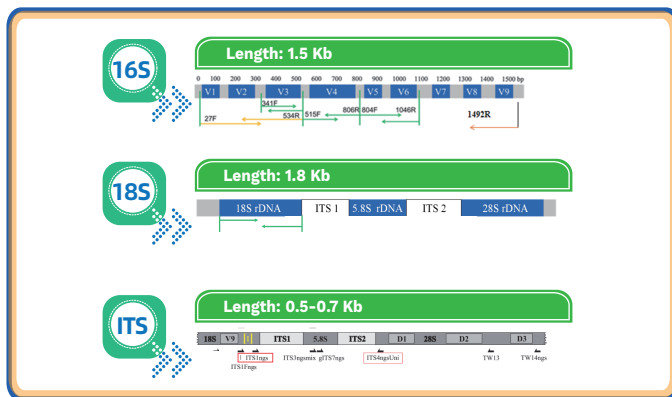


# 16S/18S/ITS Amplicon Sequencing

16S/18S/ITS amplicon sequencing empowers researchers to gain insights into the structure and functionality of microbial communities. With over 100,000 amplicon sequencing projects conducted annually, BMKGENE brings over a decade of experience, a highly skilled analysis team, comprehensive content, and excellent post-sales support. We have contributed to over 1,000 SCI publications with a cumulative impact factor exceeding 4,000.

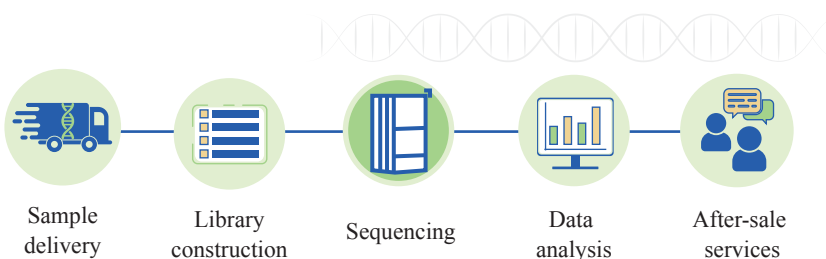
## Technical Features



## Bioinformatics

- ▶ OTU/ASV analysis
- ▶ Taxonomic annotation and relative abundance
- ▶ Alpha diversity analysis
- ▶ Beta diversity analysis
- ▶ Differential analysis between groups
- ▶ Correlation analysis
- ▶ 16S functional genes prediction

## Service Workflow



## Service Advantages

- ▶ Isolation-free and rapid identification of microbial composition in environmental samples;
- ▶ High resolution in low-abundant components in environmental samples;
- ▶ **Dual platform to meet the needs of scientific research:** Illumina NovaSeq; PacBio Revio.
- ▶ Latest QIIME2 analyzing flow with diverse analyses in terms of database, annotation, OTU/ASV.
- ▶ Primers can be customized for different rRNA gene regions to meet the researcher's goals.

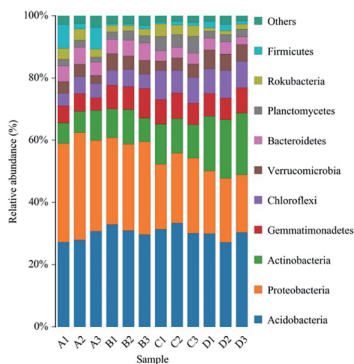
## Service Specifications

Platform	Sequencing	Recommended Data
Illumina	PE250	50 K/100 K/300 K Tags
PacBio Revio	HiFi	10 K/30 K/50 K Tags

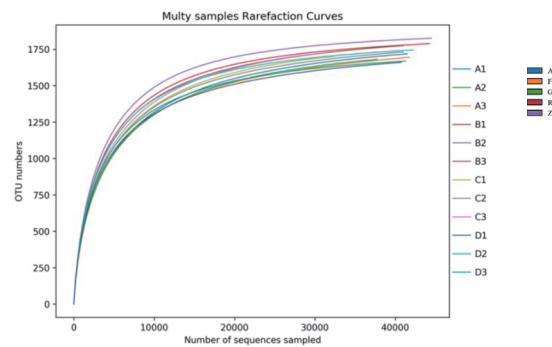
## Sample Requirements

Platform	Qubit Conc. (ng/μL)	Amount (μg)	Volume (μL)	OD260/280
Illumina	1	0.3	20	1.6-2.5
PacBio Revio	20	1	20	1.6-2.5

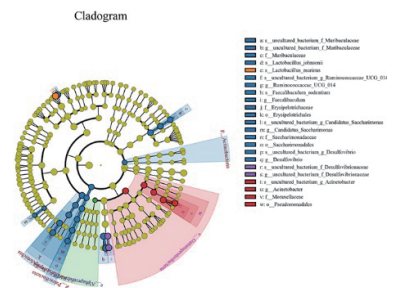
## Demo Results



1. Species distribution



2. Rare faction curve



3. Lefse analysis

## Featured Publications

Year	Journal	Article	Applications	DOI
2023	Microbiome	Gut microbiota-derived metabolites mediate the neuroprotective effect of melatonin in cognitive impairment induced by sleep deprivation	Disease treatment	10.1186/s40168-022-01452-3
2023	Journal of Hazardous Materials	Effects of co-modified biochar immobilized laccase on remediation and bacterial community of PAHs-contaminated soil	Environmental ecology	10.1016/j.jhazmat.2022.130372
2023	Chemical Engineering Journal	Complete removal of 4-fluorophenol using a novel optical fiber photocatalysis–biodegradation–ion-adsorption system	Ecological health	10.1016/j.cej.2023.142631



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