

Table S1. *S. pombe* strains used in this study

Figure	Strain #	Genotype
1A	Y4605	h+ ade6-M210 leu1-32 ura4-D18
1A	Y4469	h+ atd1Δ::kanMX4 ade6-M216 ura4-D18 leu1-32
1A	Y4468	h+ atd2Δ::kanMX4 ade6-M216 ura4-D18 leu1-32
1A	Y4470	h+ atd3Δ::kanMX4 ade6-M216 ura4-D18 leu1-32
1B	Y2154	h+ leu1-32 ura4-D18
1B	Y4693	h+ atd1::kanMX4 ura4-D18 leu1-32
1B	Y4992	h+ atd2::hphMX6 ura4-D18 leu1-32
1B	Y5131	h+ atd3::natMX6 leu1-D18 leu1-32
1B	Y5149	h? atd1::kanMX6 atd2::hphMX6
1B	Y5144	h? atd2::kanMX6 atd3::natMX6
1B	Y4605	h+ ade6-M210 leu1-32 ura4-D18
1B	Y4469	h+ atd1Δ::kanMX4 ade6-M216 ura4-D18 leu1-32
1B	Y4468	h+ atd2Δ::kanMX4 ade6-M216 ura4-D18 leu1-32
1B	Y4470	h+ atd3Δ::kanMX4 ade6-M216 ura4-D18 leu1-32
1B	Y5142	h? atd1::kanMX6 atd3::natMX6
1A	Y2154	h+ leu1-32 ura4-D18
1A	Y4693	h+ atd1::kanMX4 ura4-D18 leu1-32
2B, 2C	Y4627	h+ rad52-YFP:ura4+ leu1-32 ura4-D18
2B, 2C	Y4831	h+ atd1::kanMX4 rad52-YFP:ura4+ ura4-D18 leu1-32
2B, 2C	Y4711	h+ atd2::kanMX4 rad52-YFP:ura4+ leu1-32 ura4-D18
2D	Y2153	h- leu1-32 ura4-D18
2D	Y4694	h- atd1::kanMX4 ura4-D18 leu1-32
2D	Y4753	h- rad52::hphMX6 leu1-32 ura4-D18
2D	Y5110	h- atd1::kanMX4 rad52::hphMX6 ura4-D18 leu1-32
3A	Y0392	h+ leu1-32
3A	Y4842	h+ swi1::kanMX6 leu1-32
3A	Y0238	h+ rad26::ura4+ leu1-32 ura4-D18
3A	Y0286	h+ rad26::ura4+ swi1::KanMX6 leu1-32 ura4-D18
3B	Y4605	h+ ade6-M210 leu1-32 ura4-D18

