**Table S1 Mutagenic oligonucleotides**

| Mutant | Mutagenic oligonucleotides |
|---|---|
| R427S | 5’-gctgcgcgaatttagcatccgtggcg-3’ |
| | 5’-cgccacggatgctaaattcgcgcagc-3’ |
| R427K | 5’-gcgcgaattcaaaatccgtggcg-3’ |
| | 5’-cgccacggattttgaattcgcgc-3’ |
| R472S | 5’-aagcgccaggactctgcgacgaagctt-3’ |
| | 5’-aagcttcgtcgcagagtcctggcgctt-3’ |
| R472K | 5’-agcgccaggacaaagcgacgaagct-3’ |
| | 5’-agcttcgtcgctttgtcctggcgct-3’ |

Underline indicates the mutated nucleotides