

DNeasy® PowerSoil® Pro Kits

The next-generation kits for the isolation of microbial DNA from all soil types

Procedure

Lyse Tough Microbes

Remove Inhibitors

Improve NGS Results

Ordering Information





Procedure

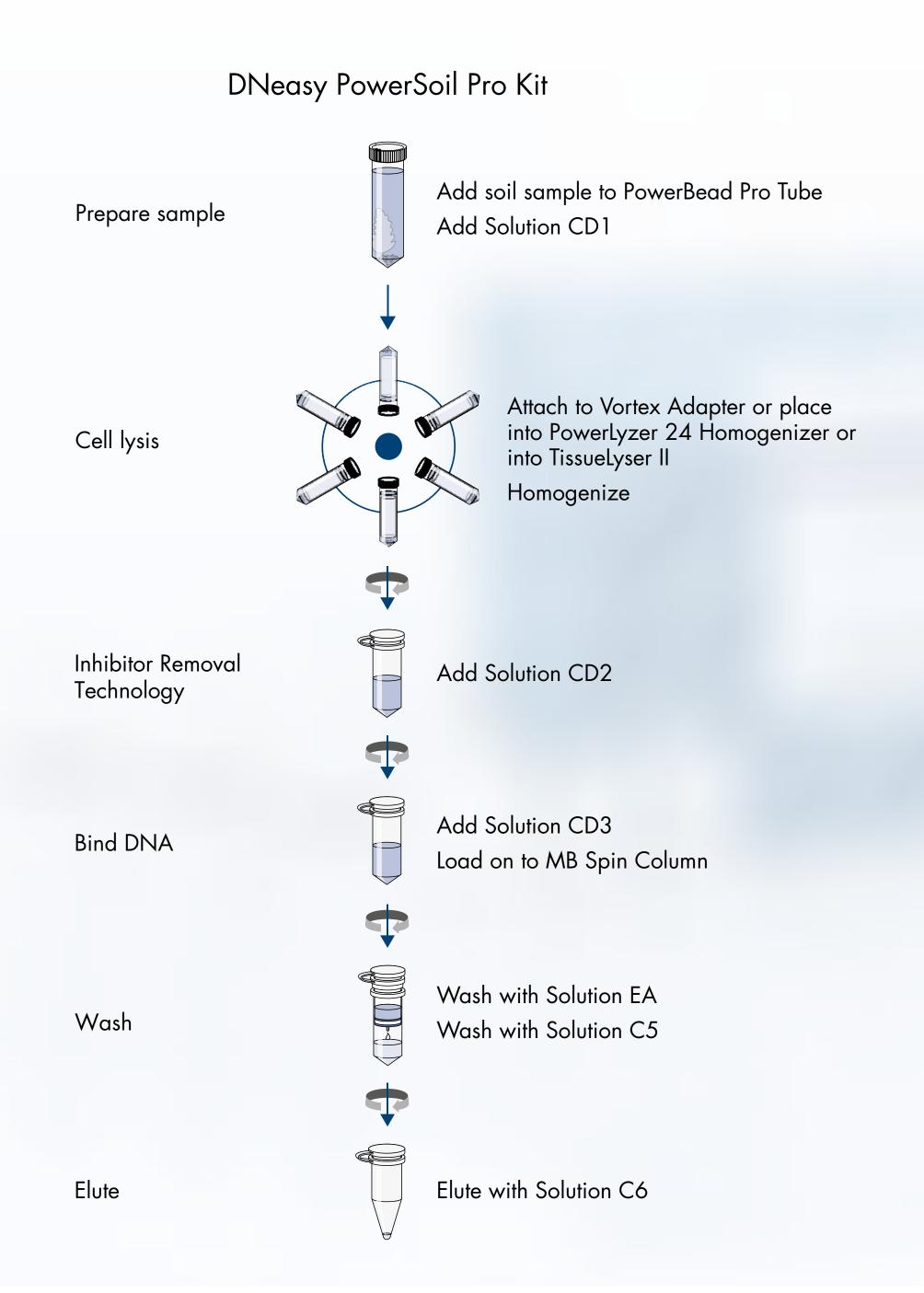
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Procedure



