

Tables:

Supplementary Table S1: Primers used in this study

| Primer denomination | Sequence (5`-3`) | Conditions | Reference |
|----------------------------|-------------------------|--|--|
| Cas9F | ACGCATTGATTTGAGTCAGC | | This study |
| Cas9R | GACCTTTGAGCTTCCGAGAC | 95°C, 3 s, 40x: 95°C, 5s; 55°C, 30s. | This study |
| 16SF | GCTCAGATTGAACGCTGG | | Zucol <i>et al.</i> , 2006 |
| 16SR | TACTGCTGCCTCCCGTA | | Zucol <i>et al.</i> , 2006 |
| BLATEMF | ATGAGTATTCAACATTTCCG | 94°C, 4m, 30x: 94°C, 1m; 47°C, 30s; 72°C, 1m, and 72°C, 4m. | This study |
| BLATEMR | TTACCAATGCTTAATCAGTG | | This study |
| TEMF | GTGCACGAGTGGGTTACATC | 95°C, 3 s, 40x: 95°C, 5s; 55°C, 30s. | This study |
| TEMR | AGAAGTAAGTTGGCCGCAGT | | This study |
| VF2 | TGCCACCTGACGTCTAAGAA | 94°C, 2m, 30x: 94°C, 30s; 50°C, 30s; 72°C, 6m, 72°C, 7m. | Registry of Standard Biological Part |
| VR | ATTACCGCCTTTGAGTGAGC | | Registry of Standard Biological Part |

Supplementary Table S2 – Clinical strains used in this study

| Strain Number | Strains | Description | Reference |
|----------------------|---|--|------------------|
| 5 | <i>E. coli</i> 189A^{WT} | Clinical strain isolated from a bacteraemia patient | This study |
| 6 | <i>E. coli</i> 189A^{CRISPR+} | Strain #5, treated with CRISPR-Cas9 | This study |
| 7 | <i>E. cloacae</i> 4962^{WT} | Clinical strain isolated from a bacteraemia patient | This study |
| 8 | <i>E. cloacae</i> 4962^{CRISPR+} | Strain #7, treated with CRISPR-Cas9 | This study |
| 9 | <i>K. variicola</i> 68AI^{WT} | Clinical strain isolated from a paediatric bacteraemia patient | This study |
| 10 | <i>K. variicola</i> 68AI^{CRISPR+} | Strain #9, treated with CRISPR-Cas9 | This study |

References:

Studier FW, Moffatt BA (1986) Use of bacteriophage T7 RNA polymerase to direct selective high-level expression of cloned genes. *J Mol Biol* 189(1):113–130.

Kim S, et al. (2017) Genomic and transcriptomic landscape of Escherichia coli BL21(DE3). *Nucleic Acids Res* 45(9):5285–5293.

Zucol F, et al. (2006) Real-Time Quantitative Broad-Range PCR Assay for Detection of the 16S rRNA Gene Followed by Sequencing for Species Identification. *Journal of Clinical Microbiology* 44(8):2750–2759.

Registry of Standard Biological Part. <http://parts.igem.org/> . Accessed in April 2019.