

Supplementary Table 1: Details of primers used

| Primer sequence (5' to 3') | Target Gene | Amplicon size | Annealing temperature | Primer concentration | References |
|--|---------------------|---------------|-----------------------|----------------------|------------|
| PTmPCR^a | | | | | |
| F- TCAATGCAGTTCGTTATCAGTT | <i>eaeA</i> | 482 bp | 63° C | 5 pmoles | 1 |
| R- GTAAAGTCCGTTACCCCAACCTG | | | | 5 pmoles | |
| F- ATTCTGGCTCTCTTCTTTATG GCTG | <i>escV</i> | 544 bp | ” | 20 pmoles | 2 |
| R- CGTCCCCTTTTACAACTTCATCG C | | | | 20 pmoles | |
| F- TGGGCTAAAAGAAGACACACTG | <i>ent</i> | 629 bp | ” | 20 pmoles | 2 |
| R- CAAGCATCCTGATTATCTCACC | | | | 20 pmoles | |
| F- GACACCTCATTGCTGAAGTCG | <i>bfpB</i> | 910 bp | ” | 5 pmoles | 2 |
| R- CCAGAACACCTCCGTTATGC | | | | 5 pmoles | |
| F- TTCTGGGAAACAGTGACGCACAT A | EHEC <i>-hly</i> | 688 bp | ” | 5 pmoles | 3 |
| R- TCACCGATCTTCTCATCCCAATG | | | | 5 pmoles | |
| F- CGATGTTACGGTTTGTTACTGTG ACAGC | <i>stx1</i> | 244 bp | ” | 10 pmoles | 2 |
| R- AATGCCACGCTTCCCAGAATTG | | | | 10 pmoles | |
| F- GTTTTGACCATCTTCGTCTGATT TTGAG | <i>stx2</i> | 324 bp | ” | 20 pmoles | 2 |

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|---|--------------|---------|---|-----------|---|
| R- AGCGTAAGGCTTCTGCTGTGAC | | | | 20 pmoles | |
| F- GAAAACCCTCCTGGTCCATCAGG | <i>ipaH</i> | 437 bp | ” | 5 pmoles | 3 |
| R- GCCGGTCAGCCACCCTCTGAGAG TAC | | | | 5 pmoles | 4 |
| F- CGATAGATGGCGAGAAATTATAT CCCG | <i>invE</i> | 766 bp | ” | 10 pmoles | 2 |
| R- CGATCAAGAATCCCTAACAGAAG AATCAC | | | | 10 pmoles | |
| F- TGCCATCAACACAGTATATCCG | <i>astA</i> | 102 bp | ” | 20 pmoles | 2 |
| R- ACGGCTTTGTAGTCCTTCCAT | | | | 20 pmoles | |
| F- ACGCAGAGTTGCCTGATAAAG | <i>aggr</i> | 400 bp | ” | 10 pmoles | 2 |
| R- AATACAGAATCGTCAGCATCAGC | | | | 10 pmoles | |
| F- AGCCGTTTCCGCAGAAGCC | <i>pic</i> | 1111 bp | ” | 10 pmoles | 2 |
| R- AAATGTCAGTGAACCGACGATTG G | | | | 10 pmoles | |
| F- GAACAGGAGGTTTCTGCGTTAGG TG | <i>elt</i> | 655 bp | ” | 5 pmoles | 2 |
| R- CTTCAATGGCTTTTTTTTGGGAG TC | | | | 5 pmoles | |
| F- CCTCTTTTLAGYCAGACARCTGAA TCASTTG | <i>estIa</i> | 157 bp | ” | 20 pmoles | 2 |
| R- CAGGCAGGATTACAACAAAGTTC ACAG | | | | 20 pmoles | |