Starting material: up to 250 mg of soil

Elution Volume: 50–100 µl

Automated on the QIAcube®

Shorter workflow compared to original DNeasy PowerSoil Kit:

- 4 fewer steps
- No incubation times
- Total time saved = 12 min





Procedure

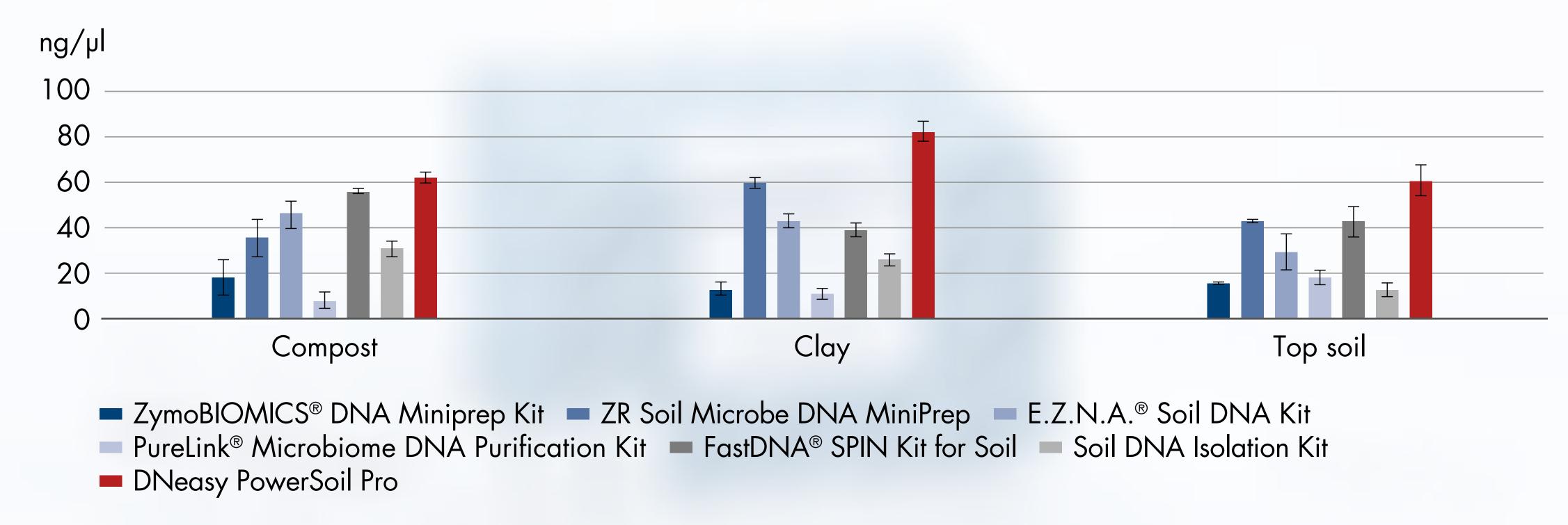
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New bead tubes increase lysis efficiency for higher DNA yields



Various soil sample types (250 mg) were prepared using commercially available sample preparation solutions and compared to the new DNeasy PowerSoil Pro Kit. Yields were measured by fluorometric quantification (Qubit®).

