**Supplemental Table 3. RAD-51 statistics**

(Figure 2B)

|  |  |  |  |
| --- | --- | --- | --- |
| PZ | WT | *brc-1(xoe4)* | *brc-1(xoe4)**cku-80(ok861)* |
| WT | - |  |  |
| *brc-1(xoe4)* | NS | - |  |
| *brc-1(xoe4) cku-80(ok861)* | NS | NS | - |
| *cku-80(ok861)* | NS | NS | NS |
|  |  |  |  |
| TZ |  |  |  |
| WT | - |  |  |
| *brc-1(xoe4)* | <0.0001 | - |  |
| *brc-1(xoe4) cku-80(ok861)* | 0.004 | <0.0001 | - |
| *cku-80(ok861)* | NS | <0.0001 | 0.046 |
|  |  |  |  |
| EP |  |  |  |
| WT | - |  |  |
| *brc-1(xoe4)* | <0.0001 | - |  |
| *brc-1(xoe4) cku-80(ok861)* | NS | <0.0001 | - |
| *cku-80(ok861)* | NS | <0.0001 | NS |
|  |  |  |  |
| MP |  |  |  |
| WT | - |  |  |
| *brc-1(xoe4)* | <0.0001 | - |  |
| *brc-1(xoe4) cku-80(ok861)* | NS | <0.0001 | - |
| *cku-80(ok861)* | NS | 0.0005 | NS |
|  |  |  |  |
| LP |  |  |  |
| WT | - |  |  |
| *brc-1(xoe4)* | NS | - |  |
| *brc-1(xoe4) cku-80(ok861)* | 0.0004 | <0.0001 | - |
| *cku-80(ok861)* | NS | NS | 0.001 |

(Supplemental Figure 1A)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| PZ | WT | *brc-1(tm1145) brd-1(dw1)* | *brc-1(tm1145)**brd-1(dw1)**cku-70(tm1524)* | *cku-70(tm1524)* | *brd-1(ok1623)**cku-70(tm1524)* |
| WT | - |  |  |  |  |
| *brc-1(tm1145) brd-1(dw1)* | NS | - |  |  |  |
| *brc-1(tm1145)**brd-1(dw1)**cku-70(tm1524)* | NS | NS | - |  |  |
| *cku-70(tm1524)* | NS | NS | NS | - |  |
| *brd-1(ok1623)**cku-70(tm1524)* | NS | NS | NS | NS | - |
| *brd-1(ok1623)* | NS | NS | NS | NS | NS |
|  |  |  |  |  |  |
| TZ |  |  |  |  |  |
| WT | - |  |  |  |  |
| *brc-1(tm1145) brd-1(dw1)* | 0.001 | - |  |  |  |
| *brc-1(tm1145)**brd-1(dw1)**cku-70(tm1524)* | NS | 0.0068 | - |  |  |
| *cku-70(tm1524)* | NS | 0.0044 | NS | - |  |
| *brd-1(ok1623)**cku-70(tm1524)* | NS | <0.0001 | 0.0194 | 0.0422 | - |
| *brd-1(ok1623)* | <0.0001 | NS | 0.0031 | <0.0001 | <0.0001 |
|  |  |  |  |  |  |
| EP |  |  |  |  |  |
| WT | - |  |  |  |  |
| *brc-1(tm1145) brd-1(dw1)* | <0.0001 | - |  |  |  |
| *brc-1(tm1145)**brd-1(dw1)**cku-70(tm1524)* | NS | <0.0001 | - |  |  |
| *cku-70(tm1524)* | NS | <0.0001 | 0.0026 | - |  |
| *brd-1(ok1623)**cku-70(tm1524)* | 0.0366 | <0.0001 | NS | 0.0041 |  |
| *brd-1(ok1623)* | <0.0001 | NS | <0.0001 | 0.0002 | <0.0001 |
|  |  |  |  |  |  |
| MP |  |  |  |  |  |
| WT | - |  |  |  |  |
| *brc-1(tm1145) brd-1(dw1)* | <0.0001 | - |  |  |  |
| *brc-1(tm1145)**brd-1(dw1)**cku-70(tm1524)* | NS | <0.0001 | - |  |  |
| *cku-70(tm1524)* | 0.0089 | 0.0151 | 0.0134 | - |  |
| *brd-1(ok1623)**cku-70(tm1524)* | <0.0001 | <0.0001 | <0.0001 | <0.0001 | - |
| *brd-1(ok1623)* | <0.0001 | NS | <0.0001 | 0.0006 | <0.0001 |
|  |  |  |  |  |  |
| LP |  |  |  |  |  |
| WT | - |  |  |  |  |
| *brc-1(tm1145) brd-1(dw1)* | 0.0262 | - |  |  |  |
| *brc-1(tm1145)**brd-1(dw1)**cku-70(tm1524)* | NS | 0.0182 | - |  |  |
| *cku-70(tm1524)* | <0.0001 | 0.0456 | <0.0001 | - |  |
| *brd-1(ok1623)**cku-70(tm1524)* | NS | 0.0172 | NS | <0.0001 | - |
| *brd-1(ok1623)* | 0.0002 | NS | <0.0001 | NS | 0.0002 |

Statistical comparisons by Mann-Whitney.