|  |  |  |
| --- | --- | --- |
| **Name** | **Oligonucleotide sequence (5' to 3')** | **Amino acid change** |
| *mfd*-W568\*-F2 | GGCAGTGAATGAAAAAAAACAAAAGC | ***mfd*-W568\*** |
| *mfd*-W568\*-R2 | GCTTTTGTTTTTTTTCATTCACTGCC |
| pIMAY-Z-*mfd*-W568\*-F | CCTCACTAAAGGGAACAAAAGCTGGGTACCGATTGAAGGCTATCCTGTCAC |
| pIMAY-Z-*mfd-*W568\*-R | CGACTCACTATAGGGCGAATTGGAGCTCCTAGGTATTGGGGTTGCAGTC |
| *ausA*-K2308FS-F2 | GCCGGTGAGAATGTGTTAAGTGC | ***ausA*-K2308FS** |
| *ausA*-K2308FS-R2 | GCACTTAACACATTCTCACCGGC |
| pIMAY-Z-*ausA*-K2308FS-F | CCTCACTAAAGGGAACAAAAGCTGGGTACCGTTGGTGATTTCGAGTGTATGG |
| pIMAY-Z-*ausA*-K2308FS-R | CGACTCACTATAGGGCGAATTGGAGCTCGTACGCCAGTCTAAACGTTGTG |
| *alr*-K354FS-F2 | CATGATTCTTTAAAAAGGAGTACATTTC | ***alr*-K354FS** |
| *alr*-K354FS-R2 | GAAATGTACTCCTTTTTAAAGAATCATG |
| pIMAY-Z-*alr*-K354FS-F | CCTCACTAAAGGGAACAAAAGCTGGGTACCGCTGATGAATTCGATGTGTCAG |
| pIMAY-Z-*alr*-K354FS-R | CGACTCACTATAGGGCGAATTGGAGCTCCTGTACCTTCAATCTGTGAACC |
| *cydA*-R390C-F2 | GGATTGTTTGTGGTTATATGCG | ***cydA*-R390C** **(reversion)** |
| *cydA*-R390C-R2 | CGCATATAACCACAAACAATCC |
| pIMAY-Z-*cydA*-R390C-F | CCTCACTAAAGGGAACAAAAGCTGGGTACCCAGCCGGTATGACGATGG |
| pIMAY-Z-*cydA*-R390C-R | CGACTCACTATAGGGCGAATTGGAGCTCCTGCACCCAATCTAGATCG |
| *agrA*-E7K-R2 | TGGATCGTCTTTGCAAATGA | ***agrA*-E7K** |
| *agrA*-E7K-F2 | TCATTTGCAAAGACGATCCA |
| pIMAY-Z-*agrA*-E7K-R | CGACTCACTATAGGGCGAATTGGAGCTCGTTTCTCACCGATGCATAGC |
| *agrC*-G310FS-F2 | GGTGAAGTCGTGGTTTAGG | ***agrC*-G310FS** |
| *agrC*-G310FS-R2 | CCTAAACCACGACTTCACC |
| pIMAY-Z-*agrC*-G310FS-R | CGACTCACTATAGGGCGAATTGGAGCTCGGGCAATGAGTCTGTGAG |
| pIMAY-Z-*agrC*-G310FS-*agrA*-E7K-F | CCTCACTAAAGGGAACAAAAGCTGGGTACCGTTATTTCGACTATCTTACTGCTTAC | ***agrA-*E7Kand *agrC*-G310FS** |

Primers used to introduce convergent mutations in BPH3370 by site-directed mutagenesis