Supplemental Figure 1. Extended treatment with heat but not sodium chloride or sorbitol highly increases desiccation tolerance. Cells were treated as described in Figure 3A-B except they were grown longer for an additional timepoint at 5 hours.

Supplemental figure 2. Incubation in hyperosmotic medium induces a stress response. A) Aliquots were taken at the timepoints indicated and the amount of *HSP12* RNA was determined. B) Aliquots were taken at the timepoints indicated and the amount of *STL1* RNA was determined. RNA was normalized to the amount of *ACT1* RNA in each sample, and then normalized to the zero timepoint.

Supplemental figure 3. Desiccation with stressors does not affect desiccation tolerance. A) Exponential phase BY4742 cells growing at 30°C in rich medium were pelleted and resuspended in the same medium with or without 1M sodium chloride at an $OD_{600} < 0.6$ and desiccated in dilute PBS with or without 1M sodium chloride at the indicated timepoints. B) Exponential phase BY4742 cells growing at 30°C in rich medium were pelleted and resuspended in the same medium with or without 2mM dithiothreitol at an $OD_{600} < 0.6$ and desiccated in dilute PBS with or without 2mM dithiothreitol at the indicated timepoints. C) Exponential phase BY4742 cells growing at 30°C in rich medium were pelleted and resuspended in the same medium with or without H_2O_2 at an $OD_{600} < 0.6$ and desiccated in dilute PBS with or without H_2O_2 at the indicated timepoints.

Supplemental figure 4. Pre-treatment with severe oxidative or reductive stress does not induce desiccation tolerance. A) Wild-type cells grown in rich medium were transferred to the same medium containing the indicated concentrations of dithiothreitol and were assayed for desiccation tolerance at the indicated timepoints. B) Wild-type cells grown in rich medium were transferred to the same medium containing the indicated concentrations of hydrogen peroxide and were assayed for desiccation tolerance at the indicated timepoints.

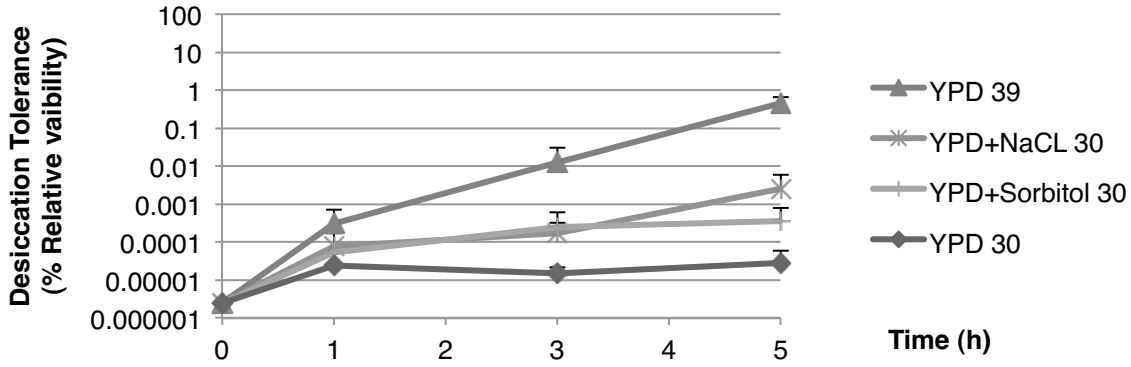
Supplemental figure 5. Further analysis of TOR role in desiccation tolerance. A) Exponential phase cultures of the indicated genotype grown in rich medium were assayed for desiccation tolerance. B) Cells with either $cyr1^{ts}$ allele or the wild-type allele of *CYR1* were grown to exponential phase at 23°C and then transferred to the same medium at 30°C with either rapamycin or vehicle added and grown for 6 hours and then assayed for desiccation tolerance.

Supplemental Figure 6. Increased desiccation tolerance in *sfp1Δ* strains is not dependent on Hsp12p and Hsp26p. Exponential phase cultures of the indicated genotype grown in rich medium were assayed for desiccation tolerance.

