Table S5. (A) Yeast strains used in this study.

Strain	Plasmid	Strain background
SHY627	none	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1*
YHY8	pYH1	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δspt3::HPH*
YHY28	pRS316	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δsgf73::KanMX*
YHY29	pYH28	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δsgf73::KanMX*
YHY30	pYH31	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δsgf73::KanMX*
YHY31	pYH32	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δsgf73::KanMX*
YHY32	pYH33	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δsgf73::KanMX*
YHY33	pRS316	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δada2::KanMX*
YHY37	pRS316	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δada3::KanMX*
YHY38	pYH30	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δada3::KanMX*
YHY39	pYH36	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δada3::KanMX*
YHY40	pYH37	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δada3::KanMX*
YHY41	pYH38	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δada3::KanMX*
YHY52	pRS316	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Sgf73-3HA::His3MX6, Δada2::KanMX*
YHY56	pRS316	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Sgf73-3HA::His3MX6, Δada3::KanMX*
YHY57	pYH30	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15*

		Δ0, trp1 Δ63, ura3 Δ0, Sgf73-3HA::His3MX6, Δada3::KanMX
YHY58	pYH36	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Sgf73-3HA::His3MX6, Δada3::KanMX*
YHY59	pYH37	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Sgf73-3HA::His3MX6, Δada3::KanMX*
YHY60	pYH38	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Sgf73-3HA::His3MX6, Δada3::KanMX*
YHY62	pYH39	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δsgf73::KanMX*
YHY63	pYH40	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δsgf73::KanMX*
YHY66	pYH41	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δada3::KanMX*
YHY67	pYH42	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δada3::KanMX*
YHY68	pYH41	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Sgf73-3HA::His3MX6, Δada3::KanMX*
YHY69	pYH42	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Sgf73-3HA::His3MX6, Δada3::KanMX*
YHY71	pRS316	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Ubp8-3HA::His3MX6, Δsgf73::KanMX*
YHY72	pYH28	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Ubp8-3HA::His3MX6, Δsgf73::KanMX*
YHY73	pYH31	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Ubp8-3HA::His3MX6, Δsgf73::KanMX*
YHY74	pYH32	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Ubp8-3HA::His3MX6, Δsgf73::KanMX*
YHY75	pYH39	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Ubp8-3HA::His3MX6, Δsgf73::KanMX*
YHY76	pYH40	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Ubp8-3HA::His3MX6, Δsgf73::KanMX*

YHY77	pYH33	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Ubp8-3HA::His3MX6, Δsgf73::KanMX*
YHY78	pYH57	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Sgf73-3HA::His3MX6, Δada2::KanMX*
YHY79	pYH58	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Sgf73-3HA::His3MX6, Δada2::KanMX*
YHY80	pYH59	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Sgf73-3HA::His3MX6, Δada2::KanMX*
YHY81	pYH57	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δada2::KanMX*
YHY82	pYH58	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δada2::KanMX*
YHY83	pYH59	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δada2::KanMX*
YHY85	pYH67	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, SPT7-(Flag1)-TAP::TRP1, Δsgf73::KanMX*
YHY86	pYH67	*mata, Δade2::hisG, his3 Δ200, leu2 Δ0, lys2 Δ0, met15 Δ0, trp1 Δ63, ura3 Δ0, Ubp8-3HA::His3MX6, Δsgf73::KanMX*

Table S5. (B) Plasmids used in this study.

Plasmid name	Insert
pYH1	Spt3 ORF with E240K (401), 608bp promoter sequence, 726bp of sequence past stop codon
pYH28	Sgf73 ORF with 3xFlag on C-terminus, 500bp promoter sequence, 100bp of sequence past stop codon
pYH30	Ada3 ORF with 3xFlag on C-terminus, 500bp promoter sequence, 106bp of sequence past stop codon
pYH31	Sgf73 ORF Δ residues 196-314 with 3xFlag on C-terminus, 500bp promoter sequence, 100bp of sequence past stop codon
pYH32	Sgf73 ORF Δ residues 350-479 with 3xFlag on C-terminus, 500bp promoter sequence, 100bp of sequence past stop codon
pYH33	Sgf73 ORF Δ residues 535-575 with 3xFlag on C-terminus, 500bp promoter sequence, 100bp of sequence past stop

	codon
pYH36	Ada3 ORF Δ residues 334-425 with 3xFlag on C-terminus, 500bp promoter sequence, 106bp of sequence past stop codon
pYH37	Ada3 ORF Δ residues 483-616 with 3xFlag on C-terminus, 500bp promoter sequence, 106bp of sequence past stop codon
pYH38	Ada3 ORF Δ residues 640-697 with 3xFlag on C-terminus, 500bp promoter sequence, 106bp of sequence past stop codon
pYH39	Sgf73 ORF Δ residues 350-400 with 3xFlag on C-terminus, 500bp promoter sequence, 100bp of sequence past stop codon
pYH40	Sgf73 ORF Δ residues 401-479 with 3xFlag on C-terminus, 500bp promoter sequence, 100bp of sequence past stop codon
pYH41	Ada3 ORF Δ residues 483-534 with 3xFlag on C-terminus, 500bp promoter sequence, 106bp of sequence past stop codon
pYH42	Ada3 ORF Δ residues 535-616 with 3xFlag on C-terminus, 500bp promoter sequence, 106bp of sequence past stop codon
pYH57	Ada2 ORF with 3xFlag on N-terminus, 491bp promoter sequence, 100bp of sequence past stop codon
pYH58	Ada2 ORF Δ residues 232-317 with 3xFlag on N-terminus, 491bp promoter sequence, 100bp of sequence past stop codon
pYH59	Ada2 ORF Δ residues 353-434 with 3xFlag on N-terminus, 491bp promoter sequence, 100bp of sequence past stop codon
pYH67	Sgf73 ORF Δ residues 2-104 with 3xFlag on C-terminus, 500bp promoter sequence, 100bp of sequence past stop codon