Supplementary information

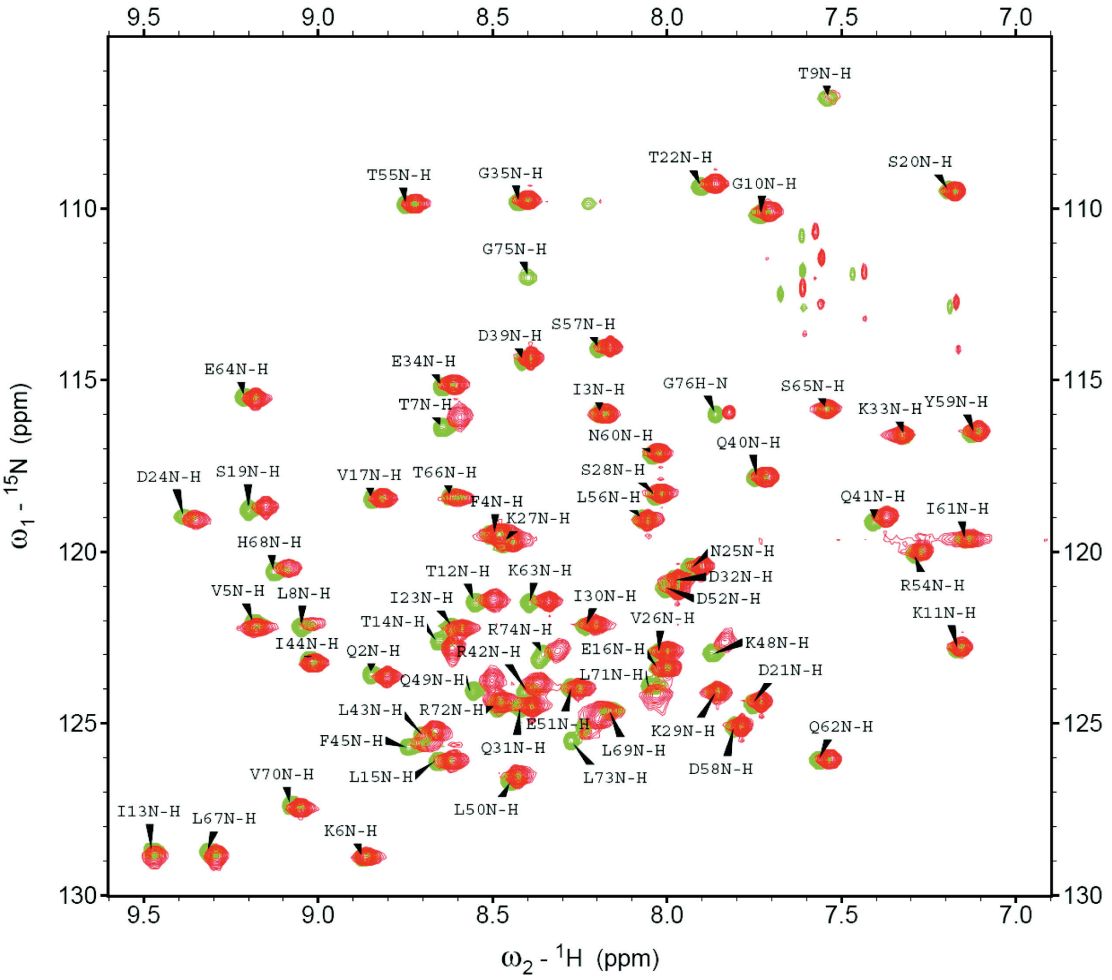

Fig. S1. ^{1}H-^{15}N TROSY of ^{15}N-labeled ubiquitin alone (green) or in complex with GST-UBZ (red). A close inspection of the spectra revealed that the resonances for residues T7, T12, T14, S19, R42, F45, K48, Q49, K63, L71 and L73 were significantly perturbed.

