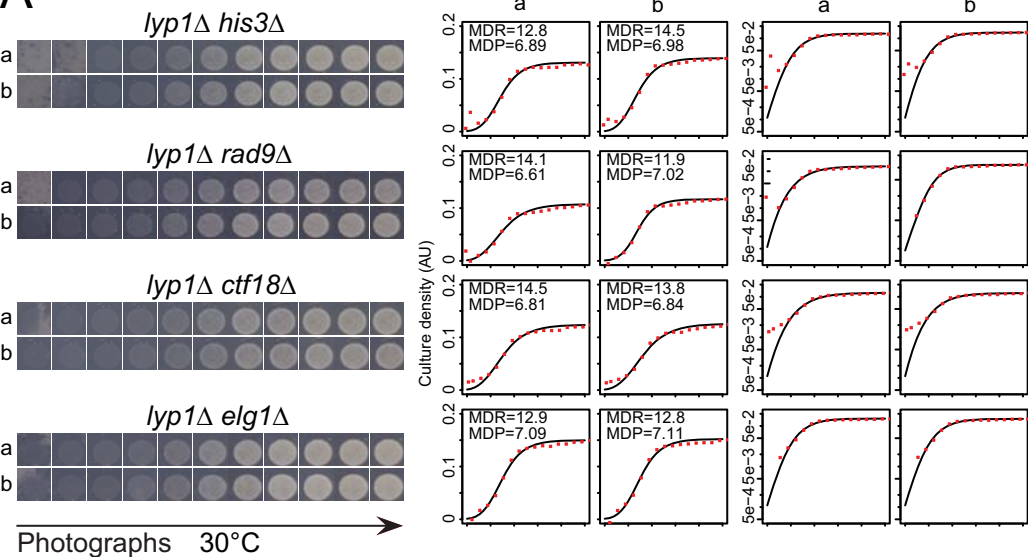
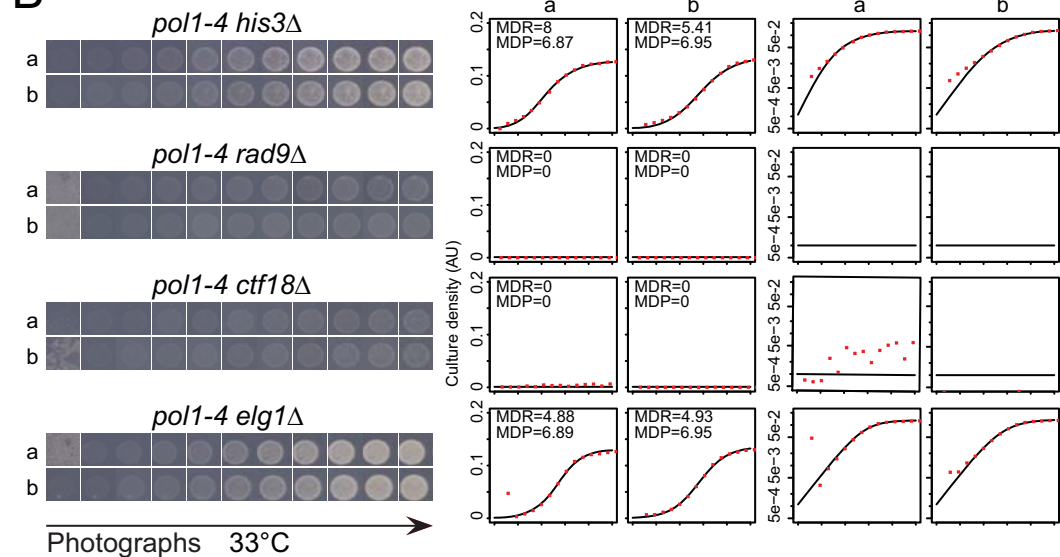


