

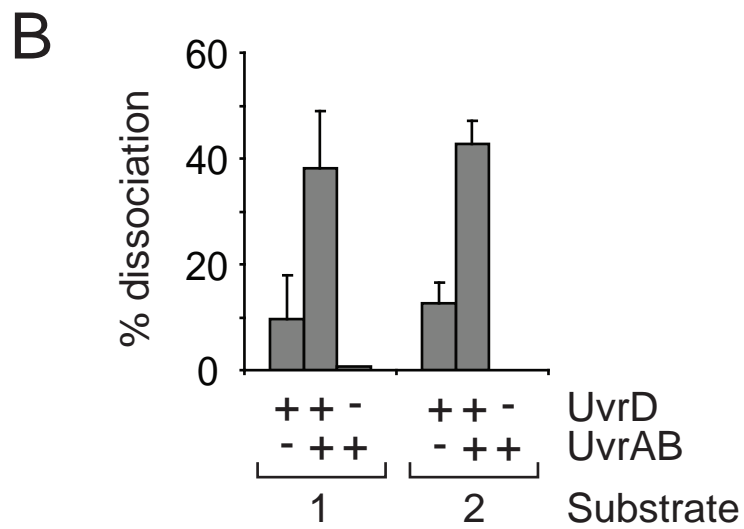
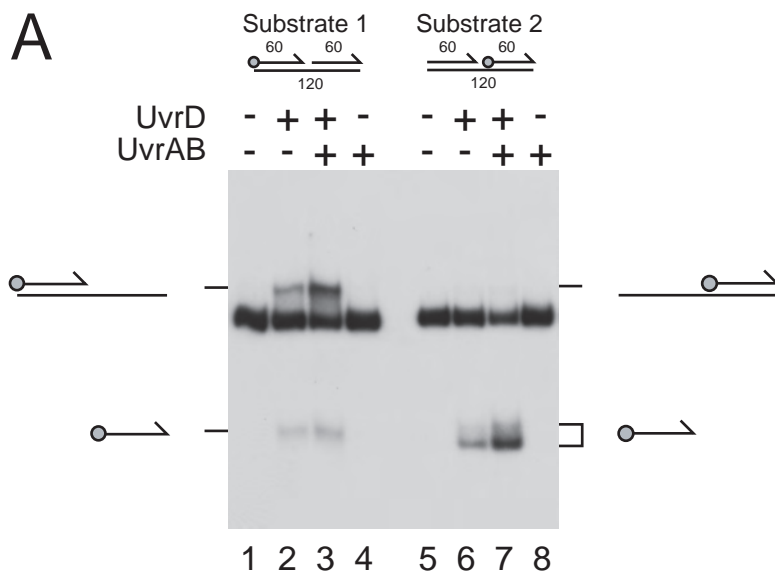
SUPPLEMENTARY FIGURE LEGENDS

Supplementary Fig. 1. Unwinding of nicked duplex substrates by UvrD±UvrAB in the absence of SSB. *A.* Unwinding of substrates 1 and 2 by UvrD (10 nM) in the presence and absence of UvrA (10 nM) and UvrB (100 nM). *B.* Degree of unwinding of substrates 1 and 2 by UvrD and UvrAB. Protein concentrations are as in *A.*

