

**Supplemental table 1 – Strains used in this study**

<i>Strain code</i>	<i>Description</i>	<i>Genotype</i>	<i>Source</i>
Y-187	2-hybrid prey	<i>MATα, ade2-101, leu2-3,112, his3-200, trp1-901, ura3-52, met-, gal4Δ, gal80Δ, URA3::GAL1<sub>UAS</sub>-GAL1<sub>TATA</sub>-LacZ</i>	Fromont-Racine <i>et al.</i> , 1997
CG1945	2-hybrid bait	<i>MATα, ade2-101, leu2-3,112, his3-200, trp1-901, ura3-52, lys2-801, gal4-542, gal80-538, LYS2::::GAL1<sub>UAS</sub>-GAL1<sub>TATA</sub>-HIS3, URA3::GAL4<sub>17mers(x3)</sub>-CYC1<sub>TATA</sub>-lacZ, cyh<sup>r</sup>2</i>	Fromont-Racine <i>et al.</i> , 1997
FYAT 270-S5		<i>MATα, leu2Δ0, trp1Δ63, ura3-53, arg8Δ0, met14Δ0, lys2Δ202, P2LEU2</i>	Loeillet <i>et al.</i> , 2005
YV460	<i>nup133Δ P2LEU2</i>	<i>MATα, leu2Δ0, trp1Δ63, ura3-53, arg8Δ0, met14Δ0, lys2Δ202, P2LEU2, nup133::URA3</i>	Loeillet <i>et al.</i> , 2005
BY4742		<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0</i>	Winzeler <i>et al.</i> , 1999
Y15998	<i>nup133Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, nup133::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y16507	<i>pml39Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, pml39::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y14906	<i>nup120Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, nup120::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y16570	<i>pom152Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, pom152::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y11573	<i>pom34Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, pom34::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y13105	<i>nup170Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, nup170::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y13551	<i>nup42Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, nup42::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y14917	<i>nup100Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, nup100::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y15244	<i>nup2Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, nup2::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y10407	<i>nup60Δ</i>	<i>MATα, leu2Δ0, ura3Δ0, lys2Δ0, nup60::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y17104	<i>mlp1Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, mlp1::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y12308	<i>mlp2Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, mlp2::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y11777	<i>rrp6Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, rrp6::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y11571	<i>pml1Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, pml1::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y04636	<i>prp18Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, met15Δ0, prp18::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y13517	<i>sac3Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, sac3::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y16214	<i>upf1Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, upf1::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y11905	<i>upf2Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, upf2::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
Y14702	<i>upf3Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, upf3::KanMX6,</i>	Winzeler <i>et al.</i> , 1999

