



Sample Submission and Coverage/Read Depth Guidelines

Below is a guideline on sample submission requirements for each workflow and recommended coverage and read length. If uncertain regarding sequencing coverage/number of reads and read length, leave section blank. Please attach all prior QC data (Nanodrop, Qubit, Bioanalyzer/TapeStation) if available.

Whole Genome Sequencing & Whole Exome Sequencing			
Sample Requirements		Coverage and Recommended Read Length	
Sample Type	Genomic DNA (RNA-free)	Whole Genome Sequencing (WGS):	2 x 150 bp read length
Sample Purity	A260/280: 1.8 - 2.0. A260/230: 1.5 - 2.2.	30X - 50X coverage	
Recommended Quantity	> 1 µg (> 20 ng/µl)	Whole Exome Sequencing (WES):	2 x 150 bp or 2 x 100 bp read length
Minimum Amount	500 ng	100X coverage	
Resuspension Buffer	Water, Elution Buffer, or low TE (<0.1 mM EDTA)		
Shotgun Metagenomics Sequencing			
Sample Requirements		Read Depth and Recommended Read Length	
Sample Type	Genomic DNA (RNA-free)		
Sample Purity	A260/280: 1.8 - 2.0. A260/230: 1.5 - 2.2.		
Recommended Quantity	> 1 µg (> 20 ng/µl)	200 000 reads/sample	2 x 150 bp
Minimum Amount	10 ng		
Resuspension Buffer	Water, Elution Buffer, or low TE (<0.1 mM EDTA)		
Amplicon Sequencing (16S, ITS2 etc)			
Sample Requirements		Read Depth and Recommended Read Length	
Sample Type	Genomic DNA	16S and ITS2:	
Sample Purity	A260/280: 1.8 - 2.0. A260/230: 1.5 - 2.2.	200 000 reads/sample	2 x 250 bp or 2 x 300 bp read length
Concentration	20 ng/µl		
Minimum Amount	5 ng	Dependent on panel	Length of amplicon insert
Resuspension Buffer	Water, Elution Buffer, or low TE (<0.1 mM EDTA)		
Whole Transcriptome Sequencing & mRNA Sequencing			
Sample Requirements		Read Depth and Recommended Read Length	
Sample Type	Total RNA (DNA-free)	Whole Transcriptome:	
Sample Purity	A260/280: 1.8 - 2.2. A260/230: 1.5 - 2.2.	30 - 200 million reads/sample	
Recommended RIN	≥ 7		
Recommended Quantity	≥ 1 µg (> 50 ng/µl)	mRNA-Seq:	1 x 75 bp or 2 x 75 bp or 2 x 100 bp
Minimum Amount	10 ng		
Resuspension Buffer	Rnase-free Water or or low TE (<0.1 mM EDTA). DO NOT USE DEPC-TREATED WATER.	5 - 25 million reads/sample	
Small RNA Sequencing			
Sample Requirements		Read Depth and Recommended Read Length	
Sample Type	Purified small RNA (DNA-free)		
Sample Purity	A260/280: 1.8 - 2.0. A260/230: 1.5 - 2.2.		
Concentration	20 ng/µl	5- 15 million reads/sample	1 x 50 bp
Minimum Amount	10 ng		
Resuspension Buffer	Rnase-free Water or or low TE (<0.1 mM EDTA). DO NOT USE DEPC-TREATED WATER.		