

Table S1. Strains used in this study

| Strain | Genotype | Source |
|----------------------------|---|-------------|
| JSP303 | <i>h⁺ leu1-32 his3-D1</i> | C. Hoffman |
| JSP303-Y4 (<i>myh1</i> Δ) | <i>h⁺ myh1::his3⁺ leu1-32 his3-D1</i> | A-L. Lu |
| Hu303 | <i>h⁻</i> | K. Ekwall |
| Hu1481 | <i>h⁻ hst4Δ::KanMX6</i> | K. Ekwall |
| Hu802 | <i>h⁻ clr6-1</i> | K. Ekwall |
| Hu1098 | <i>h⁻ sir2Δ::KanMX6</i> | K. Ekwall |
| Hu1500 | <i>h⁻ leu1-32 ura4-D18 ade6-M210 hst4⁺-6XMYC::KanMX</i> | This work |
| Hst4-MYC <i>myh1</i> Δ | <i>h⁻ myh1:: his3⁺ leu1-32 ura4-D18 ade6-M210 hst4⁺-6XMYC::KanMX</i> | This work |
| FY526 | <i>h⁺ his3-D1 ade6-M216 leu1-32 ura4-D18</i> | S. Forsburg |
| Hus1-MYC | <i>h⁻ leu1-32 ura4-D18 ade6-706 hus1-MYC</i> | A. Carr |
| Hus1-MYC <i>myh1</i> Δ | <i>h⁻ myh1::LEU2 leu1-32 ura4-D18 ade6-706 hus1-MYC</i> | This work |