Bead Mill Nucleic Acid

PURIFICATION KITS

Tissue | Bacteria | Yeast | Fecal/Urine | Plant | Soil

Optimized for Bead Mill Homogenization

Bacteria DNA Kit
Catalog # 26-008

Purify High Quality DNA and RNA from Tissues, Soil, Feces, Cells, Bacteria and Fungi.

OMNI International
The Homogenizer Company®

BEAD MILL NUCLEIC PURIFICATION KITS

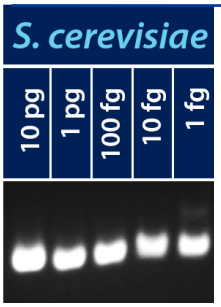
The OMNI Bead Mill Nucleic Purification Kits are designed for use with Bead Ruptor Bead Mill homogenizers to extract DNA or RNA from soil, feces, bacterial cells, fungal cells or tissues. Nucleic Acid Purification Kits contain spin-column capture columns, pre-filled bead beating tubes and nontoxic reagents. The optimized reagents are designed specifically for sample dissociation through bead milling and ensure that high quality DNA and RNA is extracted in high yields. OMNI Pre-filled bead tubes contain an optimized amount of lysing matrix and are certified DNase/RNase free to ensure purified DNA/RNA is of the highest quality. DNA and RNA purified using the OMNI Bead Mill Nucleic Acid Purification Kits are ready for downstream applications such as PCR, RT-PCR, qPCR, Next Generation Sequencing and enzyme digestions.

FEATURES

- Nucleic acid extraction kits designed specifically for bead mill homogenization.
- PCR inhibitors removed by specially formulated inhibitor removal reagent.
- Rapid DNA and RNA isolation.
- Contains pre-filled certified DNase/RNase free bead tubes, spin-columns and extraction reagents.
- Nontoxic reagents with no organic extractions.

APPLICATION DATA

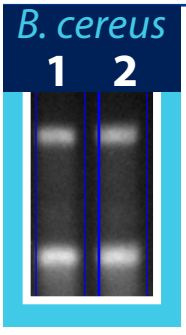
PCR PRODUCTS OBTAINED FROM DNA ISOLATION OF *S. CEREVISIAE*



DNA was purified from *Saccharomyces cerevisiae* using the OMNI Bead Mill Yeast DNA Purification Kit (Cat# 26-009B). PCR targeted a conserved 450 bp region of the 18S gene.

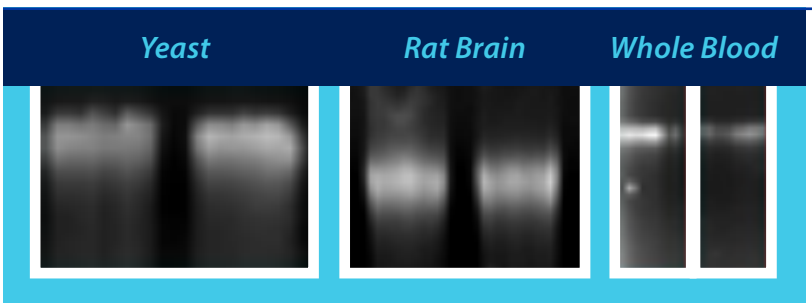
Bead Ruptor Elite
Catalog No. 19-040E

HIGH QUALITY RNA PURIFIED FROM *BACILLUS CEREUS* CELLS



RNA was purified from *B. cereus* cells using the OMNI Bead Mill Bacterial RNA purification kit (Cat# 26-008B). RNA was analyzed on a 1% agarose gel and stained with Ethidium Bromide (EtBr).

