Table S1. Yeast Strains used in this study

Strain	Genotype	Origin
BY4741	*MAT**a** his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	*Saccharomyces cerevisiae* (ATCC® 201388™)
BY4742	*MATα his3Δ1 leu2Δ0 lys2Δ0 ura3Δ0*	*Saccharomyces cerevisiae* (ATCC® 201389™)
MMY0266	*MATα cdc10(D182N)-V_C::KanMX his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	(Weems and McMurray 2017)
YO802	*MATα his3 leu2 lys2 trp1 ura3 CDC12-Vc::KanMX*	(Oh *et al.* 2013)
YO685	*MATα his3 leu2 lys2 trp1 ura3 CDC3-Vc::HIS3MX*	(Oh *et al.* 2013)
YO1057	*MATα his3 leu2 lys2 trp1 ura3 CDC10-Vc::TRP1*	(Oh *et al.* 2013)
YO671	*MATα his3 leu2 lys2 trp1 ura3 CDC11-Vc::HIS3MX*	(Oh *et al.* 2013)
YO619	*MATα his3 leu2 lys2 trp1 ura3 SHS1-Vc::HIS3MX*	(Oh *et al.* 2013)
M-1622	*MATα his3 leu2 lys2 trp1 ura3 cdc3(G365R)*	(Nagaraj *et al.* 2008)
RBy33	*MAT**a** his3Δ200 leu2Δ1 lys2Δ202 trp1Δ63 1cUAS53::URA3*	(Brachmann *et al.* 1996)
RBy159	*MATα his3Δ200 leu2Δ1 lys2Δ202 trp1Δ63 1cUAS53::URA3*	(Brachmann *et al.* 1996)
yIG397	*MAT**a** ade2-1 can1-100 his3-11,15 leu2-3,112 trp1-1 ura3-1 URA3 3XRGC::pCYC1::ADE2*	(Ishioka *et al.* 1993)
yJM3164	*MAT**a** his3Δ200 HTB2-mNeonGreen::HIS3 leu2Δ1 lys2-801 trp1Δ63 ura3-52*	Gift from Jeff Moore
yJM1838	*MATα his3Δ200 leu2Δ1 lys2-801 trp1Δ63 ura3-52*	Gift from Jeff Moore
JTY4204	*MAT**a** gal2 leu2 pep4-3 prb1-1122 prc1-451 trp1Δ63 ura3*	(Jones 1977)
TH5	*MAT**a** leu2-3,112 trp1 tup1 ura3-52 dfr1::URA3*	(Huang *et al.* 1992)
Y0134	*MAT**a** his3Δ1 leu2Δ0 met25Δ0 trp1Δ::KanMX ura3Δ0*	*Saccharomyces* Genome Deletion Project (Winzeler *et al.* 1999; Giaever *et al.* 2002)
H00398	*MAT**a** his3Δ1 HSP82-V_N::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H00399	*MAT**a** his3Δ1 HSC82-V_N::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)

Strain	Genotype	Origin
H00384	*MAT***a** *his3Δ1 HSP104-V_N::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H00387	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 SSA1-V_N::KlURA3 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H00388	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 SSA2-V_N::KlURA3 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H00403	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 SSA3-V_N::KlURA3 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H00404	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 SSA4-V_N::KlURA3 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H00395	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 SSB1-V_N::KlURA3 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H00394	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 SSB2-V_N::KlURA3 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H00383	*MAT***a** *CCT7-V_N::KlURA3 his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H00526	*CCT7-V_N::URA3 CDC3-V_C::HIS3MX*	Spore clone from YO685 x H00383 cross
H04802	*MAT***a** *GIM3-V_N::KlURA3 his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H00385	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 ura3Δ0 YDJ1-V_N::KlURA3*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H00396	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 ura3Δ0 ZUO1-V_N::KlURA3*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H06680	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 SIS1-V_N::KlURA3 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H06674	*MAT***a** *APJ1-V_N::KlURA3 his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H05926	*MAT***a** *DJP1-V_N::KlURA3 his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H06675	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 ura3Δ0 JJJ1-V_N::KlURA3*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H06685	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 ura3Δ0 JJJ2-V_N::KlURA3*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H00400	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 ura3Δ0 SSE2-V_N::KlURA3*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H06681	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 ura3Δ0 SSZ1-V_N::KlURA3*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H06682	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 ura3Δ0 SWA2-V_N::KlURA3*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H06683	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 ura3Δ0 SNO4-V_N::KlURA3*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)

Strain	Genotype	Origin
H06684	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 ura3Δ0 HSP12-V$_N$::KlURA3*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H04024	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 ura3Δ0 HSP26-V$_N$::KlURA3*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H00397	*MAT***a** *his3Δ1 HSP31-V$_N$::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H00397	*MAT***a** *his3Δ1 HSP32-V$_N$::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H06677	*MAT***a** *his3Δ1 HSP33-V$_N$::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H06676	*MAT***a** *his3Δ1 HSP42-V$_N$::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H00401	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 PAM18-V$_N$::KlURA3 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H00379	*MAT***a** *CCT2-V$_N$::KlURA3 his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H00380	*MAT***a** *CCT3-V$_N$::KlURA3 his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H00380	*MAT***a** *CCT4-V$_N$::KlURA3 his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H00391	*MAT***a** *GIM4-V$_N$::KlURA3 his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H00390	*MAT***a** *GIM5-V$_N$::KlURA3 his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H00393	*MAT***a** *PFD1-V$_N$::KlURA3 his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H00389	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 ura3Δ0 YKE2-V$_N$::KlURA3*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H00405	*MAT***a** *his3Δ1 leu2Δ0 LHS1-V$_N$::KlURA3 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H03367	*MAT***a** *his3Δ1 JID1-V$_N$::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H03970	*MAT***a** *his3Δ1 HLJ1-V$_N$::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H05688	*MAT***a** *his3Δ1 SEC63-V$_N$::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H01527	*MAT***a** *ECM10-V$_N$::KlURA3 his3Δ1 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H01444	*MAT***a** *his3Δ1 leu2Δ0 met25Δ0 SSQ1-V$_N$::KlURA3 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)
H04280	*MAT***a** *his3Δ1 JAC1-V$_N$::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V$_N$-Fusion Library (Sung *et al.* 2013)

Strain	Genotype	Origin
H05828	*MAT***a** *his3Δ1 leu2Δ0 MDJ1-V_N::KlURA3 met25Δ0 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H01128	*MAT***a** *his3Δ1 HSP78-V_N::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H01972	*MAT***a** *his3Δ1 leu2Δ0 MCX1-V_N::KlURA3 met25Δ0 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)
H01842	*MAT***a** *his3Δ1 HSP60-V_N::KlURA3 leu2Δ0 met25Δ0 ura3Δ0*	*S. cerevisiae* V_N-Fusion Library (Sung *et al.* 2013)

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