

Table S1. The PCR conditions for amplification of virulence markers, AMR-related and β -lactamases-related genes in *Salmonella* strains.

Target Gene	Primer Sequences 5'-3'	PCR conditions	Product Size
<i>invA</i>	F-GTGAAATTATCGCCACGTTCTGGGCAA R-TCATCGCACCGTCAAAGGAACC	initial denaturation step of 5 min at 94 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 30 sec at 63 °C for annealing, 30 sec at 72°C for extension and a final extension step of 10 min at 72 °C	284 bp
<i>fimA</i>	F-CCTTTCTCCATCGTCCTGAA R-TGGTGTTATCTGCCTGACCA	initial denaturation step of 5 min at 94 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 30 sec at 56 °C for annealing, 30 sec at 72°C for extension and a final extension step of 10 min at 72 °C	85 bp
<i>stn</i>	F-CTTTGGTCGTAAAATAAGGCG R-TGCCCAAAGCAGAGAGATTC	initial denaturation step of 5 min at 94 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 30 sec at 56 °C for annealing, 30 sec at 72°C for extension and a final extension step of 10 min at 72 °C	260 bp
<i>spvC</i>	F-ACTCCTTGCACAACCAAATGCGGA R-TGTCTTCTGCATTCGCCACCATCA	initial denaturation step of 5 min at 94 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 30 sec at 63 °C for annealing, 30 sec at 72°C for extension and a final extension step of 10 min at 72 °C	571 bp
<i>spvR</i>	F-CAGGTTCTTCAGTATCGCA R-TTTGGCCGGAAATGGTCAGT	initial denaturation step of 5 min at 94 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 30 sec at 56 °C for annealing, 30 sec at 72°C for extension and a final extension step of 10 min at 72 °C	310 bp
<i>rck</i>	F-CTGACCACCCATTCCGTGT R-GTAACCGACACCAACGTT	initial denaturation step of 5 min at 94 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 30 sec at 56 °C for annealing, 30 sec at 72°C for extension and a final extension step of 10 min at 72 °C	479 bp
<i>strA/strB</i>	F-ATGGTGGACCCTAAAACCTCT R-CGTCTAGGATCGAGACAAAG	initial denaturation step of 10 min at 94 °C, followed by 30 cycles as follows: 30 sec at 94 °C for denaturation, 1 min at 63 °C for annealing, 30 sec at 72°C for extension and a final extension step of 10 min at 72 °C	891 bp
<i>aadA</i>	F-GTGGATGGCGGCCTGAAGCC R-AATGCCCAGTCGGCAGCG	initial denaturation step of 10 min at 94 °C, followed by 30 cycles as follows: 30 sec at 94 °C for denaturation, 1 min at 63 °C for annealing, 30 sec at 72°C for extension and a final extension step of 10 min at 72 °C	525 bp
<i>aadB</i>	F-GAGGAGTTGGAATATGGATT R-CTTCATCGGCATAGTAAAAG	initial denaturation step of 7 min at 95 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 30 sec at 60 °C for annealing, 45 sec at 72°C for extension and a final extension step of 10 min at 72 °C	208 bp
<i>aacC</i>	F-GGCGCGATCAACGAATTTATCCGA R-CCATTGATGCCGAAGGAAACGAT	initial denaturation step of 5 min at 95 °C, followed by 30 cycles as follows: 1 min at 95 °C for denaturation, 1 min at 58 °C for annealing, 1 min at 72°C for extension and a final extension step of 7 min at 72 °C	448 bp
<i>floF</i>	F-CACGTTGAGCCTCTATATGG R-ATGCAGAAGTAGAACGCGAC	initial denaturation step of 10 min at 94 °C, followed by 30 cycles as follows: 1 min at 94 °C for denaturation, 1 min at 61 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	888 bp

Table S1. Cont.