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|---------------------------------------|--------------|---------|-------|-----------|---|
| F- TGTCTTTTTTCACCTTTTCGCTC | <i>estIb</i> | 171 bp | ” | 10 pmoles | 2 |
| R- CGGTACAAGCAGGATTACAACAC | | | | 10 pmoles | |
| F- ATGCCAGTCCAGCGTTTTTGC | <i>uidA</i> | 1487 bp | ” | 10 pmoles | 2 |
| R- AAAGTGTGGGTCAATAATCAGGA AGTG | | | | 10 pmoles | |
| VTmPCR^{b1} | | | | | |
| F- TCACTTGCAGACCAGCGTTTC | <i>hrA</i> | 537 bp | 58° C | 10 pmoles | 5 |
| R- GTA ACTCACACTGCTGTCACCT | | | | 10 pmoles | |
| F- GGGTAGAAAATGCCGATGGTG | <i>fimC</i> | 477 bp | ” | 10 pmoles | 6 |
| R- CGTCATTTTGGGGGTAAGTGC | | | | 10 pmoles | |
| F- TATACGCTGGACTGAGTCGTG | <i>mat</i> | 899 bp | ” | 10 pmoles | 5 |
| R- CAGGTAGCGTCGAACTGTA | | | | 10 pmoles | |
| F- ATCACATAGGATTCTGCCG | <i>iss</i> | 309 bp | ” | 10 pmoles | 5 |
| R- CAGCGGAGTATAGATGCCA | | | | 10 pmoles | |
| VTmPCR^{b2} | | | | | |
| F- CAGCGGAGTATAGATGCCA | <i>chuA</i> | 278 bp | 58° C | 10 pmoles | 7 |
| R- TGCCGCCAGTACCAAAGACA | | | | 10 pmoles | |
| F- AGCTATCGCGATTGCAGTG | <i>ompA</i> | 919 bp | ” | 10 pmoles | 5 |
| R- GGTGTTGCCAGTAACCGG | | | | 10 pmoles | |
| F- GTGGTGCGATGAGCACAG | <i>traT</i> | 430 bp | ” | 10 pmoles | 5 |
| R- TAGTTCACATCTTCCACCATCG | | | | 10 pmoles | |
| F- ATCCTCTGGTCGCTAACTG | <i>iroN</i> | 847 bp | ” | 10 pmoles | 5 |
| R- CTGCACTGGAAGAACTGTTCT | | | | 10 pmoles | |
| F- TGGAACCCGCTCGTAATATAC | <i>ibeA</i> | 342 bp | ” | 10 pmoles | 5 |
| R- CTGCCTGTTCAAGCATTGCA | | | | 10 pmoles | |

| VTdPCR^c | | | | | |
|----------------------------|---------------------------------------|---------|-------|----------|----|
| F- CAGTTCAGTTTCGCATTCACC | <i>iha</i> | 1305 bp | 56° C | 15 pmols | 8 |
| R- GTATGGCTCTGATGCGATG | | | | 15 pmols | |
| F- GGTGCAGCAGAAAAAGTTGTAG | <i>ehxA</i> | 1551 bp | ” | 10 pmols | 9 |
| R- TCTCGCCTGATAGTGTTTGGTA | | | | 10 pmols | |
| VTuPCR^{d1} | | | | | |
| F- CTCCTGTTCTGATTCTTCTGG | <i>katP</i> | 2125 bp | 56° C | 10 pmols | 10 |
| R- AACTTATTTCTCGCATCATCC | | | | 10 pmols | |
| VTuPCR^{d2} | | | | | |
| F- ATGAAGCGTAATATTATAG | <i>lpfA_{O11}₃</i> | 573 bp | 50° C | 10 pmols | 11 |
| R- TTATTTCTTATATTCGAC | | | | 10 pmols | |
| VTuPCR^{d3} | | | | | |
| F- AAGGTGTTACAGAGATTA | <i>efaI</i> | 266 bp | 51° C | 10 pmols | 12 |
| R- TGAGGCGGCAGGATAGTT | | | | 10 pmols | |
| RuPCR^{e1} | | | | | |
| F- CCCCCTTATAGAGCAACAA | <i>bla_{Amp}_C</i> | 634 bp | 60° C | 10 pmols | 13 |
| R- TCAATGGTCTGACTTCACACC | | | | 10 pmols | |
| RuPCR^{e2} | | | | | |
| F- CCTTTAAAGTAGTGCTCTGC | <i>bla_{SHV}</i> | 119 bp | 60° C | 10 pmols | 14 |
| R-TTCGCTGACCGGCGAGTAGT | | | | 10 pmols | |
| RuPCR^{e3} | | | | | |
| F- ATGAGTATTCAACATTTCCG | <i>bla_{TEM}</i> | 867 bp | 55° C | 10 pmols | 15 |
| R- CTGACAGTTACCAATGCTTA | | | | 10 pmols | |
| RmPCR^{f1} | | | | | |
| F-AAAAATCACTGCGCCAGTTC | <i>bla_{CTX-M1}</i> | 415 bp | 52° C | 10 pmols | 16 |
| R- AGCTTATTCATCGCCACGTT | | | | 10 pmols | |