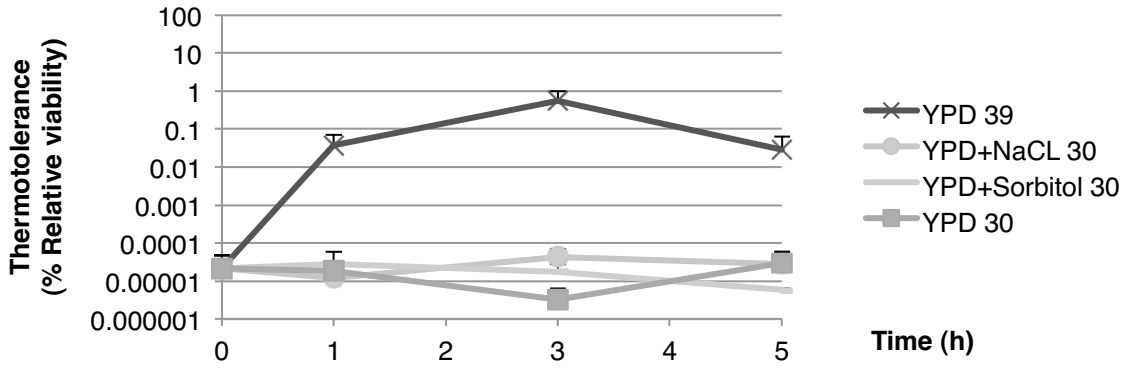
Supplemental Figure 7. Here the same data for desiccation tolerance is shown as in figure 9C, but the strains with genes involved in Large Subunit, Small Subunit, or General Ribosome biogenesis are indicated by the square, diamond, or triangle symbols, respectively.

