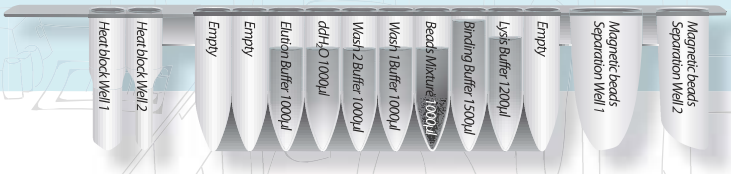
MagCore® Nucleic Acid Extraction Kits



For extraction of bacterial and fungal genomic DNA using the MagCore® System

The MagCore® Genomic DNA Microbial Library-Ready Kit is specially designed for isolating high-quality microbial genomic DNA from bacteria, yeast, and fungi. This kit efficiently isolates total DNA from tough-to-lyse Gram-positive and Gram-negative bacteria, as well as yeast and fungi, by overcoming cell wall resistance through effective lysis and homogenization using Bead-Beating Tubes and optimized lysis chemistry.

506 **MagCore® Genomic DNA Microbial Library-Ready Kit**



Features

1. The hands-on time can be completed in as little as 10–25 minutes.
2. In addition, inhibitory substances (e.g., polysaccharides and proteins) commonly present in microbial samples are efficiently removed through a one-step bead-beating process followed by fully automated purification.
3. The purified DNA is ready for downstream molecular applications, including Nanopore sequencing, NGS, qPCR, and 16S rRNA gene sequencing.

Applications

The purified DNA can be directly used for downstream application such as:

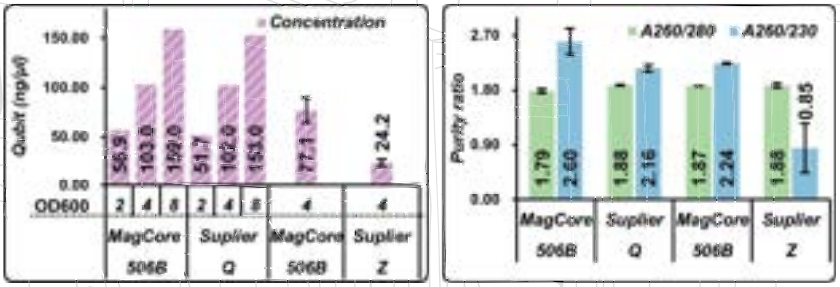
1. Nanopore sequencing
2. NGS
3. qPCR
4. 16S rRNA gene sequencing



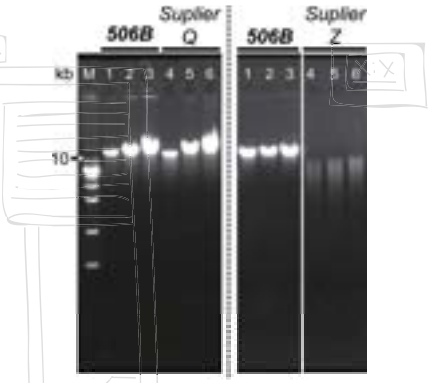
Performance

DNA Extraction Efficiency - Bacteria

DNA was extracted from E. coli (n=3) using MagCore gDNA Microbial Library-Ready Kit (Supplier Q/Z; commercial competitors). Concentration and purity (A260/280, A260/230) were measured by Qubit and NanoDrop.

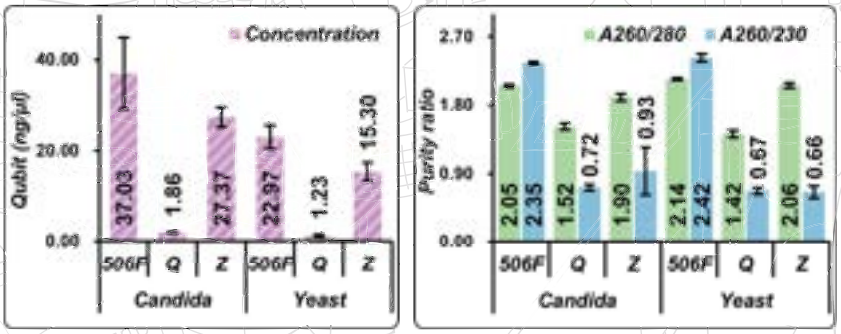


Gel electrophoresis

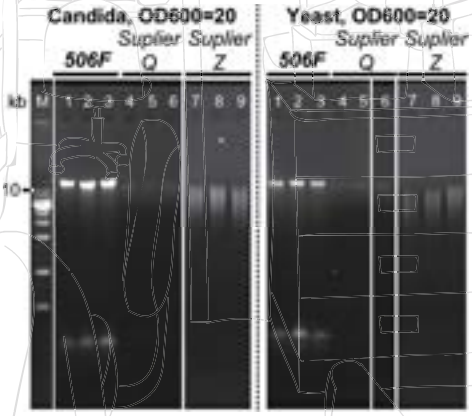


DNA Extraction Efficiency - Fungi

DNA was extracted from yeast samples (YEAST: S. cerevisiae; CANDIDA: Candida spp., n=3) using MagCore gDNA Microbial Library-Ready Kit (Supplier Q/Z; commercial competitors). Concentration and purity (A260/280, A260/230) were measured by Qubit and NanoDrop.

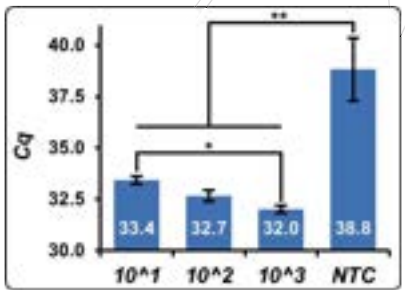


Gel electrophoresis



Detection Performance (506 Kit, 16S qPCR)

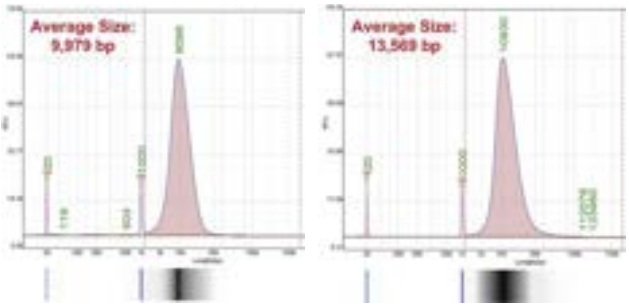
- *506 Kit DNA extraction*
- *16S qPCR (40 cycles)*
- *10^1–10^3 CFU detectable*
- *Lowest tested: 10^1 CFU (plate count)*



*Significant differences among groups were observed (*P < 0.05, **P < 0.01, T-test).*

Capillary gel electrophoresis / Fragment analysis

DNA fragment sizes of ~10–13 kb were observed in bacterial samples.



MagCore® Automated Nucleic Acid Kits Specification

Cartridge Code	MagCore® Super / Plus II / EDA							
	Cat No.		Cat No.	Running Time				
	36preps		96preps					
506	**MagCore® Genomic DNA Microbial Library-Ready Kit** *For bacterial and fungal samples.* *Contents: Pre-filled cartridges, Beads-Beating Tube, BB-L Buffer, BB-FX Buffer, RNase A, Disposable tip & holder sets, Sample tubes, Elution tubes* *Shelf life: 18 months*							
	MGL-01		MGL-02	506B – 48 min 506F - 40 min				

CE IVD

bsi ISO 13485:2016 Quality Management Systems CERTIFIED
MD 757696

CE-IVD certified (Instruments & Reagents)
Manufactured in accordance with quality system requirements that comply with ISO 13485 standards and QMS

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