Bohr et al., http://www.jcb.org/cgi/content/full/jcb.201409035/DC1

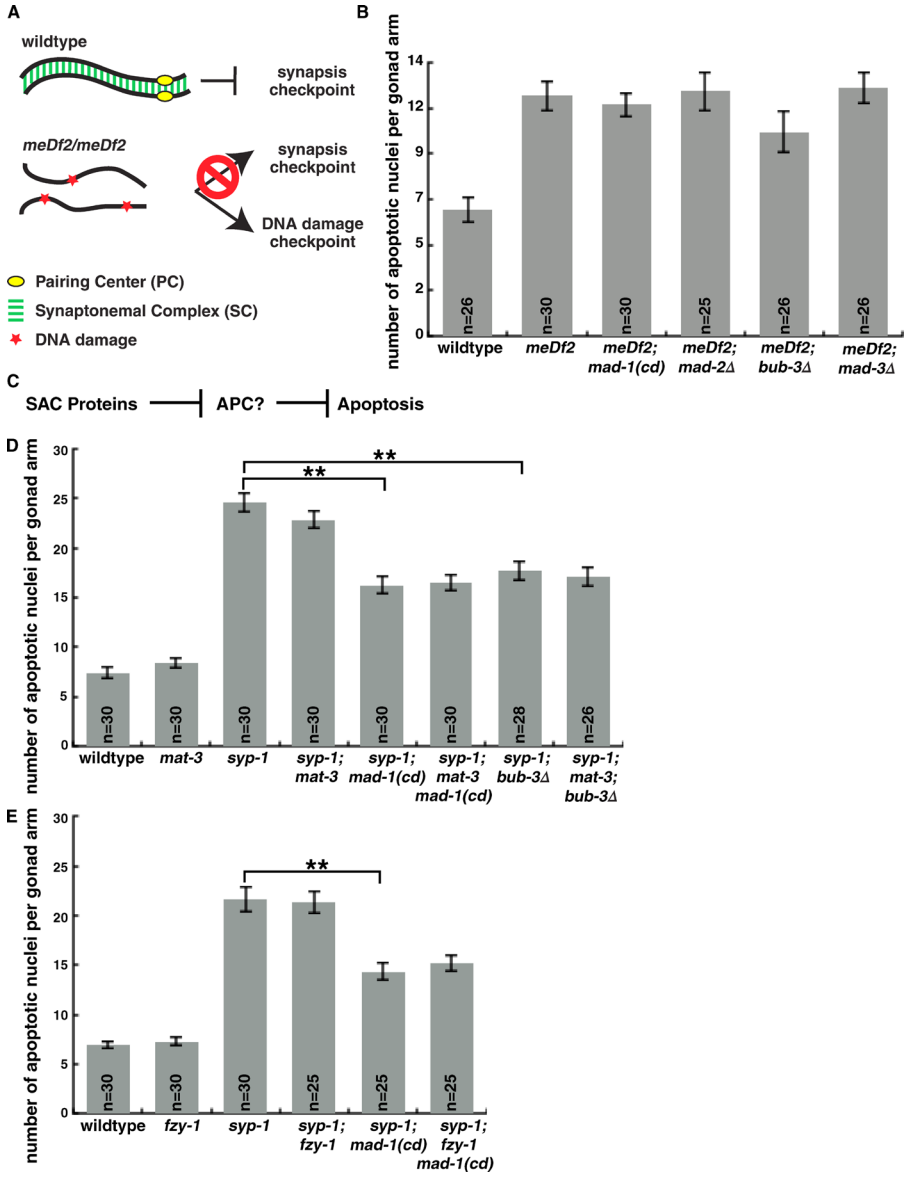

Figure S1. **SAC components MAD-1, MAD-2, and BUB-3 are not required for the DNA damage checkpoint, and loss of APC components does not affect the synapsis checkpoint.** (A) DNA damage checkpoint response in *meDf2* homozygotes. (B) Mutations in *mad-1*, *mad-2*, or *bub-3* do not affect apoptosis in *meDf2* homozygotes. (C) Schematic of the possible role of the APC in the synapsis checkpoint. (D) Mutation of *mat-3* does not affect germline apoptosis in *syp-1*, *syp-1;mad-1(cd)*, or *syp-1;bub-3Δ* mutants. (E) Mutation of *fzy-1* does not affect germline apoptosis in *syp-1* or *syp-1;mad-1(cd)* mutants. Error bars represent ±SEM. **, $P < 0.0001$.

