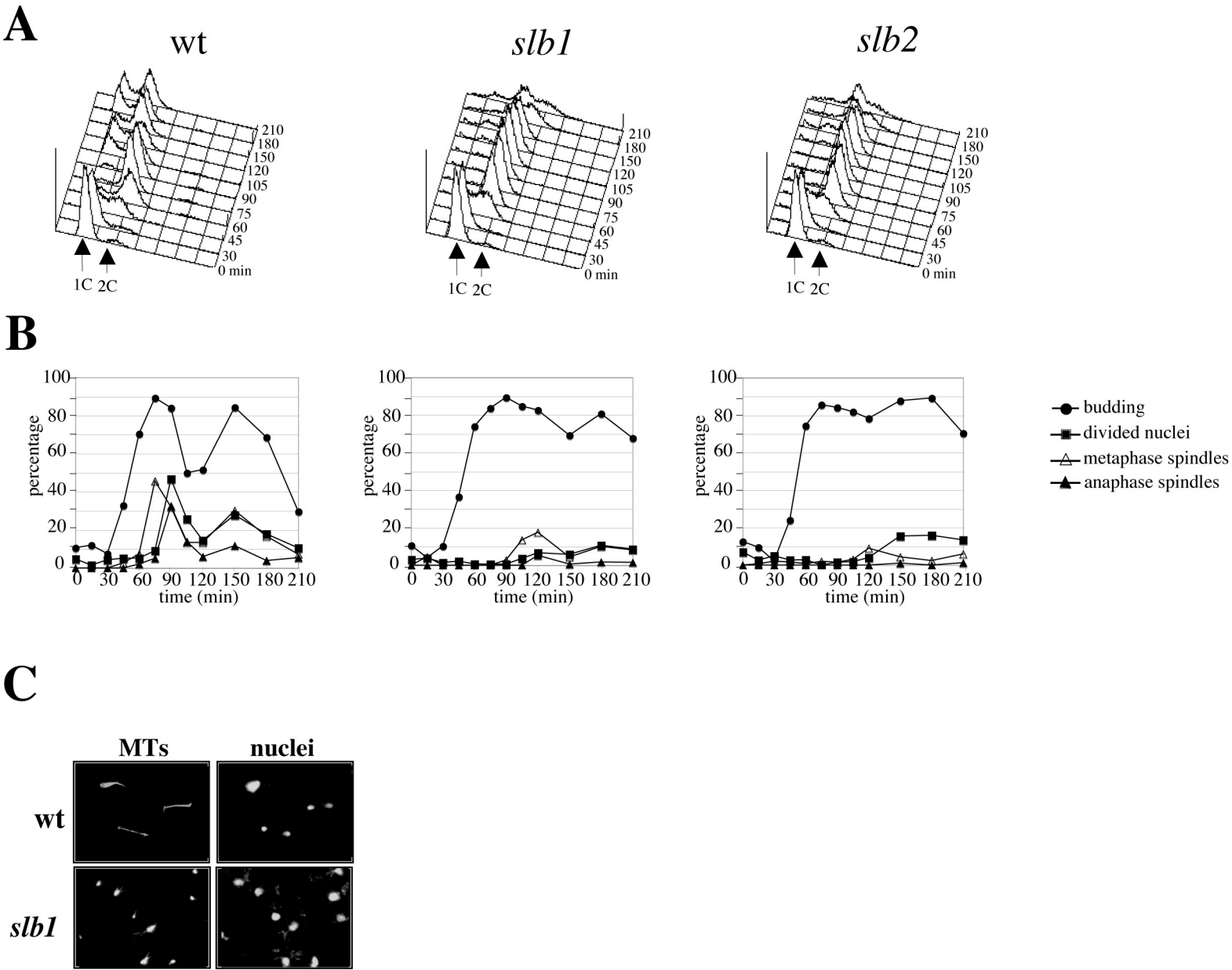
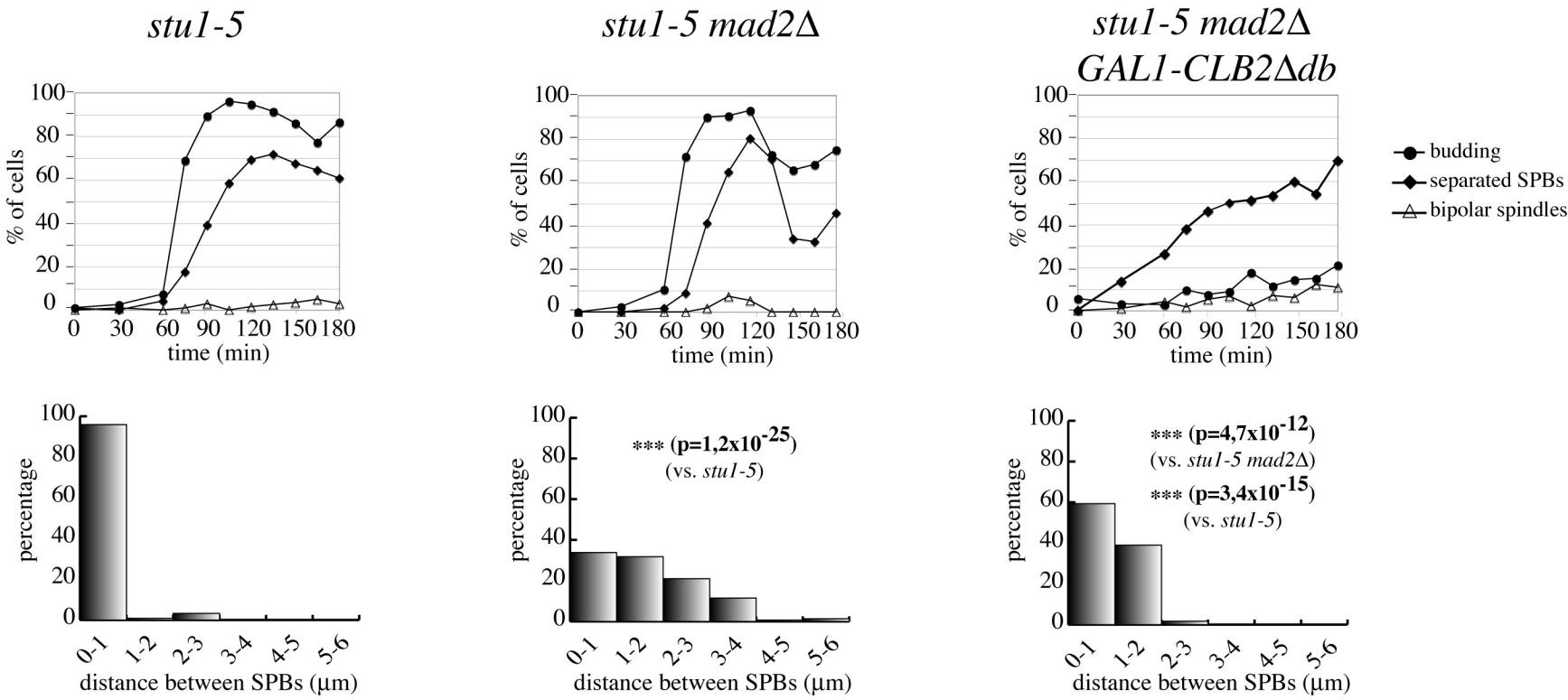
**Supplementary Figure S1. *slb* mutants delay bipolar spindle formation and elongation.** Logarithmically growing cultures of wild-type, *slb1* (ySP4383) and *slb2* (ySP4419) strains were arrested in G1 by α-factor at 25°C and then released at time 0 into YPD medium at 37°C. At the indicated time points samples were taken for (A) FACS analysis of DNA content and (B) to follow kinetics of budding, nuclear division and mitotic spindle assembly/elongation. (C) Micrographs were taken 90' after release.

