

Supplemental Table S2. PCR primers for detection and sequencing and PCR conditions.

| target gene | primer name | sequence (5'-3') | PCR conditions (30 cycles) | Size of amplicon (bp) | References |
|----------------------|-------------|--|--|-----------------------|---|
| EAEC | | | | | |
| aggR | aggR-F | CAGAATACATCAGTACACTG | 94 °C, 30 s / 55 °C, 30 s / 72 °C, 30 s | 433 | Tsukamoto T. et al., 1996 ^a |
| | aggR-R | GAAGCTTACAGCGATATAT | | | |
| aap | aap-F | TGAAAAAAATTAAAGTTGTATC | 94 °C, 30 s / 55 °C, 40 s / 72 °C, 60 s | 344 | Sarantuya J. et al., 2004 ^b |
| | aap-R | AACCCATTCCGGTAGAGC | | | |
| aatA | aatA-F | ATGTTACAGATATAAATAG | 94 °C, 30 s / 55 °C, 40 s / 72 °C, 60 s | 1065 | Nishi J. et al., 2003 ^c |
| | aatA-R | CATTCCCTGTATTGGAAATG | | | |
| aggA | aggA-1 | TTAGTCTTCTATCTAGGG | 94 °C, 30 s / 55 °C, 30 s / 72 °C, 30 s | 457 | Vila J., et al., 2000 ^d |
| | aggA-2 | AAATTAAATTCCGGCATGG | | | |
| aafA | aafA-1 | TGCGATTGCTACTTTATTAT | 94 °C, 30 s / 55 °C, 30 s / 72 °C, 30 s | 242 | Vila J., et al., 2000 ^d |
| | aafA-2 | ATTGACC GTATTGGCTTCC | | | |
| agg3A | agg3A-F | GTATCATTGCGAGTCTGGTATTAG | 94 °C, 60 s / 55 °C, 60 s / 72 °C, 60 s | 462 | Bernier C., et al., 2002 ^e |
| | agg3A-R | GGCGTGTATAGAGTAACCTCCAG | | | |
| hdaA/agg4A | hdaA-F | TCCATTATGTCAGGCTGCAA | 94 °C, 30 s / 55 °C, 30 s / 72 °C, 40 s | 411 | Boisen N., et al., 2008 ^f |
| | hdaA-R | GGCGTAA CGTCTGGTATTCC | | | |
| agg5A | aaf5-F | TATCATTGCGAGTCTGGTATTCA | 94 °C, 30 s / 55 °C, 60 s / 72 °C, 60 s | 501 | Prager R., et al., 2014 ^g |
| | aaf5-R | TAATTAAAGCTGAAAGAACGTCAA | | | |
| pet | pet-1 | ACTGGCGGACTCATTGCTGT | 94 °C, 30 s / 55 °C, 30 s / 72 °C, 30 s | 832 | Vila J., et al., 2000 ^d |
| | pet-2 | GCGTTTCCGTTCCCTATT | | | |
| astA | EAST1-F | GCCATCACACAGTATATCC | 94 °C, 30 s / 55 °C, 30 s / 72 °C, 30 s | 106 | Yatsuyanagi J., et al., 1996 ^h |
| | EAST1-R | GAGTGACGGCTTGTAGTCC | | | |
| sepA | sepA-F | GCAGTGGAAATATGATGCGGC | 94 °C, 30 s / 59 °C, 90 s / 72 °C, 90 s | 794 | Boisen N., et al., 2012 ⁱ |
| | sepA-R | TTGTTCAAGATCGGAGAACG | | | |
| sat | sat-F | TCAGAAGCTCAGCGAATCATTG | 94 °C, 30 s / 59 °C, 90 s / 72 °C, 90 s | 932 | Boisen N., et al., 2012 ⁱ |
| | sat-R | CCATTATCACCAAGTAAACGCA | | | |
| pic | pic-F | ACTGGATCTTAAGGCTCAGGAT | 94 °C, 30 s / 59 °C, 90 s / 72 °C, 90 s | 572 | Boisen N., et al., 2012 ⁱ |
| | pic-R | GACTTAATGTC ACTTGT CAGCG | | | |
| aaiC | aaiC-F | TGGT GACTACTTGATGGACATTGT | 94 °C, 50 s / 57 °C, 90 s / 72 °C, 90 s | 313 | Boisen N., et al., 2012 ⁱ |
| | aaiC-R | GACACTCTTCTGGGTAAACGA | | | |
| UPEC | | | | | |
| sfa* | sfa1 | CTCCGGAGAACTGGGTGCATCTTAC | 94 °C, 60 s / 63 °C, 60 s / 72 °C, 80 s | 410 | Yamamoto S., et al., 1995 ^j |
| | sfa2 | CGGAGGAGTAATTACAA CCTGGCA | | | |
| pap* | pap1 | GACGGCTGTACTGCAGGGTGTGGCG | 94 °C, 60 s / 63 °C, 60 s / 72 °C, 80 s | 328 | Yamamoto S., et al., 1995 ^j |
| | pap2 | ATATCCTTCTGCAGGGATGCAATA | | | |
| | pap3 | GCAACAGCAACCGCTGGTTCCATCAT | 94 °C, 60 s / 63 °C, 60 s / 72 °C, 80 s | 336 | Yamamoto S., et al., 1995 ^j |
| | pap4 | AGAGAGAGCCACTTACAGGACA | | | |
| afa* | afa1 | GCTGGG CAGCAA CTGATA ACTCTC | 94 °C, 60 s / 63 °C, 60 s / 72 °C, 80 s | 750 | Yamamoto S., et al., 1995 ^j |
| | afa2 | CATCAAGCTGTTGTCGTCGGCC | | | |
| aer* | aer1 | TACCGGATTGTCATATGCAGACCGT | 94 °C, 60 s / 63 °C, 60 s / 72 °C, 80 s | 602 | Yamamoto S., et al., 1995 ^j |
| | aer2 | AATATCTCCTCCAGTCCGGAGAACG | | | |
| cnf1 | cnf1 | GGGGGAAGTACAGAAGAATTA | 94 °C, 60 s / 55 °C, 60 s / 72 °C, 60 s | 1126 | Hinenoya A., et al., 2009 ^k |
| | cnf2 | TTCCGTCCACTCTCACCA GT | | | |
| ESBL | | | | | |
| bla _{CTX-M} | CTX-M-U1 | ATGTGCAGYACCAGTAARGTKATGGC [§] | 94 °C, 30 s / 60 °C, 30 s / 72 °C, 40 s | 593 | Boyd DA, et al., 2004 ^l |
| | CTX-M-U2 | TGGGTRAARTARGTSACCAGAACGCGG [§] | | | |
| H antigen | | | | | |
| fliC | F-FLIC1 | ATGGCACAA GTCTTAATACCCAAC | 95 °C, 30 s / 60 °C, 60 s / 72 °C, 120 s | ca. 1.3~2.6 kb | Fields PI, et al., 1997 ^m |
| | R-FLIC2 | CTAACCCCTGCAGCAGAGACA | | | |

