

**Supplementary Table 9.** Synthetic oligonucleotides used for PCR amplification and subcloning of E.coli KV methyltransferase genes.

Gene ID	Strand	PCR Primer
M.EcoGI/GII	forward*	5'-TTAGTTGCCTGCAGGAAATAAGGTTAACATATGCTTAATACTGTAAAAATATCCAGTTG-3'
	reverse	5'-TTATTAGGATCCTTATCAAACGATTAAATCCTGAACTTCCC-3'
M.EcoGIII	forward	5'-TTAGTTGCCTGCAGTTAAGGTTAACATATGCTTCAAAGCTAGACGTCGCA-3'
	reverse	5'-TTATTAGGATCCTTATCATGCAGTCAGAGCTCCTAGCTT-3'
M+S.EcoGIV	forward	5'-TTAGTTGCCTGCAGTTAAGGTTAACATATGTTGCAGAAGGCCTTGTTTTTCAT-3'
	reverse*	5'-TTATTATTCCCGGGATCCTTATTAGTTTATCGCCGCGTCAGTCAG-3'
M.EcoGV	forward	5'-TTAGTTGCCTGCAGTTAAGGTTAACATATGACGAAAAAATACACCCTCATTTAC-3'
	reverse	5'-TTATTAGGATCCTTATCAACTGGTGATGCCTTTGTCAAC-3'
M.EcoGVI	forward	5'-TTAGTTGCCTGCAGTTAAGGTTAACATATGAGAACAGGATGTGAACCGACC-3'
	reverse	5'-TTATTAGGATCCTTATTACTTTGCAATGAGATCGGGGTCA-3'
M.EcoGVII	forward	5'-TTAGTTGCCTGCAGTTAAGGTTAACATATGAGTAATAAATATTGCCAGGCGCT-3'
	reverse	5'-TTATTAGGATCCTTATCATGCCGCCATCTCCCTGACC-3'
M.EcoGVIII	forward	5'-TTAGTTGCCTGCAGTTAAGGTTAACATATGTCAACGAAGCAAAAATTAGAACTT-3'
	reverse	5'-TTATTAGGATCCTTATTATTCTTCGTCTTCGGTGTCTTCG-3'
M.EcoGIX	forward	5'-TTAGTTGCCTGCAGTTAAGGTTAACATATGTCCCGTTTTGTCTCGGTAAGT-3'
	reverse	5'-TTATTAGGATCCTTATTACGCAGCCTCCGGCATAAACC-3'
M.EcoGDam	forward	5'-GTTCTGCAGTTAAGGTTAATCATATGAAGAAAAATCGCGCTTTTTTTGAAG-3'
	reverse*	5'-GTTTCAGATCTTATTATTTTTTCGCGGGTGAAACGACT-3'

\*All PCR amplicons were inserted in plasmid pRRS via unique BamHI (GGATCC) and PstI (CTGCAG) restriction sites with the exceptions of M.EcoGI/GII, which used SbfI (CCTGCAGG) and BamHI due to the presence of PstI sites within the coding sequence, and M.EcoGDam which used PstI and BglII (AGATCT) due to the presence of a BamHI site within the coding sequence. The M+S EcoGIV sequence could not be subcloned using the vector BamHI site due to the presence of BamHI, BclI (TGATCA) and BglII sites within the coding sequences and was therefore inserted using PstI and SmaI (CCCGGG).