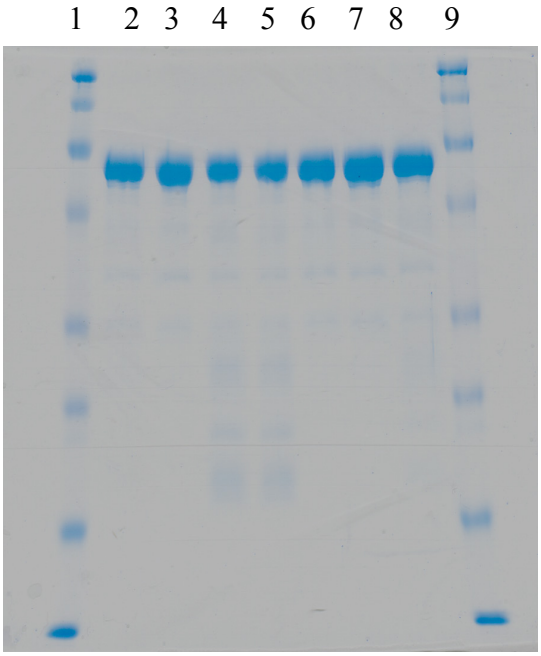


Figure S1. **SDS-PAGE analysis of purified WT and mutant Rad50 proteins.** Lanes 1 and 9 contain molecular mass markers (Myosin, 210.0 kDa; beta-galactosidase, 117.1 kDa; BSA, 97.8 kDa; Ovalbumin, 55.1 kDa; Carbonic anhydrase, 37.5 kDa; Soybean trypsin inhibitor, 29.0 kDa). Lanes 2−8 contain 5 µg of Rad50 proteins corresponding to WT, R37A, N38A, D512N, D512E, E514Q, and E514A, respectively.

