



Additional file 3 - Fluorescence *in situ* hybridization (FISH) mapping of 45S rDNA, 5S rDNA, CentBr2, and karyotyping markers (BACs) on the mitotic metaphase chromosomes of *Brassica rapa*. White arrows indicate the pair of chromosomes hybridized by each set of karyotyping markers (BACs). (O) and (X) indicate 'hybridized' and 'not hybridized' respectively, on the chromosome pair recognized by each set of karyotyping markers. Scale bar = 5  $\mu$ m.