



The absence of methylated H3-K4 is correlated to a defect in the induction of middle meiotic genes. Expression level of key genes (IME1, NDT80 and SPO20) at 0, 4, 8 and 10 hours after induction of sporulation in wild-type, $set1\Delta$, $swd3\Delta$, and $set1\Delta NHCC$ strains. Arbitrary units.

0 4 8 10

4 8 10 ∆swd3

0 4

0 4 8 10

0

0 4 8 10 WT

Wild-type, $set 1\Delta$, $swd 3\Delta$ and $set 1\Delta NHCC$ strains (DBY745 background) were used for the meiotic time course experiment. Samples were taken as the time 0 h from the presporulation culture then at 4, 8, and 10 hours after transfer into sporulation medium. For RNA extraction, one OD unit of cells were harvested, washed with DEPC-treated H2O and immediately frozen in liquid nitrogen. mRNA were extracted with µMACS mRNA Isolation Kit (Miltenyi Biotec) following the manufacturer's protocol. cDNA synthesis were performed using the Advantage RT-for-PCR Kit (Clontech). Analysis of meiotic gene expression (IME1, NDT80 and SPO20) was monitored using quantitative PCR with Roche Light Cycler. The quantity of cDNA was normalized to that of the gene ACT1.