

# Soil DNA Isolation Maxi Kit

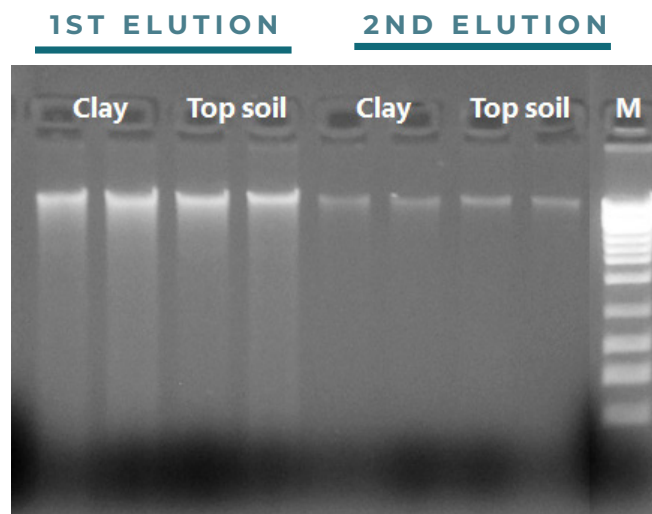
CAT. 62000

FOR THE DETECTION OF MICROORGANISMS FROM  
LARGE SOIL SAMPLES



- ✓ Rapid and convenient method to detect microorganisms in up to 10 g of soil samples
- ✓ Process all soil types
- ✓ Efficiently remove organic substances using the OSR Solution
- ✓ Remove all humic acid from DNA samples using the Maxi Humic Acid Removal Columns
- ✓ Fast and easy processing using a rapid spin-column format
- ✓ Isolate high quality total DNA from a variety of microorganisms including bacteria, fungi and algae

# Advantages You Will Bring to Your Lab

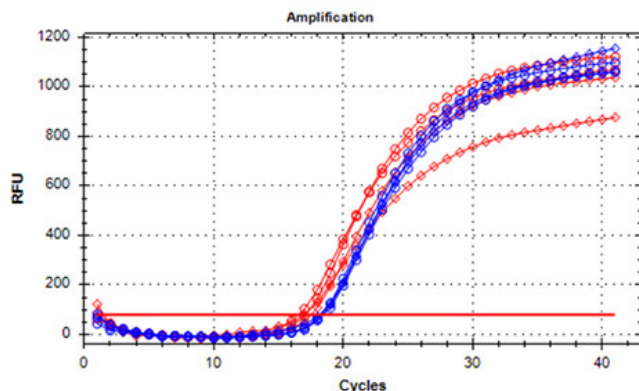
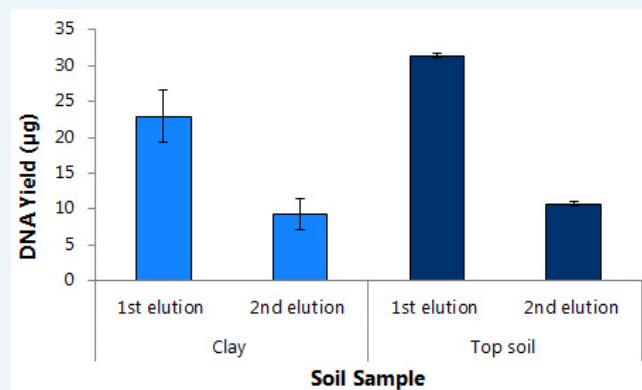


## EXCELLENT DNA INTEGRITY AND YIELD

**Figure 1. Resolution of DNA isolated from 10 g of two different soil types; regular soil (clay) and high humic acid soil (top soil) using Norgen's Soil DNA Isolation Maxi Kit.** For evaluation, 10  $\mu$ L from the 1st elution (2 mL) and 2nd elution (2 mL) from each soil sample was run on 1X TAE 1.2% agarose gel. Excellent DNA integrity and yield were observed from the Soil DNA Isolation Maxi Kit. Marker = Norgen's HighRanger DNA Ladder (Cat. 11900)

## INCREASED THE TOTAL DNA YIELD BY AN ADDITIONAL 20-30 %.

**Figure 2. Difference in DNA yield between two soil types (clay and top soil) and elutions (1st and 2nd elution).** Ten grams of soil was processed using Norgen's Soil DNA Isolation Maxi Kit. The second elution increased the total DNA yield by an additional 20-30%.



## EXCELLENT SOIL DNA QUALITY FROM 10 GRAMS OF SOIL

**Figure 3. High soil DNA quality was confirmed by real-time PCR using 8  $\mu$ L of soil DNA (total PCR reaction volume was 20  $\mu$ L) isolated using Norgen's Soil DNA Isolation Maxi Kit to detect 16s rDNA.** The 16s rRNA gene was successfully amplified in both the first elution (red) and second elution (blue) from two soil types (Clay = circle, Top soil = diamond) without PCR inhibition, indicating the excellent soil DNA quality from 10 grams of soil.



Photo: Components of Kit

## Kit Specifications

Description	Specifications
Maximum Soil Input	10 g
Type of Soil Processed	All soil types
Maximum Column Binding Capacity	1.5 mg
Average Yield from 10 g of soil*	30-50 µg
Time to Complete 10 Purifications	30 minutes

\* Average yields will vary depending upon soil sample types

## Select Publications

Li, Peng, et al. **“Mechanism of Microbial Action of the Inoculated Nitrogen-Fixing Bacterium for Growth Promotion and Yield Enhancement in Rice (*Oryza Sativa* L.)”** Advanced Biotechnology, vol. 2, no. 4, Sept. 2024, p. 32. Springer Link, <https://doi.org/10.1007/s44307-024-00038-4>.

Lopez, Mark Louie D., et al. **“Reconstructing Historical Fish Occurrence and Documenting Human-Mediated Introductions in Lakes Using Sedimentary DNA.”** Global Ecology and Conservation, vol. 54, Oct. 2024, p. e03040. ScienceDirect, <https://doi.org/10.1016/j.gecco.2024.e03040>.

Sharma, Pooja, et al. **“Plant Growth Enhancement under Combined Amendments of Food Waste Digestate and Rhizosphere Microbial Co-Occurrence.”** ACS Sustainable Resource Management, vol. 1, no. 3, Mar. 2024, pp. 563–76. ACS Publications, <https://doi.org/10.1021/acssusresmgt.4c00051>.

## Ordering Information

Description	Preps	Cat. #
Soil DNA Isolation Maxi Kit	10 Preps	62000

### Order Today!

Order Norgen's Soil DNA Isolation Maxi Kit today to help improve your research performance and workflow.

#### Three ways to order

Visit [norgenbiotech.com](https://norgenbiotech.com)  
Call at **1-866-NORGENB** or **905-227-8848**  
Email at [orders@norgenbiotech.com](mailto:orders@norgenbiotech.com)



### Related Products

Description	Prep Size	Cat. #
HighRanger 1 kb DNA Ladder	100 Loads	11900
UltraRanger 1 kb DNA Ladder	100 Loads	12100
Norgen Next Generation Sequencing Services	Call 1-866-Norgenb or Visit <a href="https://norgenbiotech.com">norgenbiotech.com</a>	

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