



# SPINeasy® DNA Kit for Microbiome

employs a novel method for isolating microbial genomic DNA from various samples. With its highly effective lysis capability and silica-membrane spin-column technology, the SPINeasy® DNA Kit for Microbiome provides the perfect solution for isolating the DNA from bacteria, body fluids and various environmental samples such as soil and stool.

With the use of specially formulated Buffer MB1 and Lysing Matrix E in combination with FastPrep® Instruments from MP Biomedicals, an efficient lysis of various samples can be achieved within seconds. Provided in the kit, the Column MB and kit buffers are designed to deliver gDNA of high yield and purity, and compatible with downstream applications such as qPCR, restriction digestion, and sequencing.

## Features

- **Effective and versatile:** Isolate high concentration of bacterial and fungal DNA from a variety of samples in less than 30 minutes.
- **Reliable:** Optimized lysis condition enables unbiased DNA isolation from most types of samples.
- **Robust:** High reproducibility of experimental results.
- **Safe:** Does not use any organic denaturants.
- **User-friendly:** No tedious enzymatic lysis procedure.

## Performance

SPINeasy® DNA Kit for Microbiome has been rigorously validated on various types of samples.

### Microbial Culture Samples

The bacterial DNA extracted with SPINeasy® DNA Kit for Microbiome has higher yield as compared to that of competitor kits.

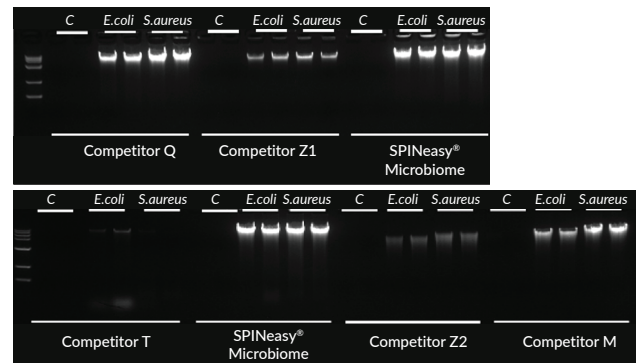
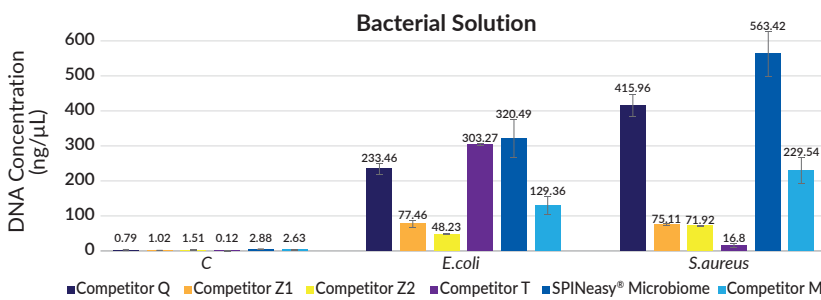


Figure 1. Comparison of extraction of bacterial gDNA from two different bacteria species (*E. coli* and *S. aureus*,  $\sim 10^8$  cfu each) using SPINeasy® DNA Kit for Microbiome and competitors kits.

### Bronchoalveolar Lavage Fluid (BALF)

The DNA extracted with SPINeasy® DNA Kit for Microbiome has high yield and good DNA integrity.

