

Table S1 Strain list

strain	genotype	Source or reference
KT1112	<i>MATa leu2 ura3 his3</i>	(Stuart et al., 1994) ^a
KT1113	<i>MATα leu2 ura3 his3</i>	(Frederick and Tatchell, 1996) ^b
KT1687	<i>MATα mad1::HIS3</i>	this study
KT1688	<i>MATa mad1::HIS3</i>	this study
KT1829	<i>MATα ip11-2 (H352Y)</i>	(Hsu et al., 2000) ^c
KT1963	<i>MATa ip11-2</i>	(Bharucha et al., 2008) ^d
KT2856	<i>MATa SDS22-mCitrine::SpHis5 POM34-mCherry::SpHis5</i>	this study
KT2865	<i>MATa ip11-R150K H352Y</i>	this study
KT2867	<i>MATa ip11-S167L H352Y</i>	this study
KT2869	<i>MATa ip11-G347E H352Y</i>	this study
KT2878	<i>MATa ip11-2 ndc80-K204E ura3::GFP-TUB1::URA3</i>	this study
KT2881	<i>MATa YPI1-13Myc:kanMX6</i>	this study
KT2934	<i>MATα ip11-2 sds22-D2N D119N</i>	this study
KT2936	<i>MATα ip11-2 sds22-77(Cterm frameshift)</i>	this study
KT2938	<i>MATα ip11-2 glc7-L71S</i>	this study
KT2939	<i>MATα ip11-2 glc7-S99L</i>	this study
KT2940	<i>MATα ip11-2 glc7-L37F</i>	this study
KT2963	<i>MATα sds22-D2N D119N</i>	this study
KT2964	<i>MATα sds22-77</i>	this study
KT2961	<i>MATα duo1-S115F (rev76)</i>	this study
KT2967	<i>MATα duo1-S115F (rev81)</i>	this study
KT2969	<i>MATα glc7-L71S</i>	this study
KT2970	<i>MATα glc7-S99L</i>	this study
KT2973	<i>MATα glc7-L37F</i>	this study
KT3052	<i>MATα ip11-2 sds22-E163I L329P</i>	this study

KT3059	<i>MATα ipl1-2 glc7-F118S</i>	this study
KT3062	<i>MATα ipl1-2 glc7-L15S</i>	this study
KT3064	<i>MATα ipl1-2 glc7-K112E</i>	this study
KT3066	<i>MATα ipl1-2 glc7-Q293D</i>	this study
KT3242	<i>MATα GLC7-mCitrine:SpHis5 POM34-mCherry:SpHis5</i>	(Tatchell et al., 2011) ^e
KT3255	<i>MATα ndc80-K204E</i>	this study
KT3257	<i>MATα ipl1-2 ndc80-K204E</i>	this study
KT3292	<i>MATα sds22-E163I L329P</i>	this study
KT3302	<i>MATα glc7-F118S</i>	this study
KT3304	<i>MATα glc7-L15S</i>	this study
KT3308	<i>MATα glc7-K112E</i>	this study
KT3310	<i>MATα glc7-Q293D</i>	this study
KT3317	<i>MATα PDS1-13Myc:kanMX6 SPC42-3XGFP:TRP1 bar1-1 ndc80-K204E</i>	this study
KT3319	<i>MATα PDS1-13Myc:kanMX6 SPC42-3XGFP:TRP1 bar1-1</i>	this study
KT3320	<i>MATα PDS1-13Myc:kanMX6 SPC42-3XGFP:TRP1 bar1-1 ndc80-K204E ipl1-2</i>	this study
KT3351	<i>MATα sds22-F177S</i>	this study
KT3353	<i>MATα ipl1-2 sds22-F177S</i>	this study
KT3355	<i>MATα glc7-Y136N</i>	this study
KT3358	<i>MATα ipl1-2 glc7-Y136N</i>	this study
KT3359	<i>MATα glc7-L74P</i>	this study
KT3361	<i>MATα ipl1-2 glc7-L74P</i>	this study
KT3363	<i>MATα glc7-Y92N R141K</i>	this study
KT3365	<i>MATα ipl1-2 glc7-Y92N R141K</i>	this study
KT3368	<i>MATα ipl1-2 ypi1-F74S</i>	this study
KT3370	<i>MATα ipl1-2 ypi1-F74L</i>	this study
KT3381	<i>MATα ipl1-2 sds22-W187R</i>	this study
KT3383	<i>MATα IPL1-13Myc:kanMX6</i>	this study

