**Supplementary File 6**

**A: Plasmids used in this study**

|  |  |  |
| --- | --- | --- |
| PLASMIDS | NAME IN THE PAPER | EXPRESSION OF |
| pYES2 | **EV** | **N/A** |
| pYES2-DNMT3b | **DNMT3b** | **MmDNMT3b** |

**B: Yeast strains used in this study**

|  |  |  |
| --- | --- | --- |
| PLASMIDS | GENETIC BACKGROUND | GENOTYPE |
| W303 | W303 | MATa, leu2-3,112 trp1-1 can1-100 ura3-1 ade2-1 his3-11,15 |
| BY4741 | BY4741 | MATa, his3Δ1, leu2Δ0, met15Δ0, ura3Δ0 |
| *set1*Δ (KLY170) | BY4741 | MATa, his3Δ1, leu2Δ0, met15Δ0, ura3Δ0, set1::KAN |
| *set2*Δ (KLY156) | BY4741 | MATa, his3Δ1, leu2Δ0, met15Δ0, ura3Δ0, set2::HIS3 |
| *dot1*Δ | W303 | MATa, leu2-3,112 trp1-1 can1-100 ura3-1 ade2-1 his3-11,15, dot1::KAN |

**C: Oligonucleotides used in this study**

|  |  |  |  |
| --- | --- | --- | --- |
| NAME | TARGET | SEQUENCE | NOTES |
| 3b\_Fw | DNMT3b | TAAATATAAA AAGCTT C GGT CCG GCC TCA CGA CAG GAA ACA AT | Used to amplify pCR-BLUNT II-TOPO DNMT3b |
| 3b\_Rev | DNMT3b | AATTATTTTA GGATC CGG ACC GTCCCCAGTCCTGGGTAGAAC |
| Dot1\_UP45 | KanMX | CACCAGTAATTGTGCGCTTTGGTTACATTTTGTTGTACAGTAATGATAACTTCGTATAATGTATGC | Used to amplify kanMX cassette with loxP flanking sequences for PCR-based gene disruption |
| Dot1\_DOWN45 | KanMX | CTTAGTTATTCATACTCATCGTTAAAAGCCGTTCAAAGTGCCTCATGATAACTTCGTATAGCATAC |
| yTDH1\_qFw | TDH1 | TGCTGCTAAGGCTGTCGGTA | qPCR primers |
| yTDH1\_qRev | TDH1 | CAACGGCATCTTCGGTGTAA |
| mDNMT3b\_qFw | DNMT3b | CTGTGGAGTTTCCGGCTACC | qPCR primers |
| mDNMT3b\_qRev | DNMT3b | TGCTCTCTGCATCCACCTGT |

**D: Antibodies used in this study**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TARGET | SUPPLIER | CATALOG # | LOT # | USED FOR ChIP (μl) |
| RNA pol II | Covance | MMS-126R-200 | D13HF02305 | 2.5 |
| H3K4me1 | Abcam | ab8895 | GR149140-1 | 2.5 |
| H3K4me3 | Active Motif | 39159 | 12613005 | 3 |
| H3K36me3 | Abcam | ab9050 | GR114293-1 | 4 |
| DNMT3b | Abcam | ab2851 | GR101720-2 | 3 |