

SUPPLEMENTAL MATERIALS

Table 1. Characterization of *cfr*-carrying transformants.

| Isolates | MIC values ^a | | | | Replicon type | Resistance genes |
|--------------|-------------------------|-----|-------|-----|---------------|------------------|
| | AMP | FLR | CL | APR | | |
| GDE5P101T | 1 | 4 | 4 | 4 | IncI2 | <i>cfr mcr-1</i> |
| GDE5P132T | 2 | 2 | 4 | 4 | IncI2 | <i>cfr mcr-1</i> |
| GDE5P137T | 128 | 2 | 4 | 128 | IncX4 | <i>cfr mcr-1</i> |
| GDE6P124T | 128 | 4 | 4 | 4 | IncP | <i>cfr mcr-1</i> |
| GDE6P128T | 128 | 4 | 4 | 4 | IncP | <i>cfr mcr-1</i> |
| GDE6P129T | 2 | 4 | 4 | 4 | IncX4 | <i>cfr mcr-1</i> |
| GDE6P133T | 2 | 2 | 4 | 4 | IncX4 | <i>cfr mcr-1</i> |
| GDE6P143T | 2 | 2 | 4 | 4 | IncX4 | <i>cfr mcr-1</i> |
| GDE6P164T | 4 | 2 | 2 | 4 | IncX4 | <i>cfr mcr-1</i> |
| GDE6P165T | 4 | 2 | 2 | 4 | IncX4 | <i>cfr mcr-1</i> |
| GDE6P168T | 128 | 4 | 4 | 4 | IncX4 | <i>cfr mcr-1</i> |
| GDE6P169T | 128 | 4 | 4 | 4 | - | <i>cfr mcr-1</i> |
| DH5 α | 2 | 2 | 0.125 | 4 | - | - |
| ATCC 25922 | 2 | 2 | 0.5 | 2 | - | - |

Note: a. AMP: ampicillin; APR: apramycin; FLR: florfenicol; CL: colistin.

Table S2. information of sample collection in the swine farm during the period of 2014-2017.

| Collected date | Suckling piglet (N) | Nursery pig (N) | Fattening pig (N) | Sow (N) | Boar (N) | Environment (N) | Total |
|----------------|---------------------|-----------------|-------------------|---------|----------|-----------------|-------|
| Jun-2014 | 50 | 40 | 72 | 57 | 0 | 0 | 220 |
| Jul-2015 | 43 | 80 | 67 | 51 | 0 | 0 | 241 |
| Jul-2016 | 15 | 55 | 56 | 60 | 10 | 4 | 200 |
| Apr-2017 | 15 | 50 | 60 | 55 | 10 | 10 | 200 |
| Total | 123 | 226 | 255 | 223 | 20 | 14 | 861 |

Table 3. Primers used for PCR and DNA sequencing in this study.

| Genes | Prime Sequence (5' to 3') | Size | References |
|------------------|--|------|---------------|
| <i>cfr</i> | F:TGAAGTATAAAGCAGGTTGGGAGTCA R:ACCATATAATTGACCACAAGCAGC | 746 | [1] |
| <i>floR</i> | F:CTGAGGGTGTTCGTCATCTAC R:GCTCCGACAATGCTGACTAT | 673 | [2] |
| <i>fexA</i> | F:GTACTTGTAGGTGCAATTACGGCTGA R:CGCATCTGAGTAGGACATAGCGTC | 977 | [1] |
| <i>fexB</i> | F:TCCCCACTATTGGTGAAAGGAT R:GCAATTCCCTTTTATGGACGTT | 750 | [3] |
| <i>optrA</i> | F:AGGTGGTCAGCGAACTAA R:ATCAACTGTTCCCATTCA | 1395 | [4] |
| <i>mcr-1</i> | F:TCGCGGCATTTCGTTATA R:GGTGGCGTTCAGCAGTC | 582 | [5] |
| parA of IncP | F:AGTGTATTTGCCAGTTAG R:GATGCGTTTATGAAGC | 496 | In this study |
| IS26- <i>cfr</i> | F:CGTTCAGCCAGCATCT R:TCGCCTGTAGCACAAA | 663 | In this study |
| <i>cfr</i> -IS26 | F:AAAGCAGGTTGGGAGTC R:GTGAAGAAGTGGCAGA | 1207 | In this study |

Note: F: forward primer; R: reverse primer.

References:

- [1] Kehrenberg, C, Schwarz, S. Distribution of florfenicol resistance genes *fexA* and *cfr* among chloramphenicol-resistant *Staphylococcus* isolates. *Antimicrob Agents Chemother* 2006; 50: 1156-63.
- [2] Chen S, Zhao S, White DG *et al.* Characterization of multiple-antimicrobial-resistant *salmonella* serovars isolated from retail meats. *Appl Environ Microbiol* 2004; 70:1-7.
- [3] Liu HB, Wang Y, Wu CM *et al.* novel phenicol exporter gene, *fexB*, found in enterococci of animal origin. *J Antimicrob Chemother* 2012; 67: 322-5.
- [4] Wang Y, Lv Y, Cai J *et al.* A novel gene, *optrA*, that confers transferable resistance to oxazolidinones and phenicols and its presence in *Enterococcus faecalis* and *Enterococcus faecium* of human and animal origin. *J Antimicrob Chemother* 2015; 70:2182-90.
- [5] Wang J, Huang XY, Xia YB *et al.* Clonal Spread of *Escherichia coli* ST93 Carrying *mcr-1*-Harboring IncN1-IncHI2/ST3 Plasmid Among Companion Animals, China. *Front Microbiol* 2018; 9:2989.