**Table S5: Sequence annotation of chromosomal breakpoints detected in the sequenced chromosome-loss strains derived from the temperature stress experiment.** Listed are the coordinates of chromosomal rearrangements and the underlying sequence annotation. Out of 23 breakpoints, 16 are located in annotated transposable elements.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Strain** | **Chromosome** | **Coordinates** | **Structural rearrangement** | **Sequence annotation** |
| **Zt09-28-1** | 8 | 2,443,191 | Chromosome breakage | TE1  Helitron  DHH2 |
|  | 9 | 2,126,204 | Chromosome breakage and *de novo* telomere formation | TE  LINE  RIL2 |
|  | 15 | 639,159 | Chromosome breakage and *de novo* telomere formation | TE  LINE  RIL2 |
| **Zt09-28-2** | 3 | 3,495,781 | Chromosome fusion | intergenic |
|  | 9 | 2,139,942 | Chromosome breakage and *de novo* telomere formation | TE  LTR  RLC7 |
|  | 13 | 1,185,632 | Chromosome fusion | telomere |
|  | 21 | 2,926 | Chromosome breakage | TE  LINE  RIL2 |
|  | 21 | 31,581 | *De novo* telomere formation | TE  LINE  RIL2 |
| **Zt09-28-3** | 1 | 183,500 | Chromosome breakage, *de novo* telomere formation | TE  LTR  RLC1 |
|  | 2 | 5,142 | Chromosome breakage, *de* *novo* telomere formation | TE  uncategorized |
|  | 2 | 8,277 | Chromosome breakage, *de novo* telomere formation, | intergenic |
|  | 2 | 3,738,843 | Chromosome breakage, *de novo* telomere formation | TE  LTR  RLC1 |
|  | 2 | 3,855,934 | Chromosome breakage | TE  LTR  RLC1 |
|  | 6 | 2,673,174 | Chromosome breakage and *de novo* telomere formation | TE  LTR  RLG14 |
|  | 10 | 27,017 | Chromosome breakage and *de novo* telomere formation | In gene  Chr10\_00005  (unknown function) |
|  | 11 | 1,621,581 | Chromosome breakage and *de novo* telomere formation | intergenic |
|  | 17 | 59,085 | Chromosome breakage and *de novo* telomere formation | TE  LINE  RIL2 |
|  | 17 | 582,095 | Chromosome breakage | TE  uncategorized |
|  | 19 | 23,469 | Chromosome breakage and *de novo* telomere formation | In gene  Chr19\_00002  (alpha-tubulin) |
| **Zt09-28-4** | 13 | 1,184,490 | Chromosome breakage and *de novo* telomere formation | intergenic |
|  | 17 | 53,867 | Chromosome breakage, *de novo* telomere formation, chromosome fusion | TE  LINE  RIL2 |
| **Zt09-28-5** | 4 | 10,389 | Chromosome breakage and *de novo* telomere formation | TE  uncategorized |
|  | 10 | 8,022 | Chromosome breakage | TE  LTR  RLX-TRIM3 |

1TE = transposable element