



**Figure S5** Increase in growth rates of fusants relative to the average rate of their parents (calculated as fusant rate / average parent rate - 1) plotted against the reduction of growth rates of *MTL*-homozygotes after transformation with resistance cassettes (the average of the reductions for both parents each calculated as 1 - rate of transformed homozygote / rate of original homozygote). Calculations are based on rates determined after  $\geq 100$  generations of serial propagation. (A) YPD medium at 37°C; (B) harsh conditions (excluding transformed and untransformed W17 $\alpha$  and the fusants it parented, since only the fusants could grow in harsh conditions).