**Table S1 Primers used for cloning and mutagenesis.**

|  |  |
| --- | --- |
| **Primers** | **Sequence (5′→3′)** |
| DinG\_F | ttttttcatatggcattaaccgccgcgct |
| DinG\_R | tttggatccttaacgccgccgacggcgtg |
| R117AF | gcggacaaacgtaggccccacgcccaaaag |
| R117AR | cttttgggcgtggggcctacgtttgtccgc |
| R211AF | tgaatctcccgagcagcgacaaaaaacgggcattcac |
| R211AR | gtgaatgcccgttttttgtcgctgctcgggagattca |
| F615AF | gtcgatgggcggagcagcgattttgtggatatgcacctgg |
| F615AR | ccaggtgcatatccacaaaatcgctgctccgcccatcgac |
| I618AF | caccgggctgtcggcgggcggaaaagcg |
| I618AR | cgcttttccgcccgccgacagcccggtg |
| Y636AF | ctttgcacctcaaacggagcgcggttgaggcttttcag |
| Y636AR | ctgaaaagcctcaaccgcgctccgtttgaggtgcaaag |
| F638AF | caggctttgcacctcagccggatagcggttgagg |
| F638AR | cctcaaccgctatccggctgaggtgcaaagcctg |
| R673AF | ttttggtcagcaaggctttgtcgtagataaccacttcgccc |
| R673AR | gggcgaagtggttatctacgacaaagccttgctgaccaaaa |