SUPPLEMENTAL FIGURE 1

A

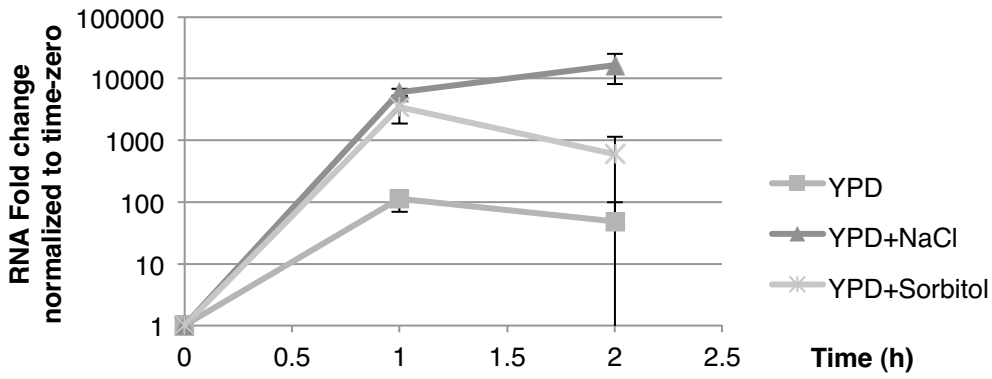


B



SUPPLEMENTAL FIGURE 2

A



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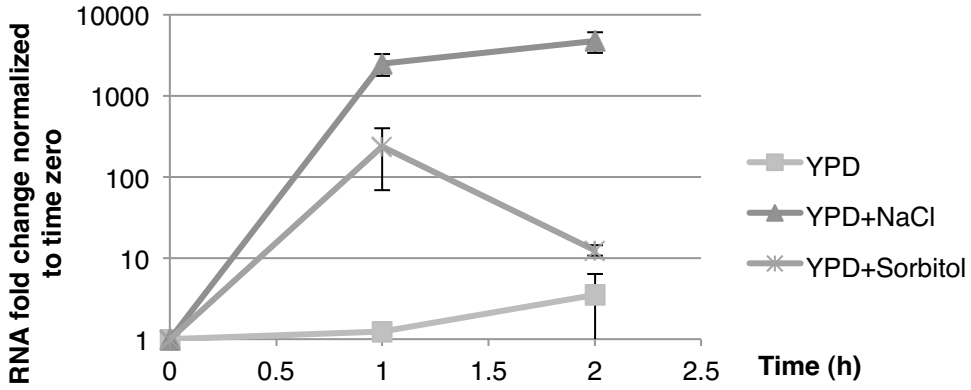
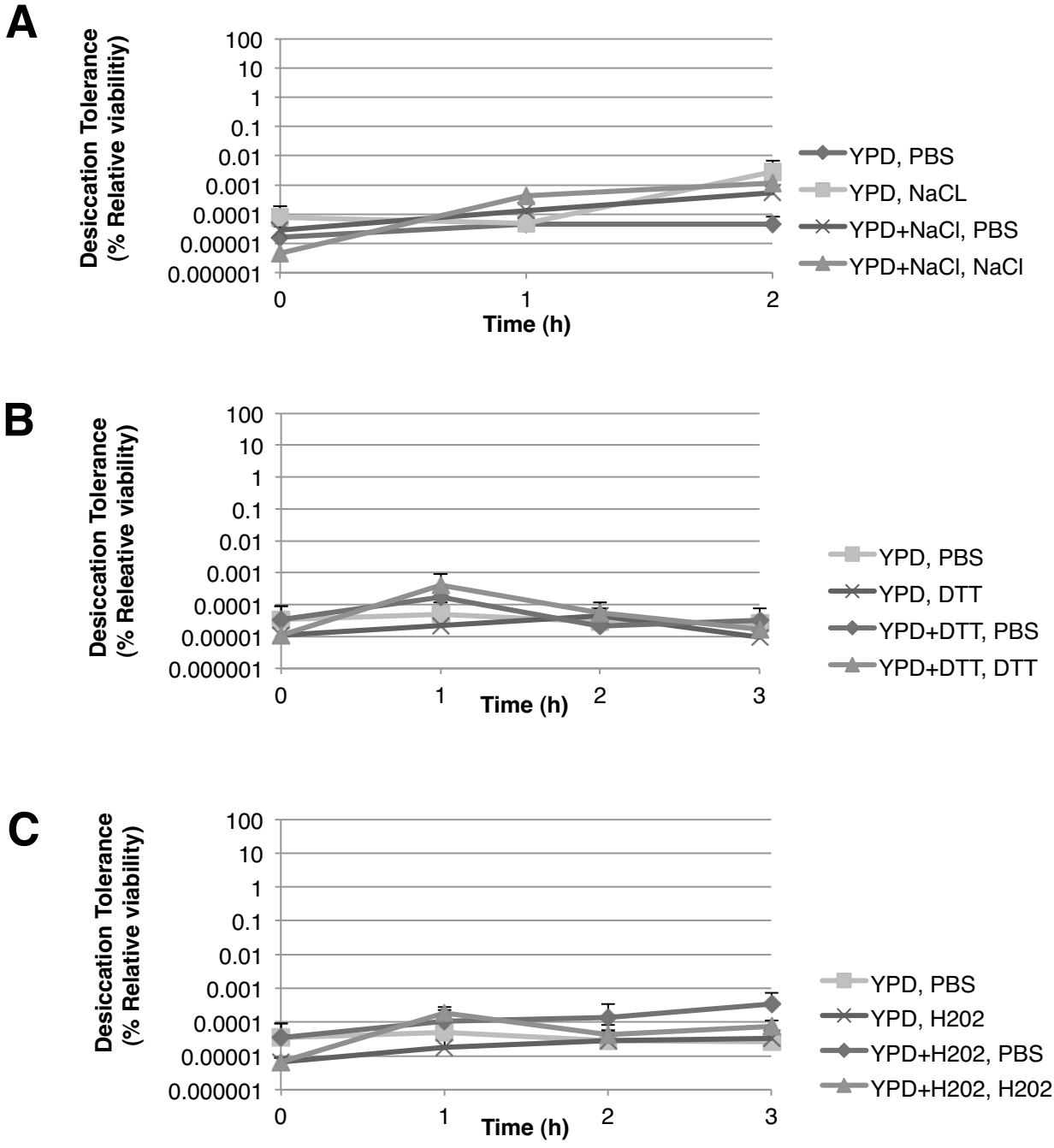
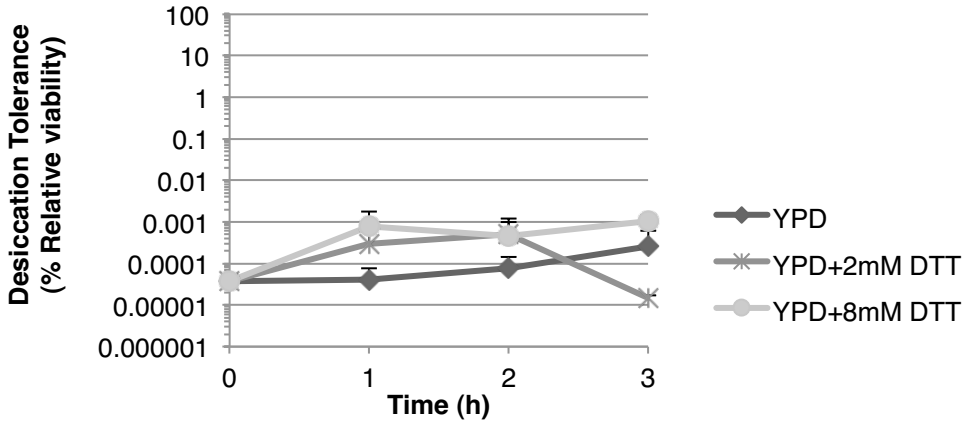


