



Figure S2 Karyotype analysis of AV221 using chromosome paints. (A) Projections of FISH images of a representative pachytene nucleus from the N2 wild type strain (top) and the AV221 strain (bottom), using whole-chromosome paints for chromosome III (red) and IV (blue), a FISH probe that hybridizes to the *lacO* sequence (green, arrowhead), and a DAPI counter stain (white). Schematics at the left of the images depict the karyotype of the *meT8* reciprocal translocation inferred from the combination of genetic mapping and the FISH experiments shown here; the pink and light blue symbols indicate the positions of the pairing centers. Bar: 2 μ m.

(B) Projections of FISH images of a representative pachytene nucleus from the N2 wild type strain (top) and the AV221 strain (bottom), using probes that hybridize to most of chromosome III except for a 1Mb region at the left end (red), to the left half of chromosome IV (blue), and to the *lacO* (green, arrowhead), and DAPI counter stain (white). Schematics at right show the portions of the karyotypes that are labeled by the probes. Bar: 2 μ m.