Microbial Whole Genome Sequencing

1.Sample Requirements

Library Type	Sample Type	Amount（Qubit）	Volume	Concentration	Purity （NanoDropTM ／ Agarose Gel）
Microbial whole genome library (350bp)	Genomic DNA	⩾ 200 ng	⩾ 20 μL	⩾ 10 ng/μL	OD260/280=1.8~2.0; no degradation,no contamination
Microbial whole genome library (PCR-free 350bp)	Genomic DNA	⩾ 1 μg	⩾ 20 μL	⩾ 10 ng/μL	

2.Sequencing Parameters

Platform	Illumina NovaSeq 6000
Read length	Paired-end 150 bp
Recommended Sequencing Depth	⩾ 100x for bacterial genomes ⩾ 50x for fungal genomes
Data quality	Guaranteed ⩾ 85% bases with Q30 or higher
Turnaround time	Minimum 3 weeks from confirmation of library preparation to data releasing without bioinformatic analysis

3.Data Analysis Contents

Bacterial and Fungal Re-sequencing Standard Analysis
Data quality control: filtering reads containing adapter or with low quality Alignment with reference genome, statistics of sequencing depth and coverage SNP/InDel calling, annotation and statistics CNV calling, annotation and statistics SV calling, annotation and statistics