



**Figure S1 Bisphenol analog exposure in the male increases the frequency of cells with SCs lacking an MLH1 focus, Related to Figure 3C.** (A) Example of a pachytene spermatocyte immunostained with antibodies to the synaptonemal complex (SC) protein, SYCP3 (red), and MLH1 (green). White arrow indicates an SC lacking an MLH1 focus (i.e. MLH1 null). Scale bar represents 10 μm. (B) Mean MLH1 null frequency for 420 cells from 14 placebo, 270 from 9 BPA, 330 from 11 BPS, 300 from 10 diphenyl sulfone, 385 from 13 BPF, and 270 from 9 BPAF males. Groups were compared by one-way ANOVA ( $F = 3.6$ ,  $p < 0.01$ ). Diphenyl sulfone, BPF, and BPAF had significantly higher MLH1 null incidence by comparison with placebo ( $p < 0.05$  for diphenyl sulfone,  $p < 0.01$  for BPF and BPAF as determined by Tukey-Kramer post-hoc test); BPA and BPS exhibited the same trend, but the difference did not reach significance. Asterisk denotes significant difference by comparison with placebo.