Y14540	<i>xrn1</i> $\Delta$	<i>MAT<alpha>, leu2</alpha></i> $\Delta$ <i>0, his3</i> $\Delta$ <i>1, ura3</i> $\Delta$ <i>0, lys2</i> $\Delta$ <i>0, xrn1::KanMX6,</i>	Winzeler <i>et al.</i> , 1999
LGY101	<i>nup159</i> $\Delta$	<i>MAT<alpha>, leu2</alpha></i> $\Delta$ <i>1, his3</i> $\Delta$ <i>200, ura3</i> -52, <i>rat7</i> -1 <sup>s</sup>	Gorsch <i>et al.</i> , 1995
GFP collection	<i>X-GFP</i>	<i>MATA, leu2</i> $\Delta$ <i>0, his3</i> $\Delta$ <i>1, ura3</i> $\Delta$ <i>0, met15</i> $\Delta$ <i>0, X-GFP::HIS3,</i>	Huh <i>et al.</i> , 2003
RFP references strains	<i>Y-mRFP</i>	<i>MAT<alpha>, leu2</alpha></i> $\Delta$ <i>0, his3</i> $\Delta$ <i>1, ura3</i> $\Delta$ <i>0, lys2</i> $\Delta$ <i>0, Y-mRFP::KanMX6,</i>	Huh <i>et al.</i> , 2003
YV726	<i>nup157</i> $\Delta$	<i>MAT<alpha>, leu2</alpha></i> $\Delta$ <i>0, his3</i> $\Delta$ <i>1, ura3</i> $\Delta$ <i>0, lys2</i> $\Delta$ <i>0, nup157::KanMX6</i>	<i>NUP157 complete CDS deletion in BY4742</i> <sup>l</sup>
YV529	<i>GFP-nup133</i> $\Delta$ <i>N</i>	<i>MATA, leu2</i> $\Delta$ <i>0, trp1</i> $\Delta$ <i>63, ura3</i> -53, <i>arg8</i> $\Delta$ <i>0, met14</i> $\Delta$ <i>0, lys2</i> $\Delta$ <i>202, P2LEU2, nup133::GFP-nup133</i> $\Delta$ <i>N, 5' MTD1::URA3</i>	Loeillet <i>et al.</i> , 2005
YV481	<i>mlp2</i> $\Delta$	<i>MAT<alpha>, leu2</alpha></i> $\Delta$ <i>0, his3</i> $\Delta$ <i>1, ura3</i> $\Delta$ <i>0, mlp2::URA3,</i>	marker swap in <i>YI2308</i>
YV500	<i>mlp2</i> $\Delta$ <i>P2LEU2</i>	<i>MATA, leu2, trp1, ura3, lys2, met14, arg8, mlp2::URA3, P2LEU2</i>	segregant of diploid constructed from <i>YV481</i> and <i>FYAT270-S5</i>
YV554	<i>mlp1</i> $\Delta$	<i>MAT<alpha>, leu2</alpha></i> $\Delta$ <i>0, his3</i> $\Delta$ <i>1, ura3</i> $\Delta$ <i>0, lys2</i> $\Delta$ <i>0, mlp1::HIS3</i>	marker swap in <i>YI7104</i>
YV555	<i>mlp1</i> $\Delta$ <i>mlp2</i> $\Delta$	<i>MATA, leu2, his3, ura3, lys2, arg8, mlp1::HIS3, mlp2::URA3, P2LEU2</i>	segregant of diploid constructed from <i>YV500</i> and <i>YV554</i>
YV678	<i>pml39</i> $\Delta$ <i>nup133</i> $\Delta$	<i>MAT?, leu2</i> $\Delta$ <i>0, his3, trp1, ura3, lys2, arg8?</i> , <i>met15?</i> , <i>nup133::URA3, pml39::KanMX6, P2LEU2</i>	segregant of diploid constructed from <i>YV460</i> and <i>YI6507</i>
YV615	<i>pml39</i> $\Delta$ <i>P2LEU2</i>	<i>MATA, leu2, ura3, lys2, arg8, pml39::URA3, P2LEU2</i>	segregant of diploid constructed from <i>FYAT270-S5</i> and a <i>pml39::URA3</i> derivative obtained by marker swap in <i>YI6507</i>