SUPPLEMENTAL FIGURE 3



SUPPLEMENTAL FIGURE 4

A



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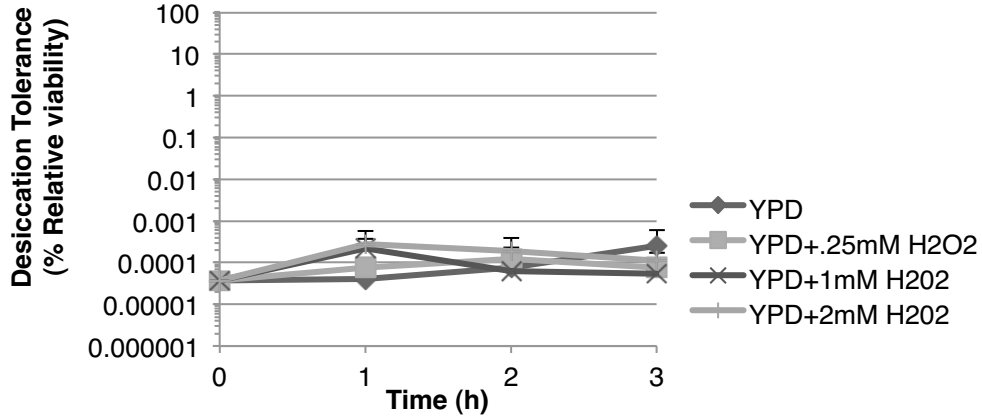
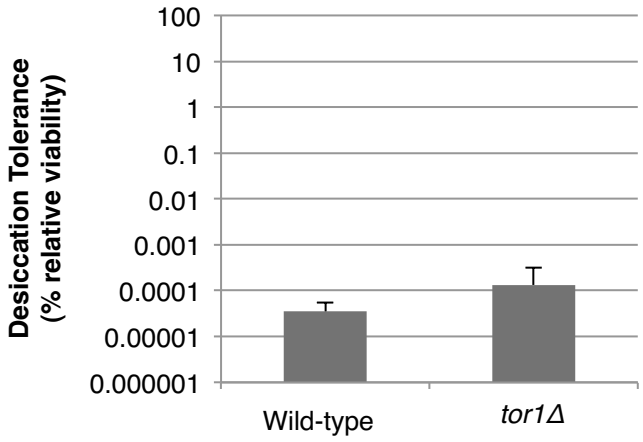


