

Table S1 Yeast strains used in this study

Strain	Genotype	Source
LPY5 (W303-1a)	<i>MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1</i>	R. Rothstein
LPY1597	W303 <i>MATa sas2Δ::TRP1</i>	
LPY2444	<i>MATα his3Δ200 leu2Δ1 ura3-52</i> with rDNA Ty mURA insert	J.S. Smith
LPY2447	<i>MATα his3Δ200 leu2Δ1 ura3-52</i> with rDNA Ty mURA insert <i>sir2Δ2::HIS3</i>	J.S. Smith
LPY4196	LPY5 + pLP60	
LPY4924	W303 <i>MATa hmr::TRP1 TELVR::URA3</i>	
LPY5035	W303 <i>MATa sir2Δ::HIS3 hmr::TRP1 TELVR::URA3</i>	
LPY5526	W303 <i>MATa yng1Δ::HIS3 rDNA::ADE2-CAN1 TELVR::URA3</i>	
LPY6285	W303 <i>MATα rDNA::ADE2-CAN1 TELVR::URA3</i>	K. Runge
LPY6439	W303 <i>MATα ada2Δ::kanMX</i>	R. Rothstein
LPY8242	W303 <i>MATα gcn5Δ::HIS3</i>	
LPY8256	W303 <i>MATα sas3Δ::HIS3</i>	
LPY9820	W303 <i>MATα gas1Δ::kanMX rDNA::ADE2-CAN1 TELVR::URA3</i>	
LPY10047	W303 <i>MATα rDNA::ADE2-CAN1 hmr::TRP1 gas2Δ::kanMX</i>	
LPY10051	W303 <i>MATα rDNA::ADE2-CAN1 hmr::TRP1 gas3Δ::kanMX</i>	
LPY10074	<i>MATα his3Δ200 leu2Δ1 ura3-52</i> with rDNA Ty mURA insert <i>gas1Δ::kanMX</i>	
LPY10129	<i>MATa ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 gas1Δ::kanMX</i>	
LPY10266	W303 <i>MATα rDNA::CAN:ADE2</i> + pLP1823	
LPY10267	W303 <i>MATα orc2-1 rDNA::CAN:ADE2</i> + pLP1823	
LPY10270	W303 <i>MATα gas1Δ::kanMX orc2-1 rDNA::CAN:ADE2</i> + pLP1823	
LPY10271	W303 <i>MATα gas1Δ::kanMX orc2-1 rDNA::CAN:ADE2</i> + pLP1823	
LPY11544	W303 <i>MATα gas3Δ::kanMX rDNA::CAN:ADE2 hmr::TRP1</i>	
LPY12232	W303 <i>MATα hht1-hhf1Δ::kanMX hht2-hhf2Δ::kanMX hta2-htb2Δ::HPH</i> + pJH33	M.M. Smith
LPY12247	LPY10129 + pLP135	
LPY12251	LPY10129 + pLP2114	
LPY12264	W303 <i>MATα rDNA::CAN:ADE2 hmr::TRP1 gcn5Δ::NatMX</i>	
LPY12326	LPY10129 + pLP1951	
LPY13102	W303 <i>MATα rDNA::CAN:ADE2 hmr::TRP1 bgl2Δ::kanMX</i>	
LPY14355	W303 <i>MATα rpd3Δ::kanMX</i> + pLP60	
LPY15695	W303 <i>MATα gas1Δ::kanMX rpd3Δ::kanMX</i> + pLP60 + pLP1823	
LPY16039	W303 <i>MATα sas3Δ::HIS3</i>	
LPY16104	W303 <i>MATα swr1Δ::kanMX</i>	
LPY16432	W303 <i>MATα hht1-hhf1Δ::kanMX hht2-hhf2Δ::kanMX hta2-htb2Δ::HPH sas3Δ::HIS3</i> + pJH33	
LPY16444	W303 <i>MATα sas3Δ::HIS3 hmr::TRP1 TELVR::URA3</i>	
LPY16736	W303 <i>MATα gas1Δ::kanMX gcn5Δ::HIS3</i> + pLP1640	
LPY16798	W303 <i>MATα gas1Δ::kanMX gcn5Δ::HIS3</i> + pLP 1640 + pLP 135	
LPY16800	W303 <i>MATα gas1Δ::kanMX gcn5Δ::HIS3</i> + pLP 1640 + pLP 1950	

LPY16801	W303 <i>MATa gas1Δ::kanMX gcn5Δ::HIS3</i> + pLP 1640 + pLP 2114	
LPY16914	W303 <i>MATa spt20Δ::HIS3</i>	D. Stillman
LPY16997	W303 <i>MATa gas1Δ::kanMX yng1Δ::HIS3 rDNA::ADE2-CAN1 TELVR::URA3</i>	
LPY17161	W303 <i>MATa swr1Δ::kanMX gas1Δ::kanMX TELVR::URA3</i>	
LPY17370	W303 <i>MATa ahc1Δ::kanMX</i>	
LPY17685	<i>MATa his3Δ200 leu2Δ1 ura3-52</i> with rDNA Ty mURA insert <i>gas1Δ::kanMX sas3Δ::HIS3</i>	
LPY18050	LPY5 + pLP 135	
LPY18081	LPY10129 + pLP 135	
LPY18206	W303 <i>MATa rtg2Δ::kanMX</i>	
LPY18343	W303 <i>MATa hht1-hhf1Δ::kanMX hht2-hhf2Δ::kanMX hta2-htb2Δ::HPH gas1Δ::kanMX</i> + pJH33	
LPY18372	W303 <i>MATa gas1Δ::kanMX rtg2Δ::kanMX</i>	
LPY18518	W303 <i>MATa ahc2Δ::kanMX</i>	
LPY19101	W303 <i>MATa gas1Δ::kanMX gcn5Δ::HIS3 sas3Δ::HIS3</i> + pLP 1640	
LPY19200	LPY10129 + plp60	
LPY19272	W303 <i>MATa gas1Δ::kanMX ada2Δ::kanMX</i>	
LPY19414	W303 <i>MATa gas1Δ::kanMX ahc2Δ::kanMX</i>	
LPY19467	W303 <i>MATa gas1Δ::kanMX ahc1Δ::kanMX</i>	
LPY19630	W303 <i>MATa gas1Δ::kanMX spt20Δ::HIS3</i>	
LPY19670	W303 <i>MATa gas1Δ::kanMX sas2Δ::HIS3</i>	
LPY19731	W303 <i>MATa sas3Δ::HIS3 hmr::TRP1 TELVR::URA3</i>	
LPY19771	W303 <i>MATa gas1Δ::kanMX sgf73Δ::URA3</i>	
LPY19773	W303 <i>MATa gas1Δ::kanMX hmr::TRP1 TELVR::URA3</i>	
LPY19816	W303 <i>MATa sgf73Δ::URA3</i>	
LPY19823	W303 <i>MATa gas1Δ::kanMX sas3Δ::HIS3</i>	
LPY19878	W303 <i>MATa hht1-hhf1Δ::kanMX hht2-hhf2Δ::kanMX hta2-htb2Δ::HPH sas3Δ::HIS3 gas1Δ::kanMX</i> + pJH33	

All strains were constructed during the course of this study or are part of our standard lab collection unless otherwise indicated.

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