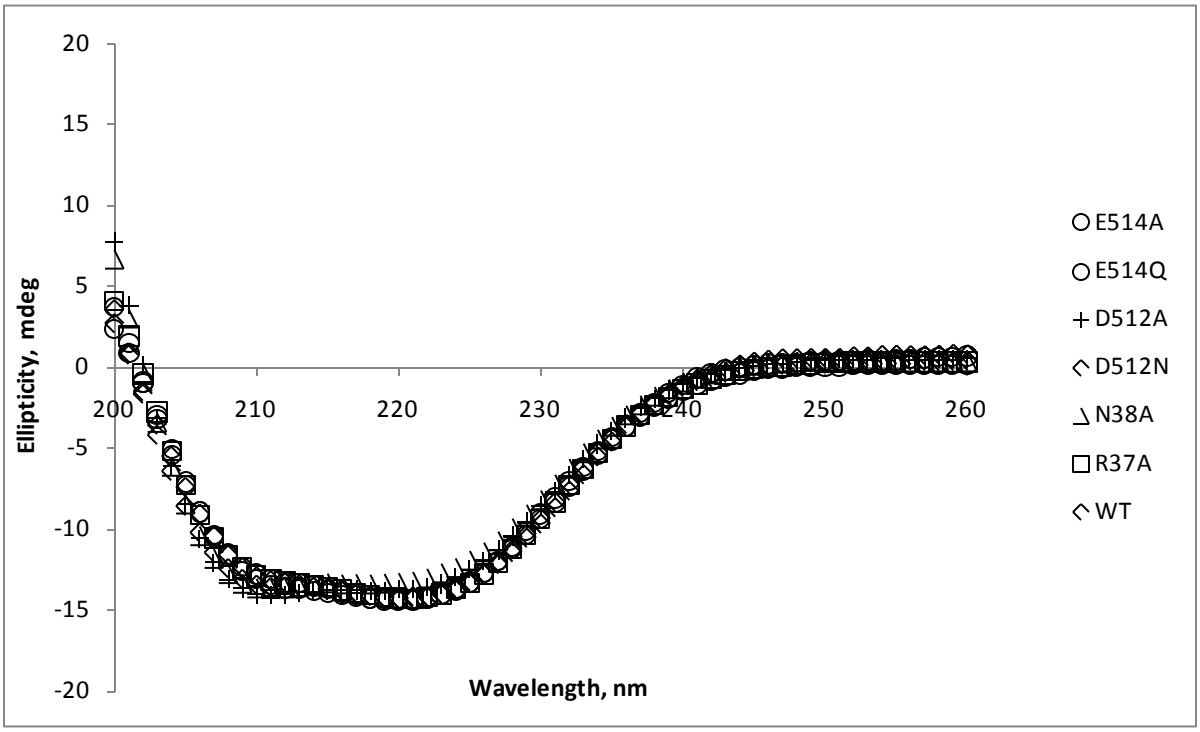


Figure S2. **Circular dichroism spectra of WT and mutant Rad50 proteins.** The experiment was carried out as described in "Materials and Methods".

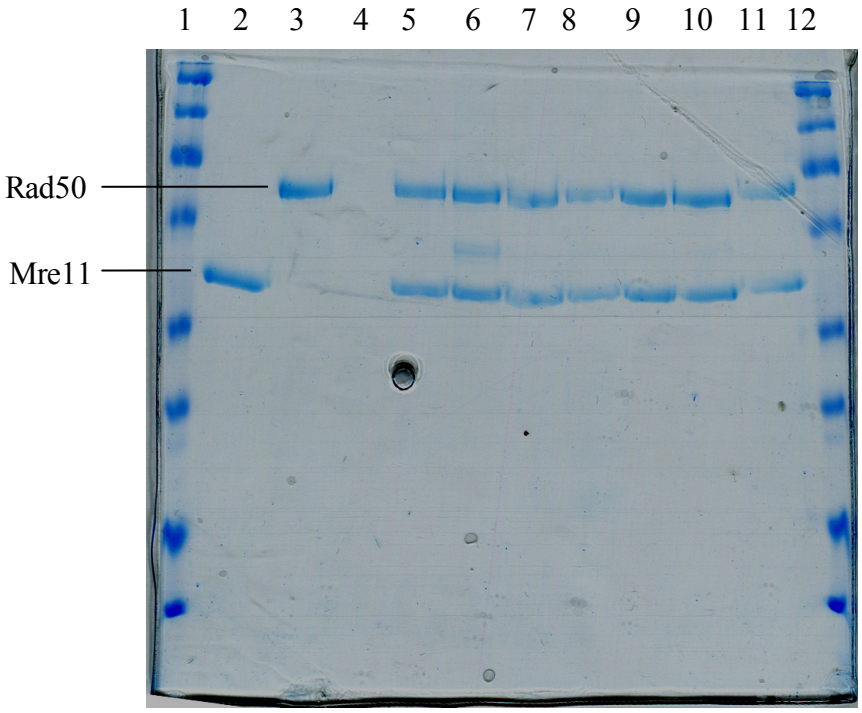


Figure S3. **Interaction of Mre11 with WT and mutant Rad50 proteins.** The pull-down procedure was out as described in "Materials and Methods". Lanes 1 and 12 contain molecular mass markers (Myosin, 210.0 kDa; beta-galactosidase, 117.1 kDa; BSA, 97.8 kDa; Ovalbumin, 55.1 kDa; Carbonic anhydrase, 37.5 kDa; Soybean trypsin inhibitor, 29.0 kDa). Lane 2 contains 2 μg of purified Mre11. Lane 3 contains WT Rad50 in the absence of Mre11 subjected to the pull-down procedure. Lane 4 contains Mre11 in the absence of Rad50 subjected to the pull-down procedure. Lanes 5-11 are WT, R37A, N38A, E512N, E512A, E514Q, and E514A Rad50 proteins, respectively, in the presence of Mre11 and subjected to the pull-down procedure.