

Supporting Information

Koo et al. 10.1073/pnas.1719354115

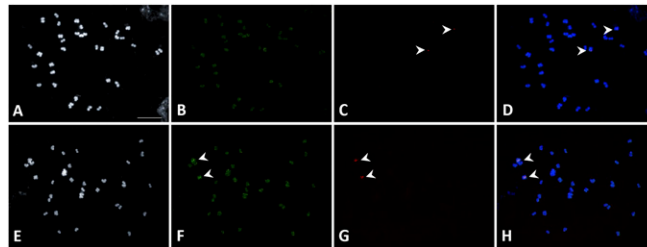


Fig. S1. Two-color FISH mapping of the *EPSPS* gene (red signals) and eccDNA (green signals) on mitotic metaphase chromosomes of GS *A. palmeri* with one *EPSPS* copy (A–D) and *A. palmeri* with 12 *EPSPS* copies (E–H). (C and D) Pericentromeric location of the *EPSPS* gene in GS *A. palmeri* with one *EPSPS* copy. (G and H) Pericentromeric location of amplified *EPSPS* genes in *A. palmeri* with 12 *EPSPS* copies. In GS *A. palmeri*, eccDNA did not generate distinct hybridization signals (B), but significantly more intense signals (arrowheads) were detected at the amplified *EPSPS* gene locus in *A. palmeri* with 12 *EPSPS* copies (F). Arrowheads point to hybridization signals. (Scale bar, 10 μ m.)

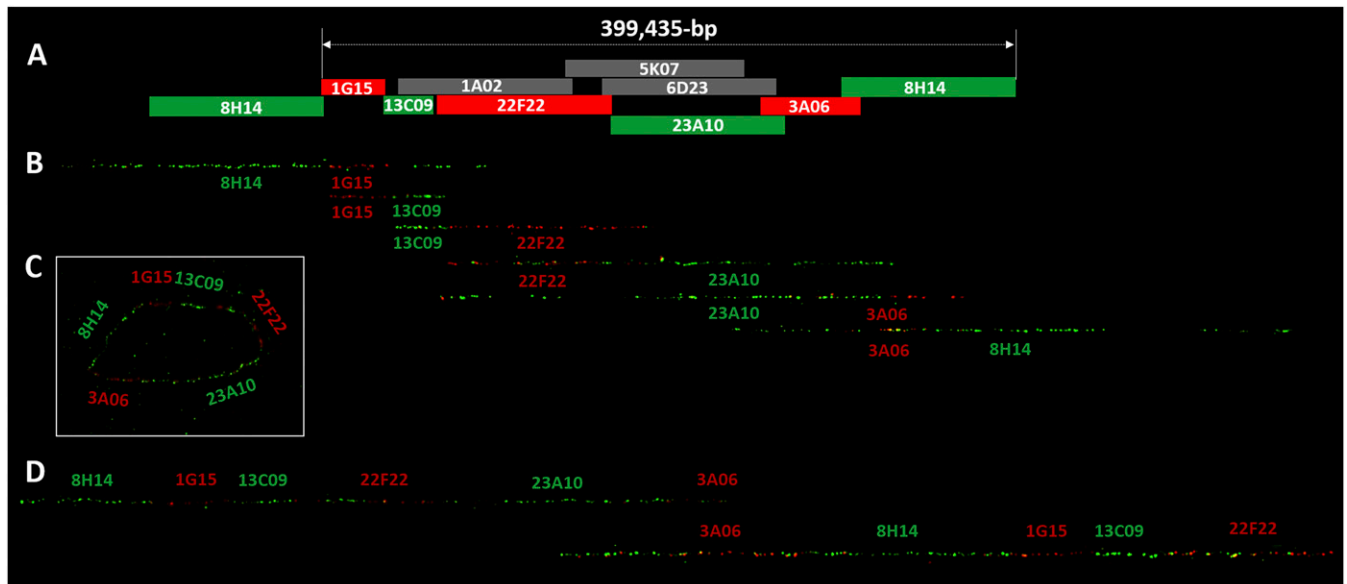


Fig. S2. (A) Validation of the ~400-kb BAC contig assembly using fiber-FISH. (B) BACs in pairs were used in fiber-FISH to verify their orientation. The six BACs were pooled, and the probe was then used in fiber-FISH to visualize the wild-type circular structure of eccDNA (C) and the polymorphic linear form (D).

