**S4 Table.** Table showing the primer sequences of wild-type and mutants (F is for forward primer, R is for reverse primer, restriction enzyme sites were indicated in the name of each primer)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Construct | | | Primer | |
| F\_Nde1 | | | GGCATTCCATATGATGAGGAGAAGTGAGGTGCTG | |
| 486\_R\_Xhol | | | CCGCTCGAGACGTGCTTTGCCCGGTGTATT | |
| DD\_R\_Xhol | | | GAAAGACTCCATCATCACCATCACCATUAGCCTCGAGG | |
| R2E/F | | | AGAAGGAGATATACATATGGAGAGAAGTGAGGTGCTG | |
| R2E/R | | CAGCACCTCACTTCTCTCCATATGTATATCTCCTTCT | | |
| R2M/F | | | AGAAGGAGATATACATAGGATGAGAAGTGAGGTGCTGG | |
| R2M/R | | | CCAGCACCTCACTTCTCATCCTATGTATATCTCCTTCT | |
| N+4/F | | AGAAGGAGATATACATATGGGCGCAGCAGCAATGAGGAGAAGTGAGGTG | | |
| N+4/R | | CACCTCACTTCTCCTCATTGCTGCTGCGCCCATATGTATATCTCCTTCT | | |
| L51A/F | GCATATCAAGGAACTCGCAGATATGATGATTGCTG | | |
| L51A/R | CAGCAATCATCATATCTGCGAGTTCCTTGATATGC | | |
| L50A/F | GAAGCATATCAAGGAAGCACTGGATATGATGATTG | | |
| L50A/R | CAATCATCATATCCAGTGCTTCCTTGATATGCTTC | | |
| I55A/F | ACTCCTGGATATGATGGCAGCTGAAGAGGAAAGCC | | |
| I55A/R | GCTTTCCTCTTCAGCTGCCATCATATCCAGGAGT | | |
| E57A/F | GGATATGATGATTGCTGCAGAGGAAAGCCTGAAGG | | |
| E57A/R | CCTTCAGGCTTTCCTCTGCAGCAATCATCATATCC | | |
| E57R/F | GGATATGATGATTGCTCGAGAGGAAAGCCTGAAGG | | |
| E57R/R | CCTTCAGGCTTTCCTCTCGAGCAATCATCATATCC | | |
| E58R/F | GGATATGATGATTGCTCGAGAGGAAAGCCTGAAGG | | |
| E58R/R | CCTTCAGGCTTTCCTCTCGAGCAATCATCATATCC | | |
| E58A/F | TATGATGATTGCTGAAGCGGAAAGCCTGAAGGAAAG | | |
| E58A/R | CTTTCCTTCAGGCTTTCCGCTTCAGCAATCATCATA | | |
| E49A/F | AAAGAAGCATATCAAGGCACTCCTGGATATGATGA | | |
| E49A/R | TCATCATATCCAGGAGTGCCTTGATATGCTTCTTT | | |