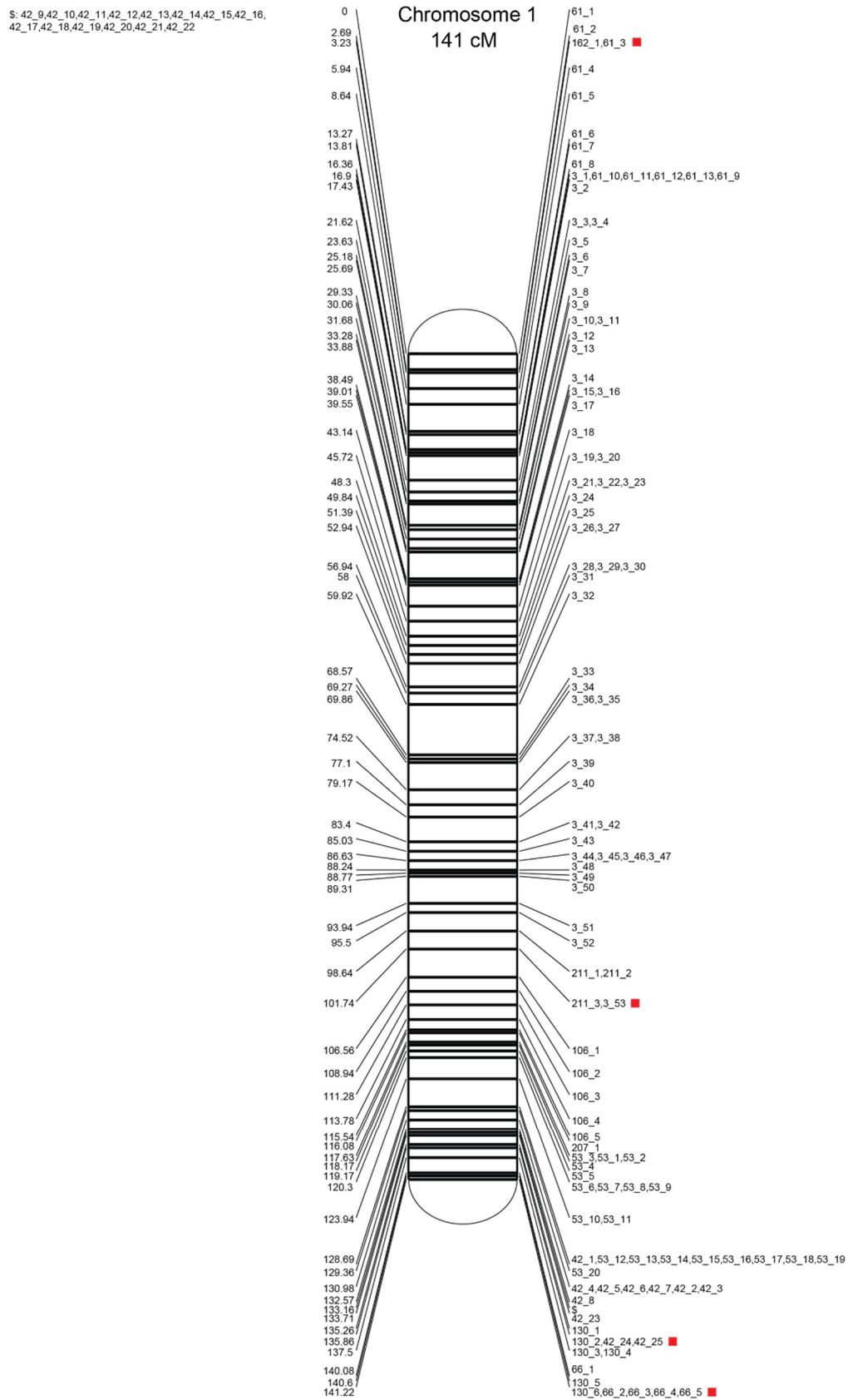
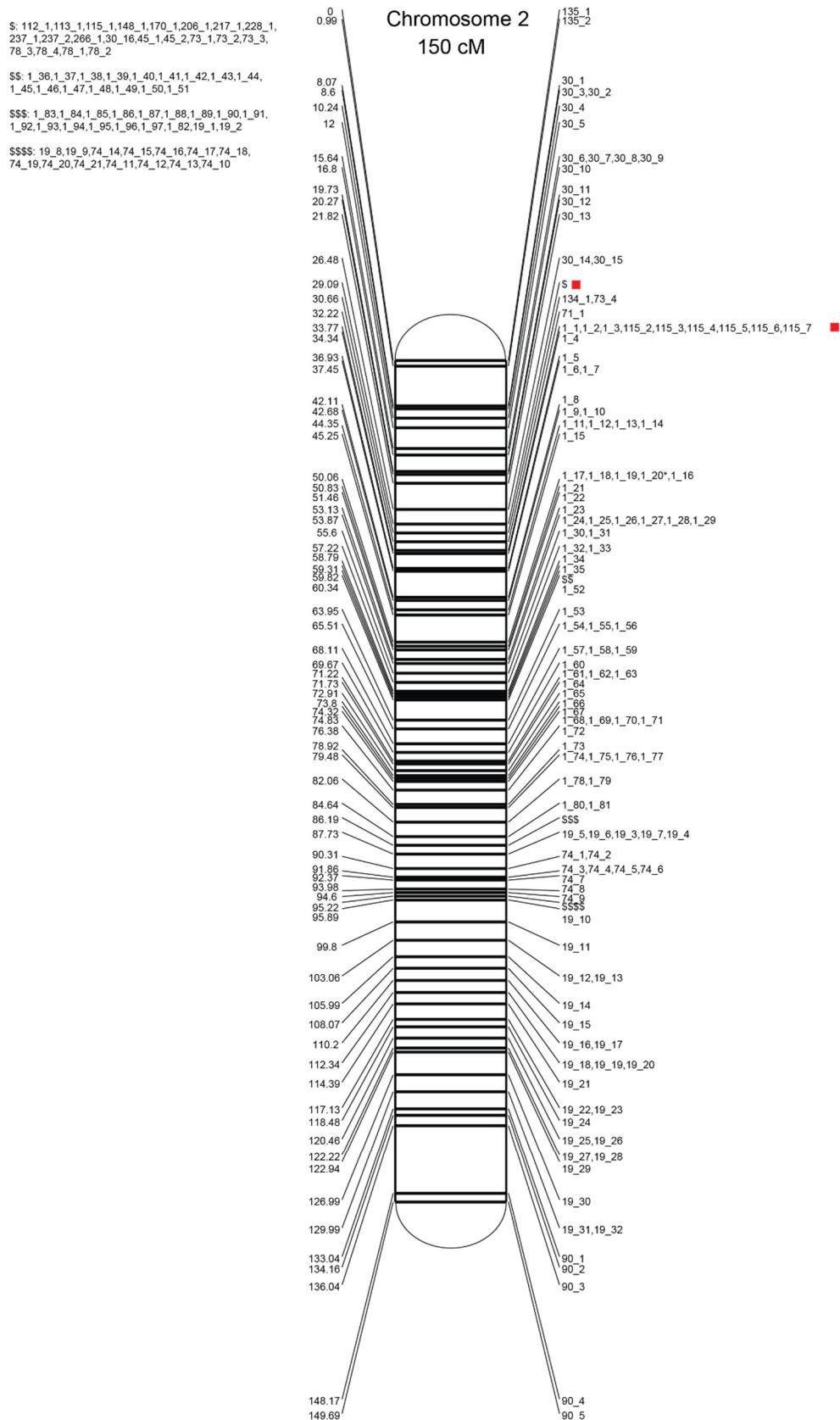


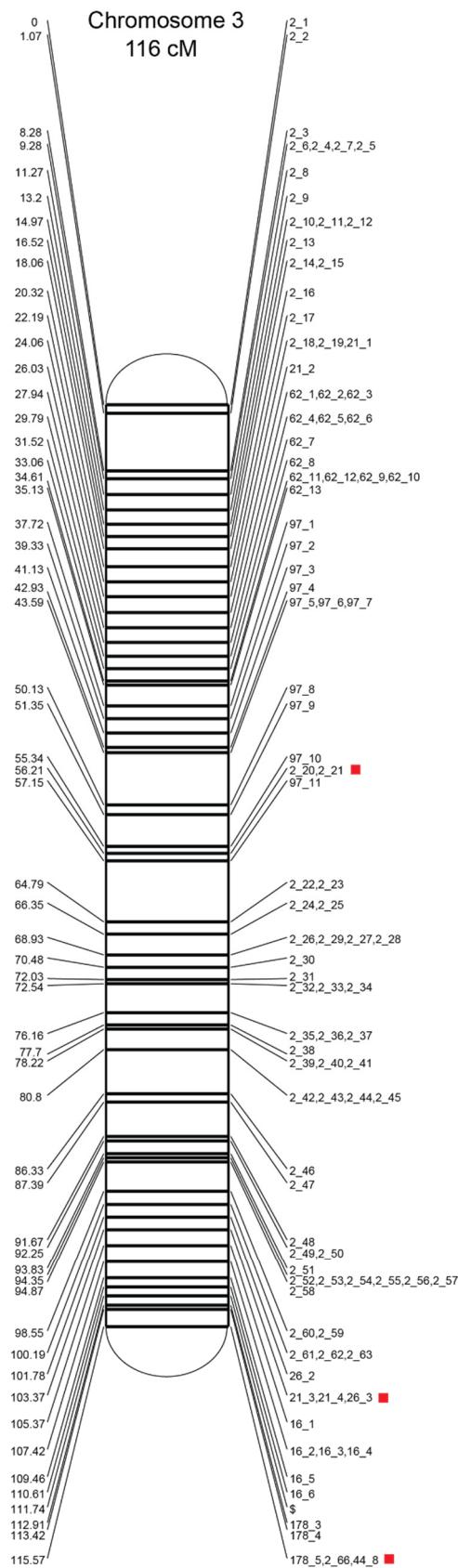
## Supplementary Figure

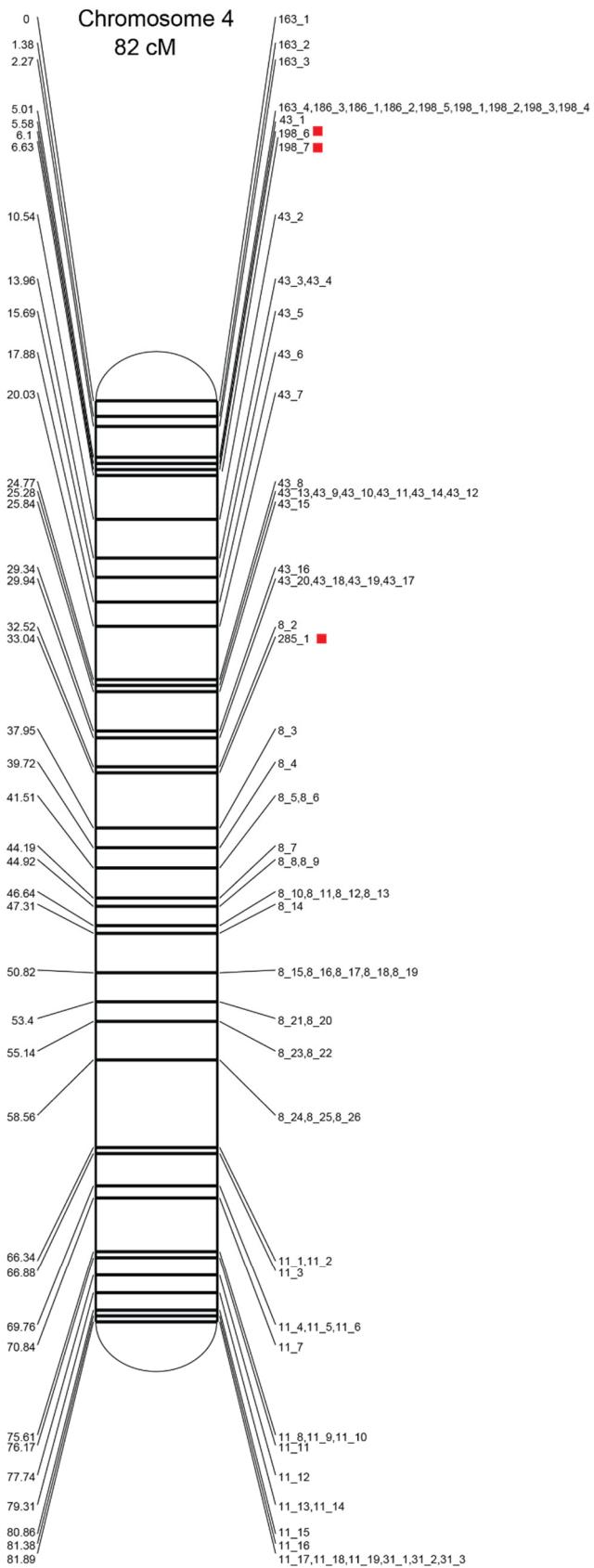
**Figure S1** The male genetic linkage map based on 1672 haplotype blocks derived from 104 single sperm genomes. The map distance for each block is on the left hand side of each linkage group, whereas the marker name is listed on the right hand side, with the number before the underscore designating the scaffold and the number after representing a randomly assigned ranking number (see supplementary data). The red squares next to marker names indicate possibly mis-assembled genomic regions in the *Daphnia arenata* reference genome. Some map positions consist of many haplotype blocks and these blocks are shown in the top left corner.