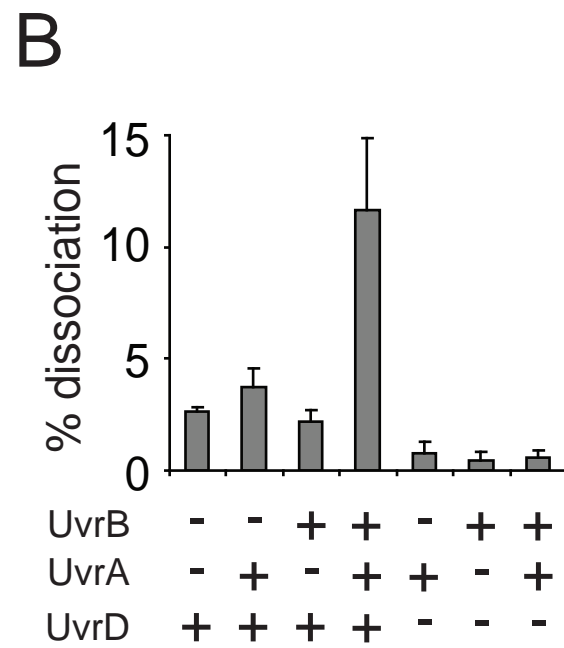
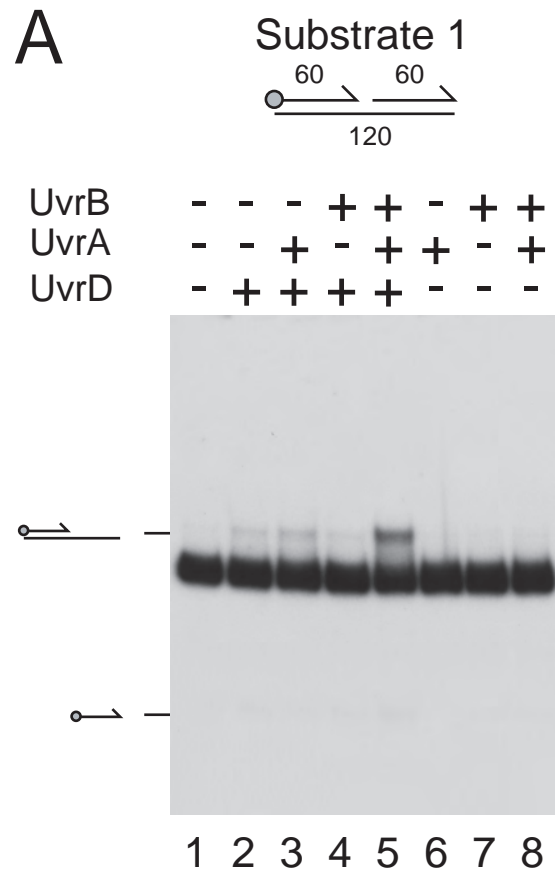
Supplementary Fig. 2. Stimulation of UvrD requires the presence of both UvrA and UvrB in the absence of SSB. *A.* Unwinding of substrate 1 by UvrD (2 nM) in the presence and absence of UvrA (10 nM) and/or UvrB (100 nM). *B.* Degree of unwinding of substrate 1 by UvrD, UvrA and UvrB. Protein concentrations are as in *A.* Note that levels of unwinding by UvrD plus UvrAB in the absence of SSB are reduced as compared with the same reactions performed in the presence of SSB (compare *B* with Figure 3G). This may be due to stimulation of UvrD by SSB via sequestration of the ssDNA product of unwinding.

Supplementary Fig. 3. SSB is not required for UvrAB-dependent stimulation of unwinding of forked DNA by UvrD. *A.* Unwinding of substrate 6 in the presence of UvrD (10 nM), Rep (10 nM), UvrA (10 nM) and UvrB (100 nM) as indicated. Note the major final product of unwinding of substrate 6 by UvrD plus UvrAB, in the absence of SSB, was product 5 (see lane 3). This contrasts with the products formed in the presence of SSB, where both products 4 and 5 were prominent (Figure 6A lanes 13 and 14). This probably reflects the inhibition of unwinding of product 4 to form product 5 by binding of SSB to the ssDNA present in product 4. *B.* Quantification of unwinding of substrate 6 by UvrD, UvrAB and Rep.

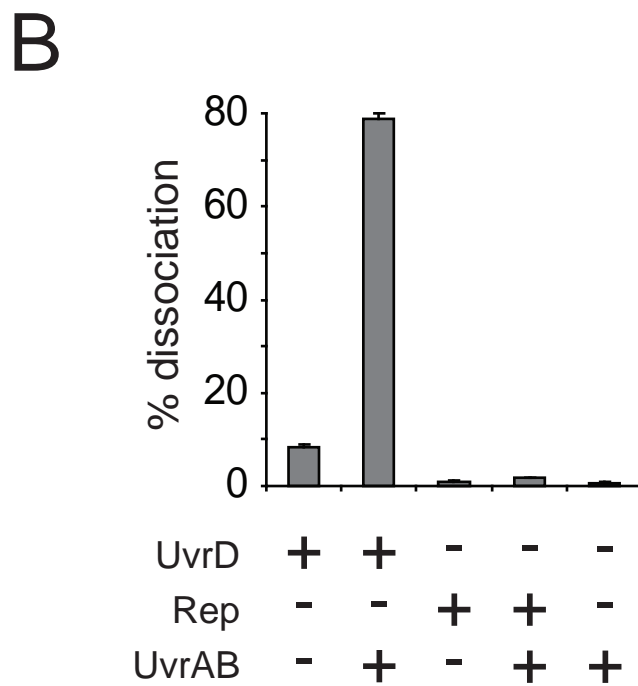
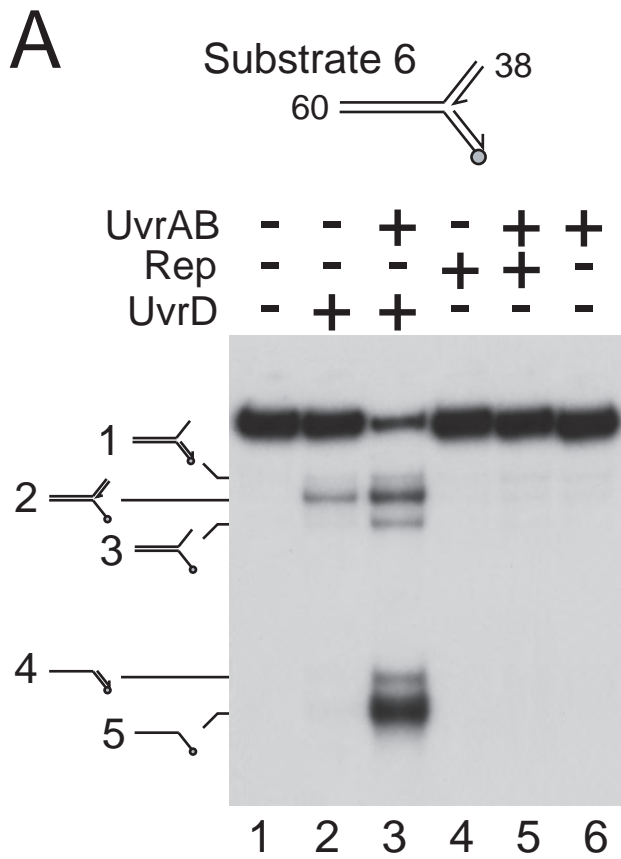
Supplementary Fig. 4. Stimulation of UvrD unwinding of forked DNA by UvrA plus UvrB K45A in the absence of SSB. *A.* Unwinding of substrate 6 by UvrD and/or UvrA plus either wild type UvrB or UvrB K45A. UvrD, UvrA, UvrB (both wild type and mutant) were present at 10, 10 and 100 nM, respectively. *B.* Quantification of extent of unwinding.



