**Table S2**. Oligonucleotides used for PCR amplification.

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| **Plasmid** | **Gene** | **Forward Primer**  **Reversed Primer** | |
| pMUM039 | *menG* | A185 | atccataTGAGTCGAGCGAGCTTGGAGAAGA |
| A186 | actGGCGGGCTTGGTGG |
| pMUM040 | *menA* | A166 | tcatccccgatccggaggaatcacttccatATGGCCAGTTTCGCGCAGT |
| A167 | actGTGGAACGCCAGCGGGAT |
| pMUM055 | Upstream *menG* | A243 | ttttttttcacagagtgGAATTCCGAGAATTCACACG |
| A244 | ttttttttcacaatgtgGCTCGCTCGACTCACGACG |
| Downstream *menG* | A245 | ttttttttccagattttggCACCAAGCCCGCCTAG |
| A246 | ttttttttccaacttttggGTCTCAAACCGATCCGCGAAA |
| pMUM058 | mTurquoise | A241 | ccagtactaatattGTTAGTAAAAGAGAAGAAC |
| A242 | CTCGTCGGCTTCGAGTGC |
| pMUM103 | *menJ* | A459 | ttttttttcatatgATGAACACCCGAGCGGATGTG |
| A460 | actGCTGAACGGCACCCGCTGAT |
| N/A | *menG* KO | A312 | CGGGCTTGCCGATTTTCG |
| A313 | CGGGTTACCAACCTCTGGTTA |
| pMUM106 | P766-8G promoter | A442 | gctagttaactacgtcgacatcgatttcccttaagattagatatcccgacaattgGCTGCTACCAGGCCTAGATCTG |
| A443 | ccccatggtaccagaaagcttGGTGGTGCATGCGGTTGT |
| *menG* | A444 | aagctttctggtaccatggGGACAGAAAGGAGGAAGGAAT |
| A445 | aagtcgtcgccaccaatccccatatgctcgagtcgcgaattaatGACTGATAGTGACCTGTTCGTTG |
| pMUM110 | TetR38 | A487 | ggggaaacttaagAGCTGGCTAGCGAGTCATGAGGT |
| A488 | cccccccgatatcAATATTGGATCACGCCGCGAG |
| pMUM119 | *menG-HA* | A185 | atccataTGAGTCGAGCGAGCTTGGAGAAGA |
| A506 | tttttcccATTAATTCAGCTGGCGTCCGCGTAGTTCTCGGAGTAGTTCTCGTCGTTGGCGGCCGCGTAGTCCGGGACGTC |