YV611	<i>PML39-GFP</i>	<i>MATA, leu2</i> $\Delta$ <i>0, trp1</i> $\Delta$ <i>63, ura3</i> -53, <i>arg8</i> $\Delta$ <i>0, lys2</i> $\Delta$ <i>202, met14</i> $\Delta$ , <i>P2LEU2, PML39GFP::KanMX6</i>	C-terminal GFP-tagging at <i>PML39</i> locus in <i>FYAT270-S5</i>
YV612	<i>PML39-GFP</i> <i>nup133</i> $\Delta$	<i>MATA, leu2</i> $\Delta$ <i>0, trp1</i> $\Delta$ <i>63, ura3</i> -53, <i>arg8</i> $\Delta$ <i>0, lys2</i> $\Delta$ <i>202, met14</i> $\Delta$ , <i>nup133::URA3, P2LEU2</i>	C-terminal GFP-tagging at <i>PML39</i> locus in <i>YV460</i>
YV681	<i>PML39-mRFP</i>	<i>MAT<alpha>, leu2</alpha></i> $\Delta$ <i>0, his3</i> $\Delta$ <i>1, ura3</i> $\Delta$ <i>0, lys2</i> $\Delta$ <i>202, PML39-mRFP::KanMX6</i>	C-terminal mRFP tagging at <i>PML39</i> locus in <i>BY4742</i>
YV808	<i>MLP2-GFP</i> <i>nup133</i> $\Delta$	<i>MAT?, leu2</i> $\Delta$ <i>0, his3</i> $\Delta$ <i>1, ura3</i> $\Delta$ <i>0, lys2</i> $\Delta$ <i>0, met15?</i> , <i>MLP2-GFP::HIS3, nup133::KanMX6</i>	segregant of diploid constructed from <i>MLP2-GFP</i> (GFP collection) and <i>YI5998</i>
YV692	<i>PML39-GFP</i> <i>SIK1-mRFP</i>	<i>MATA, leu2</i> $\Delta$ <i>0, his3</i> $\Delta$ <i>1, ura3</i> $\Delta$ <i>0, lys2?</i> , <i>met15?</i> , <i>PML39-GFP::HIS3, SIK1-mRFP::KanMX6</i>	segregant of diploid constructed from <i>PML39-GFP</i> (GFP collection) and <i>SIK1-mRFP</i> reference strain
mex67-5	<i>mex67-5</i>	<i>MAT<alpha>, ade2, his3, leu2, trp1, ura3, mex67::HIS3, &lt;PUN100-mex67-5&gt;</alpha></i>	Segref <i>et al.</i> , 1997
YV693	<i>PML39-GFP</i> <i>SIK1-mRFP</i> <i>mex67-5</i>	<i>MAT?, leu2, his3, trp1?, ura3, lys2?, met15?, mex67::HIS3, PML39-GFP::HIS3, SIK1-mRFP::KanMX6, &lt;PUN100-mex67-5&gt;</i>	segregant of diploid constructed from <i>YV692</i> and <i>mex67-5</i>
YV661	<i>PML39-GFP</i> <i>nup2</i> $\Delta$	<i>MAT?, leu2</i> $\Delta$ <i>0, his3</i> $\Delta$ <i>1, ura3</i> $\Delta$ <i>0, lys2?</i> , <i>met15?</i> , <i>nup2::KanMX6, PML39-GFP::HIS3</i>	segregant of diploid constructed from <i>PML39-GFP</i> (GFP collection) and <i>YI5244</i>
YV662	<i>PML39-GFP</i> <i>nup100</i> $\Delta$	<i>MAT?, leu2</i> $\Delta$ <i>0, his3</i> $\Delta$ <i>1, ura3</i> $\Delta$ <i>0, lys2?</i> , <i>met15?</i> , <i>nup100::KanMX6, PML39-GFP::HIS3</i>	segregant of diploid constructed from <i>PML39-GFP</i> (GFP collection) and <i>YI4917</i>

