

**Supplementary Table S2.** *E. coli* strains used in this study.

| Strain                                          | Resistance gene                           | Description                 | Tetracycline susceptibility | Usage in this study                                                             | Resource                       |
|-------------------------------------------------|-------------------------------------------|-----------------------------|-----------------------------|---------------------------------------------------------------------------------|--------------------------------|
| <i>E. coli</i> MG1655/RP4                       | <i>tetA</i> , <i>bla</i> , and <i>neo</i> | Nonpathogenic model strain  | Resistant                   | <i>In vitro</i> study of synergistic antimicrobial activity and mechanisms      | Klümper, et al. <sup>[1]</sup> |
| <i>E. coli</i> MC4100/pTGM                      | <i>tetM</i>                               | Nonpathogenic model strain  | Resistant                   | Antibiotic uptake; <i>In vitro</i> study of synergistic antimicrobial activity; | Bahl, et al. <sup>[2]</sup>    |
| Extraintestinal pathogenic <i>E. coli</i> C4313 | <i>tetA</i> , <i>mdfA</i>                 | Pathogenic clinical isolate | Resistant                   | <i>In vitro</i> and <i>in vivo</i> synergistic antimicrobial activity           | Duan, et al. <sup>[3]</sup>    |
| <i>E. coli</i> C4313Δ <i>acrB</i> .             | <i>tetA</i> , <i>mdfA</i>                 | Pathogenic clinical isolate | Resistant                   | <i>In vitro</i> and <i>in vivo</i> synergistic antimicrobial activity           | This study                     |
| <i>E. coli</i> ATCC 25922                       | -                                         | Nonpathogenic model strain  | Susceptible                 | Evolution experiment                                                            | ATCC                           |

ATCC, American Type Culture Collection.

#### Reference:

- 1 Klümper, U. *et al.* Broad host range plasmids can invade an unexpectedly diverse fraction of a soil bacterial community. *The ISME Journal* **9**, 934-945, doi:10.1038/ismej.2014.191 (2015).
- 2 Bahl, M. I., Hansen, L. H. & Sørensen, S. J. Construction of an extended range whole-cell tetracycline biosensor by use of the tet(M) resistance gene. *FEMS Microbiology Letters* **253**, 201-205, doi:10.1016/j.femsle.2005.09.034 (2005).
- 3 Duan, Y. *et al.* Antibiotic Resistance and Virulence of Extraintestinal Pathogenic Escherichia coli (ExPEC) Vary According to Molecular Types. *Front Microbiol* **11**, 598305, doi:10.3389/fmicb.2020.598305 (2020).