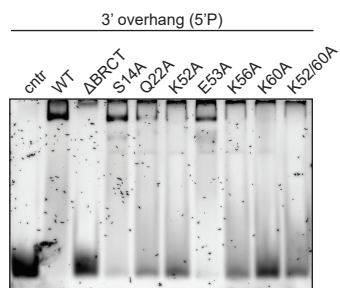
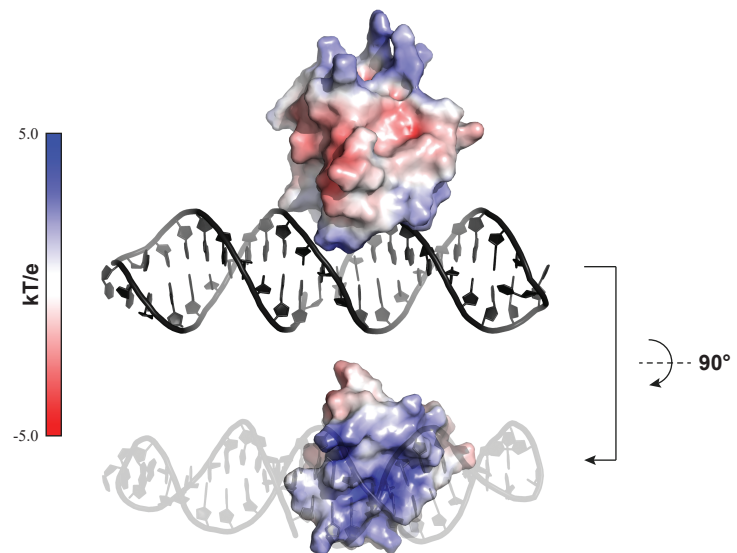


a**b**

Extended Data Figure 5. The DNA surface of the BRCT domain has a positive surface potential.

(a) EMSA assay assessing the influence of BRCT mutations on the ability of the WGR domain to bind 5'-phosphorylated DNA with a 3' overhang (DNA-9). *Af*-PARP1 WT or mutants (5 μ M) were incubated with DNA mimetic (1 μ M) for 1 h, separated via native PAGE and DNA visualised with SYBR safe staining.

(b) The electrostatic potential surface of the isolated BRCT domain was prepared with PDB2PQR^{86,87} and calculated using the APBS electrostatics plugins⁸⁸ in PyMOL (Schrödinger).