

Laragen 16S/18S/ITS1 Metagenomic Sequencing Services

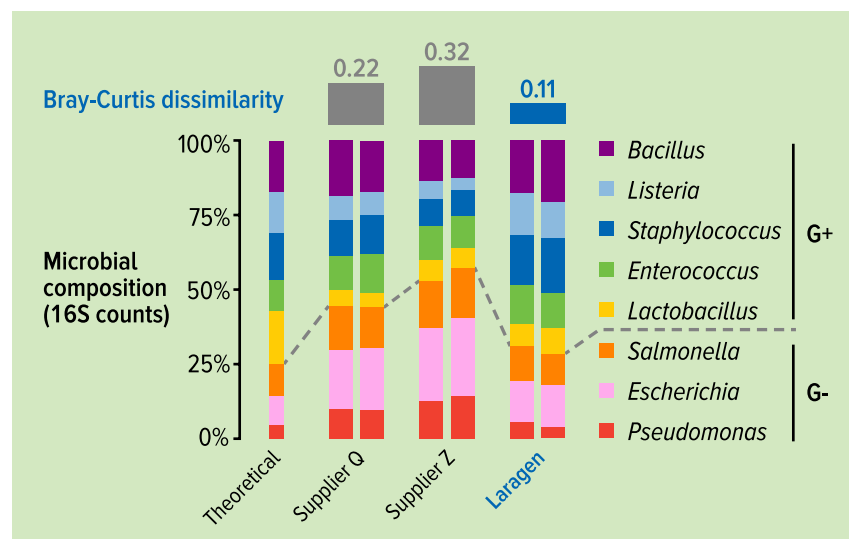
The Laragen **16S/18S/ITS1** metagenomic sequencing services deliver precise microbial profiles from diverse samples with **best-in-class accuracy, speed, and affordability**. Our optimized sequencing protocols are validated to generate comprehensive metagenomic data for streamlined applications in industries such as human and animal health, biomedicine, environmental sustainability and agriculture.

Laragen metagenomic sequencing protocols are superior in —

- **Accuracy, Precision and Robustness:** Reliably preserve original microbial profile throughout entire metagenomic workflow, ensuring precise and accurate metagenomic analyses.

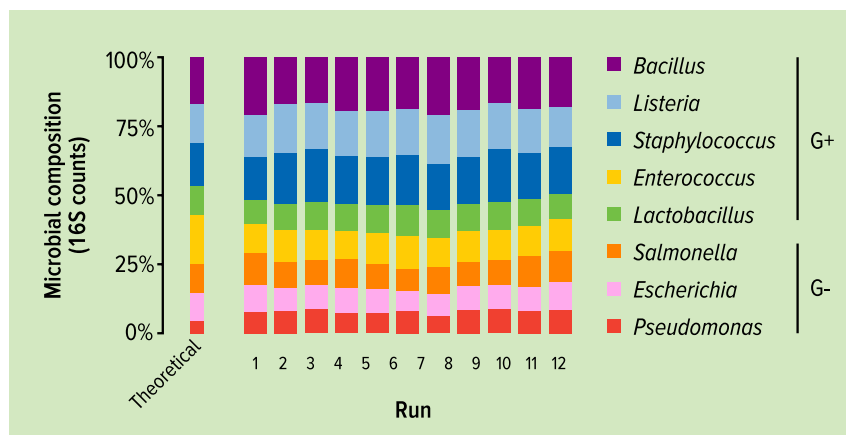
- **Speed:** Turnaround time (TAT) of **7 days for 16S V4 library** —half that of competing metagenomic sequencing services
- **Affordability:** Quality results offered at a very competitive price.

Each step of the Laragen metagenomic workflow — **from sample collection and preservation to DNA extraction, library construction, NGS sequencing and data analysis** — is validated to effectively safeguard against errors and biases. As a result, our metagenomic sequencing protocols are able to more effectively conserve and subsequently represent the accurate relative abundances of microbial components as they exist in your sample throughout the entire process.



Microbial profiles obtained from Laragen's 16S V4 proprietary magnetic bead-based fecal extraction technique, compared to the extraction kits of two other suppliers and the theoretical microbial population of the ZymoBIOMICS Community Standard.

The 16S V4 sequencing results of 12 independent runs with ZymoBIOMICS Community Standard, compared to its theoretical components.



Actualizing the potential of metagenomic techniques

Integrity at each stage of the workflow

SAMPLE COLLECTION & PRESERVATION: We use **DNAGUT™** as the first step in our metagenomic analysis. This proprietary sample collection and preservation kit is equipped with a stabilization buffer that effectively preserves microbial compositions for up to a month at room temperature, helping to ensure the integrity of the downstream workflow.

DNA EXTRACTION: The Laragen DNA extraction protocol generates **high-quality, high-yield** microbial DNA with **fewer biases** in microbial profiles than Suppliers Q and Z when using the ZymoBIOMICS community standard.

In addition, when using the ATCC Mycobiome Whole Cell Mix, the Laragen DNA extraction protocol recovers highly accurate relative abundances of ***Malassezia***, one of the most difficult to lyse fungi, while Suppliers Q and Z detect only trace amounts of this genus.

LIBRARY CONSTRUCTION: Laragen 16S/18S/ITS1 library construction results in accurate and precise microbial profiles.

All 12 independent runs (Figure 3) display **correct genus assignments** and **consistent relative abundances** equivalent to the ZymoBIOMICS community standard ('theoretical'), with **100% reproducibility** between each test replicate. Taken together, these data validate the precision, accuracy, and robustness of Laragen's metagenomic protocols.

Metagenomic data you can rely on for dynamic applications

The Laragen 16S/18S/ITS metagenomic protocols consistently outperform other commercial services in their ability to provide customers with the accurate, precise, and rapid results needed for applications in your research and product development.

Call us to today to further discuss how our metagenomic sequencing can best fit your specific needs.



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