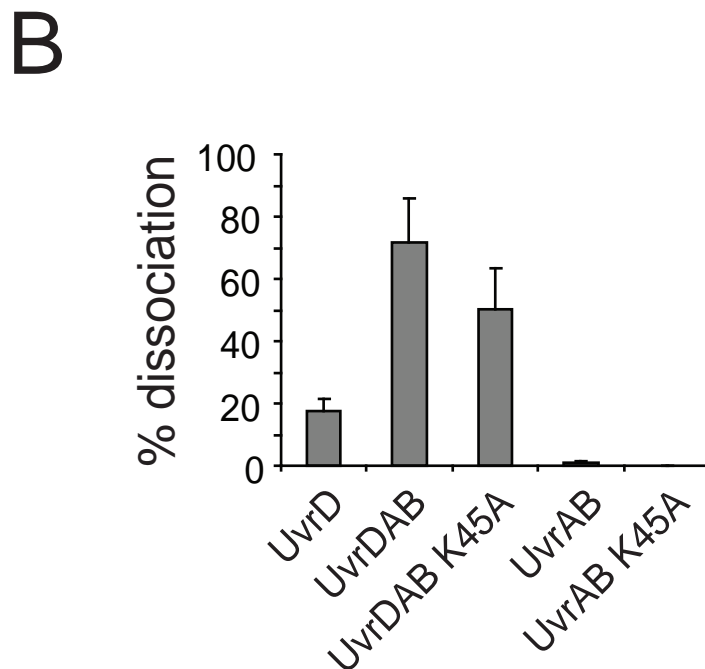
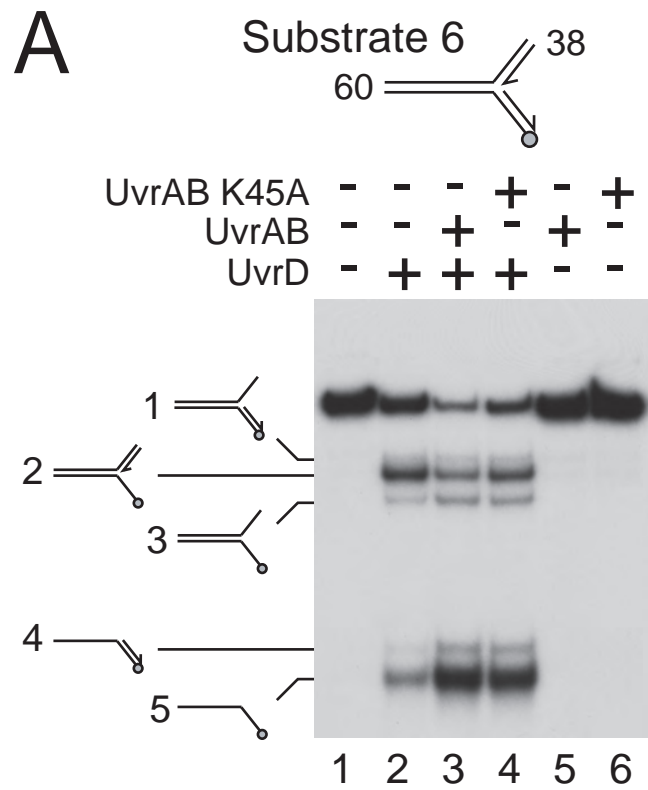
Supplementary Figure 1



Supplementary Figure 2



Supplementary Figure 3



Supplementary Figure 4