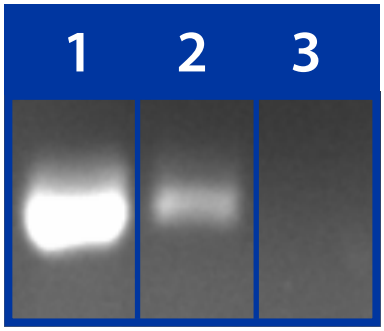
HIGH QUALITY DNA OBTAINED FROM BACTERIA AND TISSUES



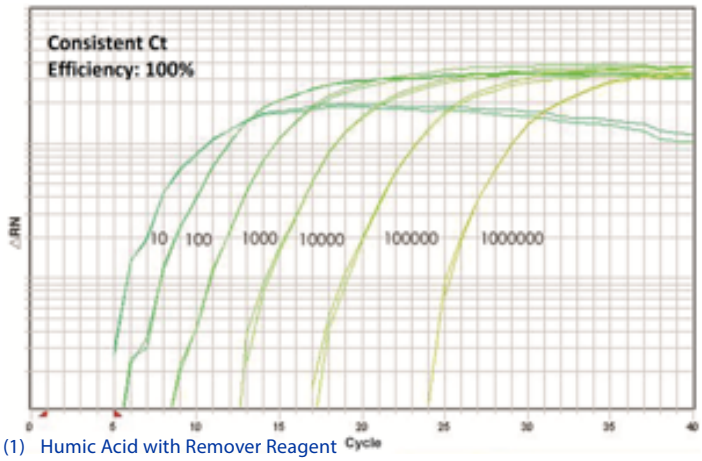
Genomic DNA was purified 30 mg rat brain, 100 µl whole rat blood and *Saccharomyces cerevisiae* cells using the Bead Mill Yeast and Tissue DNA Purification kits. DNA was analyzed on a 1% agarose/ EtBr gel.
(Cat# 26-009B, 26-010B)

REMOVAL OF PCR INHIBITORS FROM SOIL

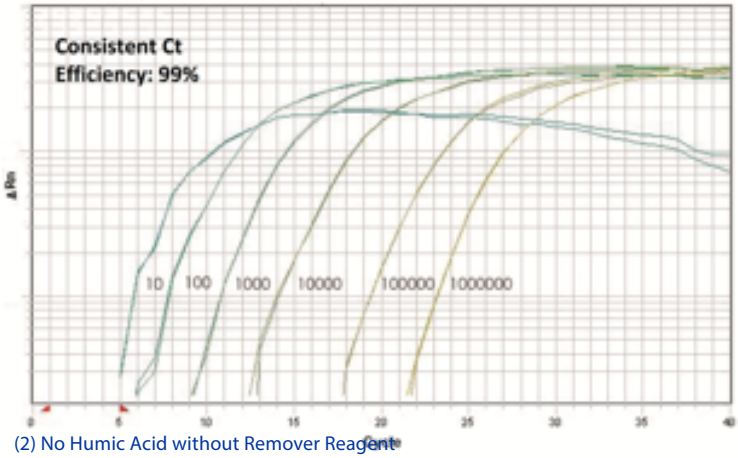
Soil samples were inoculated with and without 20% humic acid, a common PCR inhibitor found in soil and feces. Genomic DNA was extracted using the Soil DNA Kit (Cat#26-013G). DNA was spiked with 70 ng of pGLO plasmid DNA with and without the inhibitor removal steps. The DNA mixture was then subjected to endpoint PCR and qPCR to detect the GFP gene (714 bp). No inhibition was detected from either of the extractions using the OMNI PCR inhibitor removal process. Inhibition was observed via PCR in samples without the use of the removal reagent. In addition, there is a significant increase in quality and end product with addition of inhibitor reagent.



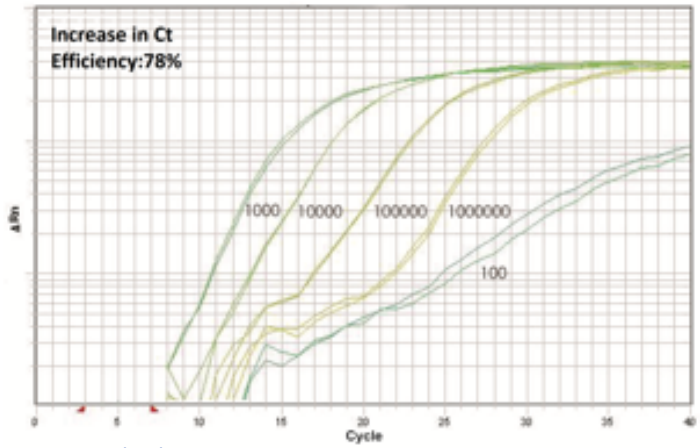
(1) Humic Acid with Remover Reagent
(2) No Humic Acid without Remover Reagent
(3) Humic Acid without Remover Reagent