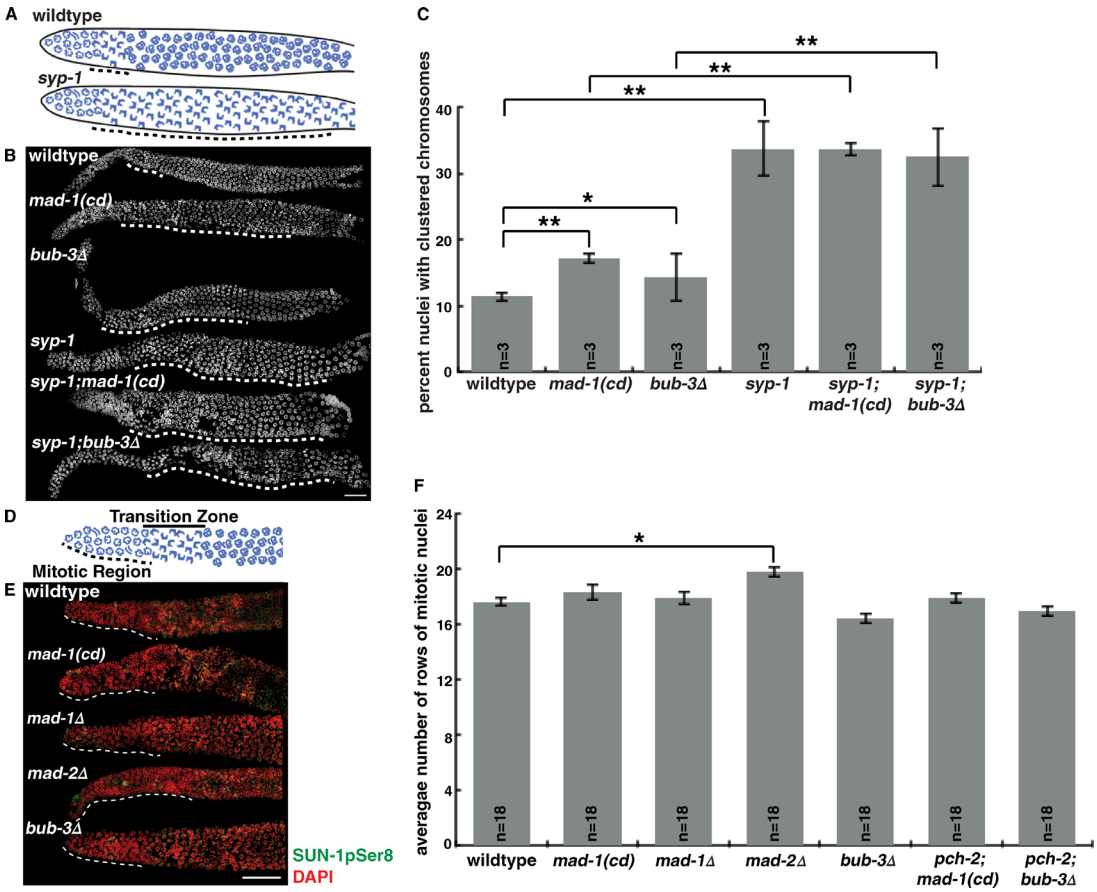

Figure S2. **Loss of MAD-1 or BUB-3 does not affect meiotic entry or meiotic progression.** (A) Cartoon depicts wild-type and *syp-1* germlines. (B) Images of wild-type, *mad-1(cd)*, *bub-3Δ*, *syp-1*, *syp-1;mad-1(cd)*, and *syp-1;bub-3Δ* germlines stained with DAPI. Regions of clustered chromosomes are indicated by dashed lines. (C) Mutation of *mad-1* and *bub-3* results in slightly more nuclei with clustered chromosomes than wild-type germlines but does not reduce the percentage of nuclei with clustered chromosomes in *syp-1* mutants. (D) Cartoon depicts mitotic and early meiotic region (transition zone) of the germline. (E) Images of the mitotic and early meiotic region of germlines in wild-type, *mad-1(cd)*, *mad-1Δ*, *mad-2Δ*, and *bub-3Δ* mutants stained with DAPI and an antibody