DNA/RNA/Protein Extraction
Pesticide Residue Extraction
QuEChERS
Food Safety
Crop Research
BioMedical Research

SAMPLE PREPARATION FOR:
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Pesticide Residue Extraction
QuEChERS
Food Safety
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BioMedical Research

SPEX SamplePrep
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A full range of accessories are available for the Geno/Grinder from different sized titer plates, vials and vial sets to different types of grinding media. Visit www.spexsampleprep.com/2010genogrinder for further information.

GENO/GRINDER® ACCESSORIES

GRINDING VIAL & TUBES
Centrifuge tubes hold samples larger than those traditionally placed in titer plates. Vial sets come pre-loaded with steel balls.

TITER PLATES & CAP-MATS
Available in 24, 48 and 96-well formats. Used for many applications such as large sample dilutions, cell suspension and RNA extractions.

GRINDING MEDIA
Grinding media is available in different sizes and materials such as steel, zirconia and ceramic. Silica beads are available in 3 grades: Molecular biology, low binding and acid washed. Ceramic cylinders aid the QuEChERS method.

PRE-FILLED TUBES
These pre-filled vials can be used in a wide range of applications. It is ideal for grinding complex samples like bacteria, small yeast and soil. Holds 0.5 to 1.0mL of sample.

CRYOGENIC GRINDING FOR YOUR TEMPERATURE SENSITIVE SAMPLES
SPEX Freezer/Mills are programmable cryogenic laboratory mills that grind the toughest or most temperature sensitive samples. Samples and ground in sealed vials using a magnetically driven impactor while the vial is continuously immersed in liquid nitrogen. Three models are available with different sample grinding capacities.

To learn more visit www.spexsampleprep.com/freezermill

DEMO & SAMPLE GRIND PROGRAM
SPEX SamplePrep has a complimentary Demo Program allowing you to try our equipment in your laboratory. We also offer in-house Sample Grinding and Testing services. To send in your request visit www.spexsampleprep.com/demo-request.

APPLICATION NOTES ONLINE
Our library of application notes can help you find the most suitable products and methods for your application. You can read our application notes online or download a copy. Visit www.spexsampleprep.com/appnotes.
The Geno/Grinder® is an automated high-throughput homogenizer and cell lyser. It is specifically designed for rapid cell disruption of plant and animal tissue through bead beating. This enables fast and efficient extraction (impact assisted extraction) of nucleic acids, proteins and other molecules of interest.

The sample clamp has a unique, vigorous, vertical motion enabling increased reproducibility over traditional sample preparation methods. The clamp is fully adjustable to accommodate a full range of sample vials from 2mL to 50mL or up to six deep well titer plates.

With variable speed settings up to 1750 RPM the Geno/Grinder is able to pulverize the toughest samples, it can also be used as a high speed mixer.

PREPARING SAMPLES TO EXTRACT DNA IS EASY WITH THE GENO/GRINDER®

1. Place 50 to 100mg of fresh tissue in a 2ml tube pre-loaded with grinding media.
2. Add 500 microliters of lysis buffer to tube (or as instructed by method).
3. Place capped tube into the Foam holder and insert it into the Geno/Grinder clamp and tighten.
4. On the control panel, set Speed to 1000rpm and Run Time for 2 minutes.
5. The clamp shakes the sample in a consistent vertical motion. The grinding media inside the tube disrupts the sample.
6. Samples are ready for the next step in the extraction method.
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CRYO-TECH® ACCESSORIES
SPEX Kryo-Tech® accessories are used to maintain tissue samples at subzero temperatures during grinding to increase yields of RNA, proteins and pesticides. They can also be used to help grind samples that are difficult to grind at room temperature.

SPEX SamplePrep has a complimentary Demo Program allowing you to try our equipment in your laboratory. We also offer in-house Sample Grinding and Testing services. To send in your request visit www.spexsampleprep.com/demo-request.

APPLICATION NOTES ONLINE
Our library of application notes can help you find the most suitable products and methods for your application. You can read our application notes online or download a copy. Visit www.spexsampleprep.com/appnotes.

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