

**Fig. S1.**

A) Ssa2-GFP functionality assayed at top left: spot test of indicated strains were serially diluted, spotted on YPD plates and incubated for 2-4 days at 30°, 35° and 37°C respectively. Left and bottom row shows representative tetrads of the indicated strains.

B) Wt, *ubp3Δ* and *bre5Δ* cells with a C-terminal GFP tag of the chromosomal SSA2 were subjected to heat stress (42°C for 30 minutes), allowed to recover at 30°C and imaged by wide field fluorescence microscopy. Data represent percentage of cells containing Ssa2-GFP aggregates over time and is represented as the mean of at least 5 experiments ± standard deviation (SD).

C) Quantification of cells containing GFP-Ubc9<sup>ts</sup> aggregates with respect to percentage of the whole population. Data is represented as the mean (± SD) of three independent experiments.

D) High copy plasmids expressing either *PDE2* or an empty vector in wt and *ubp3Δ* strains with a chromosomal copy of Ssa2-GFP. Cells were monitored and quantified as in A, B and C. Data is represented as the mean (± SD) of at least 3 experiments.