against SUN-1pSer8. The length of the mitotic region is indicated by dashed lines. (F) *mad-2Δ* delays meiotic entry, whereas *mad-1(cd)*, *mad-1Δ*, *bub-3Δ*, *pch-2;mad-1(cd)*, and *pch-2;bub-3Δ* double mutants do not affect meiotic entry. Bars, 30 µm. Error bars represent ±SEM. *, $P < 0.01$; **, $P < 0.0001$.

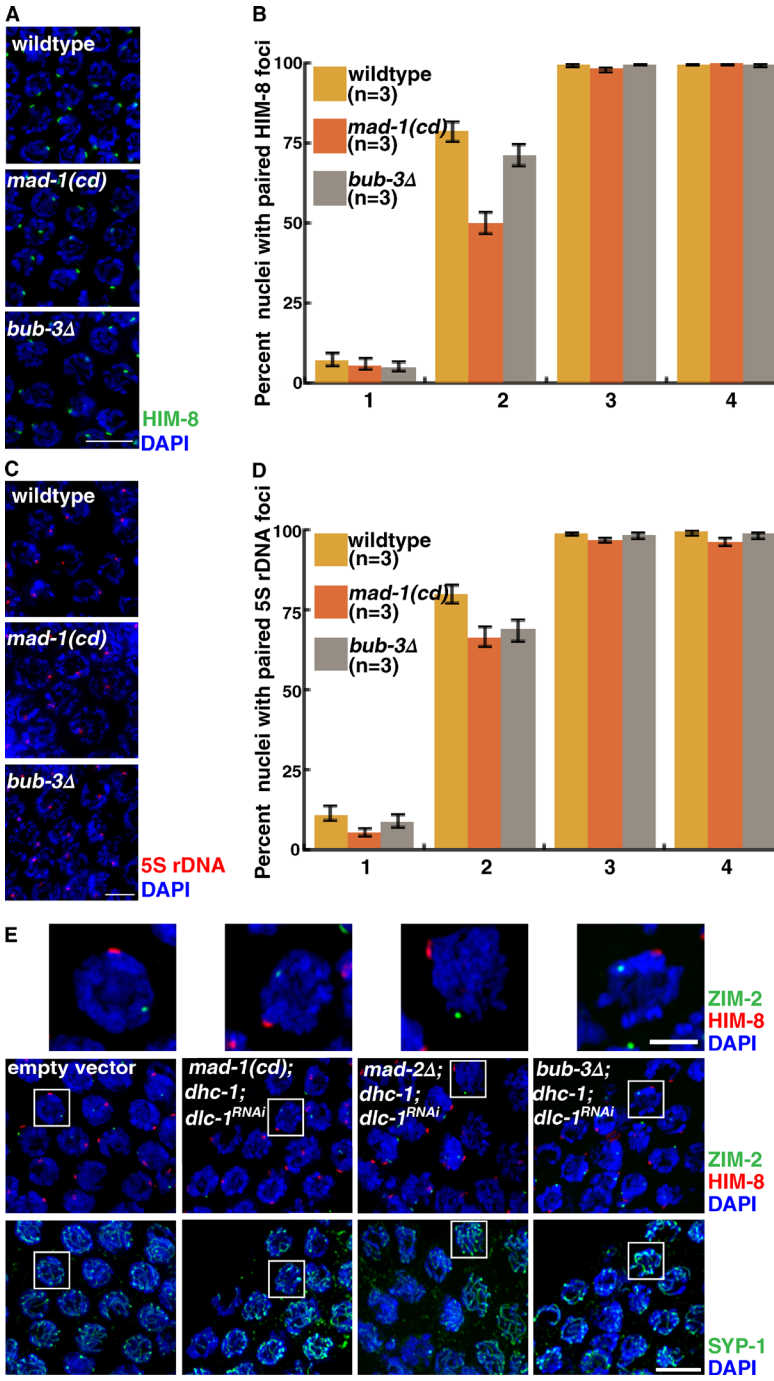

Figure S3. **Meiotic chromosomes in *mad-1(cd)* and *bub-3Δ* mutants do not undergo nonhomologous synapsis.** (A) Images of meiotic nuclei in wild-type worms and *mad-1(cd)* and *bub-3Δ* mutants stained to visualize DNA (blue) and HIM-8. (B) The X chromosome PC pairs similarly in wild-type worms and in *mad-1(cd)* and *bub-3Δ* mutants. (C) Images of meiotic nuclei in wild-type worms and *mad-1(cd)* and *bub-3Δ* mutant worms stained to visualize DNA (blue) and the 5S rDNA locus. (D) The 5S rDNA locus pairs similarly in wild-type worms and in *mad-1(cd)* and *bub-3Δ* mutants. (E) Synapsis is homologous in *mad-1(cd);dhc-1;dlc-1*^{RNAi}, *mad-2Δ;dhc-1;dlc-1*^{RNAi}, and *bub-3Δ;dhc-1;dlc-1*^{RNAi} mutants. Images of meiotic nuclei in wild-type, *mad-1(cd);dhc-1;dlc-1*^{RNAi}, *mad-2Δ;dhc-1;dlc-1*^{RNAi}, and *bub-3Δ;dhc-1;dlc-1*^{RNAi} mutant germlines stained to visualize DNA (blue), the autosomal PC protein ZIM-2, and the X chromosome PC protein HIM-8. Also depicted are the same nuclei stained with SYP-1 to verify the presence of synapsed chromosomes. White boxes outline individual fully synapsed nuclei that have paired HIM-8 and ZIM-2 signals. These nuclei are depicted as enlarged images in the top panels. Bars: (A, C, and E [bottom]) 5 µm; (E, top) 2 µm. Error bars represent 95% confidence intervals.

