### Table S1 Primers used in this work

| Name               | Sequence                                                                 |
|--------------------|---------------------------------------------------------------------------|
| pMG36e-F           | TGACCGGTAAAAATTTAATTTTGAACCTTGCTT                                       |
| pMG36e-R           | TTCAAAATTCTCCGGAATATTTTTTTACCTACTAGT                                    |
| metF-F             | ATATTCCGGAGGATTTTTGAAAATGCAAGTGATTCTAAAAATCTATTTTTTGAAGTTTTTCC          |
| metF-R             | TATTAATTCTACCGGTACATTTATGTATTTATTTTTAAAAATAAGATGAGATTGAAGATGGAACGTG     |
| drfA-F             | ATATTCCGGAGGATTTTTGAAAATGTTAGATATTTGGAACGTG                              |
| drfA-R             | TATTAATTCTACCGGTACATTTATGTATTTATTTTTAAAAATAAGATGAGATTGAAGATGGAACGTG     |
| folD-F             | ATATTCCGGAGGATTTTTGAAAATGAAATGTGCTATTATCATATTTTTTTCAAGTTTACTG          |
| folD-R             | TATTAATTCTACCGGTACATTTATGTATTTATTTTTAAAAATAAGATGAGATTGAAGATGGAACGTG     |
| thyA-F             | ATATTCCGGAGGATTTTTGAAAATGAAATGTGCTATTATCATATTTTTTTCAAGTTTACTG          |
| thyA-R             | TATTAATTCTACCGGTACATTTATGTATTTATTTTTAAAAATAAGATGAGATTGAAGATGGAACGTG     |
| glyA-F             | ATATTCCGGAGGATTTTTGAAAATGAAATGTGCTATTATCATATTTTTTTCAAGTTTACTG          |
| glyA-R             | TATTAATTCTACCGGTACATTTATGTATTTATTTTTAAAAATAAGATGAGATTGAAGATGGAACGTG     |
| drfA-metF-F        | ATATTCCGGAGGATTTTTGAAAATGTTAGATATTTGGAACGTG                              |
| glyA-metF-F        | ATATTCCGGAGGATTTTTGAAAATGAAATGTGCTATTATCATATTTTTTTCAAGTTTACTG          |
| thyA-metF-F        | ATATTCCGGAGGATTTTTGAAAATGAAATGTGCTATTATCATATTTTTTTCAAGTTTACTG          |
| metF-R2            | TTCAAAATTCTCCGGAATATTTTATGTATTTATTTTTAAAAATAAGATGAGATTGAAGATGGAACGTG   |
| folE-F             | ATATTCCGGAGGATTTTTGAAAATGAAATGTGCTATTATCATATTTTTTTCAAGTTTACTG          |
| folE-R             | ATATTAAATTCTACCGGTACATTTATCATATTTTTTTCAAGTTTACTG                       |
| drfA-folE-R        | TTCAAAATTCTCCGGAATATTTTATGTGCTATTATCATATTTTTTTCAAGTTTACTG              |
| glyA-folE-R        | TTCAAAATTCTCCGGAATATTTTATGTGCTATTATCATATTTTTTTCAAGTTTACTG              |
| pTD6-F             | GCAAAAGATGCGGAAACGTAAAG                                               |
| pTD6-R             | GGTCGACAGGCTTTCGAGATCT                                                 |
| G6PDH-F            | CAGAAGCTTTGCGACCCCTTATAAGATTAATGCTTCCACAAGATTTTTTGAAGG                 |
| G6PDH-R            | TTCCGCACTTTCTGAGAATGAAATGCTCTGTTCCACAAGATTTTTTGAAGG                   |
| fue-F              | ATATTTCCGGAGGATTTTTGAAAATGAAATGTAGAAATGAAATGAAATGAAATGAAATGAAATGAAATG |
| fue-R              | TAAATTTTACCGGTACTGGTTAAAAATTCAATTTTTTTCTCCCTATAAAAAGTTTTTTACTGCAATATC |