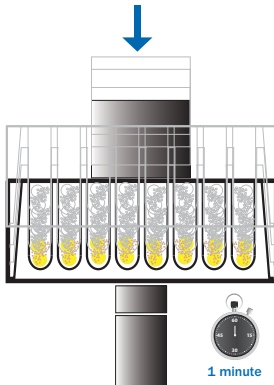
## Molecular Biology Sample Preparation System

### Typical FastPrep-96™ Procedure

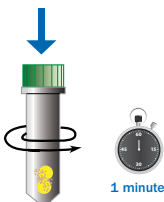
Cells and lysing buffer



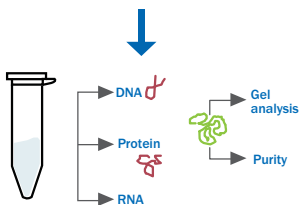
1. Prepare lysis tube



2. Process with FastPrep-96™ Instrument



3. Centrifuge to pellet debris

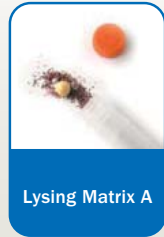


4. Transfer cleared lysate

- Homogenizes resistant samples with ease
- Process any sample in flexible quantities (96 deep well plate, 2 mL, 4.5 mL, 15 mL, 50 mL or 250 mL tubes) at cryogenic or room temperature with interchangeable adapters
- Delivers high reproducibility due to precise setting of lysis time and speed
- Eliminates cross contamination with disposable Lysing Matrix
- Completes sample preparation for extraction and purification of DNA, RNA and proteins with available FastPrep kits

### Lyse Efficiently

- Tissue, tumors, bones
- Bacteria gram + or -
- Yeast, fungi, spores
- Plants, seeds, roots
- Feces, soil



### MP Sample Prep.

Your Total Sample Prep Solution

Learn more about how FastPrep, SpinPrep, GeneClean, and the entire portfolio of MP Bio Sample Prep instruments, kits, and reagents can help your lab.

- Improve quality
- Maximize throughput
- Increase cost efficiency



part of an MP BIO  
integrated laboratory solution  
**Sample Prep**

Higher yields.  
Consistent quality.  
Super fast.  
DNA • RNA • PROTEINS

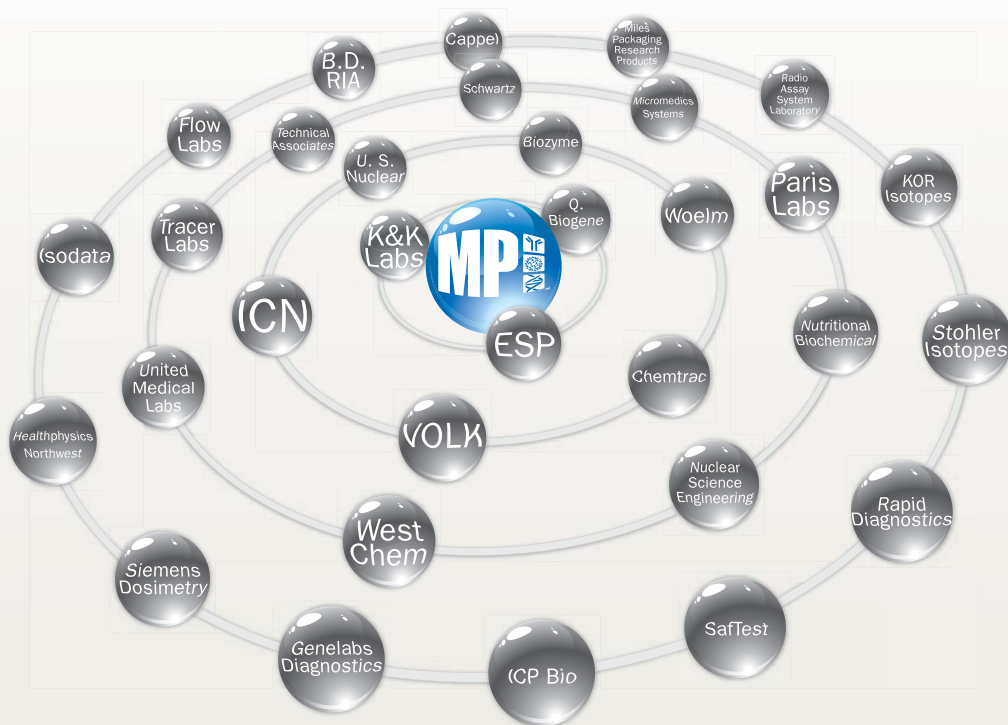
visit [www.mpbio.com](http://www.mpbio.com) Just better Preps



# FastPrep-96™

## Molecular Biology Sample Preparation System

### A Constellation of Quality Products



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United States

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BP 50067  
67402 Illkirch  
France

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