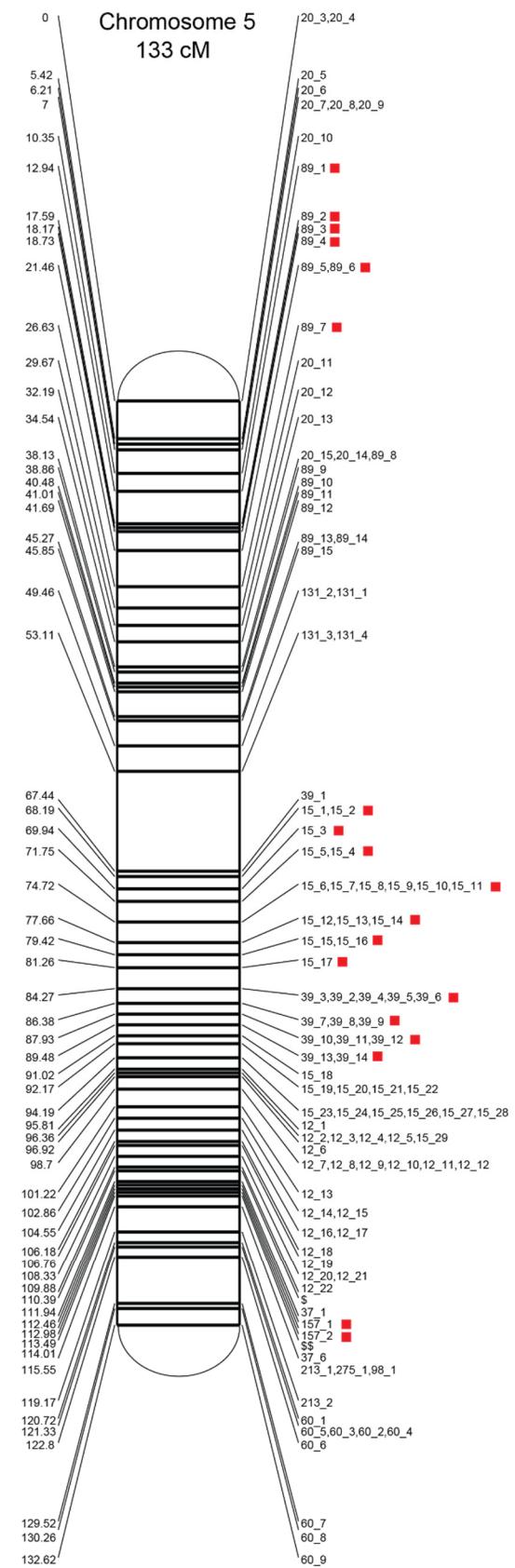
S: 114\_1,114\_3,114\_4,114\_2,117\_1,155\_1,164\_2,164\_1,  
 174\_1,178\_2,178\_1,189\_1,2\_64\_2,65\_21\_5,21\_6,21\_7,  
 21\_8,21\_9,21\_10,21\_11,21\_12,21\_13,21\_14,221\_1,  