(1) Humic Acid with Remover Reagent



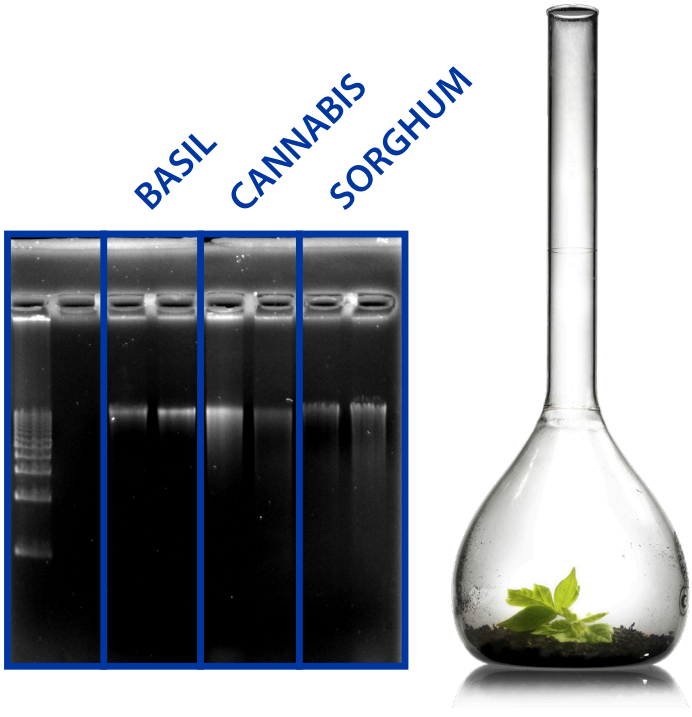
(2) No Humic Acid without Remover Reagent



(3) Humic Acid without Remover Reagent

NEW!
PLANT DNA PURIFICATION KIT

Designed for efficient recovery genomic DNA (up to 40 kB) from fresh, frozen, or dried plant tissue samples rich in polysaccharides or having a lower DNA content. Genomic DNA was recovered from 100 mg of freah basil, 30 mg dried cannabis and 100 mg fresh Sorghum using the Bead Mill Plant DNA Purification kit.
(Cat# 26-023B)



Bead Mill Nucleic Acid Purification Kits

Optimized for Bead Mill Homogenization

TARGET	PRODUCT	PREPS	CATALOG #	SAMPLE SIZE	PRE-FILLED BEAD TUBES
Genomic DNA	Tissue DNA Kit	50	26-007	Up to 30 mg tissue	
Genomic DNA	Bead Mill Tissue DNA Kit	50	26-007B	Up to 30 mg tissue	2 mL with 2.8 mm ceramic
Genomic DNA	Bacteria DNA Kit	50	26-008	Up to $3x10^9$ cells	
Genomic DNA	Bead Mill Bacteria DNA Kit	50	26-008B	Up to $3x10^9$ cells	2 mL with 0.1 mm ceramic
Genomic DNA	Yeast DNA Kit	50	26-009	Up to $3x10^7$ cells	
Genomic DNA	Bead Mill Yeast DNA Kit	50	26-009B	Up to $3x10^7$ cells	2 mL with 0.1 mm ceramic
RNA	Tissue RNA Kit	50	26-010	Up to 30 mg tissue	
RNA	Bead Mill Tissue RNA Kit	50	26-010B	Up to 30 mg tissue	2 mL with 2.8 mm ceramic
RNA	Bacteria RNA Kit	50	26-011	Up to $3x10^9$ cells	
RNA	Bead Mill Bacteria RNA Kit	50	26-011B	Up to $3x10^9$ cells	2 mL with 0.1 mm ceramic
RNA	Yeast RNA Kit	50	26-012	Up to $3x10^7$ cells	
RNA	Bead Mill Yeast RNA Kit	50	26-012B	Up to $3x10^7$ cells	2 mL with 0.1 mm ceramic
Genomic DNA	Bead Mill Soil DNA Kit	50	26-013G	Up to 0.25 g soil	2 mL with 0.7 mm garnet
Genomic DNA	Bead Mill Soil Midi DNA Kit	50	26-013B	Up to 1 g soil	30 g bulk 0.5 mm glass
Genomic DNA	Bead Mill Fecal DNA Kit	50	26-014B	Up to 0.25 g feces	2 mL with 0.5 mm glass
Genomic DNA	Plant DNA Kit	50	26-023	Up to 30 mg of dried plant tissue Or 100 mg of fresh plant issue	
Genomic DNA	Bead Mill Plant DNA Kit	50	26-023B	Up to 30 mg of dried plant tissue Or 100 mg of fresh plant issue	2 mL with 2.8 mm ceramic

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Rev. I