

Suppl Table 1 Primer pairs of semi-quantitative PCR for bacterial genes

Gene	Oligonucleotide sequence (5'→3')	Size (bp)	Tm (°C)	Ref.
<i>chuA</i>	F: GAC GAA CCA ACG GTC AGG AT	279	59	1, 2
	R: TGC CGC CAG TAC CAA AGA CA			
<i>yjaA</i>	F: TGA AGT GTC AGG AGA CGC TG	211	59	1, 2
	R: ATG GAG AAT GCG TTC CTC AAC			
<i>tspE4.C2</i>	F: GAG TAA TGT CGG GGC ATT CA	152	59	1, 2
	R: CGC GCC AAC AAA GTA TTA CG			
<i>colY</i>	F: CCA GTG AAT GTA GGG CTG GT	186	64	This study
	R: GGC TGC AAC AAT CTG TCT GA			
<i>mbeA</i>	F: GAA CGA CGA GTT CAG GAA GC	226	60	This study
	R: GGC AAA CAT CAG CAC TGA GA			
<i>16S rRNA</i>	F: CCT ACG GGA GGC AGC AG	194	53	1, 2
	R: ATT ACC GCG GCT GCT GG			

Footnote: The primer sequences were adapted from the reference of Clermont O et al^{1, 2} or designed based on the gene sequence in this study.

Suppl Table 2 Primer pairs of quantitative PCR for bacterial genes

Gene	Oligonucleotide sequence (5'-3')	Size (bp)	Ref.
<i>uidA</i>	F: CGG AAG CAA CGC GTA AAC TC	70	3
	R: TGA GCG TCG CAG AAC ATT ACA		
<i>capA</i>	F: TGT TGG AAA ACG CGG TGA TA	78	This study
	R: CTT CGA AGT GTA AAA GCC ATG TTT AT		
<i>wbgU</i>	F: GCGGTTTCGATCGCGTAAT	63	This study
	R: GGATTTTCAAGGGAGTAACGTACAC		
<i>dhbF</i>	F: CGTGGCCGAGTTGATTTTACA	63	This study
	R: CCGTTGATTAGCGCAGTTTTTC		
<i>ehpR</i>	F: AGCCCGCAATATACCAATGG	65	This study
	R: GTGCAACAAAAGTGTACCCAAACT		
<i>colY</i>	F: TGC GGC AGG CTT TCG A	67	This study
	R: GGC TGC AAC AAT CTG TCT GAC A		
<i>mbeA</i>	F: CGC ATT AGA GCA ACT GCA ACA	59	This study
	R: AGG CGC TCT CCC ATT CG		
<i>16S rRNA</i>	F: CCT ACG GGA GGC AGC AG	194	4
	R: ATT ACC GCG GCT GCT GG		

Footnote: All real-time PCR primers were designed in this study, except those cited from references. The annealing temperature (T_m) for all primer pairs is set to 60°C.

References of Supplemental Tables

1. Clermont O, Bonacorsi S, Bingen E. Rapid and simple determination of the *Escherichia coli* phylogenetic group. *Appl Environ Microbiol* 2000;66:4555-8.
2. Clermont O, Christenson JK, Denamur E, et al. The Clermont *Escherichia coli* phylo-typing method revisited: improvement of specificity and detection of new phylo-groups. *Environ Microbiol Rep* 2013;5:58-65.
3. Walker DI, McQuillan J, Taiwo M, et al. A highly specific *Escherichia coli* qPCR and its comparison with existing methods for environmental waters. *Water Res* 2017;126:101-110.
4. Watanabe K, Kodama Y, Harayama S. Design and evaluation of PCR primers to amplify bacterial 16S ribosomal DNA fragments used for community fingerprinting. *J Microbiol Methods* 2001;44:253-62.