

Table S1. Oligonucleotides used in this study.

| Primer name | Sequence (5' --> 3') ^a | Objective |
|---------------------|--|-------------------------------|
| Forward primer A | CSGCCGAYGTCGTGATYATYGGTG | Degenerate PCR and sequencing |
| Reverse primer B | GGCARATCGGCATRCARTTRTTRTTN CC | Degenerate PCR and sequencing |
| AD1 | NTCGASTWTSGWGTT | TAIL-PCR |
| AD2 | NGTCGASWGANAWGAA | TAIL-PCR |
| AD3 | WGTGNAGWANCANAGA | TAIL-PCR |
| 621H-adh-pro(+) | <u>GGGGTACCTTCTGGCGGTACGGAGT</u> C ^b | pSHO8 |
| 621H-adh-pro(-) | <u>CCGCTCGAGATTAACCAGAAGTCAT</u> GATCCAAC ^b | pSHO8 |
| fdhS-5-Eco(+) | <u>GAATTC</u> CAAACAAAAATAGTC ^b | pSHO12 |
| fdhL-3-PstBam(-) | <u>GGATCCTGCAGCGTGGCGTTGAAAC</u> ACTG ^b | pSHO12 |
| fdhS-370-ATG-Xho(+) | <u>CTCGAGGAGAAGGTAAATGGAAAAA</u> ATAGCTGATTC ^b | pSHO13 |
| delta-fdhC(+) | gaaccaacacctgcttcagcgCTGATCAGCC GTCGCAAAAAG ^c | pSHO16 |
| delta-fdhC(-) | CTTTTTGCGACGGCTGATCAGcgctga agcaggtgttggttc ^c | pSHO16 |

^a, N = A, C, G, or T; R = A or G; Y = C or T.

^b, The engineered endonuclease recognition site is underlined.

^c, The 3' and 5' regions of *fdhC* are shown in lower and upper cases, respectively.