YV663	<i>PML39-GFP pom34Δ</i>	<i>MAT?</i> , <i>leu2Δ0, his3Δ1, ura3Δ0, lys2?, met15?, pom34::KanMX6, PML39-GFP::HIS3</i>	<i>segregant of diploid constructed from PML39-GFP (GFP collection) and YI1573</i>
YV664	<i>PML39-GFP pom152Δ</i>	<i>MAT?</i> , <i>leu2Δ0, his3Δ1, ura3Δ0, lys2?, met15?, pom152::KanMX6, PML39-GFP::HIS3</i>	<i>segregant of diploid constructed from PML39-GFP (GFP collection) and YI16570</i>
YV665	<i>PML39-GFP nup170Δ</i>	<i>MAT?</i> , <i>leu2Δ0, his3Δ1, ura3Δ0, lys2?, met15?, nup170::KanMX6, PML39-GFP::HIS3</i>	<i>segregant of diploid constructed from PML39-GFP (GFP collection) and YI13105</i>
YV685	<i>PML39-GFP nup60Δ</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2?, met15?, nup60::KanMX6, PML39-GFP::HIS3</i>	<i>segregant of diploid constructed from PML39-GFP (GFP collection) and YI10407</i>
YV674	<i>PML39-GFP mlp1Δ</i>	<i>MAT?, leu2Δ0, his3Δ1, ura3Δ0, lys2?, met15?, mlp1::KanMX6, PML39-GFP::HIS3</i>	<i>segregant of diploid constructed from PML39-GFP (GFP collection) and YI17104</i>
YV675	<i>PML39-GFP mlp2Δ</i>	<i>MAT?, leu2Δ0, his3Δ1, ura3Δ0, lys2?, met15?, mlp2::KanMX6, PML39-GFP::HIS3</i>	<i>segregant of diploid constructed from PML39-GFP (GFP collection) and YI2308</i>
YV686	<i>PML39-GFP mlp1Δ mlp2Δ</i>	<i>MAT?, leu2?, his3, trp1?, ura3, mlp1::KanMX6, mlp2::URA3, PML39-GFP::HIS3</i>	<i>segregant of diploid constructed from YV674 and YV481</i>
YV772	<i>MLP1-GFP mlp2Δ</i>	<i>MAT?, leu2Δ0, his3Δ1, ura3Δ0, lys2?, met15?, MLP1-GFP::HIS3, mlp2::KanMX6,</i>	<i>segregant of diploid constructed from YI2308 and MLP1-GFP (GFP collection)</i>
YV773	<i>MLP2-GFP mlp1Δ</i>	<i>MAT?, leu2Δ0, his3Δ1, ura3Δ0, lys2?, met15?, MLP2-GFP::HIS3, mlp1::KanMX6,</i>	<i>segregant of diploid constructed from YI17104 and MLP2-GFP (GFP collection)</i>
YV763	<i>PML39-ΔC-GFP</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, PML39-Δ(126-334)-GFP::KanMX6</i>	<i>C-terminal tagging at PML39 locus in BY4742<sup>2</sup></i>
YV764	<i>GFP-ΔN-PML39</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, GFP-Δ(1,125)-PML39</i>	<i>N-terminal GFP tagging at PML39 locus in BY4742 followed by marker pop-out<sup>3</sup></i>
YV719	<i>pml39Δ</i>	<i>MATA, leu2, ura3, arg8, lys2Δ0, met14, pml39::LYS2, P2LEU2</i>	<i>marker swap in a segregant of diploid constructed from FYAT270-S5 and YI16507</i>
YV688	<i>pml39Δ mlp1Δ</i>	<i>MAT?, leu2, his3?, ura3, lys2, met14?, arg8?, pml39::LYS2, mlp1::kanMX6</i>	<i>segregant of diploid constructed from YV719 and YI17104</i>
YV690	<i>pml39Δ rrp6Δ</i>	<i>MAT?, leu2, his3?, ura3, lys2, met14?, arg8?, pml39::LYS2, rrp6::kanMX6</i>	<i>segregant of diploid constructed from YV719 and YI11777</i>
YV739	<i>pml39Δ pml1Δ</i>	<i>MATA, leu2, his3?, ura3 ?, lys2, met15?, arg8?, pml39::LYS2, pml1::KanMX6, P2LEU2</i>	<i>segregant of diploid constructed from YV719 and YI1571</i>
YV766	<i>MLP1-mRFP</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, MLP1-mRFP::KanMX6</i>	<i>C-terminal mRFP tagging at MLP1 locus in BY4742</i>
YV767	<i>NAB2-mRFP</i>	<i>MATα, leu2Δ0, his3Δ1, ura3Δ0, lys2Δ0, NAB2-mRFP::KanMX6,</i>	<i>C-terminal mRFP tagging at NAB2 locus in BY4742</i>
YV741	<i>PML39-GFP SPC42-mRFP nup60Δ</i>	<i>MAT?, leu2, his3, ura3, lys2?, met15?, nup60::KanMX6, PML39-GFP::HIS3, SPC42-mRFP::KanMX6</i>	<i>segregant of diploid constructed from YV685 and SPC42-mRFP reference strain.</i>
YV752	<i>PML39-GFP SIK1-mRFP nup60Δ</i>	<i>MAT?, leu2, his3, ura3, lys2?, met15?, arg8?, nup60::URA3, SIK1-mRFP::KanMX6, PML39-GFP::HIS3, P2LEU2</i>	<i>segregant of diploid constructed from YV692 and YV753</i>

