Supplementary Table 1: List of antibodies and primers used in this study.

ChIP and hMeDIP Antibodies

H3K4me2	Millipore, 05-1338
H3K27me3	Upstate, 07-449
H3K27Ac	Abcam, ab4729
5hmC	Diagenode, CS-HMC-100
Meis1	Abcam, ab19867
Tet1	Millipore, 09-872

RT-qPCR primers

RSP28 forward	CGATCCATCATCCGCAATG
RSP28 reverse	AGCCAAGCTCAGCGCAAC
TET1 forward	GAGCCTGTTCCTCGATGTGG
TET1 reverse	CAAACCCACCTGAGGCTGTT
TET2 forward	GTTGTTGTCAGGGTGAGAATC
TET2 reverse	TCTTGCTTCTGGCAAACTTACA
TET3 forward	CCGGATTGAGAAGGTCATCTAC
TET3 reverse	AAGATAACAATCACGGCGTTCT

ChIP/hmedip-qPCR primers

Hus1 promoter forward	GGGGGAACCTTTGTCCTG
Hus1 promoter reverse	ACAAAAGTCCCTCCCTGAGC
Negative control forward	ACCTCAGCAGAAGGAAGCAA
Negative control reverse	GCTGGGATCTCTATGCCTCA
R1 forward	AGAGCGAACCGAGAAATCAA
R1 reverse	AGAGCCTCTATTTGCCACGA
R2 forward	GACCTGAGCGCACAGTAACA
R2 reverse	ATGAAGCTGCCTTTTGAGGA
R3 forward	CCGCATTATGAACACACTCG
R3 reverse	GCTCTCCCAGGGGTAATAGG
R4 forward	ACATTCCCCAGACAAGCAAG
R4 reverse	CACTGACTGTCATCCCCTCA
R5 forward	CCGAGTGTTCCTCCACCTAA
R5 reverse	ATTTGCATACAGGCGGAGTC
ad_371 forward	CGACCATCAGCTCAGAACCT
ad_371 reverse	TCCTGCTCCCTAAGGATTCAT
mac_1334 forward	AGTCCTCCATCCCATTTCCT
mac_1334 reverse	GAAACAGCCAGAGCACTTCC
ad_5693 forward	GTAAGGGGGTGGCCTGATAG
ad_5693 reverse	ATTCCCTTCTCCCACCAAGT
ad_6850 forward	TGTGCAAGACTGGGAAACAC
ad_6850 reverse	AGCTTCAGGACTGTGTGCAA
ad_11983 forward	AGACCCTGGGGCTAAAGAAA
ad_11983 reverse	CCTGACTCGAACTCCCTCAA
CD36_E2 forward	GCAGGAAGGGAGTGACACAT
CD36_E2 reverse	ATTGCACAAGGCACACAAAG
NR5A2pro_CGI forward	GCAGGCCTGGCATATTTTAT
NR5A2pro_CGI reverse	GGAGAAGACCGGAGGAGAAC

Recombination cloning primers

R1 forward	ATTAAAAGGAATTCCTGCAGCAAGCCTAGGTTGCTTGACC
R1 reverse	GCTCTTCTCCACTAGTGGACCTTCAGGCACATTGAT

| R2 forward | ATTAAAAGGAATTCCTGCAGCTGGGAGGGTTGATAAAGCA |
| R2 reverse | GCTCTTCTCCACTAGTAACAGATGCACATGGAAGAGA |

Ligation cloning primers

R3 forward	AACTGCAGTGCCTTCCAGACCAAAATTC
R3 reverse	GACTAGTACCGACCCTCAAAAATAGGC
R4 forward	AACTGCAGTTGAGGCTACTTCTGGCACA
R4 reverse	GACTAGTGCCTCTGCCACTGTTTCTG
R5 forward	AACTGCAGATAAACATGAGGCCCGTGAG
R5 reverse	GACTAGTGGTTGATTGCCAGCTTTGTT