Novogene

Target Region Sequencing

1.Sample Requirements

Sample Type	Amount (Qubit®)	Volume	Concentration	Purity (NanoDrop™)
Genomic DNA	⩾ 400 ng	⩾ 20 μL	⩾ 20 ng/μL	OD260/280=1.8~2.0; No degradation, no contamination
Genomic DNA from FFPE*	⩾ 800 ng			Fragments should be longer than 1000 bp
cfDNA / ctDNA	⩾ 50 ng			Fragments should be in multiples of 170bp, no genomic contamination

*FFPE:Formalin-fixed,paraffin-embedded

2.Sequencing Parameter

Platform	Illumina NovaSeq 6000
Read length	Paired-end 150 bp
Recommended sequencing depth	Above 200× (Average effective sequencing depth)
Data quality	Guaranteed ⩾ 85% bases with Q30 or higher
Turnaround time	5~6 weeks (2~3 months excluded for kit ordering) from verification of sample quality to data releasing without bioinformatic analysis (depending on sample size); additional turnaround time needed for bioinformatic analysis

3．Data Analysis Contents

Standard Analysis
Data quality control: filtering reads containing adapter or with low quality
Alignment with reference, statistics of sequencing depth and coverage
SNP and InDel calling, annotation and statistics
Somatic variant detection (only apply for tumor-normal paired samples) SNP calling, annotation and statistics InDel calling, annotation and statistics