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Figure S2 A temperature-sensitive growth phenotype is linked to over-expression of GFP-Snc1 in trs85Δ mutant cells. A. Segregation of a temperature-sensitive growth phenotype with trs85\(\Delta \) GFP-Snc1. The following two haploid strains were mated: MATlpha GFP-Snc1::URA3 (YLY130) and MATlpha trs85 Δ ::KAN $^{
m R}$ (YLY919) strain on YPD at 26°C. Diploids were selected, sporulated, dissected and grown on YPD at 26°C (top). Spores (A-D) from six consecutive tetrads (1-6) were inoculated in YPD medium and spotted on various plates, which were incubated at the indicated temperatures. Shown from top to bottom: Growth on YPD at 30°C, YPD+G418 (30°C) for trs85∆::KAN^R, SD-Ura (30°C) for GFP-Snc1::URA3, and YPD at 39°C for temperature sensitivity. Green circles show KAN^R URA3 spores. All KAN^R URA3 spores are temperature sensitive for growth except for spore 3C (*). B. GFP-Snc1 localization in wild type and temperature-sensitive (ts) spores. Spores expressing GFP-Snc1 from panel A were examined using live-cell microscopy for their GFP-Snc1 phenotype at 37°C, as described for Figure 1B. The GFP-Snc1 phenotype is shown for three spores from top to bottom: 4B, TRS85 GFP-Snc1 (arrows point to GFP-Snc1 on the PM in wild type cells); 5B, trs85Δ GFP-Snc1 ts (arrowheads point to the intracellular GFP-Snc1 rings); 3C, trs85Δ GFP-Snc1 not ts (*), GFP-Snc1 accumulates inside cells at a lower level than in ts cells. C. Temperature sensitive growth phenotype by expression of GFP-Snc1 from a plasmid in trs85∆ mutant cells. Wild type and trs85∆ mutant cells were transformed with a highcopy 2μ URA3 empty plasmid, as a negative control, or the same plasmid expressing GFP-Snc1 from the TPI promoter. Shown is growth on SD-Ura plates at 32° and 39°C (10-fold serial dilutions from left to right). Over-expression of GFP-Snc1 in trs85∆ mutant cells results in a temperature-sensitive growth phenotype at 39°C. Results shown in this panel are representative of four independent transformants.

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