

Table S1. Strains used in this study

NAME	GENOTYPE
PM89	<u>MATα leu2-3,112 his4-260,519 lys2ΔNhe thr1-4 ade2-1 ura3-1 trp1-289</u> <u>MATα leu2-3,112 his4-260,519 lys2ΔNhe thr1-4 ade2-1 ura3-1 trp1-289</u>
AM447	PM89 <u>LYS2 ndt80Δ::URA3</u> <u>LYS2 ndt80Δ::URA3</u>
LFT36	PM89 <u>smt3Δ::hphMX4</u> <u>SMT3</u>
LFT46	LFT36 <u>kanMX4-P_{SCC1}-SMT3</u> <u>smt3Δ::hphMX4</u>
LY35	PM89 <u>Zip3-MYC</u> <u>ZIP3</u>
LFT62	LY35 <u>kanMX4-P_{SCC1}-SMT3</u> <u>smt3Δ::hphMX4</u>
AM2712	PM89 <u>ECM11-13MYC::kanMX4 ndt80Δ::URA3</u> <u>ECM11-13MYC::kanMX4 ndt80Δ::URA3</u>
LFT51	PM89 <u>TRP1-P_{GALI}-ZIP1 ura3::P_{GPD1}-GAL4(848).ER::URA3 ndt80Δ::LEU2</u> <u>TRP1-P_{GALI}-ZIP1 URA3 ndt80Δ::LEU2</u>
LFT65	LFT51 <u>kanMX4-P_{SCC1}-SMT3</u> <u>smt3Δ::hphMX4</u>
AM2905	PM89 <u>TRP1-P_{GALI}-V5-SMT3 TRP1-P_{GALI}-ZIP1-GFP ura3::P_{GPD1}-GAL4(848).ER::URA3</u> <u>SMT3 ZIP1 ura3::P_{GPD1}-GAL4(848).ER::URA3</u> <u>ndt80Δ::LEU2</u> <u>ndt80Δ::LEU2</u>
AM2865	PM89 <u>TRP1-P_{GALI}-ECM11-13MYC::kanMX4 TRP1-P_{GALI}-ZIP1-GFP</u> <u>ECM11 ZIP1</u> <u>ura3::P_{GPD1}-GAL4(848).ER::URA3 ndt80Δ::LEU2</u> <u>ura3::P_{GPD1}-GAL4(848).ER::URA3 ndt80Δ::LEU2</u>
AM2910	PM89 <u>TRP1-P_{GALI}-ecm11(K5R, K101R)-13MYC::kanMX4 TRP1-P_{GALI}-ZIP1-GFP</u> <u>ECM11 ZIP1</u> <u>ura3::P_{GPD1}-GAL4(848).ER::URA3 ndt80Δ::LEU2</u> <u>ura3::P_{GPD1}-GAL4(848).ER::URA3 ndt80Δ::LEU2</u>
SB14	PM89 <u>ZIP1-GFP ndt80Δ::LEU2</u> <u>ZIP1-GFP ndt80Δ::LEU2</u>
LFT37	SB14 <u>smt3Δ::hphMX4</u> <u>SMT3</u>
LFT47	SB14 <u>kanMX4-P_{SCC1}-SMT3</u> <u>smt3Δ::hphMX4</u>
LFT80	PM89 <u>pch2 Δ::hphMX4</u> <u>pch2 Δ::hphMX4</u>
LFT85	LFT80 <u>kanMX4-P_{SCC1}-SMT3</u> <u>smt3Δ::natMX4</u>
AM1848	PM89 <u>LYS2 spo11Δ::ADE2 ndt80Δ::LEU2</u> <u>LYS2 spo11Δ::ADE2 ndt80Δ::LEU2</u>
LFT61	AM1848 <u>kanMX4-P_{SCC1}-SMT3</u> <u>smt3Δ::hphMX4</u>
K231	PM89 <u>ECM11-13MYC::kanMX4 ndt80Δ::LEU2</u> <u>ECM11 ndt80Δ::LEU2</u>
K232	PM89 <u>ecm11(K5R, K101R)-13MYC::kanMX4 ura3::P_{GPD1}-GAL4(848).ER::URA3 ndt80Δ::LEU2</u> <u>ECM11 ura3-1 ndt80Δ::LEU2</u>

