Oxford Nanopore Technologies have tested three methods linked below to extract plasmid DNA. The extracted samples were sequenced using the <u>Plasmid Sequencing (using SQK-RBK004)</u> protocol with the <u>Rapid Barcoding Sequencing Kit</u> on MinION Flow Cells. However, alternative extraction methods are available to use with the plasmid sequencing protocol.

- QIAGEN Plasmid Plus Midi Kit information and protocol
- peqGOLD Plasmid Miniprep Kit II information and protocol
- ZymoPURE II Pure Midiprep Kit information and protocol

Below is an example of data generated from extracted plasmid DNA using the EPI2ME platform.

total reads 1,397,960	selected reads 101,962		FEATURE COUNT
BARCODE	READS	(%)	
barcode01	101962	(7.3%)	
O barcode02	85776	(6.1%)	
O barcode03	85311	(6.1%)	
barcode04	134578	(9.6%)	
barcode05	82138	(5.9%)	
barcode06	106569	(7.6%)	
barcode07	183224	(13.1%)	
O barcode08	112885	(8.1%)	

Figure 1. A summary table of the number of sequencing reads analysed per experimental barcode.

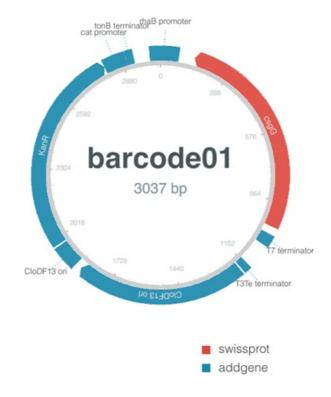


Figure 2. A figure of genome annotation for each plasmid assembled.

Version	Change
v1, 2nd March 2022	Initial document release
v2, 11th July 2023	Removed reference to specific kit code
v3, 14th August 2023	Updated URL links