 238\_1,26\_5,26\_6,26\_7,26\_8,26\_9,26\_10,26\_11,26\_12,  
 26\_13,26\_4,26\_14,33\_3,33\_4,44\_2,44\_3,44\_1,44\_4,44\_5,  
 44\_6,44\_7

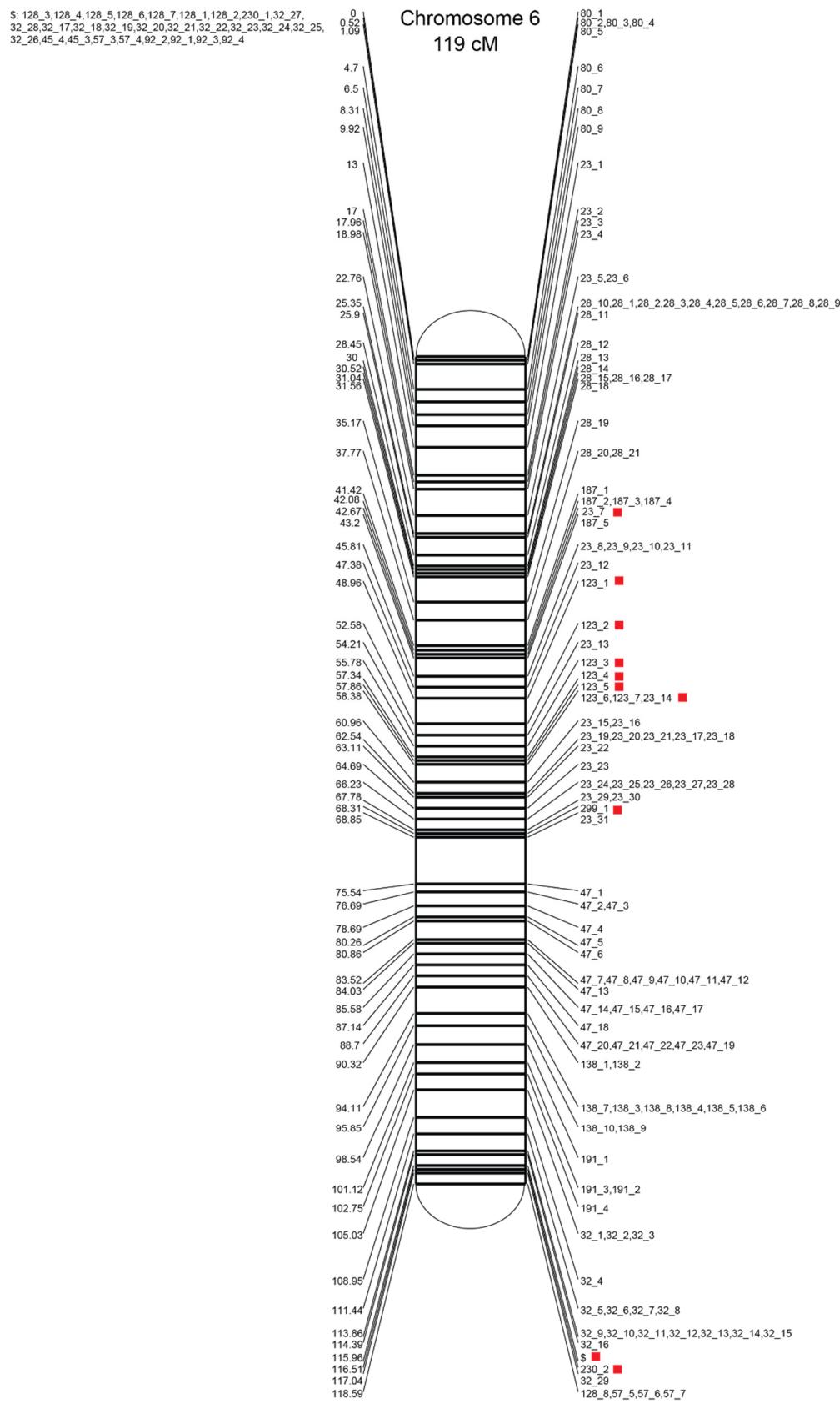


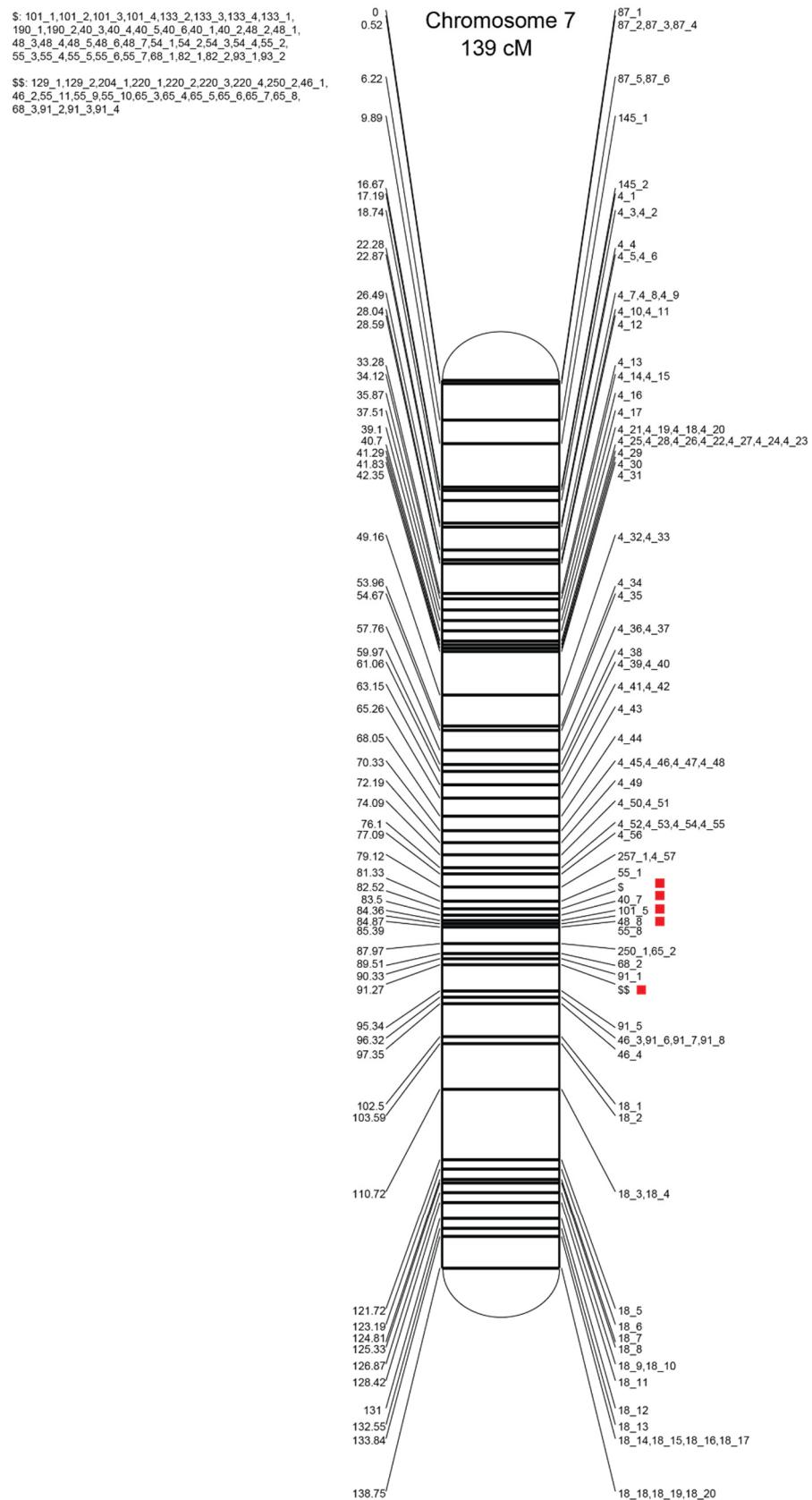


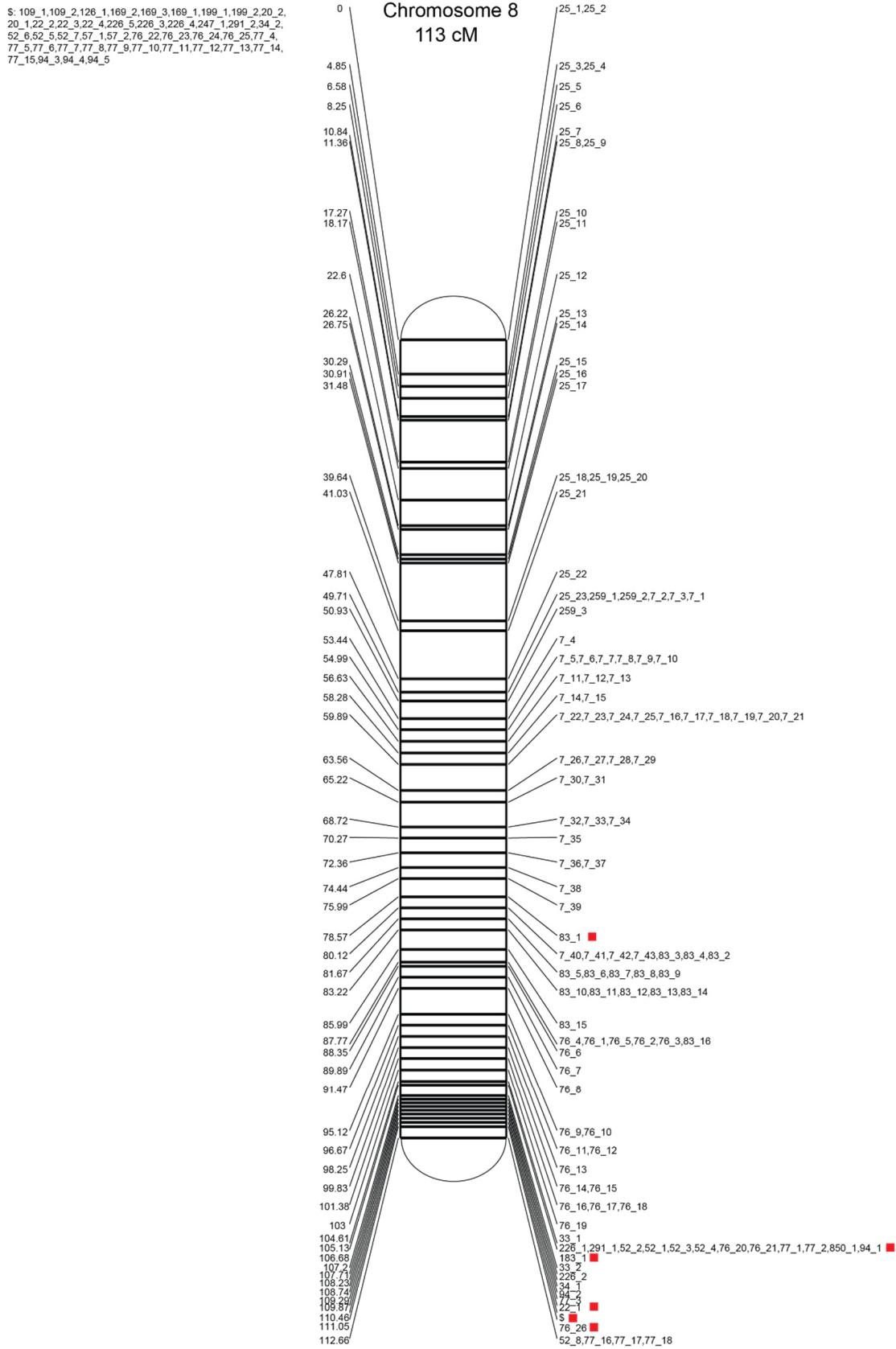
S: 12\_23,12\_24,12\_25,12\_26,12\_27,12\_28,160\_1,38\_1,  
38\_2,38\_3,38\_4,38\_5,38\_6,38\_7,38\_8,38\_9,38\_10,  
38\_11

SS: 125\_1,125\_2,125\_3,157\_4,157\_3,272\_1,307\_1,331\_1,  
331\_2,37\_2,37\_3,37\_4,37\_5,40\_8,40\_9,40\_10,49\_8









\$: 104\_1,107\_2,107\_3,107\_4,107\_5,107\_1,118\_1,118\_2,  
 139\_1,14\_7,14\_2,14\_3,14\_4,14\_5,14\_6,172\_1,  
 289\_1,41\_2,41\_3,41\_4,41\_5,41\_6,41\_7,95\_1,95\_2,  
 99\_2

### Chromosome 9 119 cM