Target Gene	Primer Sequences 5'-3'	PCR conditions	Product Size
<i>floR</i>	F-AACCCGCCCTCTGGATCAAGTCAA R-CAAATCACGGGCCACGCTGTATC	initial denaturation step of 10 min at 94 °C, followed by 30 cycles as follows: 1 min at 94 °C for denaturation, 1 min at 60 °C for annealing, 3 min at 72°C for extension and a final extension step of 10 min at 72 °C	548 bp
<i>cat1</i>	F-CCTATAACCAGACCGTTCAG R-TCACAGACGGCATGATGAAC	initial denaturation step of 5 min at 94 °C, followed by 30 cycles as follows: 1 min at 94 °C for denaturation, 1 min at 56 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	491 bp
<i>cat2</i>	F-CCGGATTGACCTGAATACCT R-TCACATACTGCATGATGAAC	initial denaturation step of 5 min at 94 °C, followed by 30 cycles as follows: 1 min at 94 °C for denaturation, 1 min at 56 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	456 bp
<i>mcr1</i>	F-AGTCCGTTTGTCTTGTGGC R-AGATCCTTGGTCTCGGCTTG	initial denaturation step of 15 min at 94 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 90 sec at 58 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	320 bp
<i>mcr2</i>	F-CAAGTGTGTTGGTCGCAGTT R-TCTAGCCCGACAAGCATACC	initial denaturation step of 15 min at 94 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 90 sec at 58 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	715 bp
<i>mcr3</i>	F-AAATAAAAATTGTTCCGCTTATG R-AATGGAGATCCCCGTTTTT	initial denaturation step of 15 min at 94 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 90 sec at 58 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	929 bp
<i>mcr4</i>	F-TCACTTTCATCACTGCGTTG R-TTGGTCCATGACTACCAATG	initial denaturation step of 15 min at 94 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 90 sec at 58 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	1116 bp
<i>mcr5</i>	F-ATGCGGTTGTCTGCATTTATC R-TCATTGTGGTTGTCTTTTCTG	initial denaturation step of 15 min at 94 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 90 sec at 58 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	1644 bp
<i>aphAI-IAB</i>	F-AAACGTCTTGCTCGAGGC R-CAAACCGTTATTCATTCGTGA	initial denaturation step of 5 min at 95 °C, followed by 30 cycles as follows: 1 min at 95 °C for denaturation, 1 min at 55 °C for annealing, 1 min at 72°C for extension and a final extension step of 7 min at 72 °C	461 bp
<i>aphA1</i>	F-ATGGGCTCGCGATAATGTC R-CTCACCGAGGCAGTTCCAT	initial denaturation step of 7 min at 95 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 30 sec at 60 °C for annealing, 45 sec at 72°C for extension and a final extension step of 10 min at 72 °C	634 bp

Table S1. Cont.

