



**Figure S1 Haploid biological replicates demonstrate consistency of quantitative assays** **a** Mean quantitative haploid flocculation data for one biological replicate (x-axis) is plotted against quantitative haploid flocculation data for a second biological replicate (y-axis) for correlation. Average taken and error bars calculated over three measurement replicates per strain. **b** Mean quantitative haploid invasion data for one biological replicate (x-axis) is plotted against quantitative haploid invasion data for a second biological replicate (y-axis) for correlation. Average taken and error bars calculated over three technical replicates per strain. **c** Mean quantitative haploid polystyrene adhesion data for one biological replicate (x-axis) is plotted against quantitative haploid polystyrene adhesion data for a second biological replicate (y-axis) for correlation. Average taken and error bars calculated over two technical replicates per strain. Outlier A shows the measurements from strain 322134S, and outlier B the measurements from strain SK1. Each of these strains was highly flocculent, and as a result the biofilm formed on polystyrene stained inconsistently across biological replicates and, in some cases, across technical replicates as well. If these outliers are eliminated from the analysis, the  $R^2$  value becomes 0.83. **d** Biological replicates of complex mat formation for two biological replicates of representative haploid strains. Photos taken at day 13 of growth.