

Supplementary Figure S1. Dormant origins located in and near the silenced locus HML are activated upon 3-7-45 expression.

SGal - Ura

GALp: OFF

8

SC + 5-FOA

D

Wt ∆swe1

∆mih1

SC - Ura

SGal + 5-FOA

SGal + 5-FOA

GALp: ON

A. Replication profile of the left end of Chromosome III in cells harboring the GALp vector (YST1038) or GALp-SLD3-SLD7-CDC45 (YST1054). For details, see (TANAKA et al. 2011). B. YST1054 cells harboring GALp-SLD3-SLD7-CDC45 were arrested in G1 and synchronously released into HU-containing media after induction of genes by addition of galactose (ON). Chromosomal DNA was isolated, separated using alkaline gels, and detected with ARS305- and ARS302-320-specific probes. C. HML ::URA3 (UCC3515) and HML!::URA3 cells harboring GALp vector (YST1788), GALp-3-7-45 (YST1790), GALp-3-7 (YST1882), GALp-3-45 (YST1878), GALp-3-45^{JET1} (YST1880), GALp-7-45 (YST1884), or Δsir1 (YST1861) were serially diluted, spotted on the indicated plates, and grown at 30°C. **D.** HML!::URA3 harboring GALp-3-7-45 (wt, YST1790), its Δswe1 and Δmih1 derivatives (YST1896 and YST1898, respectively), and HML!::URA3 Δsir1 (YST1861) cells were serially diluted, spotted on the indicated plates, and grown at 30°C. E. The cells used in D were grown in YPA-galactose, and their DNA contents were analyzed by flow cytometry.