

E.Z.N.A.[®] Soil DNA Kit

Isolate DNA from soil & environmental samples containing humic acid and PCR inhibitors

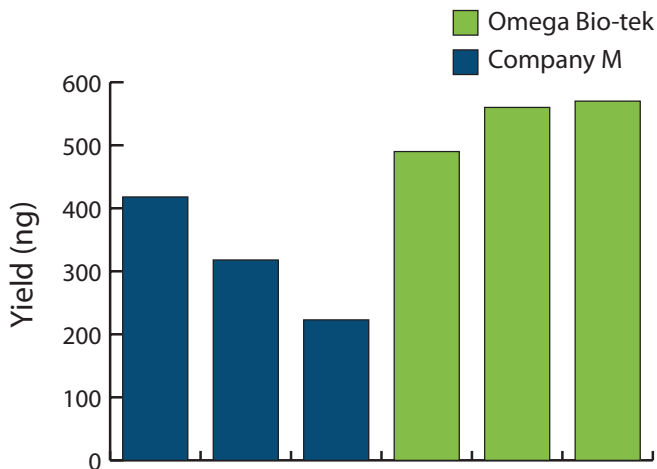
Features and Benefits

- **Reliable:** Reproducible DNA purification from a variety of sample sources
- **Quality:** Ready-to-use DNA eliminating PCR inhibitors using proprietary inhibitor removal technology
- **Yield:** Efficient purification of DNA from even specialized samples
- **Ease of Use:** Contains glass beads pre-filled in 2 mL vials

The E.Z.N.A.[®] Soil DNA Kit is formulated to isolate high purity cellular DNA from soil samples typically containing humic acid and other inhibitors of PCR. This kit uses a novel and proprietary method to isolate genomic DNA from a variety of environmental samples without organic extractions.

This kit has been successfully used to isolate DNA from Gram positive and negative bacteria, fungi, yeast and algae that inhabit a range of samples including clay, sandy, peaty, chalky or loamy soil samples. Isolated DNA can be used for most downstream applications including PCR, Southern blot and NGS analysis.

Comparison of DNA Extraction Method From Soil Samples



DNA yield determined with fluorescence-based dye quantification. 50 µL ZymoBIOMICS Microbial Community Standard was added to 200 mg soil samples and DNA was extracted using manufacturer's recommended protocols. DNA was eluted in 100 µL for both manufacturers.

Comparison of C_t Values

Extraction Method	1:10	1:100	Δ C _t
Company M	22.47	25.83	3.36
Company M	22.85	26.26	3.41
Company M	23.52	27.10	3.58
Company M Average	22.95		
Omega Bio-tek	22.25	25.04	2.79
Omega Bio-tek	22.04	25.82	3.78
Omega Bio-tek	22.40	26.38	3.98
Omega Bio-tek Average	22.23		
NTC	39.65		

20 µL SYBR Green qPCR reaction. 50 µL Zymo BIOMICS Microbial Community Standard was added to 200 mg soil samples and DNA was extracted using manufacturer's recommended protocols. DNA was eluted in 100 µL for both manufacturers.



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Protocol



Grind the sample in Disruptor tubes.



Lyse the sample with DS Buffer.



Precipitate inhibitors with P2 Buffer.



Remove inhibitors with HTR Reagent.



Adjust binding conditions.



Transfer to a HiBind[®] DNA Mini Column.



Wash 3x.

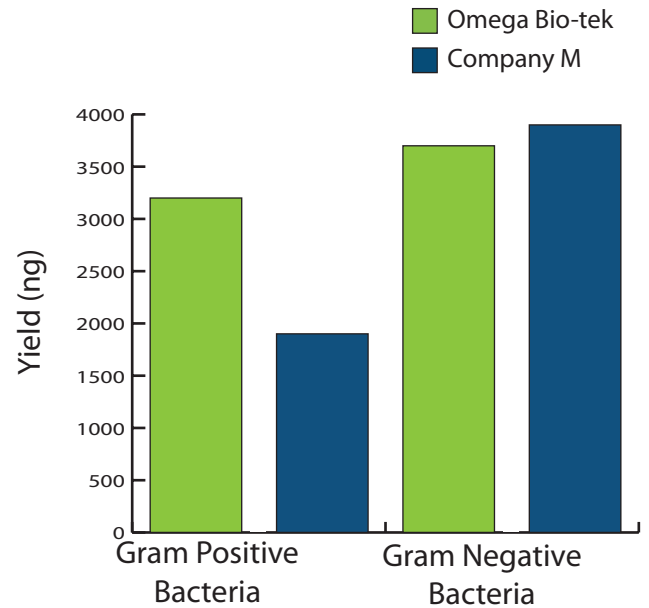


Dry.



Elute.

DNA Yield by Bacterial Classes



DNA yield determined with fluorescence-based dye quantification. 0.5 mL cultured gram positive and gram negative bacteria were added to corresponding 200 mg soil samples and DNA was extracted using manufacturer's recommended protocols. DNA was eluted in 100 μ L for both manufacturers.

Price List

VWR Cat No.	Part Number	Preparations
101319-090	D5625-00	5
101319-092	D5625-01	50
101318-884	D5625-02	200



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