Supplemental Table 1: Strains and plasmids

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| --- | --- | --- |
| **Strains** | **Description** | **Reference** |
| CYL316 | RN4220(pYL11219), L54 int gene, r | [1] |
| RN6911 | RN6390 *Δagr::tetM* | [2] |
| HG001 | RN1 derivative, *rsbU* repaired [3; 4] | [3] |
| HG001 (p)ppGpp0 | HG001 *relP/relQ/rel* mutated named as (p)ppGpp0  | [5] |
| HG001 *relsyn* | = rshsyn synthetase mutated (nucleotides 942 to 950 deleted),  | [6] |
| HG001 *relP relQ* | relP mutated (nucleotides 450–536 deleted) and relQ mutated (nucleotides 343–429 deleted) | [5] |
| HG001 *relP* | relP mutation (nucleotides 450–536 deleted) | [5] |
| HG001 *relQ* | relQ mutation (nucleotides 343–429 deleted) | [5] |
| HG001 *codY* | *Δ*cod Y::tet(M) | [3] |
| HG001 *agr* | *ΔagrABCD-hld* | [7] |
| HG001 (p)ppGpp0 *codY* | *Δ*cod Y::tet(M) | This work |
| **Plasmids** |  |  |
| pCG3 | pCL25 with ermR-cassette, single-copy integration vector  | [8] |
| pCG833 | Integrative relP complementation plasmid | This work |
| pCG216 | Integrative relQ complementation plasmid | This work |

Supplemental Table 2 Oligonucleotides

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| --- | --- |
| Primer name | sequence |
| pCG833gibfor | attcgagctcggtacccgggCATCTCTATCAATTAAGCACTTGTACCT |
| pCG833gibrev | cctgcaggtcgactctagagCAAAGTCACTCCTTCATTACACGA |
| Scv1 | GCAACACCACATAATGGTTCAC |
| Scv2.1 | TGTGCCATGATAACAGCACG |
| pCG3intfor | GCCATACCACAGATGTTCCA |
| pCG3intrev | ACATAGCGTTGCCTTGGTAG |
| relQdigfor | AAGCGGTTGATGAGTTGA |
| relQdigrev | GGCAGAAGCAGTATTT |
| BamHIrelQkompl-for | GGGGGGATCCGTTTCTGCAAAATGG |
| BamHIrelQkompl-rev | GGGGGGATCCGCATGATTTATATCG |

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