**S3 Table. Primers used in the study.**

|  |  |
| --- | --- |
| **Primers Sequences (5’-3’)** |  |
| **Primers for optimization of plasmid copy number** |  |
| LADf | **CATGCCATGG**CGATATCTAGAAGAAAATTTA | *Nco* I |
| LADd | **CCGGAGCTC**TTAGAATCTGTAAAGACTAAATGGTTT | *Xho* I |
| **Primers for constructing mutants at DR** |  |
| A2-F | CTTTAAGAAGGAGATATACCATGGCTATATCTAGAAGAAA |
| A2-D | TTTCTTCTAGATATAGCCATGGTATATCTCCTTCTTAAAG |
| S4-F | CCATGGCGATATCAAGAAGAAAATTTATCATTGGTGG |
| S4-D | CCACCAATGATAAATTTTCTTCTTGATATCGCCATGG |
| R5-F | CATGGCGATATCTAGGAGAAAATTTATCATTGGTGG |
| R5-D | CCACCAATGATAAATTTTCTCCTAGATATCGCCATG |
| R6-F | CATGGCGATATCTAGAAGGAAATTTATCATTGGTGG |
| R6-D | CCACCAATGATAAATTTCCTTCTAGATATCGCCATG |
| I9-F | CTAGAAGAAAATTTATAATTGGTGGAACAGTGGTGGC |
| I9-D | GCCACCACTGTTCCACCAATTATAAATTTTCTTCTAG |
| I10-F | CTAGAAGAAAATTTATAATTGGTGGAACAGTGGTGGC |
| I10-D | GCCACCACTGTTCCACCAATTATAAATTTTCTTCTAG |
| G11-F | TTTATCATTGGAGGAACAGTGGTGGCTGTC |
| G11-D | GACAGCCACCACTGTTCCTCCAATGATAAA |
| I3Δ-F | GAGATATACCATGGCGTCTAGAAGAAA |
| I3Δ-D | TTTCTTCTAGACGCCATGGTATATCTC |
| S4Δ-F | CCATGGCGATAAGAAGAAAATTTATCATTGG |
| S4Δ-D | CCAATGATAAATTTTCTTCTTATCGCCATGG |
| R5Δ-F | GGCGATATCTAGAAAATTTATCATTGGTGG |
| R5Δ-D | CCACCAATGATAAATTTTCTAGATATCGCC |
| K7Δ-F | GGCGATATCTAGAAGATTTATCATTGGTGG |
| K7Δ-D | CCACCAATGATAAATCTTCTAGATATCGCC |
| F8Δ-F | CTAGAAGAAAAATCATTGGTGGAACAGTGG |
| F8Δ-D | CCACTGTTCCACCAATGATTTTTCTTCTAG |
| **Primers for optimization of RBS**  |  |
| RBS-1 | TACGGTATATACCATGGCGATATCTAGAAGAA |
| RBS-2 | TGCGGTATATACCATGGCGATATCTAGAAGAA |
| RBS-3 | CTGCGGATATACCATGGCGATATCTAGAAGAA |
| RBS-4 | CTACGGATATACCATGGCGATATCTAGAAGAA |
| RBS-5 | GCGGTAATATACCATGGCGATATCTAGAAGAA |
| RBS-6 | CGGTTAATATACCATGGCGATATCTAGAAGAA |
| RBS-7 | TACGGAATATACCATGGCGATATCTAGAAGAA |
| RBS-8 | TATGGTATATACCATGGCGATATCTAGAAGAA |
| RBS-9 | GCGGCGATATACCATGGCGATATCTAGAAGAA |
| RBS-10 | TCGGTCATATACCATGGCGATATCTAGAAGAA |
| RBS-11 | GGGCGGATATACCATGGCGATATCTAGAAGAA |
| RBS-12 | ACGGGTATATACCATGGCGATATCTAGAAGAA |
| RBS-13 | GCCCGGATATACCATGGCGATATCTAGAAGAA |
| RBS-14 | CCCGGCATATACCATGGCGATATCTAGAAGAA |
| RBS-15 | CTATGTATATACCATGGCGATATCTAGAAGAA |
| RBS-16 | CTTGGTATATACCATGGCGATATCTAGAAGAA |
| RBS-17 | GTAGTAATATACCATGGCGATATCTAGAAGAA |
| RBS-18 | TGGTAGATATACCATGGCGATATCTAGAAGAA |
| **RBS-19** **(wild-type)** | **AAGGAGATATACCATGGCGATATCTAGAAGAA** |
| RBS-20 | CTCGACATATACCATGGCGATATCTAGAAGAA |
| RBS-21 | ACTTCTATATACCATGGCGATATCTAGAAGAA |
| RBS-22 | CCGAGGATATACCATGGCGATATCTAGAAGAA |
| RBS-23 | CACGCCATATACCATGGCGATATCTAGAAGAA |
| RBS-24 | CCATGTATATACCATGGCGATATCTAGAAGAA |
| RBS-25 | TTCTAGATATACCATGGCGATATCTAGAAGAA |
| RBS-26 | AGAGCCATATACCATGGCGATATCTAGAAGAA |
| RBS-27 | ATAGCCATATACCATGGCGATATCTAGAAGAA |
| RBS-rev | CTTAAAGTTAAACAAAATTATTTCTAGAGG |
| **Primers for qRT-PCR** |  |
|  LAD-F | GCTGATGTTGTTGTTGTT |  |
|  LAD-D | TTGCCTGACCATAGAATC |  |
|  16S rRNA-F | TAATACCTTTGCTCATTG |  |
|  16S rRNA-D | CCAGTAATTCCGATTAAC |  |