

Supplementary material

Table S1: Primer sequences, annealing temperature, and amplicon sizes for antibiotic-resistant and virulent genes

| Gene Name | | Primer Name | Gene Sequence | Size | Ref. | |
|------------------|----------------|---------------------|----------------------------|------|------|------|
| Species-specific | 16S rRNA | 16S rRNA F1 (NM3_F) | ATGTCGCAAGACCAGAGTGG | 658 | [70] | |
| | | 16S rRNA R1 (NM3_R) | GCACAACCTCCAAATCGACA | | | |
| Antibiotic Genes | blaTEM | MultiTSO-T F | CATTTCCGTGTCGCCCTTATT | 800 | [80] | |
| | | MultiTSO-T R | CGTTCATCCATAGTTGCCTGA | | | |
| | blaSHV | MultiTSO-S F | AGCCGCTTGAGCAAATTA | 713 | | |
| | | MultiTSO-S R | ATCCCGCAGATAAATCACCA | | | |
| | blaOXA-1-like | MultiTSO-O F | GGCACCAGATTCAACTTTCAA | 564 | | |
| | | MultiTSO-O R | GACCCCAAGTTTCCTGTAAGT | | | |
| | BlaCTX-M-1 | MultiCTXMGp1 F | TTAGGAARTGTGCCGCTGYA | 688 | | |
| | | MultiCTXMGp1-2 R | CGATATCGTTGGTGGTRCCAT | | | |
| | BlaCTX-M-2 | MultiCTXMGp2 F | CGTTAACGGCACGATGA | 404 | | |
| | | MultiCTXMGp1-2 R | CGATATCGTTGGTGGTRCCAT | | | |
| | BlaCTX-M-9 | MultiCTXMGp9 F | TCAAGCCTGCCGATCTGG | 561 | | |
| | | MultiCTXMGp9 R | TGATTCTCGCCGCTGAA | | | |
| | blaGES | MultiGES F | AGTCGGCTAGACCGGAAAG | 399 | | |
| | | MultiGES R | TTTGTCCGTGCTCAGGAT | | | |
| | blaOXA-48-like | MultiOXA-48 F | GCNGATCGCCCTCGAT | 281 | | |
| | | MultiOXA 48 R | GATTTGCTCCGTGGCCGAAA | | | |
| | blaIMP | MultiIMP F | TTGACACTCCATTTACDG | 139 | | |
| | | MultiIMP R | GATYGAGAAITAAGCCACYCT | | | |
| | blaVIM | MultiVIM F | GATGGTGTTTGGTCGCATA | 390 | | |
| | | MultiVIM R | CGAATGCGCAGCACCAG | | | |
| | blaKPC | MultiKPC F | CATTCAAGGGCTTTCTTGCTGC | 538 | | |
| | | MultiKPC R | ACGACGGCATAGTCATTTGC | | | |
| | blaNDM-1 | NDM-F | CTTCCAACGGTTTGATCGTC | 625 | | [46] |
| | | NDM-R | TAGTGCTCAGTGTCGGCATC | | | |
| Virulent Genes | kfuBC | kfu-F1179 | GAA GTG ACG CTG TTT CTG GC | 797 | [81] | |
| | | kfu-R649 | TTT CGT GTG GCC AGT GAC TC | | | |
| | fimH | fim-1 | GCTCTGGCCGATACC ACCACGG | 423 | | |
| | | fim-2 | GCGATAGATAACGTCGCCTGGAACGG | | | |
| | uge | uge-F | GATCATCCGGTCTCCCTGTA | 534 | | |
| | | uge-R | TCTTCACGCCTTCCTTCACT | | | |
| | wabG | wabG-F | CGGACTGGCAGATCCATATC | 683 | | |
| | | wabG-R | ACCATCGGCCATTTGATAGA | | | |
| | ureA | ureA-F | GCTGACTTAAGAGAACGTTATG | 337 | | |
| | | ureA-R | GATCATGGCGCTACCTTA | | | |