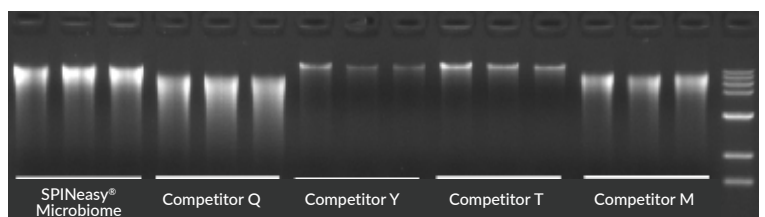
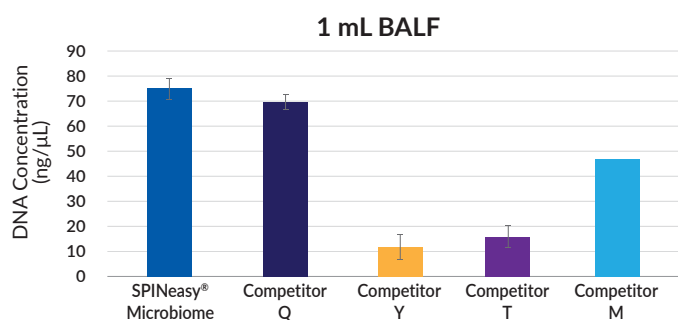


Figure 2. DNA was extracted from 1 mL of BALF using SPINeasy® DNA Kit for Microbiome and other competitor kits. The results from the three replicates were consistent.

## Milk

Different types of milk contain different amounts of protein and fat. SPINeasy® DNA Kit for Microbiome has an effective impurity removal technology and is able to extract gDNA from the three types of milk tested.

The DNA extracted with SPINeasy® DNA Kit for Microbiome showed high yield and better purity (especially for fresh milk) than that of competitor kits.

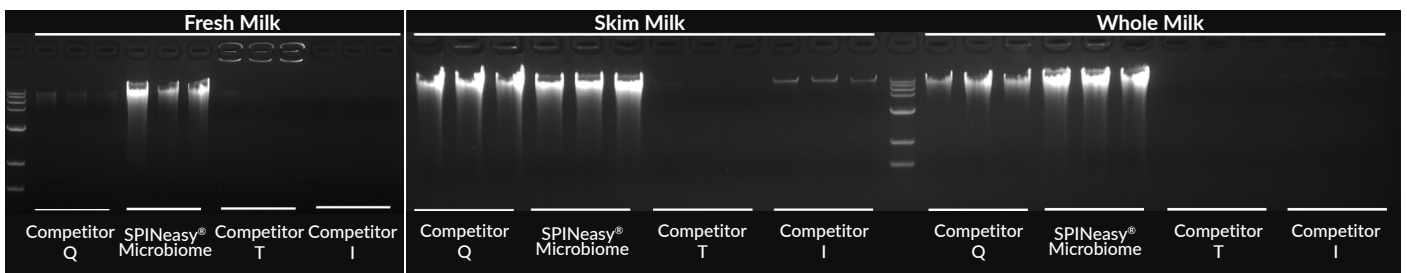
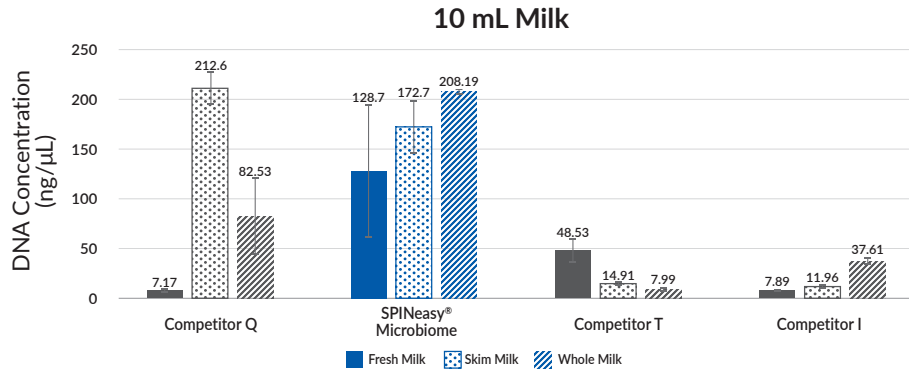


Figure 3. Three types of milk, i.e., fresh milk, skim milk, whole milk (10 mL each) were spiked with 500 μL of bacterial solution. The results from the three replicates were consistent.