Up to 8-fold higher DNA yields than alternative methods



Procedure

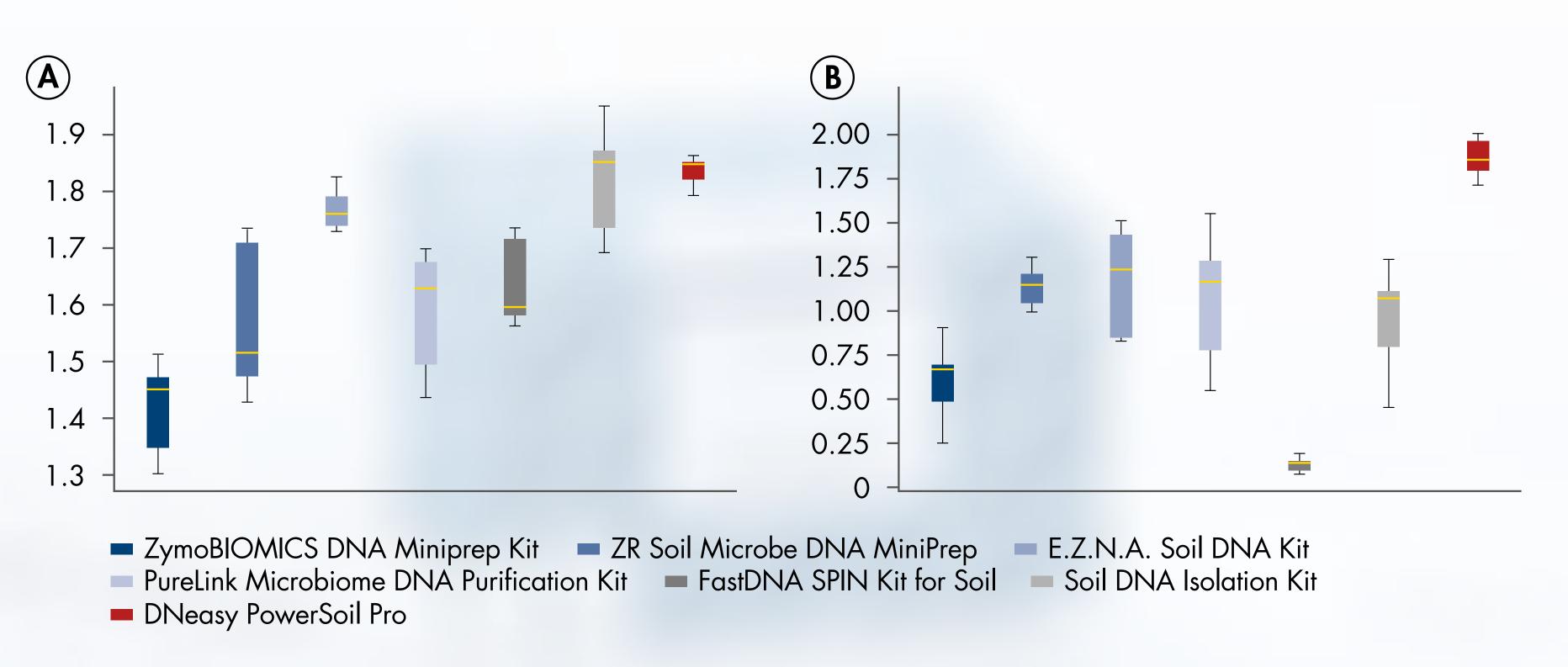
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Streamlined Inhibitor Removal Technology® (IRT) removes inhibitors for pure DNA



Various soil samples (250 mg) were prepared using commercially available sample preparation solutions and compared to the new DNeasy PowerSoil Pro Kit. DNA purity was measured via spectrophotometry and is presented as the ratios $\mathbf{A} A_{260}/A_{280}$ and $\mathbf{B} A_{260}/A_{230}$.

