

S3 Comparison of cycle threshold and nucleic acid concentration measured by Nanodrop and Qubit for cell suspension of *S. aureus*, *E. coli* and *C. parvum* after extraction. DNA concentration by Nanodrop and Qubit was not an indication of good performance in real-time PCR.

Extraction protocol	<i>S. aureus</i>					<i>E. coli</i>					<i>C. parvum</i>				
	Nucleic acid concentration (ng/μl)		260/280	260/230	Quantification cycle	Nucleic acid concentration (ng/μl)		260/280	260/230	Quantification cycle	Nucleic acid concentration (ng/μl)		260/280	260/230	Quantification cycle
	Qubit	Nanodrop				Qubit	Nanodrop				Qubit	Nanodrop			
No pre-treatment	15.55	59.10	0.61	0.18	20.92	3.68	72.80	0.62	0.20	15.52	13.40	0.00	0.02	- 0.03	27.23
	(± 1.20)	(± 83.58)	(± 0.06)	(± 0.04)	(± 1.07)	(± 0.57)	(± 35.07)	(± 0.01)	(± 0.01)	(± 0.58)	(± 0.50)	(± 0.92)	(± 0.13)	(± 0.09)	(± 0.30)
Proteinase K	35.50	323.00	0.75	0.18	21.07	3.15	53.10	0.70	0.27	15.27	13.80	0.00	0.03	- 1.11	26.30
	(± 0.71)	(± 216.09)	(± 0.04)	(± 0.01)	(± 0.53)	(± 0.77)	(± 27.29)	(± 1.17)	(± 0.09)	(± 0.11)	(± 0.10)	(± 6.15)	(± 0.34)	(± 1.86)	(± 0.42)
Alkaline treatment RT	20.65	25.10	0.61	0.12	22.79	0.76	31.15	0.58	0.14	18.70	12.80	0.00	0.42	0.45	27.35
	(± 2.76)	(± 8.49)	(± 0.03)	(± 0.01)	(± 2.09)	(± 1.07)	(± 6.01)	(± 0.01)	(± 0.01)	(± 1.34)	(± 0.40)	0.00	0.41	(± 0.16)	(± 0.33)
Alkaline treatment 95°C	24.45	41.60	1.21	0.50	20.07	1.81	24.05	0.63	0.16	15.69	13.30	0.00	0.41	0.31	26.54
	(± 0.21)	(± 36.63)	(± 0.58)	(± 0.46)	(± 0.32)	(± 0.57)	(± 0.78)	(± 0.02)	(± 0.01)	(± 0.35)	(± 0.80)	0.00	(± 0.01)	(± 0.10)	(± 0.59)
Bead beating	15.55	23.75	0.84	0.18	17.13	1.33	18.25	0.84	0.12	17.59	14.70	0.00	0.39	- 0.53	30.89
	(± 0.35)	(± 4.74)	(± 0.27)	(± 0.06)	(± 0.66)	(± 0.33)	(± 13.36)	(± 0.46)	(± 0.01)	(± 0.31)	(± 0.40)	0.00	(± 0.02)	(± 1.98)	(± 0.21)
No extraction	13.80	7.10	2.69	- 0.76	23.88	15.60	56.15	0.57	0.18	17.18	13.00	0.00	0.85	0.36	31.83
	(± 0.28)	(± 1.27)	(± 0.82)	(± 0.32)	(± 0.42)	(± 4.95)	(± 79.41)	(± 0.02)	(± 0.11)	(± 0.43)	(± 0.20)	0.00	(± 0.11)	(± 0.03)	(± 0.79)
Only bead beating	14.50	16.40	2.14	1.75	16.81	1.74	23.95	1.72	- 2.71	17.11	13.00	4.60	1.21	0.49	30.20
	(± 1.98)	(± 14.14)	(± 0.11)	(± 0.63)	(± 0.01)	(± 0.05)	(± 33.87)	(± 0.04)	(± 3.42)	(± 0.23)	(± 0.80)	(± 1.27)	(± 0.07)	(± 0.02)	(± 0.76)
Spin column	16.80	0.00	0.18	0.63	19.34	5.38	1.70	0.73	- 0.05	17.45	13.50	0.00	0.54	0.38	28.41
	(± 2.40)		(± 0.04)	(± 0.03)	(± 0.47)	(± 1.17)	(± 1.98)	(± 1.54)	(± 0.06)	(± 0.47)	(± 0.10)	0.00	(± 0.08)	(± 0.58)	(± 0.92)
Spin column + bead beating	15.35 (± 0.49)	9.20 (± 4.10)	0.40 (± 10.51)	- 6.87 (± 8.51)	17.40 (± 0.54)	0.00	0.00	1.02 (± 0.21)	0.09 (± 0.01)	23.34 (± 0.11)	13.20 (± 0.60)	0.00	0.70 (± 0.11)	0.42 (± 0.11)	30.16 (± 0.74)
Pairwise correlation of nucleic acid concentration with corresponding C _q ¹	0.228	0.087				- 0.548	- 0.468				- 0.09	0.493			

¹ in term of correlation coefficient r

RT = room temperature

C_q = quantification cycle