| #↓ | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | A | G | **A*** | T* | C | C | A | **A** | S | **T** | T | G | G | A* | **T*** | C | T |
| 2 | A | G | **A*** | T* | C | C | A | **C** | S | **G** | T | G | G | A* | **T*** | C | T |
| 6 | A | G | **C** | T | C | C | A | **C** | S | **G** | T | G | G | A | **G** | C | T |
| 7 | A | G | **C** | T | C | C | A | **G** | S | **C** | T | G | G | A | **G** | C | T |
| 9 | A | G | **G** | T | C | C | A | **A** | S | **T** | T | G | G | A | **C** | C | T |
| 10 | A | G | **G** | T | C | C | A | **C** | S | **G** | T | G | G | A | **C** | C | T |
| 11 | A | G | **G** | T | C | C | A | **G** | S | **C** | T | G | G | A | **C** | C | T |
| 13 | A | G | **T** | T | C | C | A | **A** | S | **T** | T | G | G | A | **A** | C | T |
| 14 | A | G | **T** | T | C | C | A | **C** | S | **G** | T | G | G | A | **A** | C | T |

Table S1. Operator Sequences used in interference selection. Positions of interest for the work presented here are 5,10,12,17 and are shown in bold. Position 11 is 'S', where S = (G or C). The wild-type operator is shown here as operator #10. In the wild-type interaction, His 6 has been shown to hydrogen bond with the guanines at operator positions 5 and 17. Arg 2 has been shown to interact with the guanines at operator positions 10 and 12. A* and T* indicate that the A's of those base-pairs are methylated by *dam* methylase.

| | Codons | | Residues | |
|---|---|---|---|---|
| #↓ | 2 | 6 | 2 | 6 |
| 1 | AGG | CAT | Arg | His |
| 2 | AGG | CAT | Arg | His |
| 3 | AGG | CAT | Arg | His |
| 4 | CGC | CAT | Arg | His |
| 5 | AGG | CAC | Arg | His |
| 6 | CGT | AGC | Arg | Ser |
| 7 | AGG | CAC | Arg | His |
| 8 | CGC | CAT | Arg | His |
| 9 | AGG | CAT | Arg | His |
| 10 | AGG | CAT | Arg | His |
| 11 | CGC | ACC | Arg | Thr |

Table S2. Selected codons and amino acids using the wild-type operator. Sequence of Mnt positions 2 and 6 from the 11 true positive colonies selected with the wild-type operator.

| | Codons | | Residues | |
|---|---|---|---|---|
| #↓ | 2 | 6 | 2 | 6 |
| 1 | AGA | CCA | Arg | Pro |
| 2 | CGA | CCC | Arg | Pro |
| 3 | CGG | CCT | Arg | Pro |
| 4 | CGA | CCA | Arg | Pro |
| 5 | CGG | CCC | Arg | Pro |
| 6 | AGG | CCA | Arg | Pro |
| 7 | CGT | ACT | Arg | Thr |

Table S3. Selected codons and amino acids using the operator #2 (A at position 5). All codons combinations are different; 5 of the 6 Arg codons are represented, as are 3 of the 4 Pro codons.

| | Codons | | Residues | |
|---|---|---|---|---|
| #↓ | 2 | 6 | 2 | 6 |
| 1 | CGC | TCA | Arg | Ser |
| 2 | CGC | TCG | Arg | Ser |
| 3 | CGG | CCG | Arg | Pro |
| 4 | CGC | ATG | Arg | Met |
| 5 | CGC | ATT | Arg | Ile |
| 6 | CGC | GTT | Arg | Val |
| 7 | CGC | ATC | Arg | Ile |
| 8 | CGC | GTT | Arg | Val |
| 9 | CGG | CCC | Arg | Pro |
| 10 | CGG | GCA | Arg | Ala |
| 11 | CGC | GGA | Arg | Gly |
| 12 | AGG | CCA | Arg | Pro |

Table S4. Selected codons and amino acids using the operator #14 (T at position 5). 11 od the 12 codon combinations are unique.