Target Gene	Primer Sequences 5'-3'	PCR conditions	Product Size
<i>aphA2</i>	F-GATTGAACAAGATGGATTGC R-CCATGATGGATACTTTCTCG	initial denaturation step of 7 min at 95 °C, followed by 35 cycles as follows: 30 sec at 94 °C for denaturation, 30 sec at 60 °C for annealing, 45 sec at 72°C for extension and a final extension step of 10 min at 72 °C	347 bp
<i>tetA</i>	F-GCTACATCCTGCTTGCCTTC R-CATAGATCGCCGTGAAGAGG	initial denaturation step of 5 min at 94 °C, followed by 35 cycles as follows: 1 min at 94 °C for denaturation, 1 min at 56 °C for annealing, 1 min at 72°C for extension and a final extension step of 7 min at 72 °C	210 bp
<i>tetB</i>	F-TTGTTAGGGGCAAGTTTTG R-GTAATGGGCCAATAACACCG	initial denaturation step of 5 min at 94 °C, followed by 35 cycles as follows: 1 min at 94 °C for denaturation, 1 min at 53 °C for annealing, 1 min at 72°C for extension and a final extension step of 7 min at 72 °C	659 bp
<i>tetC</i>	F-CTTGAGAGCCTTCAACCCAG R-ATGGTCGTCATCTACCTGCC	initial denaturation step of 5 min at 94 °C, followed by 35 cycles as follows: 1 min at 94 °C for denaturation, 1 min at 56 °C for annealing, 1 min at 72°C for extension and a final extension step of 7 min at 72 °C	417 bp
<i>sul1</i>	F-CGGCGTGGGCTACCTGAACG R-GCCGATCGCGTGAAGTTCGG	initial denaturation step of 10 min at 94 °C, followed by 30 cycles as follows: 1 min at 94 °C for denaturation, 1 min at 66 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	433 bp
<i>sul2</i>	F-CGGCATCGTCAACATAACCT R-TGTGCGGATGAAGTCAGCTC	initial denaturation step of 10 min at 94 °C, followed by 30 cycles as follows: 1 min at 94 °C for denaturation, 1 min at 66 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	721 bp
<i>sul3</i>	F-GGGAGCCGCTTCCAGTAAT R-TCCGTGACACTGCAATCATTA	initial denaturation step of 5 min at 94 °C, followed by 30 cycles as follows: 45 sec at 94 °C for denaturation, 45 sec at 57 °C for annealing, 45 sec at 72°C for extension and a final extension step of 10 min at 72 °C	500 bp
<i>dfrA1</i>	F-CAATGGCTGTTGGTTGGAC R-CCGGCTCGATGTCTATTGT	initial denaturation step of 5 min at 94 °C, followed by 30 cycles as follows: 45 sec at 94 °C for denaturation, 45 sec at 62 °C for annealing, 45 sec at 72°C for extension and a final extension step of 10 min at 72 °C	253 bp
<i>dfrA10</i>	F-TCAAGGCAAATTACCTTGGC R-ATCTATTGGATCACCTACCC	initial denaturation step of 5 min at 94 °C, followed by 30 cycles as follows: 45 sec at 94 °C for denaturation, 45 sec at 59 °C for annealing, 45 sec at 72°C for extension and a final extension step of 10 min at 72 °C	433 bp
<i>dfrA12</i>	F-TTCGCAGACTCACTGAGGG R-CGGTTGAGACAAGCTCGAAT	initial denaturation step of 5 min at 94 °C, followed by 30 cycles as follows: 45 sec at 94 °C for denaturation, 45 sec at 63 °C for annealing, 45 sec at 72°C for extension and a final extension step of 10 min at 72 °C	330 bp

Table S1. Cont.

Target Gene	Primer Sequences 5'–3'	PCR conditions	Product Size
<i>bla_{TEM}</i>	F–ATGAGTATTCAACATTTCCG R–CTGACAGTTACCAATGCTTA	initial denaturation step of 5 min at 95 °C, followed by 35 cycles as follows: 1 min at 95 °C for denaturation, 1 min at 55 °C for annealing, 1 min at 72°C for extension and a final extension step of 7 min at 72 °C	867 bp
<i>bla_{CTX-M}</i>	F–CGCTTTGCGATGTGCAG R–ACCGCGATATCGTTGGT	initial denaturation step of 5 min at 95 °C, followed by 35 cycles as follows: 1 min at 95 °C for denaturation, 1 min at 60 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	585 bp
<i>bla_{SHV}</i>	F–AGGATTGACTGCCTTTTTG R–ATTTGCTGATTTGCTCG	initial denaturation step of 5 min at 94 °C, followed by 30 cycles as follows: 1 min at 94 °C for denaturation, 1 min at 55 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	393 bp
<i>bla_{CMY-2}</i>	F–GACAGCCTCTTTCTCCACA R–TGGACACGAAGGCTACGTA	initial denaturation step of 5 min at 94 °C, followed by 30 cycles as follows: 1 min at 94 °C for denaturation, 1 min at 55 °C for annealing, 1 min at 72°C for extension and a final extension step of 10 min at 72 °C	1000 bp
<i>bla_{PSE-1}</i>	F–GCAAGTAGGGCAGGCAATCA R–GAGCTAGATAGATGCTCACAA	initial denaturation step of 5 min at 95 °C, followed by 30 cycles as follows: 45 sec at 95 °C for denaturation, 45 sec at 60 °C for annealing, 45 sec at 72°C for extension and a final extension step of 10 min at 72 °C	422 bp