^{*}amplified by multiplex PCR, [§]Y stands for pyrimidine, R stands for purine, K stands for G or T, and S stands for G or C^aTsukamoto T. PCR methods for detection of enteropathogenic *Escherichia coli* (localized adherence) and enteroaggregative *Escherichia coli*. Kansenshogaku Zasshi 70(6):569-573, 1996 (jpn)^bSarantuya J., et al. 2004. Typical enteroaggregative *Escherichia coli* is the most prevalent pathotype among *E. coli* strains causing diarrhea in Mongolian children. J Clin Microbiol 42:133-139.^cNishi J., et al. 2003. The export of coat protein from enteroaggregative *Escherichia coli* by a specific ATP-binding cassette transporter system. J Biol Chem 278:45680-45689.^dVila J., et al. Enteroaggregative *Escherichia coli* virulence factors in traveler's diarrhea strains. J Infect Dis 182(6):1780-1783, 2000^eBernier C., et al. Identification of an aggregative adhesin fimbria (AAF) type III-encoding operon in enteroaggregative *Escherichia coli* as a sensitive probe for detecting the AAF-encoding operon family. Infect Immun 70(8):4302-4311, 2002^fBoisen N., et al. New adhesin of enteroaggregative *Escherichia coli* related to the Afa/Dr/AAF family. Infect Immun 76(7):3281-3292, 2008^gPrager R., et al. Two Novel EHEC/EAEC Hybrid Strains Isolated from Human Infections. PLoS One 9:e95379.^hYatsuyanagi J., et al. Enteropathogenic *Escherichia coli* strains harboring enteroaggregative *Escherichia coli* (EAggEC) heat-stable enterotoxin-1 gene isolated from a food-borne like outbreak. Kansenshogaku Zasshi 70(1):73-79, 1996 (jpn)ⁱBoisen N., et al. 2012. Genomic characterization of enteroaggregative *Escherichia coli* from children in Mali. J Infect Dis 205:431-444.^jYamamoto S., et al. 1995. Detection of urovirulence factors in *Escherichia coli* by multiplex polymerase chain reaction. FEMS Immunol Med Microbiol 12:85-90.^kHinenoya A., et al. Prevalence and characteristics of cytolethal distending toxin-producing *Escherichia coli* from children with diarrhea in Japan. Microbiol Immunol 53(4):206-215, 2009^lBoyd DA, et al. 2004. Complete nucleotide sequence of a 92-kilobase plasmid harboring the CTX-M-15 extended-spectrum β-lactamase involved in an outbreak in long-term-care facilities in Toronto, Canada. Antimicrob Agents Chemother 48:3758-3764.^mFields PI, et al. 1997. Molecular characterization of the gene encoding H antigen in *Escherichia coli* and development of a PCR-restriction fragment length polymorphism test for identification of *E. coli* O157:H7 and O157:NM. J Clin Microbiol 35:1066-1070.