

NGS sample QC criteria (DNA)

The values given below are for reference only and may change at any time without notice. For more information, please contact your MacroGen Europe representative.

1. Illumina sequencing

1.1 Whole genome

<i>Library prep kit</i>	<i>Total DNA (μg)</i>	<i>DIN</i>	<i>Additional criteria</i>
Accel Methyl-Seq DNA	0.200	7	
mtDNA	0.100	7	
Nextera DNA XT	0.001	7	
PCR-free (low molecular weight)	1.000	7	
TruSeq ChIP-Seq	0.010	7	
TruSeq DNA PCR-free (350 bp insert)	1.000	7	
TruSeq DNA PCR-free (550 bp insert)	2.000	7	
TruSeq Nano DNA (350 bp insert)	0.100	7	
TruSeq Nano DNA (550 bp insert)	0.200	7	
TruSeq Nano DNA (low molecular weight)	0.100	7	

1.2 Targeted

<i>Library prep kit</i>	<i>Total DNA (μg)</i>	<i>DIN</i>	<i>Additional criteria</i>
SureSelect custom	1.000	7	
SureSelect custom (cfDNA)	0.020		
SureSelect custom (FFPE)	0.200		
SureSelect human methyl-seq	3.000	7	
SureSelect mouse	1.000	7	
SureSelect mouse methyl-seq	3.000	7	
SureSelect mouse (cfDNA)	0.020		a
SureSelect mouse (FFPE)	0.200		
SureSelect V4+UTR	1.000	7	
SureSelect V4+UTR (cfDNA)	0.020		a
SureSelect V4+UTR (FFPE)	0.200		
SureSelect V4	1.000	7	
SureSelect V4 (cfDNA)	0.020		a
SureSelect V4 (FFPE)	0.200		
SureSelect V5+UTR	1.000	7	
SureSelect V5+UTR (cfDNA)	0.020		a
SureSelect V5+UTR (FFPE)	0.200		
SureSelect V5	1.000	7	
SureSelect V5 (cfDNA)	0.020		a
SureSelect V5 (FFPE)	0.200		

SureSelect V6+COSMIC	1.000	7	
SureSelect V6+COSMIC (cfDNA)	0.020		a
SureSelect V6+COSMIC (FFPE)	0.200		
SureSelect V6+UTR	1.000	7	
SureSelect V6+UTR (cfDNA)	0.020		a
SureSelect V6+UTR (FFPE)	0.200		
SureSelect V6	1.000	7	
SureSelect V6 (cfDNA)	0.020		a
SureSelect V6 (FFPE)	0.200		
SureSelect V7	1.000	7	
SureSelect V7 (cfDNA)	0.020		a
SureSelect V7 (FFPE)	0.200		
Twist custom	0.050	7	
Twist Human Core Exome	0.050	7	
Twist Human Core Exome + refseq	0.050	7	

1.3 Amplicon

<i>Library prep kit</i>	<i>Total DNA (µg)</i>	<i>DIN</i>	<i>Additional criteria</i>
Metagenome amplicon			b,c
Target amplicon DNA			b,c

2. PacBio sequencing

<i>Library prep kit</i>	<i>Total DNA (µg)</i>	<i>GQN</i>	<i>Additional criteria</i>
10 kb SMRTbell Express	8.100	2	
16s full-length amplicon library	0.100		b,c
20 kb SMRTbell Express	8.100	2	
HiFi 10 to 25 kb (Sequel II)	8.100	3	
PacBio amplicon library construction 1 to 5 kb	1.000		
PacBio Sequel microbial library construction	4.100	2	

Notes

- Cell-free DNA should be above 70%
- Concentration should be above 0.1 ng/µL
- Volume should be above 10 µL

DIN: DNA integrity number

GQN: genome quality number