## Human whole blood

The DNA extracted with SPINeasy® DNA Kit for Microbiome showed high yield and purity.

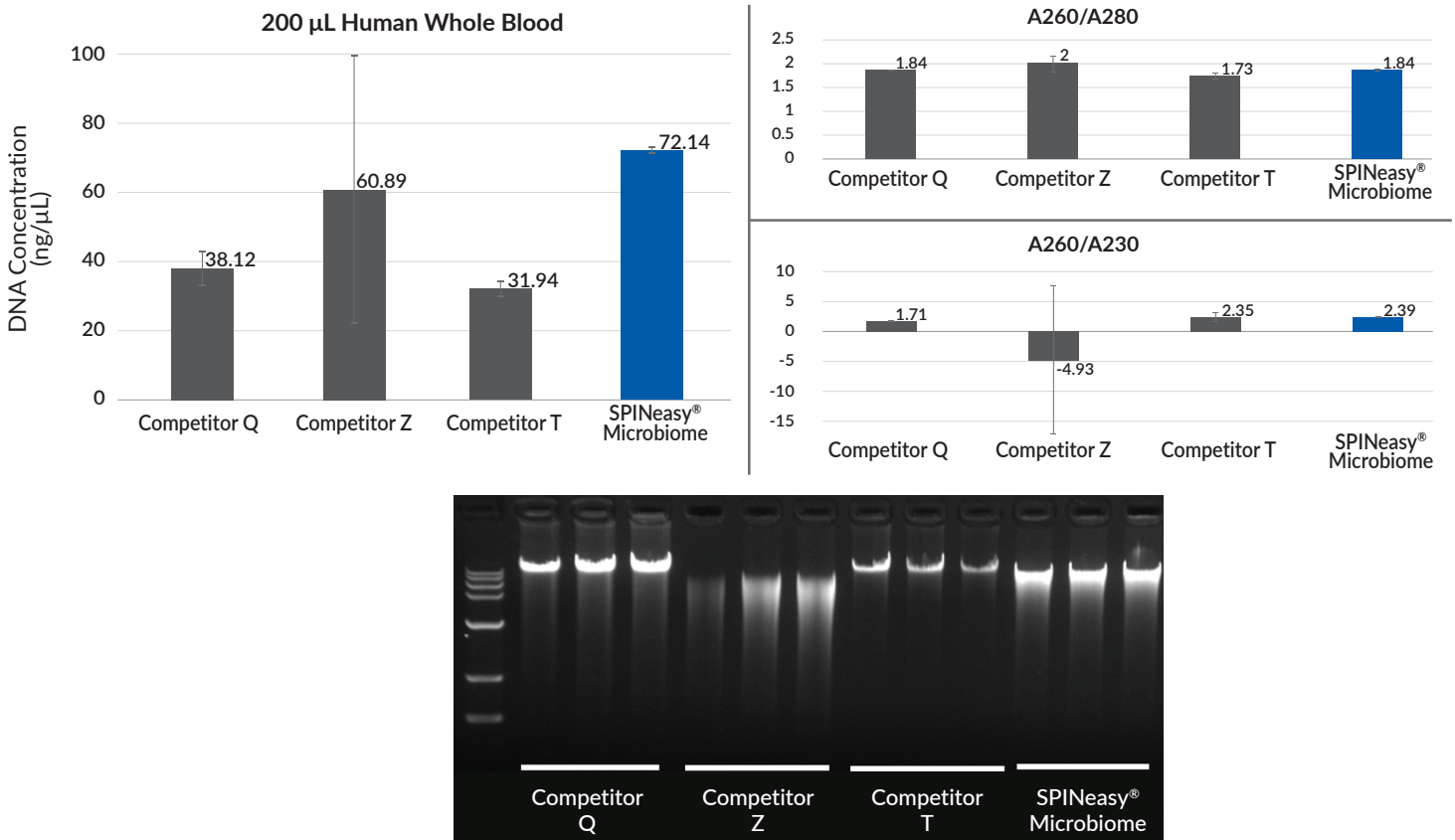


Figure 4. 200 μL of human whole blood (spiked with 10 μL of bacterial solution) were added directly to Lysing Matrix E, and used for DNA extraction. SPINeasy® DNA Kit for Microbiome gave the highest yield and good DNA integrity as compared to the competitor kits. The results from the three replicates were consistent. DNA marker: 1,5000 bp