3B	Y4469	h+ atd1Δ::kanMX4 ade6-M216 ura4-D18 leu1-32
3B	Y0599	h+ swi1::KanMX6 leu1-32 ura4-D18 ade6-210
3B	Y4648	h+ slx4::kanMX6 leu1-32 ura4-D18
3B	Y4683	h+ atd1::kanMX4 swi1::natMX6 ade6 ura4-D18 leu1-32
3B	Y4684	h- atd1::kanMX4 swi1::natMX6 ura4-D18 leu1-32
3B	Y4687	h+ atd1::kanMX4 slx4::hphMX6 ade6 ura4-D18 leu1-32
3B	Y4688	h- atd1::kanMX4 slx4::hphMX6 ade6 ura4-D18 leu1-32
3C	Y0001	h- leu1-32 ura4-D18
3C	Y4608	h- swi1::kanMX6 leu1-32 ura4-D18
4A, 3B	Y0002	h+ leu1-32 ura4-D18
4A, 3B	Y4647	h+ rad51::kan ura4-D18 leu1-32
4A, 3B	Y4708	h+ rad52::hphMX6 leu1-32 ura4-D18
4A, 3B	Y4693	h+ atd1::kanMX4 ura4-D18 leu1-32
4A, 3B	Y0392	h+ leu1-32
4A, 3B	Y0212	h+ rad3::ura4+ leu1-32 ura4-D18
4A, 3B	Y4719	h+ swi9::ura4+ leu1-32 ura4-D18
4A, 3B	Y4750	h+ swi10::ura4+ leu1-32 ura4-D18
4A, 3B	Y4710	h+ swi9::ura4+ rad3::kanMX4 leu1-32 ura4-D18
4A, 3B	Y4749	h- swi10::ura4+ rad3::kanMX4 leu1-32 ura4-D18
4C	Y4627	h+ rad52-YFP:ura4+ leu1-32 ura4-D18
4C	Y4716	h+ rad52-YFP:ura4+ slx4::kanMX6 leu1-32 ura4-D18
4C	Y4724	h+ swi9::ura4+ rad22-YFP:kanMX6 leu1-32 ura4-D18
4C	Y4726	h+ swi10::ura4+ rad22-YFP:kanMX6 leu1-32 ura4-D18
4D	Y4627	h+ rad52-YFP:ura4+ leu1-32 ura4-D18
4D	Y4731	h+ fml1::natMX6 rad52-YFP:ura4+ leu1-32 ura4-D18
4D	Y4729	h+ chl1::hphMX6 rad52-YFP:ura4+ leu1-32 ura4-D18
5	Y0001	h- leu1-32 ura4-D18
5	Y1646	h- wws1::hphMX6 leu1-32 ura4-D18
5	Y1622	h- wws2::KanMX6 leu1-32 ura4-D18
5	Y4608	h- swi1::kanMX6 leu1-32 ura4-D18
5	Y3243	h- swi1::natMX6 wws1::hphMX6 leu1-32 ura4-D18

5	Y3249	h- swi1::natMX6 wws2::hphMX6 leu1-32 ura4-D18
5	Y5028	h- wws1::hphMX6 wws2::kanMX6 leu1-32 ura4-D18
5	Y5027	h- swi1::natMX6 wws1::hphMX6 wws2::kanMX6 leu1-32 ura4-D18
6A	Y0001	h- leu1-32 ura4-D18
6A	Y4608	h- swi1::kanMX6 leu1-32 ura4-D18
6A	Y4513	h- chl1::hphMX6 leu1-32 ura4-D18
6A	Y4455	h- fml1::natMX6 leu1-32 ura4-D18
6A	Y4461	h- slx4::kanMX6 leu1-32 ura4-D18
6A	Y1528	h- swi1::kanMX6 chl1::KanMX6 leu1-32 ura4-D18
6A	Y4618	h- swi1::kanMX6 fml1::natMX6 leu1-32 ura4-D18
6A	Y4609	h- chl1::hphMX6 fml1::natMX6 leu1-32 ura4-D18
6B	Y0001	h- leu1-32 ura4-D18
6B	Y4694	h- atd1::kanMX4 ura4-D18 leu1-32
6B	Y1567	h- rad3::KanMX4 leu1-32 ura4-D18
6B	Y4455	h- fml1::natMX6 leu1-32 ura4-D18
6B	Y4513	h- chl1::hphMX6 leu1-32 ura4-D18
6B	Y4691	h+ atd1::kanMX4 rad3::hphMX6 ura4-D18 leu1-32
6B	Y4685	h- atd1::kanMX4 fml1::natMX6 ura4-D18 leu1-32
6B	Y4689	h- atd1::kanMX4 chl1::hphMX6 ura4-D18 leu1-32
6C	Y0001	h- leu1-32 ura4-D18
6C	Y4455	h- fml1::natMX6 leu1-32 ura4-D18
6C	Y4513	h- chl1::hphMX6 leu1-32 ura4-D18
6C	Y1567	h- rad3::KanMX4 leu1-32 ura4-D18
6C	Y4704	h- rad3::kanMX4 fml1::natMX6 leu1-32 ura4-D18
6C	Y4621	h- rad3::KanMX4 chl1::hphMX6 leu1-32 ura4-D18
6D	Y0002	h+ leu1-32 ura4-D18
6D	Y4679	h+ rad3::kanMX4 leu1-32 ura4-D18
6D	Y4930	h+ pso2::kanMX4 leu1-32 ura4-D18
6D	Y4935	h+ fan1::kanMX4 leu1-32 ura4-D18
6D	Y4933	h+ rad3::hphMX6 pso2::kan leu1-32 ura4-D18
6D	Y4937	h+ rad3::hphMX6 fan1::kan leu1-32 ura4-D18