Faster, one-step IRT results in highly pure DNA



Procedure

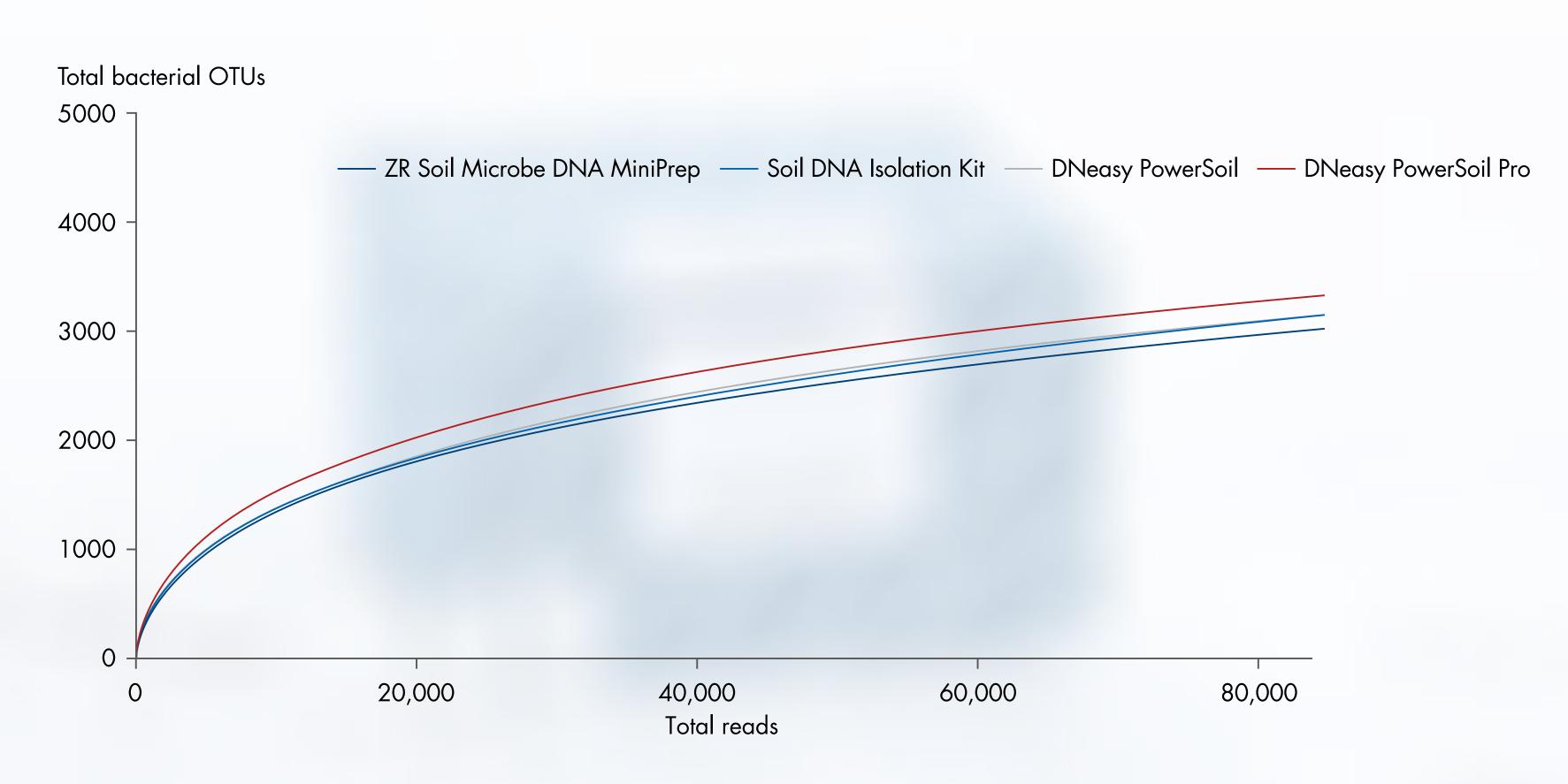
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Better lysis of tough microbes results in increased alpha diversity in 16S rRNA gene sequencing



DNA prepared from soil samples was isolated with different methods and enriched. Analysis of the 16S rRNA genes was done using the QIAseq® 1-Step Amplicon Kit and data analysis was done using the Microbial Genomics Pro suite (CLC workbench). Alpha diversity was determined as total number of bacterial operational taxonomic units (OTUs).

More bacteria (OTUs) identified than alternative methods



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Product	Description	Cat. no.
DNeasy PowerSoil Pro (50)	For 50 DNA minipreps: Buffers, PowerBead Tubes, Spin Filters, 2 ml Collection Tubes	47014
DNeasy PowerSoil Pro Kit (250)	For 250 DNA minipreps: Buffers, PowerBead Tubes, Spin Filters, 2 ml Collection Tubes	47016

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