### Table S1 List of PCR primer sequences.

| Primer | Name | Primer Sequence (5'-3') | Use |
|--------|------|-------------------------|-----|
| 1      | TdDMT1-F | GCACAAAAATTTCACCCC | Screening of mutant |
| 2      | TdDMT1-R | CTTTCCCTGCCCCAAACT | Screening of mutant |
| 3      | G418-F | GGCTATCGTGGCTGGCA | Screening of mutant |
| 4      | G418-R | GCAGATCGGAGCGGCGA | Screening of mutant |
| 5      | TdDMT2-F | GCAGTGACCGATCTCACC | Screening of mutant |
| 6      | TdDMT2-R | GGAAGGCTCCAGGTCTCC | Screening of mutant |
| 7      | CpDmnt1_G-F | AAGGCACCAGGAACCTTGCCCTCGAGACGATTTGATTTGAGGAAG | Construction of CpDmnt1-null mutant. Underline: indicates the geneticin resistant cassette (G418) part |
| 8      | CpDmnt1_G-R | TCCTCAATATCATGATACGTCTCGAGGCAAGATTCTCTGCTGCCCT | Construction of CpDmnt1-null mutant. Underline indicates the G418 part |
| 9      | G_CpDmnt1-F | GTFCTCGAGGTCGACGGTATCAGGTGCGACTTGCTGGAGAAAAGT | Construction of CpDmnt1-null mutant. Underline indicates the G418 part |
| 10     | G_CpDmnt1-R | ACTTTTCTCCAGCAAGTCTCGACGATACCGTACCTCAGGAACAAC | Construction of CpDmnt1-null mutant. Underline indicates the G418 part |
| 11     | CpDmnt2_G-F | CTCAGACTTTGCCTATTTCGAGGACGTTAATTCTC | Construction of CpDmnt2-null mutant. Underline indicates the G418 part |
| 12     | CpDmnt2_G-R | TCAGTTAAGCTCTCGAGAATAGCGCAAAGTCTGAG | Construction of CpDmnt2-null mutant. Underline indicates the G418 part |
| 13     | G_CpDmnt2-F | TCGAGGTCGACGGTATCGAAGATCCCAGCCCCTGCTCA | Construction of CpDmnt2-null mutant. Underline indicates the G418 part |
| 14     | G_CpDmnt2-R | TGCGACGCGGCGGATCTCGTAGGACCGTACCTCA | Construction of CpDmnt2-null mutant. Underline indicates the G418 part |