

Empowering Microbiome Studies

16S V3-V4 Library Preparation Kit



Uncoded: Igniting Scientific Breakthroughs

Premas Life Sciences is proud and exhilarated to introduce Uncoded, an initiative that marks a significant milestone in our journey of scientific innovation. With 18 years of our industry expertise, Uncoded is dedicated to developing cutting-edge solutions that empower scientists to make groundbreaking discoveries in academic and translational research. Uncoded will take the legacy of Premas forward by bringing to you, credible and superior quality products with the best in the industry customer support to assist you in your diagnostic and scientific pursuits. **Uncoded is more than just a supplier; we are your partner in scientific exploration!**

Uncoded brings you its first ever product, the 16S V3-V4 Library Preparation Kit, for metagenomics. Metagenomics sequencing method enhances researcher's understanding of bacterial diversity and phylogeny by targeting the 16S ribosomal RNA (rRNA) gene that offer detailed insights into microbial communities. Despite its promising potential, researchers often face challenges with complex protocols, high costs, data loss, compromised sequencing quality, and high limits of detection (LOD).

These challenges are addressed with this kit as it targets the highly variable V3-V4 region of the 16S rRNA gene, providing robust solution to identify diverse microbial populations with difficult sample types (stool & soil). It utilizes phased primers and high-quality reagents offering a cost-effective, all-in-one solution. The libraries are prepared and sequenced using a user-friendly protocol. This kit has been tested and optimized on diverse sample types and wide range of bacterial load (low to high), ensuring reliable and precise results.



Consistency

Ensures reliable, reproducible results across different samples without background noise by optimized protocol and implementing QMS guidelines



User-Friendly

Kits intuitive design, allowing for easy & straightforward workflow with minimal hands-on-time & reduce technical complexity



Scalability

Effectively supporting both small & large scale projects with consistent performance & adaptability across various sample types for different Illumina platforms



Technical Support

Benefit from our dedicated technical support team from expert guidance and troubleshooting

Applications and Research Areas



Agriculture



Environment



Industrial application



Bioscience



Medical



Biotechnology



Food and nutrition

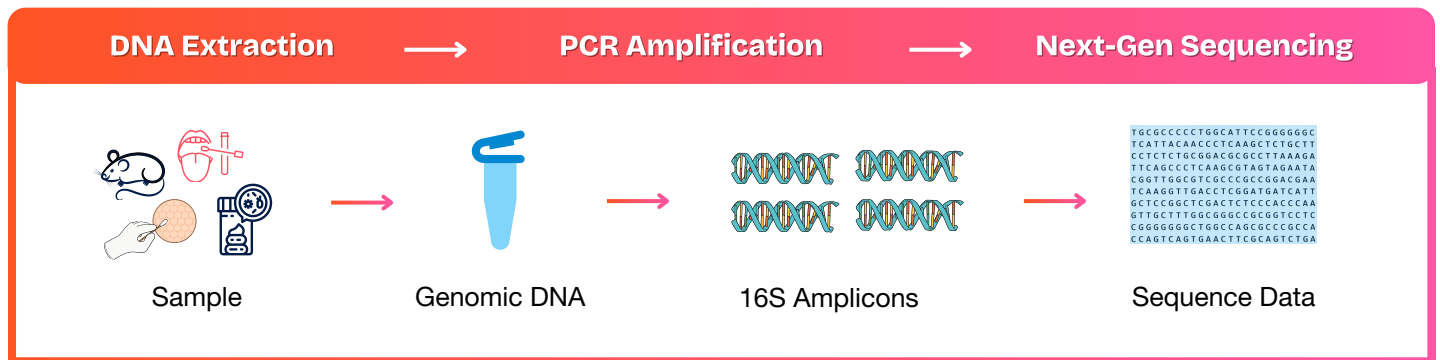


Energy

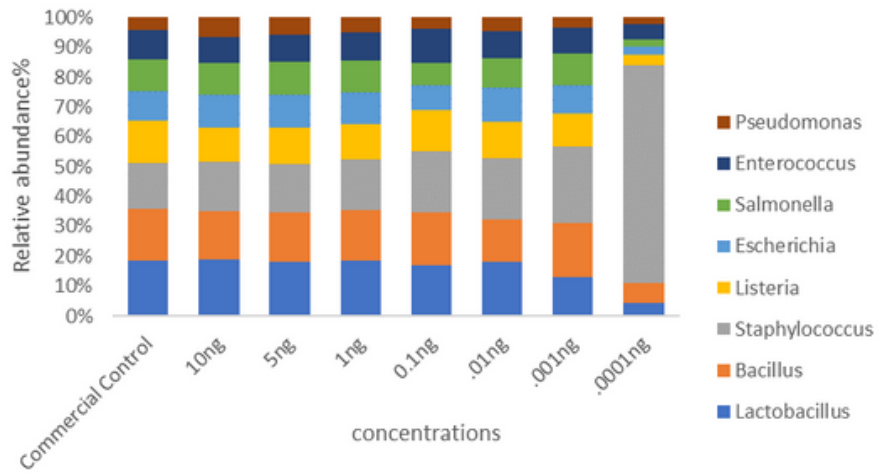
Simplify your Workflow in 3 Easy Steps



The 16S rRNA sequencing workflow is a comprehensive process that provides invaluable insights into microbial diversity and composition. It begins with the extraction of genomic DNA from various sample types, such as saliva, feces, soil, skin and mucosal swabs. This DNA is then subjected to targeted PCR amplification of the 16S V3-V4 region using phased primers, which increases sequencing quality by enhancing cluster diversity. The amplified DNA is prepared for illumina compatible sequencing and subsequent data analysis.



The use of phased primers shifts nucleotide balance and enhances base diversity, improving quality scores. The data for the limit of detection using commercial controls show that sequencing outcomes remain consistent with theoretical expectations even at 1 pg of bacterial DNA. This confirms the exceptional sensitivity of the 16S V3-V4 Library Preparation Kit, which reliably delivers accurate results from very low DNA quantities. Its ability to maintain high performance at minimal input levels ensures precise and detailed insights into microbial communities.



The 16S V3-V4 library preparation kit can be used with as low as 1 pg of Bacterial DNA.

Ordering Details

Cat. No.	Product Name	Rxns
UN16S/0507/024	16S V3-V4 Library Preparation Kit	24
UN16S/0507/096	16S V3-V4 Library Preparation Kit	96
UN16S/0507/384	16S V3-V4 Library Preparation Kit	384



Brought to you by:

Premas Life Sciences Pvt Ltd

Contact us at:



Premas Life Sciences Pvt Ltd
E - 49/5, Second Floor,
Okhla Phase II, New Delhi-110020



uncoded@premaslifesciences.com



011-46170798



Learn more at www.uncoded.in

