

# **Ready-to-Use Protocols for DNA, RNA and Protein Isolation**



- Easy Lysis of Microorganisms
- Quality DNA, RNA and proteins
- No cross contamination

# Purification Kits for all sample types are available with the same great results!

Cat. No.	Description	Size
MP116540600	FastDNA™ SPIN Kit	100 Preps
MP116560200	FastDNA™ SPIN Kit for Soil	50 Preps
MP116570200	FastDNA™ SPIN Kit for Feces	50 Preps
MP116020050	FastRNA™ SPIN Kit for Microbes	50 Preps
MP116030050	FastRNA™ SPIN Kit for Yeast	50 Preps
MP116025050	FastRNA™ Pro Blue Kit (bacteria)	50 Preps
MP116035050	FastRNA™ Pro Red Kit (yeast and fungi)	50 Preps
MP116045050	FastRNA™ Pro Green Kit (plants and animals)	50 Preps
MP116070050	FastRNA™ Pro Soil-Direct Kit	50 Preps

MP Biomedicals - It's What's Inside That Counts!

#### FastDNA<sup>™</sup> SPIN Kit - Rapid Method of Isolating Pure Genomic DNA from a Wide Variety of Sources! · No hazardous organic reagents are required

#### • Isolate PCR-ready DNA from a variety of sample types

The FastDNA<sup>TM</sup> SPIN Kit quickly and efficiently isolates genomic DNA from any sample (plant, animal tissues, cultured cells, bacteria, yeast, fungi, insects, etc). Up to 200 mg of tissue or cells are processed by the FastPrep-24<sup>TM</sup> 5G with Lysing Matrix A tubes. The kit includes 3 different chaotropic buffers for the homogenization 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 other applications.

## **FastDNA™ SPIN Kit For Soil** - Isolate Pure DNA from Cells Present in Soil or Other Environmental Samples!

#### • Easily isolate DNA from a variety of organisms in many different types of soil

The FastDNA™ SPIN Kit for Soil will efficiently isolate bacterial, fungal, plant and animal genomic DNA from soil and environmental samples. Up to 500 mg soil are processed by the FastPrep-24<sup>TM</sup> 5G with Lysing Matrix E tubes designed to efficiently lyse all microorganisms including difficult sources such as eubacterial spores and endospores, gram positive bacteria and yeast. The released DNA is purified by a silica-based spin filter method and is suitable for PCR and other downstream applications.

# **FastDNA™ SPIN Kit for Feces** - Isolate High Quality DNA from Fecal Material!

- Removes organic contaminates, such as humic acid, for downstream applications
- Achieves Optimal 260/280 ratios (1.8-2.0)

· No hazardous organic reagents are required

Typically isolates 10 µg – 20 µg of gDNA from 500 mg of stool

FastDNA™ SPIN Kit isolate genomic DNA from fecal material. The FastDNA™ SPIN Kit for Feces has everything you need to quickly and efficiently lyse any fecal sample isolating high quality DNA for use in downstream applications. Used in conjunction with our FastPrep-24<sup>TM</sup> 5G homogenization system, you will be able to completely lyse fecal samples in seconds with no pre-grinding or preparation.

# FastRNA<sup>™</sup> SPIN Kits - Isolate High Quality RNA From Bacteria, Yeast and Fungi!

• Fast, 15 minute protocol

 Large and small RNA's from a variety of microbial sources ast, 15 minute protocol Purified RNA can be eluted in as little as 6 µL for very concentrated product

 Eliminates the need for organic denaturants The FastRNA™ SPIN Kit for Microbes quickly and efficiently isolates high-quality, total RNA from tough-to-lyse bacterial, yeast or fungal cell cultures in 15 minutes using a zirconium silicate Lysing Matrix (0.1mm) to lyse bacteria and SPIN columns for the purification process. The kit is designed for processing samples in 2 mL tubes using the FastPrep-24<sup>TM</sup> 5G Instrument. Gram (+/-) bacteria, wet, dry, or frozen are easily lysed in 60 seconds. Isolate both large and small RNA species without the use of phenol or reducing agents. Small RNAs (e.g., tRNAs, microRNAs) can be recovered following a simple adjustment within the RNA isolation protocol.

# FastRNA<sup>™</sup> Pro Kits - Isolate High Quality Total RNA with a Single-Reagent Extraction Method!

### • Safe and consistent RNA isolation with the single-reagent RNAProTM solution • Lyse and isolate total RNA from a variety of sample types

The FastRNA™ Pro Kits quickly and efficiently isolate total RNA from any sample. During the homogenization step, intact total RNA is released in the proprietary RNA-Pro™ solution where it is immediately stabilized. The RNAPro™ solution inactivates cellular RNases during cell lysis to prevent RNA degradation. RNA is then extracted with chloroform and precipitated with ethanol. DEPC-treated water is provided for resuspension of total RNA. High quality RNA prepared with FastRNA<sup>TM</sup> Pro Kits is ready for all downstream applications including RT-PCR, gene expression and microarray analysis.

# FastRNA<sup>™</sup> Pro Soil Kits - Isolate Total RNA from Soil!

- · Easily lyse difficult gram positive cells, plant material, and organic debris directly from soil Humic acids levels reduced to allow uninhibited RT-PCR
- Lysis and purification solutions protect RNA during processing

The FastRNA™ Pro Soil-Direct and Indirect kits efficiently isolate total RNA from organic material found in soil samples or soil supernatants. The direct method extracts 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. This method allows soil incubation with growth media to amplify under-represented living organisms prior to RNA isolation if specific comparisons of microbial diversity are not desired. FastRNA<sup>TM</sup> 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 suitable for RT-PCR analysis and other downstream applications.

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For customer service, call 1-800-234-7437 To fax an order, use 1-800-463-2996 To order online: www.fishersci.ca





Lysis and purification of total RNA