



**nanoCORE Amplicon Metagenomics**  
**Species-level Resolution Achieved Within 3 Weeks**

### **Complete Service Bundle**

From high-quality sample isolation and advanced library preparation to sequencing and comprehensive bioinformatics analysis, we expertly manage every step. We guarantee completion of the entire service package within three weeks.

### **Unparalleled Taxonomic Resolution**

Achieve unmatched taxonomic resolution for microbial and environmental communities, with cost-effective rates for both small and large sample volumes.

### **Enjoy Unmatched Customer Satisfaction**

Our dedication to quality, fast delivery, and outstanding customer service guarantees a level of satisfaction that's second to none.

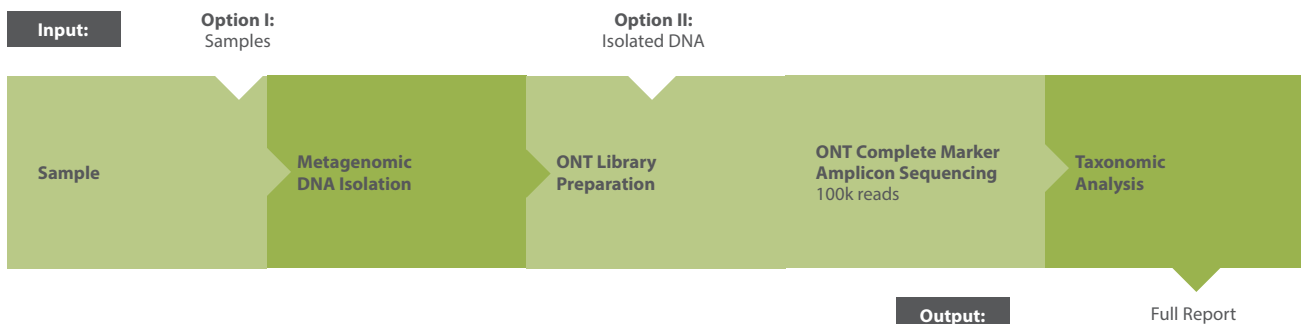
## Explore Microbial Communities with Confidence

Discover the composition of bacterial, archaeal, or fungal communities with Microsynth's nanoCORE Amplicon Metagenomics service, powered by Oxford Nanopore sequencing. This marker-based, full-length amplicon sequencing technique offers ultimate taxonomic resolution down to

the species level, enabling precise assessment of taxonomic composition and the impact of treatments or environmental factors. Designed for precision and efficiency, Microsynth's nanoCORE Amplicon Metagenomics service provides unmatched accuracy to support your research. Explore

microbial communities in environmental samples, track taxonomic shifts under experimental conditions, assess agricultural soils, evaluate nutritional quality, or investigate microbial diversity for well-being or pathogenic potential in medical settings.

## Workflow and Service Description



**DNA Isolation:** Outsource your DNA isolation to Microsynth for standardized pricing across diverse sample types, from forest soil to feces.

**Library Preparation:** We handle DNA quality control, full-length PCR library preparation for Oxford Nanopore

sequencing, indexing for multiplexing, and equimolar pooling.

**Sequencing:** Our fixed data package delivers 100,000 reads per sample, ensuring enough coverage to detect rare species in complex communities.

**Bioinformatics:** We provide comprehensive bioinformatics, including quality control, OTU clustering, taxonomic profiling,  $\alpha$ - and  $\beta$ -diversity, rarefaction curves, and publication-ready plots.

## ONT vs. Illumina Sequencing

| Research Question or Application  | ONT | Illumina |
|---|-----|----------|
| Fast and Cost-Effective Community Analysis Starting From Small Sample Numbers | +++ | +++      |
| Taxonomic Resolution  | +++ | ++       |
| Coverage of the Entire Marker Loci (e.g. 16S, 18S, ITS)                       | +++ | -        |
| Sequencing of Length Polymorphisms  | +++ | +        |
| Low DNA Requirements  | +++ | +++      |
| High-Throughput for Large Amounts of Samples                                  | ++  | +++      |

## nanoCORE Amplicon Metagenomics Products

**20005** DNA Isolation for Amplicon Metagenomics

**30350** nanoCORE Amplicon Metagenomics

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