

Supplementary Table S1. Yeast Strains

Strain	Genotype
YIO002	<i>MATa scc4Δ::HIS3 scc4-4::LEU2 SCC3-18MYC::TRP1 SMC1-6HA::HIS3 pep4Δ::LEU2 ade2</i>
YMS1004	<i>MATa scc4Δ::HIS3 scc4-4::LEU2 SCC3-18MYC::TRP1 SMC1-6HA::HIS3 pep4Δ::LEU2 ade2 ura3::SCC4-3V5:URA3</i>
YMS1005	<i>MATa scc4Δ::HIS3 scc4-4::LEU2 SCC3-18MYC::TRP1 SMC1-6HA::HIS3 pep4Δ::LEU2 ade2 ura3::scc4-L490ins-3V5:URA3</i>
YMS1006	<i>MATa scc4Δ::HIS3 scc4-4::LEU2 SCC3-18MYC::TRP1 SMC1-6HA::HIS3 pep4Δ::LEU2 ade2 ura3::scc4-L305ins-3V5:URA3</i>
YMS1007	<i>MATa scc4Δ::HIS3 scc4-4::LEU2 SCC3-18MYC::TRP1 SMC1-6HA::HIS3 pep4Δ::LEU2 ade2 ura3::scc4-V485ins-3V5:URA3</i>
YMS1008	<i>MATa scc4Δ::HIS3 scc4-4::LEU2 SCC3-18MYC::TRP1 SMC1-6HA::HIS3 pep4Δ::LEU2 ade2 ura3::scc4-S505ins-3V5:URA3</i>
YMS1010	<i>MATa trp1-1 leu2-3,112 ura3-52 his3-11,15 GAL+scc4-4 cloNAT lys4::LacO GFP-LacI-HIS3</i>
YMS1011	<i>MATa trp1-1 leu2-3,112 ura3-52 his3-11,15 GAL+ scc4-4 cloNAT lys4::LacO GFP-LacI-HIS3 SCC4-3V5 URA3</i>
YMS1012	<i>MATa trp1-1 leu2-3,112 ura3-52 his3-11,15 GAL+ scc4-4 cloNAT lys4::LacO GFP-LacI-HIS3 ura3::scc4-L490ins-3V5:URA3</i>
YMS1013	<i>MATa trp1-1 leu2-3,112 ura3-52 his3-11,15 GAL+scc4-4 cloNAT lys4::LacO GFP-LacI-HIS3 ura3::scc4-L305ins-3V5:URA3</i>
YMS1014	<i>MATa trp1-1 leu2-3,112 ura3-52 his3-11,15 GAL+ scc4ts cloNAT lys4::LacO GFP-LacI-HIS3 ura3::scc4-V485ins-3V5:URA3</i>
YMS1015	<i>MATa trp1-1 leu2-3,112 ura3-52 his3-11,15 GAL+ scc4ts cloNAT lys4::LacO GFP-LacI-HIS3 ura3::scc4-S505ins-3V5:URA3</i>
YMS1003	<i>MATa pep4Δ::g418::TRP1 trp1-1 leu2-3,112 ura3-52 his3-11,15 bar1 GAL+ his3::SCC2-12MYC:HIS3 MX</i>
YMS1016	<i>MATa pep4Δ::g418::TRP1 trp1-1 leu2-3,112 ura3-52 his3-11,15 bar1 GAL+ his3::SCC2-12MYC:HIS3 MX, ura3::SCC4-3V5:URA3</i>
YMS1017	<i>MATa pep4Δ::g418::TRP1 trp1-1 leu2-3,112 ura3-52 his3-11,15 bar1 GAL+ his3::SCC2-12MYC:HIS3 MX, ura3::scc4-L305ins-3V5:URA3</i>

Strain	Genotype
YMS1018	<i>MATa pep4Δ::g418::TRP1 trp1-1 leu2-3,112 ura3-52 his3-11,15 bar1 GAL+ his3::SCC2-12MYC:HIS3 MX, ura3::scc4-V485ins-3V5:URA3</i>
YMS1019	<i>MATa pep4Δ::g418::TRP1 trp1-1 leu2-3,112 ura3-52 his3-11,15 bar1 GAL+ his3::SCC2-12MYC:HIS3 MX, ura3::scc4-L490ins-3V5:URA3</i>
YMS1020	<i>MATa pep4Δ::g418::TRP1 trp1-1 leu2-3,112 ura3-52 his3-11,15 bar1 GAL+ his3::SCC2-12MYC:HIS3 MX, ura3::scc4-S505ins-3V5:URA3</i>
YMS1021	<i>MATa SCC2-3V5-AID2-G418 TIR1-CaTRP1 LacO(DK)-NAT::lys4 leu2-3,112 GAL+ pHIS3-GFPLacI-HIS3:his3-11,15 bar1 ura3-52 ura3::SCC4-3V5:URA3</i>
YMS1022	<i>MATa SCC2-3V5-AID2-G418 TIR1-CaTRP1 LacO(DK)-NAT::lys4 leu2-3,112 GAL+ pHIS3-GFPLacI-HIS3:his3-11,15 bar1 ura3-52 ura3::SCC4-3V5:URA3, leu2::SMC1-3Flag:LEU2</i>
YMS1023	<i>MATa scc4Δ::HIS3 scc4-4::LEU2 SCC3-18MYC::TRP1 SMC1-6HA::HIS3 pep4Δ::LEU2 ade2 ura3::scc4-L306E-3V5:URA3</i>
YMS1024	<i>MATa scc4Δ::HIS3 scc4-4::LEU2 SCC3-18MYC::TRP1 SMC1-6HA::HIS3 pep4Δ::LEU2 ade2 ura3::scc4-L307E-3V5:URA3</i>
YMS1025	<i>MATa scc4Δ::HIS3 scc4-4::LEU2 SCC3-18MYC::TRP1 SMC1-6HA::HIS3 pep4Δ::LEU2 ade2 ura3::scc4-W490A-3V5:URA3</i>
YMS1026	<i>MATa scc4Δ::HIS3 scc4-4::LEU2 SCC3-18MYC::TRP1 SMC1-6HA::HIS3 pep4Δ::LEU2 ade2 ura3::scc4-L491E-3V5:URA3</i>