

Supplementary Information

Supplementary Figure legends:

Supplementary Figure S1: Analysis of *GAL10* antisense transcription in the *esa1-ts* mutant and wild type strains. **(A)** RT-PCR analysis. *GAL10* antisense transcript level with respect to *ACT1* in the *esa1-ts* mutant strain. **(B)** Real-time PCR analysis of *GAL10* antisense transcript level with respect to *ACT1*. Real-time PCR analysis was performed in the Davie laboratory (Judith K. Davie; Southern Illinois University). **(C)** Amplification of genomic DNA using PCR primer pairs targeted to the *GAL7* coding sequence (Region N in Figure 1A) and *GAL1* core promoter (Region P in Figure 1A). **(D)** PCR analysis of cDNA of Figure 1B, using primer pair targeted to the region P (i.e., *GAL1* core promoter; Figure 1A).

Supplementary Figure 2: Dilution factor analysis of DNA samples for PCR. **(A and B)** PCR analysis of the DNA samples of Figure 2A at various dilutions using the primer pair targeted to 18S rDNA. Maximum ChIP signal was set to 100. Other ChIP signals relative to maximum ChIP signal were plotted in the form of a histogram in panel B.

Supplementary Tables:

Supplementary Table 1: List of strains used in this study.

Strain	Genotype	References
LPY3498	<i>MAT a his3Δ200 leu2-3,112 trp1Δ1 ura3-52 ESA1</i>	Clarke et al (1).
LPY3291	<i>MAT a his3Δ200 leu2-3,112 trp1Δ1 ura3-52 esa1Δ::HIS3 esa1-414</i>	Clarke et al (1).
FY406	<i>MATa hta1-htb1Δ::LEU2 hta2-htb2Δ::TRP1 leu2Δ1 ura3-52 trp1Δ63 his3Δ200 pJH23 (FB1251) HIS3 AMP CEN HTA1 FLAG-HTB2</i>	Schwabish and Struhl (3)
MSY143	<i>MATa hta1-htb1Δ::LEU2 hta2-htb2Δ::TRP1 leu2Δ1 ura3-52 trp1Δ63 his3Δ200 swi2Δ::KanMX pJH23 (FB1251) HIS3 AMP CEN HTA1 FLAG-HTB2</i>	Schwabish and Struhl (2, 3)
FM392	<i>MATα hisΔ1 leu2Δ0 met15Δ0 ura3Δ0</i>	Research Genetics
STY1	<i>MATα hisΔ1 leu2Δ0 met15Δ0 ura3Δ0 Cps60-TAP</i>	Lee et al (4)
STY2	<i>MATα hisΔ1 leu2Δ0 met15Δ0 ura3Δ0 rad6Δ Cps60-TAP</i>	Lee et al (4)
DY7014	<i>MATa ura3-1 leu2-3,-112 his3-11,-15 trp1-1 ade2-1 can1-100 paf1Δ::URA3</i>	Biswas et al (5)
W303a	<i>MATa ura3-1 leu2-3,-112 his3-11,-15 trp1-1 ade2-1 can1-100</i>	Thomas and Rothstein (6)
FY67	<i>MATa trp1Δ63</i>	Roberts and Winston (7)
FY1097	<i>MATa trp1Δ63 spt20Δ100::URA3 ura3-52</i>	Roberts and Winston (7)
YKH045	<i>MATa htb1-1 htb2-1 leu2-3,-112 his3-11,-15 trp1-1 ura3-1 ade2-1 can1-100 GAPDH::HA-UB14::URA3 <pRS314-Flag-HTB1></i>	Henry et al (8)
BY4741	<i>MATa his3Δ1 leu2Δ0 met15Δ0 ura3Δ0</i>	Open Biosystems
Δset3	<i>MATa his3Δ1 leu2Δ0 met15Δ0 ura3Δ0 set3Δ::KanMX</i>	Open Biosystems
Δrpd3	<i>MATa his3Δ1 leu2Δ0 met15Δ0 ura3Δ0 rpd3Δ::KanMX</i>	Open Biosystems
ASY16	<i>MATa ura3-1 leu2-3,-112 his3-11,-15 trp1-1 ade2-1 can1-100 set1Δ::URA3</i>	Shukla et al (9)
ZDY2	<i>MATa ura3-1 leu2-3,-112 his3-11,-15 trp1-1 ade2-1 can1-100 RAD26-Myc (KanMX)</i>	Malik et al (10, 11)

