

Additional file 3.

Statistical analysis of the BOXA-PCR for phage fingerprinting

BOXA1R vs BOXA2R primer

Table 1. SPSS output of the reproducibility analysis showing that there was no statistically significant difference between the replicates generated using BOXA1R vs BOXA2R primer ($p=0.279$).

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Values	117	98.2128	2.93565	89.40	100.00
Tests	117	1.5470	.49993	1.00	2.00

Mann-Whitney Test

Ranks				
	Tests	N	Mean Rank	Sum of Ranks
Values	BOXA1R	53	62.11	3292.00
	BOXA2R	64	56.42	3611.00
	Total	117		

Test Statistics

	Values
Mann-Whitney U	1531.000
Wilcoxon W	3611.000
Z	-1.086
Asymp. Sig. (2-tailed)	.277
Exact Sig. (2-tailed)	.279
Exact Sig. (1-tailed)	.140
Point Probability	.001

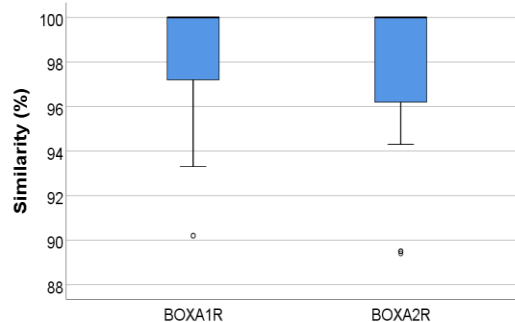


Figure 1. The plot illustrates 95% Confidence Intervals (CI) of dispersion estimates when using BOXA1R and BOXA2R primer

DNA1 30°C vs DNA1 37°C

Table 2. SPSS output of the reproducibility analysis of phage replicates where phage was amplified at 30°C and 37°C showing no significant difference between replicates ($p = 0.527$)

Descriptive Statistics

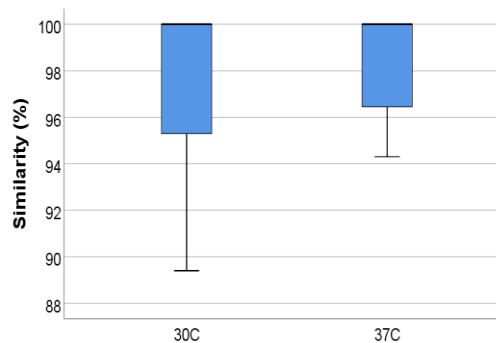
	N	Mean	Std. Deviation	Minimum	Maximum
Data	30	97.9233	2.87326	89.40	100.00
Vars	30	1.5000	.50855	1.00	2.00

Mann-Whitney Test

Ranks				
	Vars	N	Mean Rank	Sum of Ranks
Data	30C	15	14.53	218.00
	37C	15	16.47	247.00
	Total	30		

Test Statistics

	Values
Mann-Whitney U	98.000
Wilcoxon W	218.000
Z	-.681
Asymp. Sig. (2-tailed)	.496
Exact Sig. (2-tailed)	.567 ^a
Exact Sig. (1-tailed)	.527
Point Probability	.264



^a. Not corrected for ties.

Figure 2. The plot illustrates 95% Confidence Intervals (CI) of dispersion estimates when using phage amplified at 30°C and 37°C as templates

DNA1 vs DNA2

Table 3. SPSS output of the reproducibility analysis using phage DNA isolated following two different protocols showing no significant difference between them ($p = 0.080$)

Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Results	117	98.2128	2.93565	89.40	100.00
Vars	117	1.3932	.49055	1.00	2.00

Mann-Whitney Test

Ranks				
	Vars	N	Mean Rank	Sum of Ranks
Results	DNA1	71	55.32	3927.50
	DNA2	46	64.68	2975.50
	Total	117		

Test Statistics

	Values
Mann-Whitney U	1371.500
Wilcoxon W	3927.500
Z	-1.755
Asymp. Sig. (2-tailed)	.079
Exact Sig. (2-tailed)	.080
Exact Sig. (1-tailed)	.039
Point Probability	.000

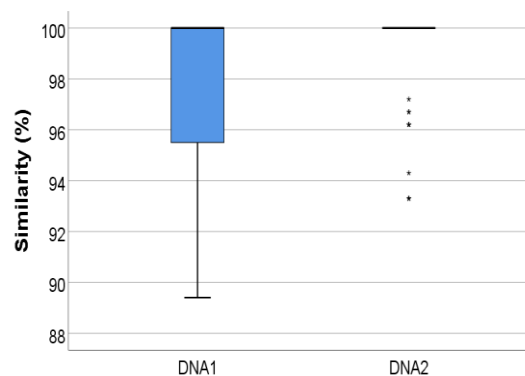


Figure 3. The plot illustrates 95% Confidence Intervals (CI) of dispersion estimates when using phage DNA amplified following two different protocols

Descriptives

	Vars		Statistic	Std. Error
Results	DNA1	Mean	97.7648	.39211
		95% Confidence Interval for	Lower Bound	96.9828
		Mean	Upper Bound	98.5468
		5% Trimmed Mean	98.1013	
		Median	100.0000	
		Variance	10.916	
		Std. Deviation	3.30394	
		Minimum	89.40	
		Maximum	100.00	
		Range	10.60	
		Interquartile Range	4.50	
		Skewness	-1.293	.285
		Kurtosis	.571	.563
	DNA2	Mean	98.9043	.31031
		95% Confidence Interval for	Lower Bound	98.2794
		Mean	Upper Bound	99.5293
		5% Trimmed Mean	99.1548	
		Median	100.0000	
		Variance	4.429	
		Std. Deviation	2.10459	
		Minimum	93.30	
		Maximum	100.00	
		Range	6.70	
		Interquartile Range	.70	
		Skewness	-1.708	.350
		Kurtosis	1.616	.688