## Inhibitor-Free DNA Ready for Downstream Applications

The DNA extracted with SPINeasy® DNA Kit for Microbiome could be directly used for downstream applications (such as qPCR), suggesting the effectiveness of the kit in removing any inhibitor.

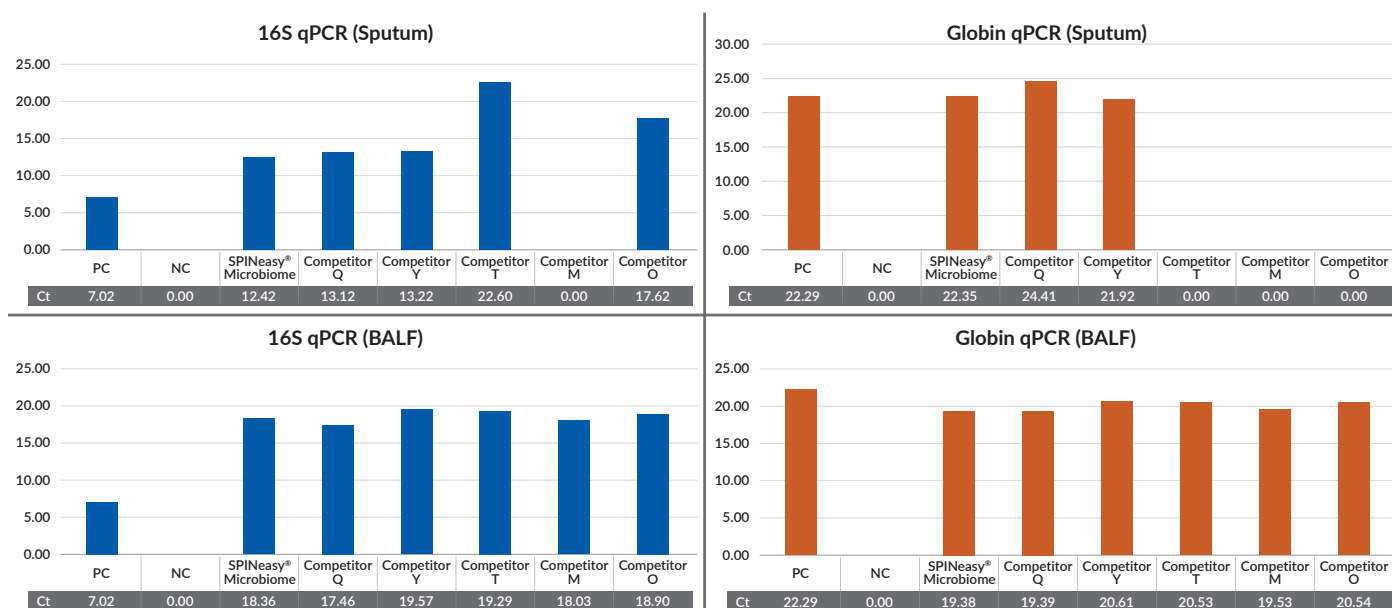


Figure 5. qPCR amplification of gDNA extracted from Sputum and BALF samples using SPINeasy® DNA Kit for Microbiome. 20 ng of DNA template were used in each reaction. Primers: 16S rRNA (197 bp) and Globin (400 bp).

## Catalogue

Product Description	Preps	Cat No.
SPINeasy® DNA Kit for Microbiome	50	116553050
	5	116553000

