

MP Biomedicals

FastPrep® Systems & Kits

One Call

One Source

A World of
Sample
Preparation
Solutions

Thank YOU for
being a loyal
customer, our
biggest asset!

How can we help you today?

5 Second Sample Prep? Believe It or Not!

Highest Yield and Molecular Weight DNA

Super
FastPrep-2™



The World's Fastest, Homogenizer for
the Extraction of DNA, RNA and Proteins



The Fastest and Most Powerful Handheld SamplePrep Tool

SuperFastPrep-2™



**Lyse Any Tough
or Frozen Sample
in 5 Seconds!**

Cat. No. 116012500

The SuperFastPrep-2™ from MP Biomedicals is the newest addition to the trusted FastPrep Family of sample preparation products. An evolution of the famous high-throughput sample preparation system from Bio101® Systems, with more than 8,000 installations worldwide, FastPrep® provides a unique means of homogenizing by which any type of sample, no matter how tough, can be quickly and consistently lysed within 5 seconds. For the first time, FastPrep® technology is available in a lightweight, compact, handheld format.

When compared to traditional homogenization methods such as vortexing, ultrasonication, rotor-stator homogenizers, grinding with a mortar and pestle, or chemical or enzymatic lysis, the SuperFastPrep-2™ will save hours of work during the sample preparation stage and provide higher yields of intact DNA, RNA and proteins.

An innovation in the sample lysis industry, the SuperFastPrep-2™ is a portable omni-directional bead beating system with a unique, patent pending bal-

anced crankshaft–slider mechanism which creates the most aggressive bead beating lysis based on combination of cascade impaction, mechanical shearing, and if the sample is in buffer, shear flow lysis. The combined kinetics of the processes result in an amazing performance of 5 seconds or less lysing time for most samples.

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

Designed for a single, 2 mL Lysing Matrix Tube, The SuperFastPrep-2™ is an attachment that fits on a high speed rotary tool. Attachment to the tool is done via a built-in threaded adapter. The rotary tool can be configured for AC power for use in a lab setting, or for DC power via rechargeable lithium ion batteries for use in the field.

A wide variety of specialized Lysing Matrix tubes containing beads of different materials, sizes and shapes have been tailored to guarantee thorough homogenization of samples from various sources as bacteria, yeast, fungi, botanical samples (including seeds), insects, mammalian tissues, (bone, skin, brain, tumor) and cultured cells

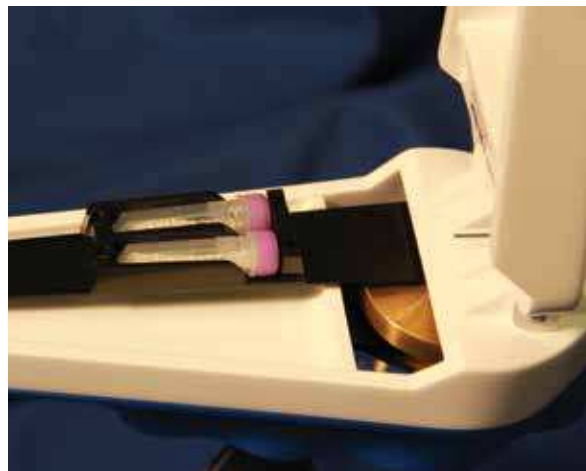
High performance FastPrep® Purification Kits, when used in conjunction with the FastPrep-24™ Instrument, provide simple, ready-to-use methods for the release and subsequent purification of intact DNA, RNA, and proteins from virtually any source.

Visit mpbio.com/sampleprep for additional information.

The Most Powerful FastPrep® Yet! Over 500 G's Acceleration!

Super FastPrep-2™

- Omnidirectional motion with the highest G's!
- Handheld system for lab and field use.
- Uses standard 2 mL screw cap tubes for lysis.
- Compatible with all FastPrep Lysing Matrices.
- Compatible with all FastPrep purification kits.



Cat. No. 116012500

Lyse your samples in 5 Seconds!

Efficiently Lyse:

- Bone, brain, tumors
- Bacteria gram + or -
- Yeast, fungi, spores
- Feces, soil, sediment
- Leaves, roots, seeds

Disruption Principle	bead beating
Power requirements	90-240V for lab version, cordless operation for field version
Overall Length	13"
Overall Width	3.4"
Overall Height	4.6"
Weight	2.2 lbs
Number of Tubes per Run	2
Size of Tube	Std 2 mL (screw cap), skirted or non-skirted
Maximum speed	4,900 CPM (AC powered) 4,400 CPM (cordless)
Minimum speed	1,000 CPM (AC powered) 500 CPM (cordless)
Type of Motion	Reciprocating
Peak to Peak Amplitude of Motion	1.5"
Peak Acceleration	up to 500 G.
Sound at 1ft	100 dB at 4,900 CPM 90 dB at 3,300 CPM
Typical Run Time	2-15 seconds at 3,300 CPM

Powerful, Portable, Sample Lysis at your Fingertips

SuperFastPrep-2™

The World's only sample preparation lab in a box. Completely portable, cordless operation for go-anywhere grinding, lysis and homogenization.