**Supplementary Figure S2. *CLB2* overexpression partially suppresses the effects of SAC inactivation on SPB separation in *stu1-5* cells.** *stu1-5* (ySP6892), *stu1-5 mad2Δ* (ySP6625), *stu1-5 mad2Δ GAL1-CLB2Δdb* (ySP7653) cells were grown in YEPR, arrested in G1 with α factor at 25°C and released in YEPRG at 37°C. Samples were collected at the indicated times to follow kinetics of budding, SPB separation and mitotic spindle formation. Distances between SPBs were measured 120' after release.


A
wt
slb1
slb2
210
180
150
120
105
90
75
60
45
30
0 min
1C 2C
B
percentage
time (min)
0 30 60 90 120 150 180 210
0 20 40 60 80 100
budding
divided nuclei
metaphase spindles
anaphase spindles
C
MTs
nuclei
wt
slb1


stu1-5
stu1-5 mad2Δ
stu1-5 mad2Δ GAL1-CLB2Δdb
% of cells
time (min)
budding
separated SPBs
bipolar spindles
percentage
distance between SPBs (µm)
0-1
1-2
2-3
3-4
4-5
5-6
*** (p=1,2x10-25) (vs. stu1-5)
*** (p=4,7x10-12) (vs. stu1-5 mad2Δ)
*** (p=3,4x10-15) (vs. stu1-5)

**Supplementary Table I. Strains used in this study**

| Name | Relevant genotype |
|---|---|
| ySP1804 | *MATa, stu1-5, spc42Δ1::LEU2, TRP1::SPC42-GFP (3X)* |
| ySP1856 | *MATa, stu1-5, spc42Δ1::LEU2, TRP1::SPC42-GFP (3X), mad2::TRP1* |
| ySP4383 | *MATa, slb1* |
| ySP4419 | *MATa, slb2* |
| ySP4595 | *MATa, stu1-5, spc42Δ1::LEU2, TRP1::SPC42-GFP (3X), mad3::TRP1 (Kl. lactis)* |
| ySP4935 | *MATa, TRP1::SPC42-GFP* |
| ySP5360 | *MATa, bub3::bub3WDd1::URA3, TRP1::SPC42-GFP, cin8-3, kip1::HIS3* |
| ySP5361 | *MATa, TRP1::SPC42-GFP, cin8-3, kip1::HIS3* |
| ySP5363 | *MATa, cin8-3, kip1::HIS3, TRP1::SPC42-GFP, mad3::TRP1* |
| ySP5364 | *MATa, cin8-3, kip1::HIS3, TRP1::SPC42-GFP, mad2::TRP1* |
| ySP5366 | *MATa, cin8-3, kip1::HIS3, TRP1::SPC42-GFP, CDC20-107 on YCplac33* |
| ySP6194 | *MATa, stu1-5, spc42Δ1::LEU2, TRP1::SPC42-GFP (3X), CDC20-107 on YCplac33* |
| ySP6202 | *MATa, stu1-5, spc42Δ1::LEU2, TRP1::SPC42-GFP (3X), bub3::bub3WDd1::URA3* |
| ySP6204 | *MATa, stu1-5, TRP1::SPC42-GFP (3X), bub3::bub3WDd1::URA* |
| ySP6583 | *MATa, stu1-5, TRP1::SPC42-GFP (3X), mad2::TRP1, cdc14-3* |
| ySP6605 | *MATa, stu1-5, TRP1::SPC42-GFP (3X), mad2::TRP1, dyn1::URA3* |
| ySP6625 | *MATa, stu1-5, TRP1::SPC42-GFP (3X), mad2::TRP1* |
| ySP6665 | *MATa, stu1-5, TRP1::SPC42-GFP (3X), mad2::TRP1, cdc20-3* |
| ySP6789 | *MATa, stu1-5, TRP1::SPC42-GFP, mad3::TRP1 (Kl. lactis), cdc20-3* |
| ySP6891 | *MATa, stu1-5, TRP1::SPC42-GFP, mad3::TRP1 (Kl. lactis)* |
| ySP6892 | *MATa, stu1-5, TRP1::SPC42-GFP (3X)* |
| ySP7068 | *MATa, stu1-5, TRP1::SPC42-GFP (3X), pds1::URA3* |
| ySP7211 | *MATa, stu1-5, TRP1::SPC42-GFP (3X), mad2::TRP1, cdc16-1* |
| ySP7469 | *MATa, bub3::bub3WDd1::URA3, stu1-5, cdc5 (msd2-1::URA3), TRP1::SPC42-GFP* |
| ySP7572 | *MATa, stu1-5, TRP1::SPC42-GFP (3X), mad2::TRP1, leu2::LEU2 GAL-PDS1mdb-myc18* |

| | |
|---|---|
| ySP7653 | *MATa, stu1-5, TRP1::SPC42-GFP (3X), mad2::TRP1, ura3::GAL1-CLBΔdb::URA3* |
| ySP7773 | *MATa, cin8-3, kip1::HIS3, TRP1::SPC42-GFP, 3X GAL1-CDC14::URA3* |
| ySP7926 | *MATa, stu1-5, TRP1::SPC42-GFP (3X), mad2::TRP1, swe1::LEU2* |
| ySP7981 | *MATa, stu1-5, TRP1::SPC42-GFP (3X), mad2::TRP1, cdc14-1* |
| ySP7828 | *MATa, stu1-5, TRP1::SPC42-GFP (3X), mad2::TRP1, esp1-1* |