## **Supplementary Tables**

**Supplementary Table 1.** List of DNA parts in this study

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Sequence (5’→3’)** | **Intensity (RFU)** | **ID** | **Type** |
| BBa\_I14018 | TGTAAGTTTATACATAGGCGAGTACTCTGTTATGG | 4.520 | P1 | Promoter |
| BBa\_I14034 | CATTATTGCAATTAATAAACAACTAACGGACAATTCTACCTAACA | 1.471 | P2 | Promoter |
| BBa\_J23101 | TTTACAGCTAGCTCAGTCCTAGGTATTATGCTAGC | 3.553 | P3 | Promoter |
| BBa\_J23104 | TTGACAGCTAGCTCAGTCCTAGGTATTGTGCTAGC | 4.399 | P4 | Promoter |
| BBa\_J23111 | TTGACGGCTAGCTCAGTCCTAGGTATAGTGCTAGC | 5.516 | P5 | Promoter |
| BBa\_J23115 | TTTATAGCTAGCTCAGCCCTTGGTACAATGCTAGC | 1.265 | P6 | Promoter |
| BBa\_J23116 | TTGACAGCTAGCTCAGTCCTAGGGACTATGCTAGC | 1.307 | P7 | Promoter |
| BBa\_J23119 | TTGACAGCTAGCTCAGTCCTAGGTATAATGCTAGC | 9.542 | P8 | Promoter |
| BBa\_K088007 | TATAAGATCATACGCCGTTATACGTTGTTTACGCTTTG | 0.601 | P9 | Promoter |
| BBa\_K119000 | TTTACACTTTATGCTTCCGGCTCGTATGTTGTGTGGAC | 0.548 | P10 | Promoter |
| BBa\_M13101 | CCCGTCTAATGCGCTTCCCTGTTTTTATGTTATTCTCTCTGTAAAGG | 2.873 | P11 | Promoter |
| BBa\_M13104 | TTGATAAATTCACTATTGACTCTTCTCAGCGTCTTAATCTAAGCTATCG | 4.684 | P12 | Promoter |
| BBa\_M13106 | GGTAAACCATATGAATTTTCTATTGATTGTGACAAAATAAACTTATTCC | 1.551 | P13 | Promoter |
| BBa\_M13108 | AATCTCCGTTGTACTTTGTTTCGCGCTTGGTATAATCGCTGGGGGTC | 4.066 | P14 | Promoter |
| BBa\_M13110 | TCTTTTTGATGCAATCCGCTTTGCTTCTGACTATAATAGTCAGGGTAA | 5.172 | P15 | Promoter |
| BBa\_R1075 | TTAAATTTCCTCTTTTCAGGCCGGAATAACTCCCTATAATGCGCCACCA | 0.829 | P16 | Promoter |
| BBa\_J23100 | TTGACGGCTAGCTCAGTCCTAGGTACAGTGCTAGC | 1.672 | P17 | Promoter |
| BBa\_J23106 | TTTACGGCTAGCTCAGTCCTAGGTATAGTGCTAGC | 1.263 | P18 | Promoter |
| BBa\_J23109 | TTTACAGCTAGCTCAGTCCTAGGGACTGTGCTAGC | 1.801 | P19 | Promoter |
| BBa\_J23114 | TTTATGGCTAGCTCAGTCCTAGGTACAATGCTAGC | 1.002 | P20 | Promoter |
| BBa\_J23117 | TTGACAGCTAGCTCAGTCCTAGGGATTGTGCTAGC | 1.913 | P21 | Promoter |
| BBa\_J61100 | TCTAGAGAAAGAGGGGACAAA | 1.736 | R1 | RBS |
| BBa\_J61101 | TCTAGAGAAAGACAGGACCCA | 1.041 | R2 | RBS |
| BBa\_J61104 | TCTAGAGAAAGAAGGGACAGA | 0.984 | R3 | RBS |
| BBa\_J61106 | TCTAGAGAAAGATAGGAGACA | 1.447 | R4 | RBS |
| BBa\_J61110 | TCTAGAGAAAGAGGCGAATTA | 2.076 | R5 | RBS |
| BBa\_J61113 | TCTAGAGAAAGAGTGGAAAAA | 2.218 | R6 | RBS |
| BBa\_J61116 | TCTAGAGAAAGACATGAGGCA | 1.266 | R7 | RBS |
| BBa\_J61121 | TCTAGAGAAAGAGACGAGTCA | 0.829 | R8 | RBS |
| BBa\_J61125 | TCTAGAGAAAGAGCCGAGTTA | 0.986 | R9 | RBS |
| BBa\_J61127 | TCTAGAGAAAGAGTGGAACTA | 1.547 | R10 | RBS |
| BBa\_J61132 | TCTAGAGAAAGACAGGATTAA | 3.009 | R11 | RBS |
| BBa\_J61135 | TCTAGAGAAAGACCGGAGACA | 0.703 | R12 | RBS |
| BBa\_J61137 | TCTAGAGAAAGAGTAGATCAA | 1.690 | R13 | RBS |
| BBa\_B0029 | TCTAGAGTTCACACAGGAAACCTA | 1.733 | R14 | RBS |
| BBa\_B0033 | TCTAGAGTCACACAGGACTA | 0.905 | R15 | RBS |
| BBa\_B0035 | TCTAGAGATTAAAGAGGAGAATA | 5.972 | R16 | RBS |
| BBa\_B0064 | TCTAGAGAAAGAGGGGAAATA | 4.620 | R17 | RBS |
| BBa\_B0072 | TCTAGAGCACCACTA | 0.363 | R18 | RBS |
| BBa\_B0073 | TCTAGAGTCACACCACTA | 0.320 | R19 | RBS |
| BBa\_B0074 | TCTAGAGTCACACCACCCTA | 0.288 | R20 | RBS |
| BBa\_B0030 | TCTAGAGATTAAAGAGGAGAAATA | 7.617 | R21 | RBS |
| BBa\_B0032 | TCTAGAGTCACACAGGAAAGTA | 1.475 | R22 | RBS |
| BBa\_B0034 | TCTAGAGAAAGAGGAGAAATA | 5.608 | R23 | RBS |
| L2U5H11 | TAGCGTGCGAACAGCACGCTATTGTTGTAT |  | T1 | Terminator |
| L3S1P56 | TTTTCGAAAAAAGGCCTCCCAAATCGGGGGGCCTTTTTTATTGATAACAAAA |  | T2 | Terminator |