K172	LFT51 <u>ECM11-13MYC::kanMX4</u> <u>ECM11-13MYC::kanMX4</u>
K163	LFT51 <u>ecm11(K5R, K101R)-13MYC::kanMX4</u> <u>ecm11(K5R, K101R)-13MYC::kanMX4</u>
K263	LFT51 <u>ECM11-13MYC::kanMX4</u> <u>LYS2</u> <u>ECM11</u> <u>LYS2</u>
K235	LFT51 <u>ecm11(K5R, K101R)-13MYC::kanMX4</u> <u>ECM11</u>
K260	K172 <u>kanMX4-P_{SCC1}-SMT3</u> <u>smt3Δ::hphMX4</u>
K262	K163 <u>kanMX4-P_{SCC1}-SMT3</u> <u>smt3Δ::hphMX4</u>
K230	K172 <u>ndt80Δ::LEU2</u> <u>ndt80Δ::LEU2</u>
K259	K230 <u>kanMX4-P_{SCC1}-SMT3</u> <u>smt3Δ::hphMX4</u>
K189	PM89 <u>his4-260,519</u> <u>CEN3</u> <u>RAD18</u> <u>TetO:THR1(@215,000 of IV)</u> <u>LacO-CEN4-LEU2</u> <u>HIS4</u> <u>HYG@CEN3</u> <u>ADE2@RAD18</u> <u>CEN4</u>
K188	K189 <u>kanMX4-P_{SCC1}-SMT3</u> <u>kanMX4-P_{SCC1}-SMT3</u>
K197	K189 <u>smt3Δ::natMX4</u> <u>SMT3</u>
K196	K189 <u>kanMX4-P_{SCC1}-SMT3</u> <u>smt3Δ::natMX4</u>
K167	K189 <u>pch2::TRP1</u> <u>pch2::TRP1</u>
K191	K167 <u>kanMX4-P_{SCC1}-SMT3</u> <u>kanMX4-P_{SCC1}-SMT3</u>
K325	K167 <u>smt3Δ::natMX4</u> <u>SMT3</u>
K198	K189 <u>pch2::TRP1</u> <u>kanMX4-P_{SCC1}-SMT3</u> <u>pch2::TRP1</u> <u>smt3Δ::natMX4</u>
K223	K167 <u>PCH2</u> <u>kanMX4-P_{SCC1}-SMT3</u> <u>PCH2</u> <u>smt3Δ::natMX4</u>
AM2892	PM89 <u>ECM11-13MYC::kanMX4</u> <u>ndt80Δ::LEU2</u> <u>ECM11+</u> <u>ndt80Δ::LEU2</u>
SM170	PM89 <u>TRP1-P_{GAL1}-ZIP1</u> <u>ura3::P_{GPD1}-GAL4(848).ER::URA3</u> <u>ndt80Δ::LEU2</u> <u>ZIP1-YFP</u> <u>URA3</u> <u>ndt80Δ::LEU2</u>
SM176	PM89 <u>ZIP1-YFP</u> <u>ndt80Δ::LEU2</u> <u>ZIP1-YFP</u> <u>ndt80Δ::LEU2</u>
SM224	PM89 <u>ZIP1-YFP</u> <u>2x[ZIP1-YFP]@LEU2</u> <u>ndt80Δ::HYG</u> <u>ZIP1-YFP</u> <u>leu2</u> <u>ndt80Δ::HYG</u>
LFT117	PM89 <u>ZIP1-YFP</u> <u>ECM11-13MYC::kanMX4</u> <u>ndt80Δ::LEU2</u> <u>TRP1-P_{GAL1}-ZIP1</u> <u>ECM11-13MYC::kanMX4</u> <u>ndt80Δ::LEU2</u>
LFT119	PM89 <u>ZIP1-YFP</u> <u>2x[ZIP1-YFP]@LEU2</u> <u>ECM11-13MYC::kanMX4</u> <u>ndt80Δ::HYG</u> <u>ZIP1-YFP</u> <u>leu2</u> <u>ECM11-13MYC::kanMX4</u> <u>ndt80Δ::HYG</u>