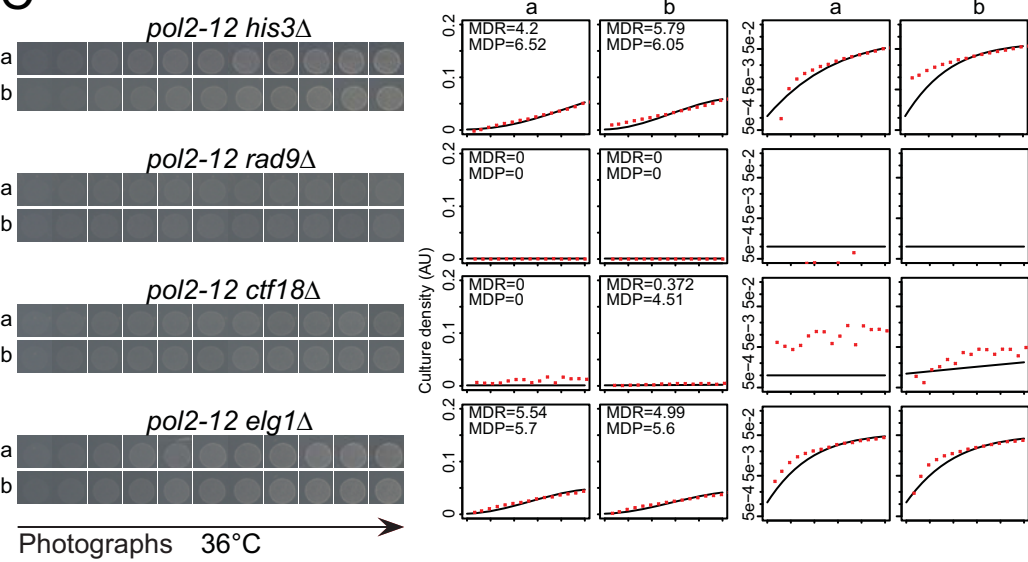
A



B



C



D

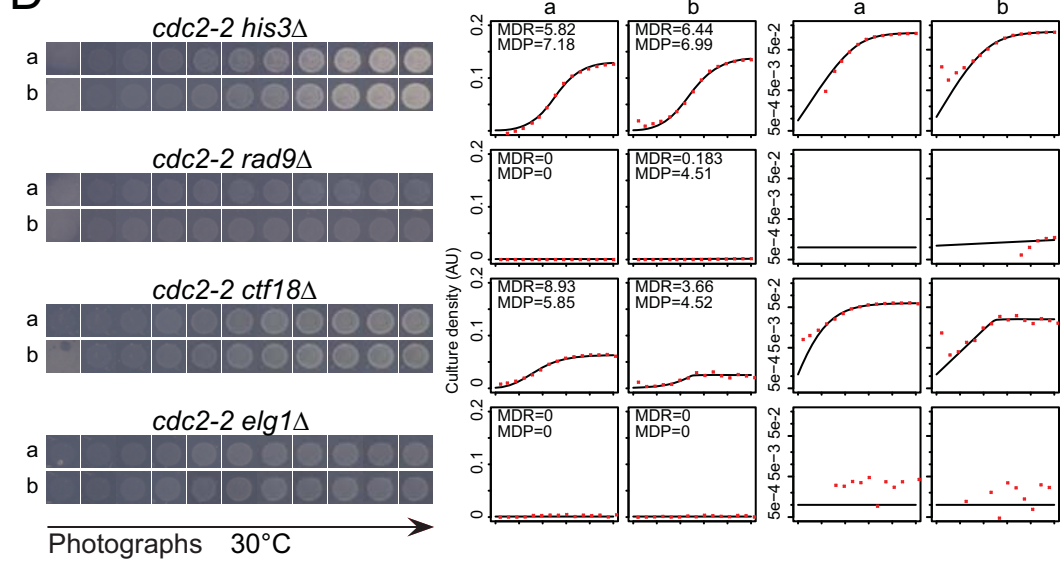


Figure S2: Quantitative fitness analysis

A) First eleven photographs of a QFA time course showing two representative replicates (a and b) of *his3Δ*, *rad9Δ*, *ctf18Δ* and *elg1Δ* gene deletions combined with *lyp1Δ* (control) at 30°C (left panel). QFA growth curves (linear on the left and logarithmic on the right) for each of the double-mutants (a and b) are presented in the left panel at 30°C for 2.5 days (right panel). Cell density of individual cultures was determined after image-analysis. The generalized logistic growth model is fitted to each culture density time-series. Fitness is defined as the product of the MDR and MDP values. **B)** As in A) but gene deletions were combined with *pol1-4* mutation at 33°C. **C)** As in A) but gene deletions were combined with *pol2-12* mutation at 36°C. **D)** As in A) but gene deletions were combined with *cdc2-2* mutation at 30°C.