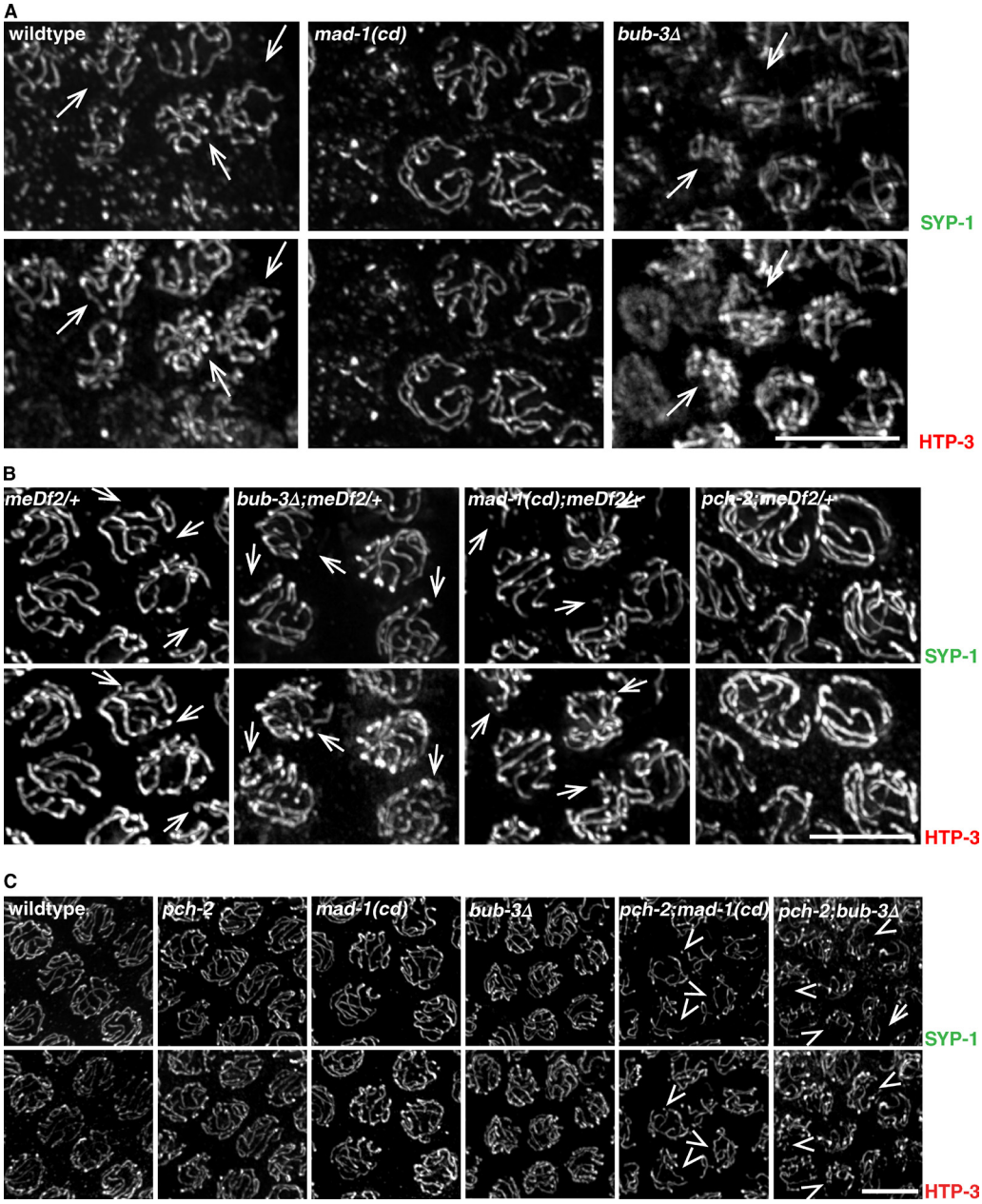

Figure S4. **Grayscale images of Fig. 2 (C and F) and Fig. 4 B.** (A) Images of nuclei during synapsis initiation in wild-type worms and *mad-1(cd)* and *bub-3Δ* mutants stained to visualize SYP-1 (top; green in Fig. 2 C) and HTP-3 (bottom; red in Fig. 2 C). (B) Images of meiotic nuclei in *meDf2/+*, *mad-1(cd);meDf2/+*, *bub-3Δ;meDf2/+*, and *pch-2;meDf2/+* mutants stained to visualize SYP-1 (top; green in Fig. 2 F) and HTP-3 (bottom; red in Fig. 2 F). (C) Images of nuclei in wild-type worms and *pch-2*, *mad-1(cd)*, *bub-3Δ*, *pch-2;mad-1(cd)*, and *pch-2;bub-3Δ* mutants stained to visualize SYP-1 (top; green in Fig. 4 B) and HTP-3 (bottom; red in Fig. 4 B). Arrows/arrowheads indicate unsynapsed chromosomes. Bars, 5 µm.