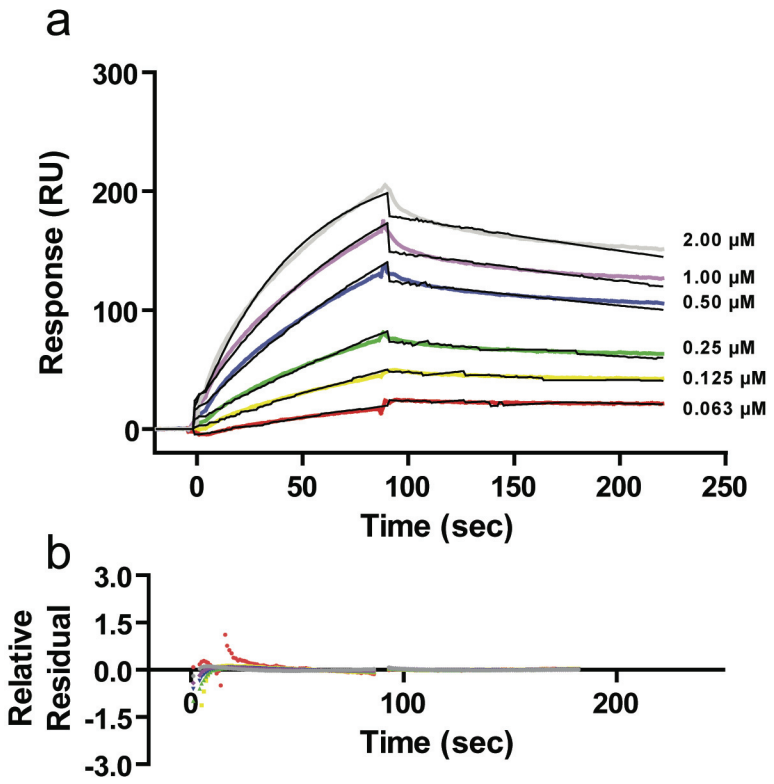

Fig. S2. Kinetic analysis of the wild-type C-term Polη binding to ubiquitin by surface plasmon resonance. (a) The fitting of sensorgrams to a 1:1 binding with mass transfer model. The fitted lines are shown as black. A χ^2 of 5.12 was obtained for the global fitting. (b) Distribution of residuals for both the association and dissociation phases showing the goodness of fit.

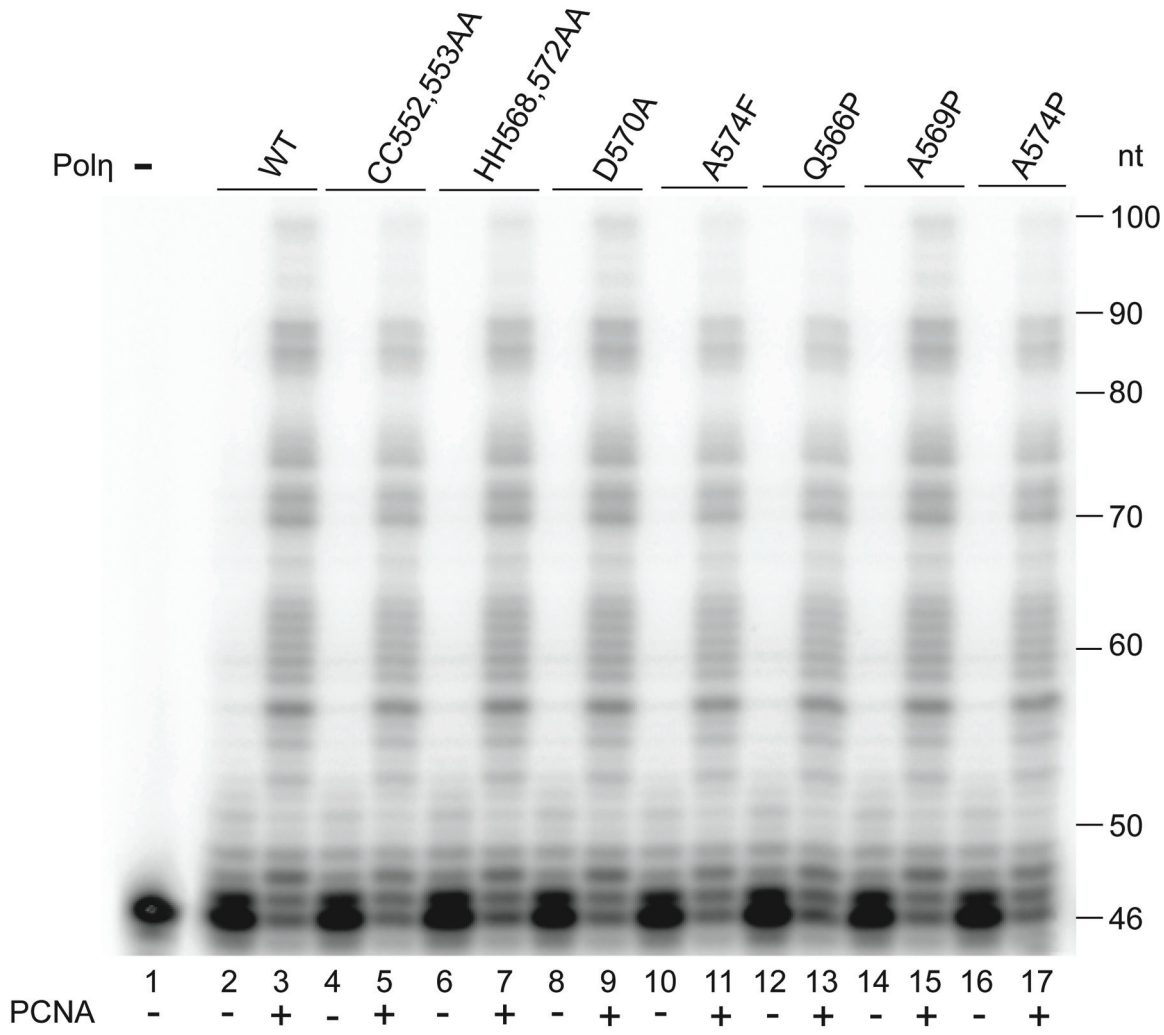

Fig. S3. The full-length Polη UBZ mutants retain normal DNA synthesis activity in the presence of PCNA and RFC. DNA synthesis by WT or mutant full-length Polη CC552,553AA, HH568,572AA, D570A, A574F, Q566P, A569P and A574P was assayed by using single-stranded M13mp18 DNA primed with γ-^{32}P-labeled 46mer primer. The reaction was carried out in the presence or absence of PCNA as indicated. Lane 1 is the γ-^{32}P-labeled 46mer primer. We observed similar primer extension for the wild-type and mutant full-length Polη in the presence of PCNA, suggesting that the mutation in UBZ does not affect Polη's normal function in DNA synthesis.