

| Strain | Full Dataset | | Filtered dataset | |
|--------|--------------|-------------|------------------|-------------|
| | Pooled Cells | Mouse level | Pooled Cells | Mouse level |
| WSB | p<0.0001 | 0.0409 | p<0.0001 | 1e-04 |
| | 1e-04 | 0.1056 | 3e-04 | p<0.0001 |
| G | p<0.0001 | p<0.0001 | p<0.0001 | p<0.0001 |
| | p<0.0001 | 0.0012 | 4e-04 | 6e-04 |
| LEW | p<0.0001 | 5e-04 | p<0.0001 | 3e-04 |
| | p<0.0001 | 0.0013 | p<0.0001 | 0.004 |
| PWD | 0.0013 | 0.0824 | 0.4811 | 0.061 |
| | p<0.0001 | 0.0024 | 0.0032 | 0.0121 |
| SKIVE | 0.0309 | 0.277 | 0.0022 | 0.0027 |
| | 0.0172 | 0.1411 | 0.0045 | 0.0043 |
| KAZ | p<0.0001 | p<0.0001 | 0.053 | 8e-04 |
| | 0.001 | p<0.0001 | 0.1546 | p<0.0001 |
| MSM | p<0.0001 | 0.0382 | p<0.0001 | p<0.0001 |
| | p<0.0001 | 0.0043 | p<0.0001 | p<0.0001 |

Supplemental Table 1. Results of permutation tests examining the difference between females and males in the within-mouse standard deviation or coefficient of variation in MLH1 focus count. P-values computed based on 10,000 permutations are displayed. Top of cell = p-value for sex difference in standard deviation; bottom of cell = p-value for sex difference in coefficient of variation.