Each SuperFastPrep-2™ comes with:

- One (1) SuperFastPrep-2™ unit.
- One (1) Rotary tool
- Two (2) Lithium Ion Rechargeable Batteries
- One (1) Battery Charging Station
- Ten (10) samples of MP Lysing Matrices
- Four (4) tube support plugs
- User Manual

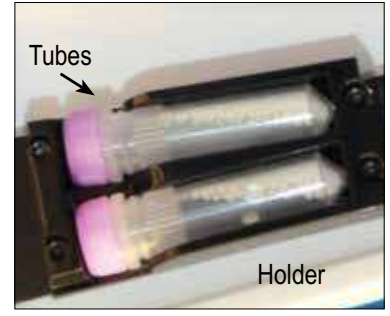
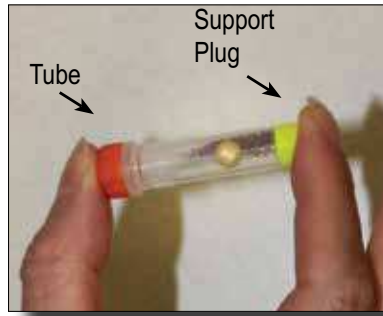


Optional Field Carrying Case transports your SuperFastPrep-2™ safely. Air-tight and water-tight construction.

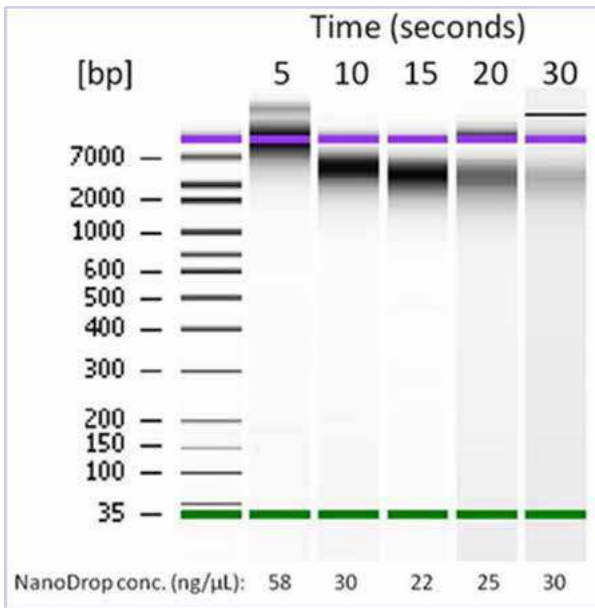
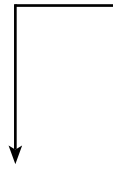


Cat. No.	Description	Unit
116012500	SuperFastPrep-2™	Each
116011510	Field Carrying Case	Each
116011520	Voltage Converter	Each

Super Easy, Super Fast!



Super FastPrep-2™



This workflow shows the dry grinding of a dried corn kernel, one of the most difficult agro/bio samples to process. To demonstrate the quality of lysate we performed complete DNA purification followed by analysis with a NanoDrop spectrophotometer and a BioAnalyser system from Agilent Technologies. An MP Bio Lysing Matrix A tube with two ¼ inch ceramic balls was used for grinding and a Zymo Research Plant/Seed DNA MiniPrep kit for DNA extraction and purification.

After lysis, the sample was centrifuged and the supernatant was processed manually using a bind-wash-elute column based protocol as described in the kit. The resulting BioAnalyser image is presented, together with the DNA quantification data. At 5 seconds, the high quality and quantity of extracted DNA with low shearing is evident. At the longer grinding times, increased DNA shearing as well as decreased average molecular weights were observed.

Optimal Lysing Performance - MP FastPrep® Lysing Matrix Tubes



Convenient Lysing Matrix Tubes for Every Need
 MP Biomedicals guarantees the BEST performance from your FastPrep® Instrument when used in combination with FastPrep Lysing Matrix Tubes
www.mpbio.com/sampleprep



MP Biomedicals, **YOUR PARTNER IN RESEARCH!**



One Source for All Your Laboratory Needs

Molecular Biology

Biochemicals

Cell Biology

Adsorbents

Rare & Fine Chemicals

FastPrep® Sample Prep

Immunology

Labware

Culture Growth Media

Apoptosis

Research diets

SafTest™ Food Quality