YV751	<i>PML39-mRFP MLP1-GFP</i>	<i>MATa, leu2, his3, ura3, lys2?, met15?, PML39-mRFP::KanMX6, MLP1-GFP::HIS3</i>	<i>segregant of diploid constructed from YV681 and MLP1-GFP (GFP collection)</i>
YV683	<i>PML39-mRFP MLP2-GFP</i>	<i>MAT?, leu2Δ0, his3Δ200, ura3Δ0, lys2?, met15?, PML39-mRFP::KanMX6, MLP2-GFP::HIS3</i>	<i>segregant of diploid constructed from MLP2-GFP (GFP collection) and YV681</i>
YV774	<i>PML39-mRFP NAB2-GFP</i>	<i>MAT?, leu2, his3, ura3, lys2?, met15?, PML39-mRFP::KanMX6, NAB2-GFP::HIS3</i>	<i>segregant of diploid constructed from YV754 and NAB2-GFP (GFP collection)</i>
YV753	<i>nup60Δ</i>	<i>MATα, leu2Δ0, ura3Δ0, lys2Δ0, nup60::URA3</i>	<i>marker swap in Y10407</i>
YV754	<i>PML39-mRFP nup60Δ</i>	<i>MAT?, leu2, his3, ura3, lys2?, met15?, nup60::URA3, PML39-mRFP::KanMX6</i>	<i>segregant of diploid constructed from YV751 and YV753</i>
YV702	<i>PML39-mRFP MLP1-GFP</i>	<i>MAT?, leu2, his3, ura3, lys2?, met15?, nup60::URA3, PML39-mRFP::KanMX6, MLP1-GFP::HIS3</i>	<i>segregant of diploid constructed from YV751 and YV753</i>
YV755	<i>PML39-mRFP MLP2-GFP</i>	<i>MAT?, leu2, his3, ura3, lys2?, met15?, nup60::URA3, PML39-mRFP::KanMX6, MLP2-GFP::HIS3</i>	<i>segregant of diploid constructed from YV754 and MLP2-GFP (GFP collection)</i>
YV756	<i>PML39-mRFP NAB2-GFP</i>	<i>MAT?, leu2, his3, ura3, lys2?, met15?, nup60::URA3, PML39-mRFP::KanMX6, NAB2-GFP::HIS3</i>	<i>segregant of diploid constructed from YV754 and NAB2-GFP (GFP collection)</i>
YV757	<i>PML39-mRFP YRA1-GFP</i>	<i>MAT?, leu2, his3, ura3, lys2?, met15?, nup60::URA3, PML39-mRFP::KanMX6, YRA1-GFP::HIS3</i>	<i>segregant of diploid constructed from YV754 and YRA1-GFP (GFP collection)</i>
