

Supplemental Material

Table S1 Primers used in this study for the detection of antibiotic resistance genes and class 1 and class 2 integrons

| Antimicrobial or integron | Gene | Product size (bp) | Primer sequence (5' to 3') | Reference |
|---------------------------|----------------------------|-------------------|---|----------------------------------|
| Tetracycline | <i>tet(A)</i> | 387 | tet-F -CGCTNTATGCGTTGATGCA ACAGCCCGTCAGGAAATT | Jun <i>et al.</i> 2004 |
| | <i>tet(B)</i> | 171 | TGAAAGCAAACGGCCTAA | |
| | <i>tet(C)</i> | 631 | CGTGCAAGATTCCGAATA | |
| | <i>tet(D)</i> | 484 | CCAGAGGTTAACAGCATGT | |
| | <i>tet(E)</i> | 246 | ATGTGTCCTGGATTCCCT | |
| | <i>tet(G)</i> | 803 | ATGCCAACACCCCCGGCG | |
| Ampicillin | <i>bla_{TEM}</i> | 861 | ATGAGTATTCAACATTCCG TTACCAATGCTTAATCAGTGAG | Mugnaioli <i>et al.</i> 2006 |
| | <i>bla_{SHV}</i> | 797 | TTATCTCCCTGTTAGCCACC GATTGCTGATTCGCTCGG | Cao <i>et al.</i> 2002 |
| Trimethoprim | <i>dfrA1</i> | 367 | GGAGTGCCAAAGGTGAACAGC GAGGCGAAGTCTGGTAAAAAC | Lapierre <i>et al.</i> 2008 |
| Streptomycin | <i>aadA1</i> | 447 | TATCCAGCTAACCGCGAACT | Lapierre <i>et al.</i> 2008 |
| | <i>strA</i> | 548 | ATTGCCGACTACCTTGGTC CTTGGTGATAACGGCAATT | Srinivasan <i>et al.</i> 2007 |
| | <i>strB</i> | 509 | CCAATCGCAGATAGAAGGC ATCGTCAAGGGATTGAAACC GGATCGTAGAACATATTGGC | Srinivasan <i>et al.</i> 2007 |
| Sulphonamides | <i>sul1</i> | 433 | CGCGTGGCTACCTGAACG | Ho <i>et al.</i> 2009 |
| | <i>sul2</i> | 285 | GCCGATCGCGTGAAGTTCCG | Ho <i>et al.</i> 2009 |
| | <i>sul3</i> | 792 | GCGCTCAAGGCAGATGGCATT GCGTTGATACCGGCACCCGT GAGCAAGATTGGAAATCG CATCTGCAGCTAACCTAGGGCTTGGA | Saenz <i>et al.</i> 2010 |
| Class 1 integron | <i>intI1</i> | 280 | CCTCCCGCACGATGATC | Lapierre <i>et al.</i> 2008 |
| | 5'CS class1 3'CS class1 | Variable | TCCACGCATCGTCAGGC GGCATCCAAGCAGCAAG AAGCAGACTTGACCTGA | Lapierre <i>et al.</i> 2008 |
| Class 2 integron | <i>intI2</i> | 232 | TTATTGCTGGGATTAGGC ACGGCTACCCCTCTGTTATC | Lapierre <i>et al.</i> 2008 |

Supplemental References

- **Cao, V., Lambert, T., Nhu, D.Q., Loan, H.K., Hoang, N.K., Arlet, G., Courvalin, P.** 2002. Distribution of extended-spectrum beta-lactamases in clinical isolates of *Enterobacteriaceae* in Vietnam. *Antimicrob. Agents Chemother.* **46**:3739–3743.
- **Mugnaioli, C., Luzzaro, F., De Luca, F., Brigante, G., Perilli, M., Amicosante, G., Stefani, S., Toniolo, A., Rossolini, G.M.** 2006. CTX-M-Type Extended-Spectrum β -Lactamases in Italy: Molecular Epidemiology of an Emerging Countrywide Problem. *Antimicrob. Agents Chemother.* **50**:2700-2706.
- **Saenz, Y., Vinué, L., Ruiz, E., Somalo, S., Martínez, S., Rojo-Bezares, B., Zarazaga, M., Torres, C.** 2010. Class 1 integrons lacking qacED1 and *sull* genes in *Escherichia coli* isolates of food, animal and human origins. *Vet. Microbiol.* **144**:493–497.
- **Srinivasan, V., Nam, H.M., Sawant, A.A., Headrick, S.I., Nguyen, L.T., Oliver, S.P.** 2008. Distribution of tetracycline and streptomycin resistance genes and class 1 integrons in *Enterobacteriaceae* isolated from dairy and nondairy farm soils. *Microb. Ecol.* **55**:184–193.