



**Figure S1.** Recombination reporter system used to score recombination intermediates and products (Jessop *et al.* 2005). Diploid strains contain divergently oriented *URA3* and *ARG4* genes inserted at the *LEU2* locus on one copy of chromosome III (P1), and a similar construct with an *EcoRI* site-marked short palindrome inserted in *ARG4* (*arg4-pal*) at the *HIS4* locus on the other copy of chromosome III (P2). *EcoRI-XhoI* double digests produce restriction fragments diagnostic of crossovers and of noncrossovers where *arg4-pal* is gene converted to *ARG4*, while recombination intermediates, including interhomolog, intersister, and multichromatid joint molecules, are detected using *XmnI* digests.