YV758	<i>PML39-mRFP ULP1-GFP</i>	<i>MAT?, leu2, his3, ura3, lys2?, met15?, nup60::URA3, PML39-mRFP::KanMX6, ULP1-GFP::HIS3</i>	<i>segregant of diploid constructed from YV754 and ULP1-GFP (GFP collection)</i>
YV759	<i>PML39-mRFP MSL5-GFP</i>	<i>MAT?, leu2, his3, ura3, lys2?, met15?, nup60::URA3, PML39-mRFP::KanMX6, MSL5-GFP ::HIS3</i>	<i>segregant of diploid constructed from YV754 and MSL5-GFP (GFP collection)</i>
YV760	<i>PML39-mRFP NPL3-GFP</i>	<i>MAT?, leu2, his3, ura3, lys2?, met15?, nup60::URA3, PML39-mRFP::KanMX6, NPL3-GFP::HIS3</i>	<i>segregant of diploid constructed from YV754 and NPL3-GFP (GFP collection)</i>
YV761	<i>PML39-mRFP PML1-GFP</i>	<i>MAT?, leu2, his3, ura3, lys2?, met15?, nup60::URA3, PML39-mRFP::KanMX6, PML1-GFP::HIS3</i>	<i>segregant of diploid constructed from YV754 and PML1-GFP (GFP collection)</i>
FSY1026	<i>YRA1 shuffle</i>	<i>MATa, ade2, leu2, his3, trp1, ura3, yra1::HIS3, &lt; pURA3-YRA1 ; pFS1876&gt;</i>	<i>Vinciguerra et al., 2005</i>
YV769	<i>YRA1 shuffle</i>	<i>MATa, ade2, leu2, his3, ura3, yra1::HIS3, &lt; pURA3-YRA1 ; pFS1876&gt;</i>	<i>TRP1 insertion in FSY1026<sup>4</sup></i>
FSY1284	<i>YRA1 shuffle mlp2Δ</i>	<i>MATa, ade2, leu2, his3, trp1, ura3, yra1::HIS3, mlp2::TRP1, &lt; pURA3-YRA1 ; pFS1876&gt;</i>	<i>Vinciguerra et al., 2005</i>
YV768	<i>YRA1 shuffle pml39Δ</i>	<i>MATa, ade2, leu2, his3, trp1, ura3, yra1::HIS3, pml39::TRP1, &lt; pURA3-YRA1 ; pFS1876&gt;</i>	<i>PML39 complete CDS deletion in FSY1026<sup>1</sup></i>
ACY429	<i>NAB2 shuffle</i>	<i>MATα, leu2, his3, trp1, ura3, nab2::HIS3, &lt; pURA3-NAB2 ; pAC636&gt;</i>	<i>Green et al., 2003</i>
YV771	<i>NAB2 shuffle</i>	<i>MATα, leu2, his3, ura3, nab2::HIS3, &lt; pURA3-NAB2 ; pAC636&gt;</i>	<i>TRP1 insertion in ACY429<sup>4</sup></i>

