

Supplementary table 2. Primer for gene-deletion, complementation, amino-acid substitution

Primer name	Sequence (5' – 3')	Application
spy0146upper800_fwd	tcgagctcggtacccCAATATTTTGC GCGTCGAAATTC	<i>nga</i> deletion, complementation
spy0146upper800_rev	atacatattgGTAAACCACCTTATATTATTTTAAGTAAAC	<i>nga</i> deletion
spy0146down800_fwd	gtggtttacCAATATGTATAAGGTGCCAAAG	<i>nga</i> deletion
spy0146down800_rev	ctctagaggateccccTCTGACTTTTTTCTTCTTTTTCTG	<i>nga</i> deletion, complementation
spy0148upper800_fwd	tcgagctcggtacccATAAGCTAGGCTATATCCGAAC	<i>slo</i> deletion, complementation
spy0148upper800_rev	aaccagtcACCTTTTTATCATTCTAAAATGTTTC	<i>slo</i> deletion
spy0148down800_fwd	ataaaaaggtGACTGGTTCAAGAGGTTTCGTC	<i>slo</i> deletion
spy0148down800_rev	ctctagaggateccccACTTTACACTGTATGGTAAGCC	<i>slo</i> deletion, complementation
pSET4S_nga/sni_fwd	tcgagctcggtacccatgagaaacaaaaaagtaacattag	Nga mutants construct
pSET4S_nga/sni_rev	ctctagaggateccccataaatgtttctattgttcttga	Nga mutants construct
nga R289K fwd	gctaaaaaaaagtcacgattggcgacaagaa	Inverse PCR
nga R289K rev	tgacttttttagcatcatcaaaagtaacat	Inverse PCR
nga G330D fwd	ataaaagatgctgatagcggaataatagtgat	Inverse PCR
nga G330D rev	atcgacatcttttatatttcaatttggtcagc	Inverse PCR
nga W81A fwd	actgtcgcggaggaaaattcacctggtg	Inverse PCR
nga W81A rev	ttcctccgcgacagtactcattgagccg	Inverse PCR
nga E389A/E391A fwd	aattcagcaagtgcattaattttcccatcgattagtgtt	Inverse PCR
nga E389A/E391A rev	aattaatgcacttgctgaattttcaatgtgttttctga	Inverse PCR
nga RT-PCR fwd	TGTTGCTATTGCTTTGGCTG	RT-PCR
nga RT-PCR rev	TTGAGCCGTCTAATGTGTGC	RT-PCR
slo RT-PCR fwd	TCCTGCGGATGTGTTTGATA	RT-PCR
slo RT-PCR rev	TGCACTAAAGGCCGCTTC	RT-PCR
sni RT-PCR fwd	AGAAATGTCAAATAGCGGTCAAG	RT-PCR
sni RT-PCR rev	CCATAGCCTCTCTAATATGCGC	RT-PCR
gyrA RT-PCR fwd	CGTCGTTTGACTGGTTTGG	RT-PCR
gyrA RT-PCR rev	GGCGTGGGTTAGCGTATTTA	RT-PCR