SUPPLEMENTAL FIGURE 5

A



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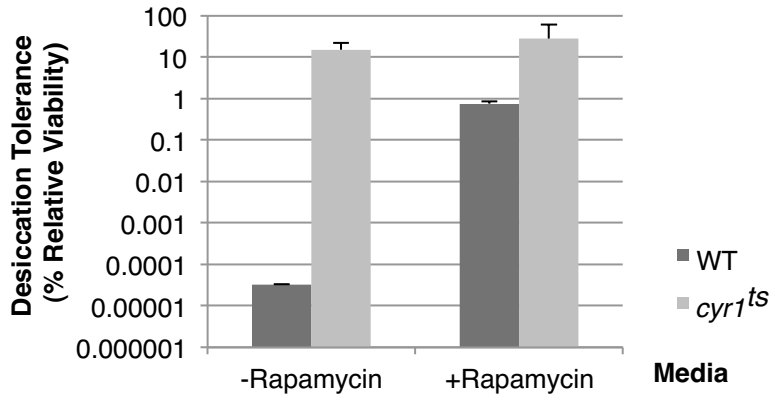
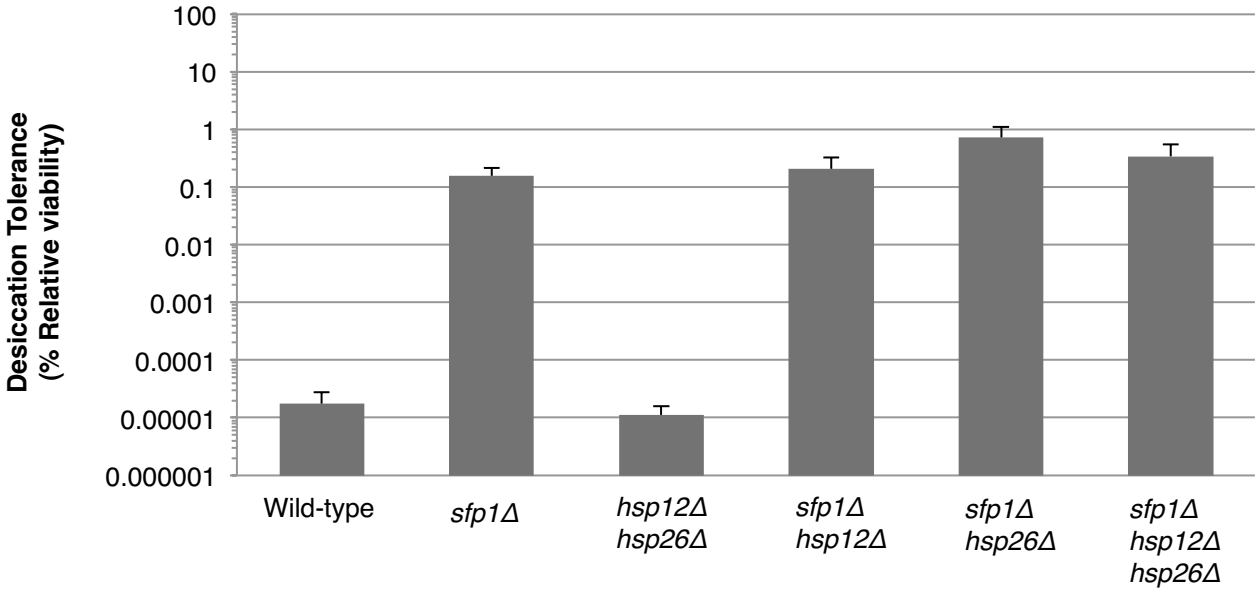


SUPPLEMENTAL FIGURE 6



SUPPLEMENTAL FIGURE 7