**Table S5. Chromosomal references used for mapping**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Species** | **Number of Isolates** | **Reference strain** | **Reference Length (bp)** | **Median % reference sites called (range)** | **Accession number** |
| *Citrobacter amalonaticus* | 2 | CAV1321 (*Citrobacter freundii*)a | 4,976,908 | 60 (60-61) | CP011612 |
| *Citrobacter freundii* | 30 | CAV1321b | 4,976,908 | 95 (81-98) | CP011612 |
| *Enterobacter aerogenes* | 4 | EA1509E | 5,419,609 | 88 (87-89) | NC\_020181.1 |
| *Enterobacter asburiae* | 1 | NCTC 9394 (*Enterobacter cloacae*)c | 4,908,759 | 70 (70-70) | NC\_021046.1 |
| *Enterobacter cloacae* | 96 | NCTC 9394 | 4,908,759 | 85 (71-89) | NC\_021046.1 |
| *Escherichia coli* | 2 | DH10B | 4,686,137 | 80 (78-83) | NC\_010473.1 |
| *Klebsiella pneumoniae* | 94 | MGH78578 | 5,315,120 | 88 (82-90) | CP000647.1 |
| *Klebsiella oxytoca* | 35 | E718 | 6,097,032 | 79 (76-91) | NC\_018106.1 |
| *Kluyvera intermedia* | 7 | CAV1151b | 5,529,132 | 97 (96-97) | CP011602  |
| *Proteus mirabilis* | 1 | HI4320 | 4,063,606 | 87 (87-87) | NC\_010554.1 |
| *Raoultella ornothinolytica* | 1 | B6 | 5,398,151 | 91 (91-91) | NC\_021066.1 |
| *Serratia marcescens* | 5 | WW4 | 5,241,455 | 81 (80-81) | NC\_020211.1 |
| Other (unknown) | 3 | NCTC 9394 (*Enterobacter cloacae*)a | 4,908,759 | 46 (46-46) | NC\_021046.1 |

a No species-specific reference available

b Comparisons made with long-read (PacBio), fully closed chromosomes for these strains obtained in this study

c *E. cloacae* reference used as *E. asburiae* is part of the *E. cloacae* complex