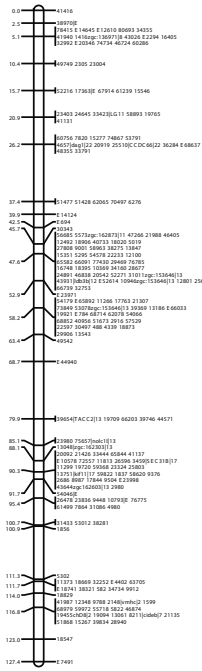
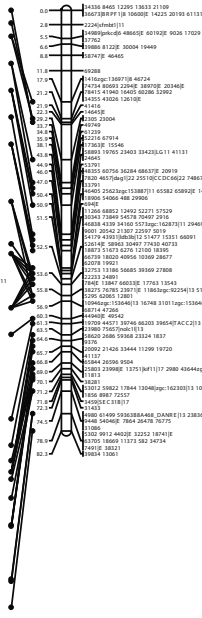


MaleG5 (20 prog)



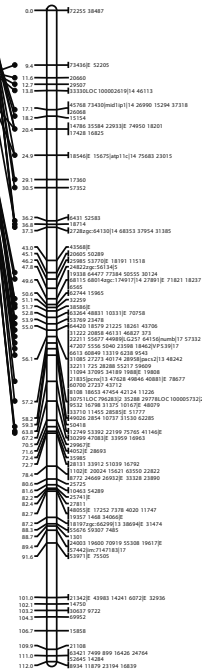
MaleG5 (94 prog)



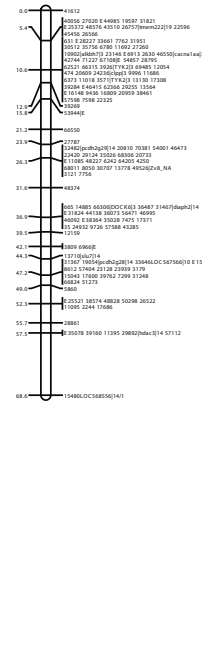
MaleG6 (20 prog)



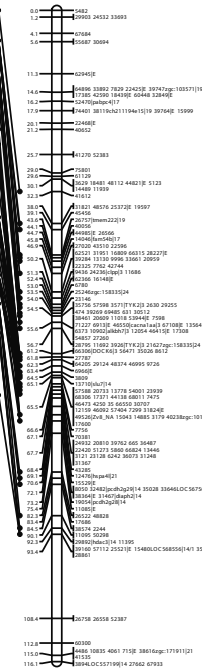
MaleG6 (93 prog)



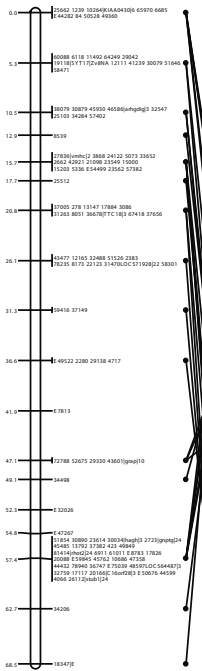
MaleG9 (20 prog)



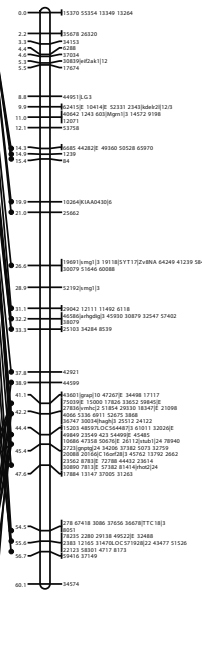
MaleG9 (94 prog)



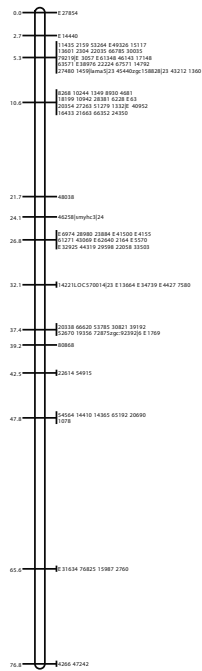
MaleG13 (20 prog)



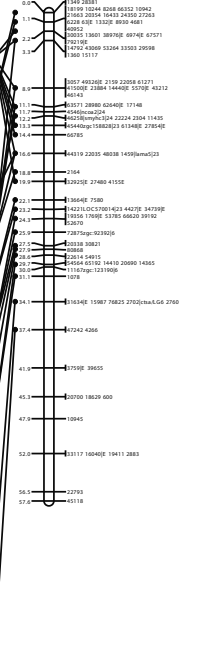
MaleG13 (94 prog)



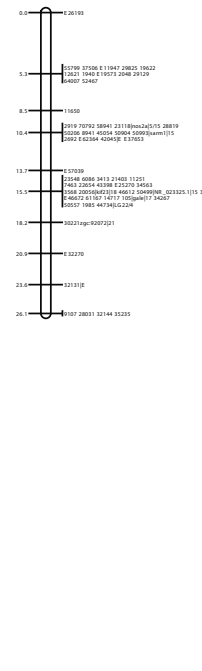
MaleG16 (20 prog)



MaleG16 (94 prog)



MaleG22 (20 prog)



MaleG22 (94 prog)

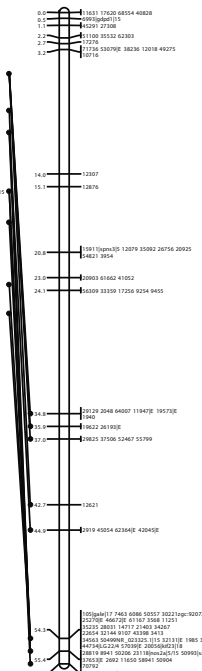


Figure S4 Useful maps can be created with as few as 20 map cross individuals. We randomly selected 20 individuals from our panel and constructed a map just from markers segregating in just those individuals. Inspection of six representative linkage groups constructed from that small number of progeny show that linkage groups based on 20 individuals were generally missing distal parts of chromosomes compared to those made with 94 individuals and occasionally, some markers were inverted. Nonetheless, major portions of linkage groups could be reconstructed with as few as 20 map cross individuals.