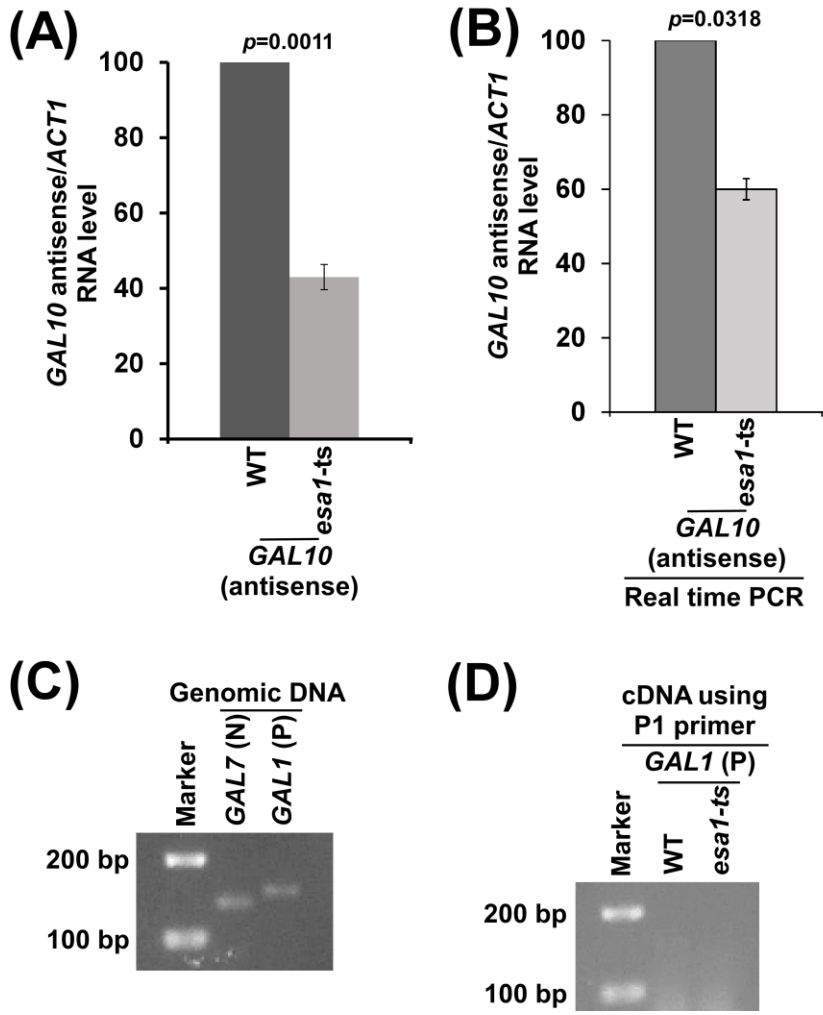
SLY7	<i>MATa ura3-1 leu2-3,-112 his3-11,-15 trp1-1 ade2-1 can1-100 set2Δ::URA3 RAD26-Myc (KanMX)</i>	Malik et al (11)
PSY2	<i>MATa ura3-1 leu2-3,-112 his3-11,-15 trp1-1 ade2-1 can1-100 RAD6-Myc (KanMX)</i>	Bhaumik lab
PSY4	<i>MATa ura3-1 leu2-3,-112 his3-11,-15 trp1-1 ade2-1 can1-100 SET1-Myc (KanMX)</i>	Bhaumik lab
Sc599	<i>MATα ade2-1 ura3-1 his3-11 trp1-1 leu2-3,-112 can1-100</i>	Russel et al (12)
BUY12	<i>MATα ade2-1 ura3-1 his3-11 trp1-1 leu2-3,-112 can1-100 ESA1-Myc (KanMx)</i>	Uprety et al (13)
BUY24	<i>MATa ura3-1 leu2-3,-112 his3-11,-15 trp1-1 ade2-1 can1-100 eaf1Δ::HIS3</i>	Uprety et al (14)
Jon538	<i>MATa ura3-52 trp1-Δ63 his3-Δ200 Leu2::PET56</i>	Houseley et al (15)
Jon811	<i>MATa ura3-52 trp1-Δ63 his3-Δ200 Leu2::PET56 GAL10 reb1Δbs</i>	Houseley et al (15)
BUY45	<i>MATa ura3-52 trp1-Δ63 his3-Δ200 Leu2::PET56 ESA1-Myc (KanMX)</i>	This study
BUY46	<i>MATa ura3-52 trp1-Δ63 his3-Δ200 Leu2::PET56 GAL10 reb1Δbs ESA1-Myc (KanMX)</i>	This study
BUY57	<i>MATa htb1-1 htb2-1 leu2-3,-112 his3-11,-15 trp1-1 ura3-1 ade2-1 can1-100 GAPDH::HA-UB14::URA3 <pRS314-Flag-HTB1> bre1Δ500::HIS3</i>	This study
RSY69	<i>MATa ura3-1 leu2-3,-112 his3-11,-15 trp1-1 ade2-1 can1-100 eaf1Δ::HIS3 EAF5-Myc (KanMX)</i>	Uprety et al (14)
RSY70	<i>MATa ura3-1 leu2-3,-112 his3-11,-15 trp1-1 ade2-1 can1-100 EAF5-Myc (KanMX)</i>	Uprety et al (14)

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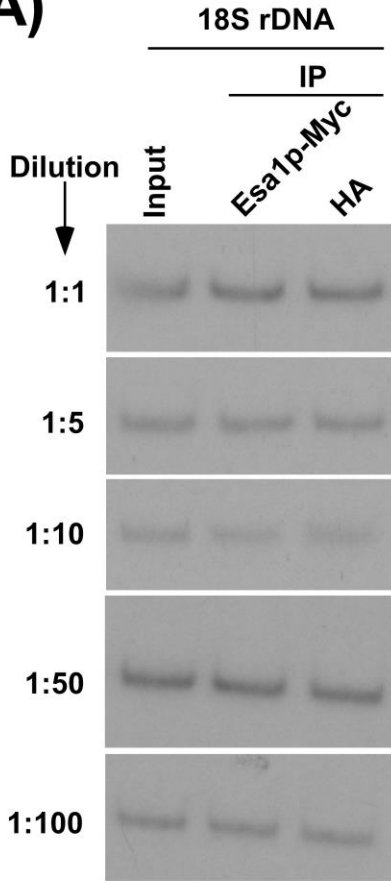
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Supplementary Figure S1:



Supplementary Figure S2:

(A)



(B)

