# Versatile and effective

Sample disruption starts here  $\bigcirc$ 





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## Your success story starts with effective disruption

Sample disruption

Sample preparation

Sample quality control

Analysis by NGS, dPCR or qPCR/PCR

Data analysis

Your sample disruption process can spell the difference between poor and successful downstream DNA and RNA analysis. Ideally, a sample homogenizer should effectively release intracellular components and should be flexible to meet the demand to lyse samples based on your sample type and throughput requirement.

#### The TissueLyser III delivers on that promise - but how?

- The intuitive software interface and convenient touchscreen and rotary knob make running and customizing disruption protocols easier.
- It has 7 pre-programmed protocols and 5 customizable protocols for the most challenging samples (see Figure 1A).
   The instrument also allows you to create custom program cycles to conveniently set your disruption parameters (see Figure 1B).
- The adapter accessories designed for the TissueLyser III make it possible to process up to 192 samples in parallel.

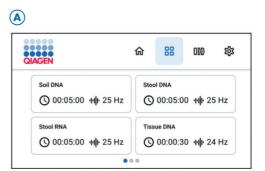




Figure 1. Pre-programmed protocols and customizable program cycles for challenging samples.

**A.** The TissueLyser III has 7 pre-programmed protocols for different sample types and 4 customizable protocols, depending on your sample needs. **B.** A new feature of TissueLyser III allows you to create program cycles with customized running times and frequency for a specified number of cycles with the option to pause at the middle of the cycle.



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## For every challenging sample, TissueLyser III effectively disrupts them all

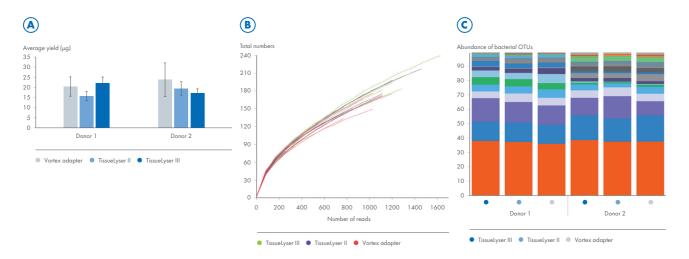


Figure 2. Comparable microbial communities are generated from lysed samples using the TissueLyser III.

Stool samples (batched using 10-µL-inoculation loop) from 2 donors were prepared using the QIAamp® PowerFecal® Pro DNA Kit and were subsequently lysed on the TissueLyser III, TissueLyser II, and a vortex adapter. A. Average yield, B. alpha diversity, and C. abundance of bacterial OTUs were comparable between the 3 instruments.

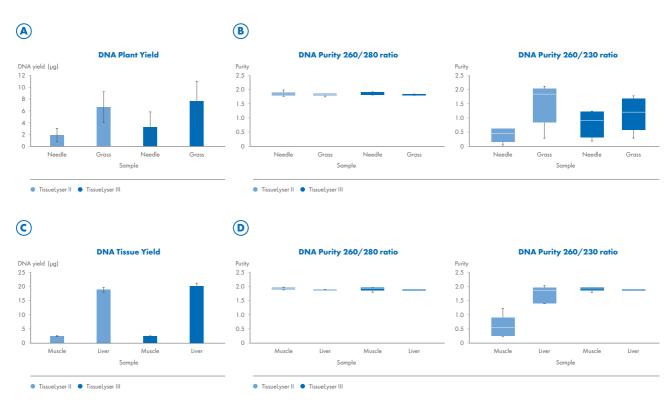


Figure 3. DNA extracted from challenging samples lysed using the TissueLyser III had comparable yield and purity.

Plant samples (needle and grass, 50 mg each) were prepared using DNeasy (R) Plant Pro Kit. Lysis was performed on the TissueLyser III using a pre-programmed protocol with disruption parameters set at 2 x 2 min at 24 Hz. A. DNA yields were comparable for both instruments, showing effective sample disruption. B. DNA purity was comparable for both instruments, showing no contamination during sample lysis.

Stabilized rat muscle and liver tissue samples (10 mg each) were prepared using the QIAamp Fast DNA Tissue Kit. Lysis was performed on the TissueLyser III using a pre-programmed protocol with disruption parameters set at 30 sec at 24 Hz. C. DNA yields were comparable for both instruments, showing effective tissue disruption.

D. The ratio of absorbance at 260/280 nm and 260/230 nm showed that DNA purity was comparable for both instruments.

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### Ordering Information

Product	Contents	Cat. no.
TissueLyser III	TissueLyser III instrument for sample disruption	9003240
Accessories		
TissueLyser Adapter Set 2 x 24	Two sets of adapter plates and 2 racks for use with 2 ml microcentrifuge tubes on the TissueLyser III	69982
TissueLyser Adapter Set 2 x 96	Two sets of adapter plates for use with Collection Microtubes (racked) on the TissueLyser III	69984
Plate Adapter Set	Two sets of adapter plates for use with two 96-well plates on the TissueLyser III, compatible with the PowerBead Pro Plates	11990
5 ml Tube Adapter Set	For sample homogenization using 5 ml bead tubes on a TissueLyser III	11980
2 ml Tube Holder Set	For sample homogenization in 2 ml bead tubes on a TissueLyser III	11993
Grinding Jar Set, Stainless Steel (2 x 10 ml)	2 Grinding Jars (10 ml), 2 Stainless Steel Grinding Balls (20 mm)	69985
Grinding Jar Set, Teflon (2 x 10 ml)	2 Grinding Jars (10 ml), 2 Teflon Grinding Balls (20 mm)	69965
Coming soon: 50 mL Tube Adapter		



#### See it in action.

Scan or click on the QR code to request for a demo and view the tutorial video.





To learn more about the TissueLyser III, visit www.qiagen.com/TLIII

The TissueLyser III is intended for molecular biology applications. This product is not intended for the diagnosis, prevention, or treatment of a disease. For up-to-date licensing information and product-specific disclaimers, see the respective QIAGEN kit instructions for use or user operator manual. QIAGEN kit instructions for use and user manuals are available at www.qiagen.com or can be requested from QIAGEN Technical Services (or your local distributor).

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