

**Supplementary Table 1.** Primer sequences used in constructing engineered strains.

| <b>NAME</b>     | <b>SEQUENCE</b>   |
|-----------------|---|
| Gal/Dal80 F     | CTGAGCGGGATATTGTTTATCTGCCGTCATGAGACGGTCACAGCTTGTCTG         |
| Gal/Dal80 R     | ATAATATGATATAATATAATGTAATATAGTCTAAAGGGAACAAAAGCTGGGTACG     |
| Gdh1 mut.p fwd  | CTTAGACCGCTCGGCCAAACAACACTCAGGTCATTATTCTCTAGTGTATCAGGCT     |
| Gdh/leu mut rev | CTACATCCACTCAGGTCATTATTCTCTAGTCTGAGAGTGCACCATATCGACTACGTCCG |
| Leu fwd         | GTTGTTTGGCCGAGCGGTCTAAG                                     |
| Gdh1 mut.p rev  | TTTTGGTCTCCTAACTGTTATATTAGAATA                              |
| Qpcr Dal80.fwd  | AAAAAGCTGAATAACAACAATGTGAA                                  |
| Qpcr Dal80.rev  | GGAACGGTTTCCTTTGGTTTTAA                                     |