6D	Y4932	h- rad3::hphMX6 pso2::kan leu1-32 ura4-D18
6D	Y4938	h- rad3::hphMX6 fan1::kan leu1-32 ura4-D18 ade6-M216
7A	Y2311	h- leu1-32
7A	Y4718	h- swi9::ura4+ leu1-32 ura4-D18
7A	Y4888	h- fml1::natMX6 leu1-32
7A	Y4843	h- swi1::kanMX6 leu1-32
7A	Y4887	h- fml1::natMX6 swi9::ura4+ leu1-32 ura4-D18
7A	Y4893	h- swi1::kanMX6 swi9::ura4+ leu1-32 ura4-D18
7B	Y0001	h- leu1-32 ura4-D18
7B	Y4753	h- rad52::hphMX6 leu1-32 ura4-D18
7B	Y4608	h- swi1::kanMX6 leu1-32 ura4-D18
7B	Y4455	h- fml1::natMX6 leu1-32 ura4-D18
7B	Y4752	h- swi1::kanMX6 rad52::hphMX6 leu1-32 ura4-D18
7B	Y4890	h- fml1::natMX6 rad52::hphMX6 leu1-32 ura4-D18
8A	Y4606	h+ leu1-32 ura4-D18 ade6-M216
8A	Y2174	h? eso1::kanMX6 leu1-32 ura4-D18 ade-
8A	Y2175	h? kpa1::bleMX6 leu1-32 ura4-D18 ade-
8A	Y2176	h? rev3::hphMX6 leu1-32 ura4-D18 ade-
8A	Y2177	h- eso1::kanMX6 rev3::hphMX6 kpa1::bleMX6 leu1-32 ura4-D18 ade-
8A	L0508	h+ pso2::kanMX4 leu1-32 ura4-D18 ade6-M216
8A	L1381	h+ fan1::kanMX4 leu1-32 ura4-D18 ade6-M216
8A	Y4704	h- rad3::kanMX4 fml1::natMX6 leu1-32 ura4-D18
8B	Y2311	h- leu1-32
8B	Y0212	h+ rad3::ura4+ leu1-32 ura4-D18
8B	Y4917	h+ rad3::ura4+ eso1::kanMX6 leu1-32 ura4-D18
8B	Y4919	h+ rad3::ura4+ rev3::hphMX6 leu1-32 ura4-D18
8B	Y4921	h+ rad3::ura4+ kpa1::bleMX6 leu1-32 ura4-D18
8B	Y4908	h+ eso1::kanMX6 rev3::hphMX6 kpa1::bleMX6 leu1-32 ura4-D18
8B	Y4910	h+ rad3::ura4+ eso1::kanMX6 rev3::hphMX6 kpa1::bleMX6 leu1-32 ura4-D18
8C	Y2311	h- leu1-32
8C	Y0212	h+ rad3::ura4+ leu1-32 ura4-D18

8C	Y4882	h- nth1::ura4+ leu1-32 ura4-D18
8C	Y4885	h- apn2::ura4+ leu1-32 ura4-D18
8C	Y4881	h- nth1::ura4+ rad3::hphMX6 leu1-32 ura4-D18
8C	Y4884	h- apn2::ura4+ rad3::hphMX6 leu1-32 ura4-D18