KT3385	<i>MATα duo1-S115F</i>	this study
KT3386	<i>MATα ipl1-2 duo1-S115F</i>	this study
KT3389	<i>MATα IPL1-13Myc:kanMX6 tco89-71</i>	this study
KT3391	<i>MATα IPL1-13Myc:kanMX6 glc7-L74P</i>	this study
KT3392	<i>MATα IPL1-13Myc:kanMX6 glc7-Y92N R141K</i>	this study
KT3395	<i>MATα IPL1-13Myc:kanMX6 shp1-105</i>	this study
KT3396	<i>MATα IPL1-13Myc:kanMX6 shp1-99</i>	this study
KT3400	<i>MATα ipl1-2 ybp2Δ::kanMX6</i>	this study
KT3401	<i>MATα ipl1-2 ybp2Δ::kanMX6</i>	this study
KT3403	<i>MATα ybp2Δ::kanMX6</i>	this study
KT3409	<i>MATα ipl1-2 duo1-S115F ybp2Δ::kanMX6</i>	this study
KT3410	<i>MATα duo1-S115F ybp2Δ::kanMX6</i>	this study
KT3412	<i>MATα shp1-99</i>	this study
KT3413	<i>MATα shp1-99 ipl1-2</i>	this study
KT3415	<i>MATα shp1-99 ipl1-2</i>	this study
KT3416	<i>MATα shp1-105</i>	this study
KT3417	<i>MATα shp1-105 ipl1-2</i>	this study
KT3419	<i>MATα shp1-105 ipl1-2</i>	this study
KT3424	<i>MATα GLC7-mCitrine:SpHis5 POM34-mCitrine:SpHis5 ipl1-2 shp1-105</i>	this study
KT3247	<i>MATα YPI1-13Myc:kanMX6 ipl1-2 shp1-105</i>	this study
KT3428	<i>MATα SDS22-mCitrine:SpHis5 POM34-mCherry:SpHis5 ipl1-2 shp1-105</i>	this study
KT3449	<i>MATα/MATα ipl1-2/IPL1 duo1Δ::kanMX6 pRS306:duo1-S115F</i>	this study
KT3450	<i>MATα/MATα ipl1-2/IPL1 ndc80Δ::kanMX6 pRS313:ndc80-K204E</i>	this study

^aStuart, J.S., Frederick, D.L., Varner, C.M., and Tatchell, K. (1994). The mutant type 1 protein phosphatase encoded by *glc7-1* from *Saccharomyces cerevisiae* fails to interact productively with the *GAC1*-encoded regulatory subunit. *Mol Cell Biol* **14**, 896-905.

^bFrederick, D.L., and Tatchell, K. (1996). The *REG2* gene of *Saccharomyces cerevisiae* encodes a type1 protein phosphatase-binding protein that functions with Reg1p and the Snf1p protein kinase to regulate growth. *Mol Cell Biol* **16**, 2922-2931.

^c Hsu, J.-Y., Sun, Z.-W., Li, X., Ruben, M., Tatchell, K., Bishop, D.K., Grushcow, J.M., Brame, C.J., Caldwell, J.A., Hunt, D.F., *et al.* (2000). Mitotic phosphorylation of histone H3 is governed by Ipl1/aurora kinase and Glc7p/PP1 phosphatase in budding yeast and nematodes. *Cell* *102*, 279-291.

^d Bharucha, J.P., Larson, J.R., Gao, L., Daves, L.K., and Tatchell, K. (2008). Ypi1, a Positive Regulator of Nuclear Protein Phosphatase Type 1 Activity in *Saccharomyces cerevisiae*. *Mol Biol Cell* *19*, 1032-1045.

^e Tatchell, K., Makrantonis, V., Stark, M.J., and Robinson, L.C. (2011). Temperature-sensitive ipl1-2/Aurora B mutation is suppressed by mutations in TOR complex 1 via the Glc7/PP1 phosphatase. *Proc Natl Acad Sci U S A* *108*, 3994-3999.