

**S4 Table. Primers used for construction of mutators.**

Primer name	Sequence (5'→3')	Purpose
F-mutS-up	GGGGACAAGTTTGTACAAAAAAGCAGGCTCGGCTGTGCTTGCTCGCTAATC	gene disruption
F-mutS-down	GGGGGGGGGGGGGAAGATCGGCTGTCAGAAGGC	gene disruption
R-mutS-up	CCCCCCCCCCCCCTCAAGGTCGTCATCCCGTTG	gene disruption
R-mutS-down	GGGGACCACTTTGTACAAGAAAGCTGGGTCAGTCACGACAGAAGGCGTTT	gene disruption
F-mutL-up	GGGGACAAGTTTGTACAAAAAAGCAGGCTCGGTGGGGCTATTTCCGGCTTAAA	gene disruption
F-mutL-down	GGGGGGGGGGGGGGCTTCTCCAGCTGCGATACGATT	gene disruption
R-mutL-up	CCCCCCCCCCCCCATGGGTAAAGCTCGGCCATAAA	gene disruption
R-mutL-down	GGGGACCACTTTGTACAAGAAAGCTGGGTCGGCCATCCCAAATTAGACCGTT	gene disruption
F-mutS2-up	GGGGACAAGTTTGTACAAAAAAGCAGGCTCGATGTAGCGGCTGTCCTGATG	gene disruption
F-mutS2-down	CCCCCCCCCCCCCTGAGCAAGTCAGCCAAGGAT	gene disruption
R-mutS2-up	GGGGGGGGGGGGGGTGTGATCCTTCGTCGTCGTC	gene disruption
R-mutS2-down	GGGGACCACTTTGTACAAGAAAGCTGGGTCTAGGAAACAGCCTGCCAAGG	gene disruption