FSY2081	<i>NAB2 shuffle mlp1Δ</i>	<i>MATα, leu2, his3, trp1, ura3, nab2::HIS3, mlp1::TRP1,&lt;pURA3-NAB2 ; pAC636&gt;</i>	<i>Vinciguerra et al., 2005</i>
FSY2082	<i>NAB2 shuffle mlp2Δ</i>	<i>MATα, leu2, his3, trp1, ura3, nab2::HIS3, mlp2::TRP1, &lt;pURA3-NAB2 ; pAC636&gt;</i>	<i>Vinciguerra et al., 2005</i>
YV770	<i>NAB2 shuffle pml39Δ</i>	<i>MATα, leu2, his3, trp1, ura3, nab2::HIS3, pml39::TRP1,&lt;pURA3-NAB2 ; pAC636&gt;</i>	<i>PML39 complete CDS deletion in ACY429<sup>l</sup></i>

<sup>1</sup> Marker insertion precisely removed the concerned CDS from ATG to STOP.

<sup>2</sup> Deletion of aminoacids 126 to 334 from Pml39 was achieved through direct homologous recombination of the GFP tag in fusion with aminoacid 125 at the *PML39* locus.

<sup>3</sup> Deletion of aminoacids 1 to 125 from Pml39 was obtained by insertion of the GFP tag upstream from aminoacid 126 at the *PML39* locus.

<sup>4</sup> TRP1 marker was amplified from pFA6a-TRP1 and integrated at its cognate locus in *trp1*- strains FSY1026 and ACY429. This modification allows a significant comparison with shuffle strains deleted for genes of interest using the TRP1 marker.

## **Supplemental table 2 – Plasmids used in this study**

<b>Name</b>	<b>Markers</b>	<b>Reference</b>
pUN100-GFP-NUP49	CEN, LEU2	Doye et al., 1994
PUN100-mex67-ts5	CEN, LEU2	Segref et al., 1997
pYX213	2μ, URA3	R & D systems
pYX214	2μ, LYS2	This study <sup>a</sup>
pYX213-PML39-GFP	2μ, URA3	This study <sup>a</sup>
pYX214-PML39-GFP	2μ, LYS2	This study <sup>a</sup>
pASΔΔ	2μ, TRP1	Fromont-Racine et al., 1997
pASΔΔ-PML39 1-334	2μ, TRP1	This study <sup>b</sup>
pASΔΔ-PML39 126-334	2μ, TRP1	This study <sup>b</sup>
pASΔΔ-PML39 1-126	2μ, TRP1	This study <sup>b</sup>
pACTII	2μ, LEU2	Fromont-Racine et al., 1997
pACTII-MLP1-7-143	2μ, LEU2	This study <sup>c</sup>
pACTII-MLP1-287-584	2μ, LEU2	This study <sup>c</sup>
pACTII-MLP2-1-120	2μ, LEU2	This study <sup>c</sup>
pLGSD5	2μ, URA3	Legrain and Rosbash, 1989
pJCR51	2μ, URA3	Legrain and Rosbash, 1989
pJCR1	2μ, URA3	Legrain and Rosbash, 1989
pJCR1 mut 5'SS	2μ, URA3	Rain and Legrain, 1997
pJCR1 mut BP	2μ, URA3	Rain and Legrain, 1997
pFS2555/YCpLac111-YRA1	CEN, LEU2	Vinciguerra et al., 2005
pFS2554/YCpLac111-yrα1-8	CEN, LEU2	Zenklusen et al., 2002
pAC717/pRS315-NAB2	CEN, LEU2	Green et al., 2003
pAC1152/pRS315-ΔN-nab2	CEN, LEU2	Marfatia et al., 2003
pFA6a-TRP1	TRP1	Longtine et al., 1998
pFA6a-GFP(S65T)-KanMX6	KanMX6	Longtine et al., 1998
pFA6a-mRFP-KanMX6	KanMX6	Huh et al., 2003

<sup>a</sup> To generate the pYX213-PML39-GFP overexpression constructs, the *PML39-GFP* coding sequence was PCR amplified from genomic DNA extracted from the PML39-GFP strain (YV611) and cloned downstream the GAL1 promoter in the pYX213 vector (R & D Systems). For construction of pYX214 and pYX214-PML39-GFP plasmids, the *ura3*::LYS2 conversion cassette ((Voth *et al.*, 2003)) was contrtransformed in yeast with pYX213 and pYX213-PML39-GFP, respectively and *ura3*- LYS2+ clones were selected. Plasmids were rescued in E. coli and checked by restriction analysis.

<sup>b</sup> To generate the 2-hybrid bait constructs, *PML39* coding sequences (full-length or partial) were amplified from the pYX213-PML39-GFP vector and cloned downstream of the GAL4 DNA binding domain in the pASΔΔ vector ((Fromont-Racine *et al.*, 1997)).

<sup>c</sup> pACTII prey plasmids containing the indicated inserts were rescued from the FRYL library during the course of the 2-hybrid screen.

## References to Supplemental Tables

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