



Fig S2 Combined effects of HU and elevated temperature

Strains 8127-7-4 (A364a WT), 8289-12-2 (A364a *spt16-ΔNTD*), DY150 (W303 WT), and 8368-3-2 (W303 *spt16-ΔNTD*) were grown to saturation in rich medium, then aliquots of 10-fold serial dilutions were placed on plates with no HU or the amount of HU indicated (mM) and incubated at the temperature shown. Deleting the Spt16 NTD consistently caused a growth defect on media containing HU, but the concentration of HU and the temperature at which this defect was maximal varied with time and with genetic background. For example, a clear defect was noted on HU60 in both strain backgrounds after 2 days at 30°, but was no longer evident after 3 days. This shows that the defect is largely a retardation of growth, not a loss of viability. Increasing the temperature or increasing the concentration of HU enhanced the growth defect, but the WT strain was also more severely affected. The W303 strains appear to be inherently less able to withstand these simultaneous stresses, as even the WT failed to grow on HU200 at 33°, a condition tolerated by the A364a strain even with the *spt16-ΔNTD* mutation. We conclude that elevated temperatures and the presence of HU are independent, additive stresses even for WT yeast strains and the effect is enhanced by deletion of the Spt16 NTD. This pattern is consistent with intact stress checkpoints but a less effective response to the stress.