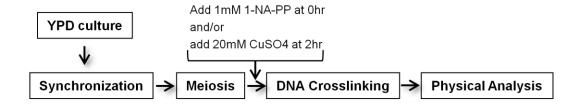
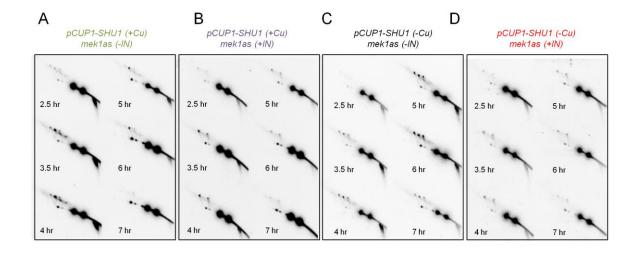


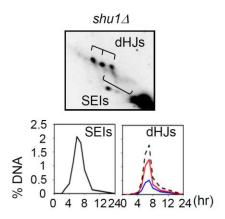
Supplemental Figure 1. Detection of joint molecules from meiotic cell cross-linked with psoralen under UV light.



Supplemental Figure 2. Experimental procedures for yeast meiosis by adding 1-NA-PP1 to inhibit Mek1 kinase activity and CuSO₄ to produce Shu1 protein.



Supplemental Figure 3. Images of two-dimensional gel Southern analysis illustrate the DNA species at different time points. DNA species were separated on two-dimensional gels, which displayed the branched joint molecules. *Xhol*-digested genomic DNA is detected by Southern blot hybridization using a random-primed [³²P]-dCTP DNA "probe A." Quantitative analysis of the joint molecules is shown in Figure 2F and 2G.



Supplemental Figure 4. Analysis of joint molecules from two-dimensional gel Southern analysis showing the DNA species in $shu1\Delta$ mutant.