

**Supplementary Table 6. Oligonucleotides used in this study, Related to Figure STAR Methods.**

Oligonucleotide	Source	Description
GTCGACGGTATCGATAATGCTTATGTGTACAGCTGC	This paper	<i>RUMOBE_00028</i> forward cloning primer
GCAGGAATTCGATATCACTAATTCTGAAAATGAATCTGC	This paper	<i>RUMOBE_00028</i> reverse cloning primer
CCAAAACAGCTTTCGCTACGTTGCTGGCTCGTTTTAACACGGAGT AAGTGTTAGAAAAATTCATCCAGCA	This paper	Construction of <i>B. obeum luxS</i> insertion into the <i>endA</i> gene of the <i>E. coli</i> forward primer
GGTTGTACGCGTGGGGTAGGGGTTAACAAAAGAATCCCGCTA GTGTAGGCGGGCAGTGAAAGGAAGGCC	This paper	Construction of <i>B. obeum luxS</i> insertion into the <i>endA</i> gene of the <i>E. coli</i> reverse primer
GAACTTTCGTCACGTAAGTC	This paper	<i>vasK</i> deletion upstream fragment forward primer
GTCGACGGATCCCCGGAATCATGAATTGTGTCCTTGTTTAC	This paper	<i>vasK</i> deletion upstream reverse primer
GAACTTTCGTCACGTAAGTC	This paper	<i>vasK</i> deletion downstream fragment forward primer
GTCGACGGATCCCCGGAATCATGAATTGTGTCCTTGTTTAC	This paper	<i>vasK</i> deletion downstream reverse primer
ATCCGGGGATCCGTCGAC	This paper	<i>vasK</i> trimethoprim resistance cassette replacement forward primer
TGTAGGCTGGAGCTGCTTC	This paper	<i>vasK</i> trimethoprim resistance cassette replacement reverse primer
CTCCTACGGGAGGCAGCAG	This paper	16S forward qPCR primer
TTACCGCGG CTGCTGGCAC	This paper	16S reverse qPCR primer
GCGATCAGATTACGATCACTC	This paper	<i>RUMOBE_00028</i> forward qPCR primer
GCCATGCCAACACCTTTTTTC	This paper	<i>RUMOBE_00028</i> reverse qPCR primer
GAAGAAGTTTGTAAGAAGAACACG	Fykse et al. 2007	<i>tcpA</i> forward qPCR primer
CGCTGAGACCACACCATA	This paper	<i>tcpA</i> reverse qPCR primer
CACTAAGTGGGCACTTCTCA	This paper	<i>ctxA</i> forward qPCR primer
TGATCATGCAAGAGGAACTCA	Fykse et al. 2007	<i>ctxA</i> reverse qPCR primer
ATTGAAGCGGAAATGGGCGATAG	Amin Marashi et al., 2013	<i>recA</i> forward qPCR primer
TACACATACAGTTGGATTGCTTGAGG	Amin Marashi et al., 2013	<i>recA</i> reverse qPCR primer
AATGATACGGCGACCACCGAGATCTACACTATGGTAATT GTGTGCCAGCMGCCGCGGTAA	Earth microbiome project ( <a href="https://earthmicrobiome.org/protocols-and-standards/16s/">https://earthmicrobiome.org/protocols-and-standards/16s/</a> )	16S V4 library forward primer

Oligonucleotide	Source	Description
CAAGCAGAAGACGGCATAACGAGATNNNNNNNNNNNAGTCAG TCAGCCGGACTACHVGGGTWTCTAAT	Earth microbiome project ( <a href="https://earthmicrobiome.org/protocols-and-standards/16s/">https://earthmicrobiome.org/protocols-and-standards/16s/</a> )	16S V4 library reverse primer
TATGGTAATTGTGTGCCAGCMGCCGCGGTAA	Earth microbiome project ( <a href="https://earthmicrobiome.org/protocols-and-standards/16s/">https://earthmicrobiome.org/protocols-and-standards/16s/</a> )	16S V4 library read1 sequencing primer
AGTCAGTCAGCCGGACTACHVGGGTWTCTAAT	Earth microbiome project ( <a href="https://earthmicrobiome.org/protocols-and-standards/16s/">https://earthmicrobiome.org/protocols-and-standards/16s/</a> )	16S V4 library read2 sequencing primer
ATTAGAWACCCBDGTAGTCCGGCTGACTGACT	Earth microbiome project ( <a href="https://earthmicrobiome.org/protocols-and-standards/16s/">https://earthmicrobiome.org/protocols-and-standards/16s/</a> )	16S V4 library index read sequencing primer