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|---------------------------|---------------------------------|--------|-------|----------|----|
| F- CGACGCTACCCCTGCTATT | <i>bla</i> _{CTX-M2} | 552 bp | ” | 10 pmols | |
| R- CCAGCGTCAGATTTTTCAGG | | | | 10 pmols | |
| F- CAAAGAGAGTGCAACGGATG | <i>bla</i> _{CTX-M9} | 205 bp | ” | 10 pmols | |
| R- ATTGGAAAGCGTTCATCACC | | | | 10 pmols | |
| F- TCGCGTTAAGCGGATGATGC | <i>bla</i> _{CTX-M8} | 688 bp | ” | 10 pmols | |
| F- GCACGATGACATTCGGG | <i>bla</i> _{CTX-M25} | 347 bp | ” | 10 pmols | |
| R- AACCCACGATGTGGGTAGC | <i>bla</i> _{CTX-M8/25} | | ” | 20 pmols | |
| RmPCR^{f2} | | | | | |
| F- GGAATAGAGTGGCTTAAYTCTC | <i>bla</i> _{IMP} | 232 bp | 60° C | 10 pmols | 17 |
| R- GGTTTAAAYAAAACAACCACC | | | | 10 pmols | |
| F- AAAATCTGGGTACGCAAACG | <i>bla</i> _{SPM} | 271 bp | ” | 10 pmols | |
| R- GTTCGGCCACCTCGAATTG | | | | 10 pmols | |
| F-GATGGTGTTTGGTCGCATA | <i>bla</i> _{VIM} | 390 bp | ” | 10 pmols | |
| R- CGAATGCGCAGCACCAG | | | | 10 pmols | |
| F-GATCGGATTGGAGAACCAGA | <i>bla</i> _{OXA-23} | 501 bp | 60° C | 10 pmols | 18 |
| R-ATTTCTGACCGCATTTCAT | | | | 10 pmols | |
| RmPCR^{f3} | | | | | |
| F- TATGCAGCTCCTTTAAGGGC | <i>bla</i> _{BIC} | 537 bp | 60° C | 10 pmols | |
| R- TCATTGGCGGTGCCGTACAC | | | | 10 pmols | |
| F- GGTTTGGCGATCTGGTTTTC | <i>bla</i> _{NDM} | 621 bp | ” | 10 pmols | |
| R- CGGAATGGCTCATCACGATC | | | | 10 pmols | |
| F- CGTCTAGTTCTGCTGTCTTG | <i>bla</i> _{KPC} | 798 bp | ” | 10 pmols | |
| R- CTTGTCATCCTTGTTAGGCG | | | | 10 pmols | |
| F-GCGTGGTTAAGGATGAACAC | | 438 bp | ” | 10 pmols | |

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|---|---------------------------------|----------------|---------|----------|----|
| R- CATCAAGTTCAACCCAACCG | <i>bla_{OXA}</i> -48 | | | 10 pmols | |
| RmPCR^f4 | | | | | |
| F- CAGCAAGAGGATTTCTCACG | <i>qnrA</i> | 630 bp | 63° C | 10 pmols | 19 |
| R- AATCCGGCAGCACTATTACTC | | | | 10 pmols | |
| F- CGAGATCAATTTACGGGGAATA | <i>qnrD</i> | 581 bp | ” | 10 pmols | 20 |
| R- AACAAAGCTGAAGCGCCTG | | | | 10 pmols | |
| F- GGCTGTCAGTTCTATGATCG | <i>qnrB</i> | 488 bp | ” | 10 pmols | 19 |
| R- GAGCAACGATGCCTGGTAG | | | | 10 pmols | |
| F- GCAAGTTCATTGAACAGGGT | <i>qnrS</i> | 428 bp | ” | 10 pmols | 21 |
| R- TCTAAACCGTCGAGTTCGGCG | | | | 10 pmols | |
| F- CCGCACCGATAAATTAGTCC | <i>oqxAB</i> | 313 bp | ” | 10 pmols | 19 |
| R- GGCGAGGTTTTGATAGTGGA | | | | 10 pmols | |
| F- TTGGAAGCGGGGACGGAM | <i>aac(6')</i> <i>-Ib-cr</i> | 260 bp | ” | 10 pmols | 22 |
| R- ACACGGCTGGACCATA | | | | 10 pmols | |
| F- GCAGGTCCAGCAGCGGGTAG | <i>qepA</i> | 218 bp | ” | 10 pmols | 23 |
| R- CTCCTGCCCGAGTATCGTG | | | | 10 pmols | |
| F- GCAGAATTCAGGGGTGTGAT | <i>qnrC</i> | 118 bp | ” | 10 pmols | 19 |
| R- AACTGCTCCAAAAGCTGCTC | | | | 10 pmols | |
| ERIC PCR | | | | | |
| ERIC1R- ATGTAAGCTCCTGGGGATTCAC | Regions between ERIC | 0.1–2.5 kbp | 51.2° C | 10 pmols | 24 |
| ERIC2- AAGTAAGTGACTGGGGTGAGCG | | | | 10 pmols | |
| Pathotype multiplex PCR ^a ; Virulotype uniplex PCR ^b ; Virulotype duplex PCR ^c ; Virulotype multiplex PCR ^d ; Resistance uniplex PCR ^e ; Resistance multiplex PCR ^f | | | | | |

References for Supplementary Table 1

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