**Table S1. Bisexual cell fusion frequencies for the mating competition experiment.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Competition pair | Fusion pair | Cell fusion per 1000 CFU | Fold difference | P value |
| Competing for **a** MH *HYG* | α-1 HHVs α-2 MH | α HH X **a** MH | 52 | 8.1 | 0.0005\*\*\* |
| α MH X **a** MH | 6.4 |
| α-1 HHVs α-2 LH | α HH X **a** MH | 10 | 24 | 0.0023\*\* |
| α LH X **a** MH | 0.41 |
| α-1 HHVs α-2 LH | α MH X **a** MH | 3.4 | 5.8 | 0.0159\* |
| α LH X **a** MH | 0.59 |
| Competing for **a** LH *HYG* | α-1 HHVs α-2 MH | α HH X **a** LH | 1.3 | 6.5 | 0.0003\*\*\* |
| α MH X **a** LH | 0.2 |
| α-1 HHVs α-2 LH | α HH X **a** LH | 0.29 | 14.5 | 0.0228\* |
| α LH X **a** LH | 0.02 |
| α-1 HHVs α-2 LH | α MH X **a** LH | 0.091 | 4.6 | 0.0006\*\*\* |
| α LH X **a** LH | 0.02 |
| Competing for **a** NH *HYG* | α-1 HHVs α-2 MH | α HH X **a** NH | 0.049 | 5.3 | 0.0468\* |
| α MH X **a** NH | 0.0092 |
| α-1 HHVs α-2 LH | α HH X **a** NH | 0.064 | 8.9 | 0.0170\* |
| α LH X **a** NH | 0.0072 |
| α-1 HHVs α-2 LH | α MH X **a** NH | 0.01 | 1.7 | 0.0126\* |
| α LH X **a** NH | 0.0059 |