Supplementary Material Figure S1. Models of the Rad51 paralogs are color-coded by certainty in the alignment; red denotes stable regions in the alignment; green, regions with variability in the alignment and blue, loop regions that are absent in the *Pf*Rad51 template. The green arrow shown in the Rad51B model highlights a variable length region between strands 5 and 6 in the Rad51 paralogs, which is longest in Rad51B. Rad51C features two unique insertions that are absent in the other paralogs as indicated by red arrows; the top arrow denotes an insertion within the linker of Rad51C and the lower arrow indicates an insertion between strands 2 and 3. Rad51D, Xrcc2, and Xrcc3 all share a short insertion between strands 6 and 7 shown by the black arrows; Rad51B and Rad51C do not feature an insertion in this region. This figure was made with "depth cuing" to better illustrate the three-dimensionality of the molecules, using the program VMD [Humphrey, W., et al., J. Molec. Graphics 1996, 14(1): 33-38].

