|  |  |  |
| --- | --- | --- |
| **Experiment** | **Library** | **Reads** |
| *E. coli* vector pool Bar-seq | RBJC009\_IT013 | 93,277,156 |
| RBJC009\_IT014 | 73,914,499 |
| RBJC009\_IT015 | 79,273,122 |
| RBJC009\_IT016 | 81,404,878 |
| RBJC45\_IT013 | 100,794,463 |
| RBJC45\_IT014 | 92,410,111 |
| RBJC45\_IT015 | 91,931,624 |
| RBJC45\_I0T16 | 96,631,037 |
| RBJC009\_IT013 | 93,277,156 |
| RBJC009\_IT014 | 73,914,499 |
| RBJC009\_IT015 | 79,273,122 |
| RBJC45\_IT016 | 96,631,037 |
| 37°C vs. 28°C barcoded RH-seq in yeast | RMBA038A\_IT001 | 16,042,537 |
| RBMA038A\_IT002 | 19,451,725 |
| RBMA038A\_IT003 | 16,313,279 |
| RBMA038A\_IT004 | 19,512,043 |
| RBMA038A\_IT005 | 13,625,004 |
| RBMA038A\_IT006 | 22,257,379 |
| RBMA038A\_IT007 | 22,385,133 |
| RBMA038A\_IT008 | 16,359,601 |
| RBMA038A\_IT009 | 20,118,293 |
| RBMA038A\_IT010 | 19,121,369 |
| RBMA038A\_IT011 | 18,887,044 |
| RBMA038A\_IT012 | 15,895,905 |
| RBMA038A\_IT013 | 18,922,229 |
| RBMA038A\_IT014 | 26,602 |
| RBMA038A\_IT015 | 16,571,744 |
| RBMA038A\_IT016 | 18,783,445 |
| RBMA038A\_IT017 | 17,671,257 |
| RBMA038A\_IT018 | 18,040,605 |
| RBMA038A\_IT019 | 16,929,985 |
| RBMA038A\_IT020 | 15,319,721 |
| RBMA038A\_IT021 | 16,897,401 |
| RBMA038A\_IT022 | 16,372,841 |
| RBMA038A\_IT023 | 16,679,583 |
| RBMA038A\_IT024 | 13,875,240 |
| 36°C vs. 28°C barcoded RH-seq in yeast | RMBA039A\_IT001 | 28,004,341 |
| RBMA039A\_IT002 | 19,283,097 |
| RBMA039A\_IT003 | 12,427,040 |
| RBMA039A\_IT004 | 13,934,236 |
| RBMA039A\_IT005 | 12,068,707 |
| RBMA039A\_IT006 | 60,072,532 |
| RBMA039A\_IT008 | 12,500,340 |
| RBMA039A\_IT009 | 25,029,516 |
| RBMA039A\_IT010 | 14,765,007 |
| RBMA039A\_IT011 | 7,059,133 |
| RBMA039A\_IT012 | 19,837,690 |
| RBMA039A\_IT013 | 14,393,602 |
| RBMA039A\_IT014 | 19,572,649 |
| RBMA039A\_IT015 | 8,814,383 |
| RBMA039A\_IT016 | 14,587,181 |
| RBMA039A\_IT017 | 8,619,661 |
| RBMA039A\_IT018 | 13,216,843 |
| RBMA039A\_IT019 | 12,499,486 |
| RBMA039A\_IT020 | 11,963,866 |
| RBMA039A\_IT021 | 6,626,989 |
| RBMA039A\_IT022 | 11,649,542 |
| RBMA039A\_IT023 | 5,813,357 |
| RBMA039A\_IT024 | 9,349,172 |

**Supplementary Table 3. Bar-seq sequencing data sets.** Each row reports numbers of reads sequenced for the indicated Bar-seq experiment. The first set of rows reports results from a check of barcoded piggyBac transposon plasmids as in Figure S1C; the remaining rows report results from quantification of yeast hemizygote insertion genotypes after competition in the indicated condition, as in Figure 1B of the main text. Experiment identifiers are from BioProject PRJNA735401.