

Table S1. Oligonucleotides used in this study

| Name          | Sequence (5'-3')                           | Reference         |
|---------------|--------------------------------------------|-------------------|
| FhlR F        | TGCGTCATCGCCATTGGTACCTTAAATCAATGCCGATTATC  | pFA-GESS          |
| FhlR R        | CCCAGCGATTTCATCAACAAGCTTGATTACCACACGCCGAA  |                   |
| PfdhF F       | TTCGGCGTGTGGTAAATCAAGCTTGTTGATGAAATCGCTGGG |                   |
| PfdhF R       | GTTCTTCACCTTTGCTCATCGGTCTCGCTCCAGTTAATCAA  |                   |
| FA-v-F        | TTGATTAAGTGGAGCGAGACCGATGAGCAAAGGTGAAGAAC  |                   |
| FA-v-R        | GATAAATCGGCATTGATTAAAGGTACCAATGGCGATGACGCA |                   |
| PfrmR F       | GAGTGCACCAGTTATATACTATAGGGGGGGTATGC        | pFrm-GESS         |
| PfrmR R       | CCTTTGCTCATCTCTCGCTCTTCCTCAATATGGT         |                   |
| Frm-v-F       | GAGCGAGAGATGAGCAAAGGTGAAGAACTGT            |                   |
| Frm-v-R       | TATAGTATATAACTGGTGCCTCTCAGTACAATCTG        |                   |
| Frm-v1-F      | ATTGTCAAGCAGATTGTACTGAGAGTGCAC             | pMeOH-GESS        |
| Frm-v1-R      | AGAAGATTAATCTGATGCCGCATAGTTAAGC            |                   |
| trc-Bsmdh F   | CGGCATCAGATTAATCTTCTTTTCAGTTTCAGAACGATACG  |                   |
| trc-Bsmdh R   | AGTACAATCTGCTTGACAATTAATCATCCGGCTCG        |                   |
| pET-fal v F   | CGCAGCATAATGACTCGAGGATCCGGCTG              | pET-Faldh         |
| pET-fal v R   | TTCCCGACATGGTTTAACCTCCTGTGTGAAATTGTTATC    |                   |
| Faldh F       | AGGTAAACCATGTCTGGGAAACCGCGG                |                   |
| Faldh R       | CCTCGAGTCATTATGCTGCGGAAAAGGTCTTGTG         |                   |
| mcherry-Frm F | AGAGCGAGAGATGGTGAGCAAGGGCGAG               | pFrm-GESS-mcherry |
| mcherry-Frm R | AAACAGAAGCCTACTTGTACAGCTCGTCCATG           |                   |
| Frm-v2-F      | GTACAAGTAGGCTTCTGTTTTGGCGGATG              |                   |
| Frm-v2-R      | TGCTCACCATCTCTCGCTCTTCCTCAATATGGTAATAG     |                   |
| FA-gess m F   | AGACGGTCACTTCTTCGTCTGTTTCTACTGGTATTGG      | pFA-Frm-GESS      |
| FA-gess m R   | CAGACAAGCTAAGAGTTTGTAGAAACGCAAAAAGG        |                   |
| Frm-gess m F  | ACAACTCTTAGCTTGTCTGTAAGCGGATG              |                   |
| Frm-gess m R  | AGACGAAGAAGTGACCGTCTCCGGGAG                |                   |
| Pbad-Bsmdh F  | AACAGGAGGAATTAACCATGAAAGCGGCGGTTGT         | pAC-Bsmdh-Faldh   |
| Pbad -Bsmdh R | CTGCAGGTCGACTCTAGAGGTACCTTAATCTTCTTTTCAGTT |                   |
| Prham F       | GGTACCTCTAGAGTCGACCTGCAGCAAGATACAGCGTGAAT  |                   |
| Prham R       | CCGCGGTTTCCCGACATATGGTGATCCTGCTGAA         |                   |
| Prham Faldh F | TTCAGCAGGATCACCATATGTCGGGAAACCGCGG         |                   |
| Prham Faldh R | CAGCCAAGCTTGCATGCTTATGCTGCGGAAAAGG         |                   |
| pAC-v-F       | CCTTTTCCGCAGCATAAGCATGCAAGCTTGGCTG         |                   |

|         |                                    |  |
|---------|------------------------------------|--|
| pAC-v-R | ACAACCGCCGCTTTCATGGTTAATTCCTCCTGTT |  |
|---------|------------------------------------|--|