Figure S2  Histone mutants controls.

(A) Phenotypes of histone H4 lysine to alanine mutations in the esa1Δ sds3Δ hht1-hhf1Δ hht2-hhf2Δ background. Tested strains included the following histone mutations: wild-type histones H3-H4 (LPY17368), H4K5A (LPY17272), H4K8A (LPY17271), H4K12A (LPY17273) and H4K16A (LPY17369). (B) Histone mutants in the wild-type background are not independently sensitive to environmental challenges. Strains were deleted for genes encoding all copies of H3 and H4 (hht- hhf∆) and carried a plasmid with either wild type H3 and H4 or with one mutated lysine in H4 or H3 as indicated. Wild type histones H3-H4 (LPY14161), H4K5R (LPY14162), H4K8R (LPY20625), H4K12R (LPY20626), H4K16R (LPY20628), H3K9R (LPY20631), H3K14R (LPY20629), H4K5A (LPY13061), H4K8A (LPY14162), H4K12A (LPY13060), H4K16A (LPY13059), H3K14A (LPY15908), H3K9A (LPY20630), H3K9Q (LPY20632), H4K5Q,K8Q,K12Q (LPY10700), H4K8,K12Q (LPY20633) and H4K8,12A (LPY19307) in the hht1-hhf1Δ hht2-hhf2Δ background were tested in serial dilutions on YPAD at room temperature, 30° and 35°. Hydroxyurea plates were grown at 30°. The combined H4K5Q,K8Q,K12Q mutant was previously found to be sensitive to DNA damage (Bird et al. 2002). The same mutant in the esa1Δ sds3Δ background suppressed temperature sensitivity, but not DNA damage sensitivity as expected (Figure 2E).