\* RFU is calculated in *E.coli* DH5α

**Supplementary Table 2.** Overhangs for golden gate assembly

|  |  |  |
| --- | --- | --- |
| **Sequence (5’→3’)** | **Description** | **Reference** |
| GCCT | Vector – Promoter | Potapov et al. 2018 |
| CTTT | Promoter – RBS | Potapov et al. 2018 |
| GCAG | RBS – CDS | Potapov et al. 2018 |
| CTAA | CDS – Terminator | Potapov et al. 2018 |
| TCAC | Terminator - Vector | Potapov et al. 2018 |

**Supplementary Table 3.** Tag primer sequence for tagging colony PCR

|  |  |  |
| --- | --- | --- |
| **Name** | **Sequence (5’→3’)** | **Type** |
| p15A\_ori\_A | GCATGTACAGAGCAAGAGATTACGCGC | Forward |
| p15A\_ori\_B | TTGTCTCCAGAGCAAGAGATTACGCGC | Forward |
| p15A\_ori\_C | GTTCGAACAGAGCAAGAGATTACGCGC | Forward |
| p15A\_ori\_D | TGTCGAGCAGAGCAAGAGATTACGCGC | Forward |
| p15A\_ori\_E | TAGGCTTCAGAGCAAGAGATTACGCGC | Forward |
| p15A\_ori\_F | ACATAGGCAGAGCAAGAGATTACGCGC | Forward |
| p15A\_ori\_G | GACTTACCAGAGCAAGAGATTACGCGC | Forward |
| p15A\_ori\_H | ATGGTCCCAGAGCAAGAGATTACGCGC | Forward |
| M13F\_1 | TGGACTAGTAAAACGACGGCCAGT | Reverse |
| M13F\_2 | ATCAACCGTAAAACGACGGCCAGT | Reverse |
| M13F\_3 | ACCAGAAGTAAAACGACGGCCAGT | Reverse |
| M13F\_4 | GATCTCCGTAAAACGACGGCCAGT | Reverse |
| M13F\_5 | CTAAGGAGTAAAACGACGGCCAGT | Reverse |
| M13F\_6 | GACGGAAGTAAAACGACGGCCAGT | Reverse |
| M13F\_7 | TTGCAGAGTAAAACGACGGCCAGT | Reverse |
| M13F\_8 | GAAGTCGGTAAAACGACGGCCAGT | Reverse |
| M13F\_9 | GCTGCTTGTAAAACGACGGCCAGT | Reverse |
| M13F\_10 | GTGACAAGTAAAACGACGGCCAGT | Reverse |
| M13F\_11 | GAACCAAGTAAAACGACGGCCAGT | Reverse |
| M13F\_12 | GTAATGCGTAAAACGACGGCCAGT | Reverse |