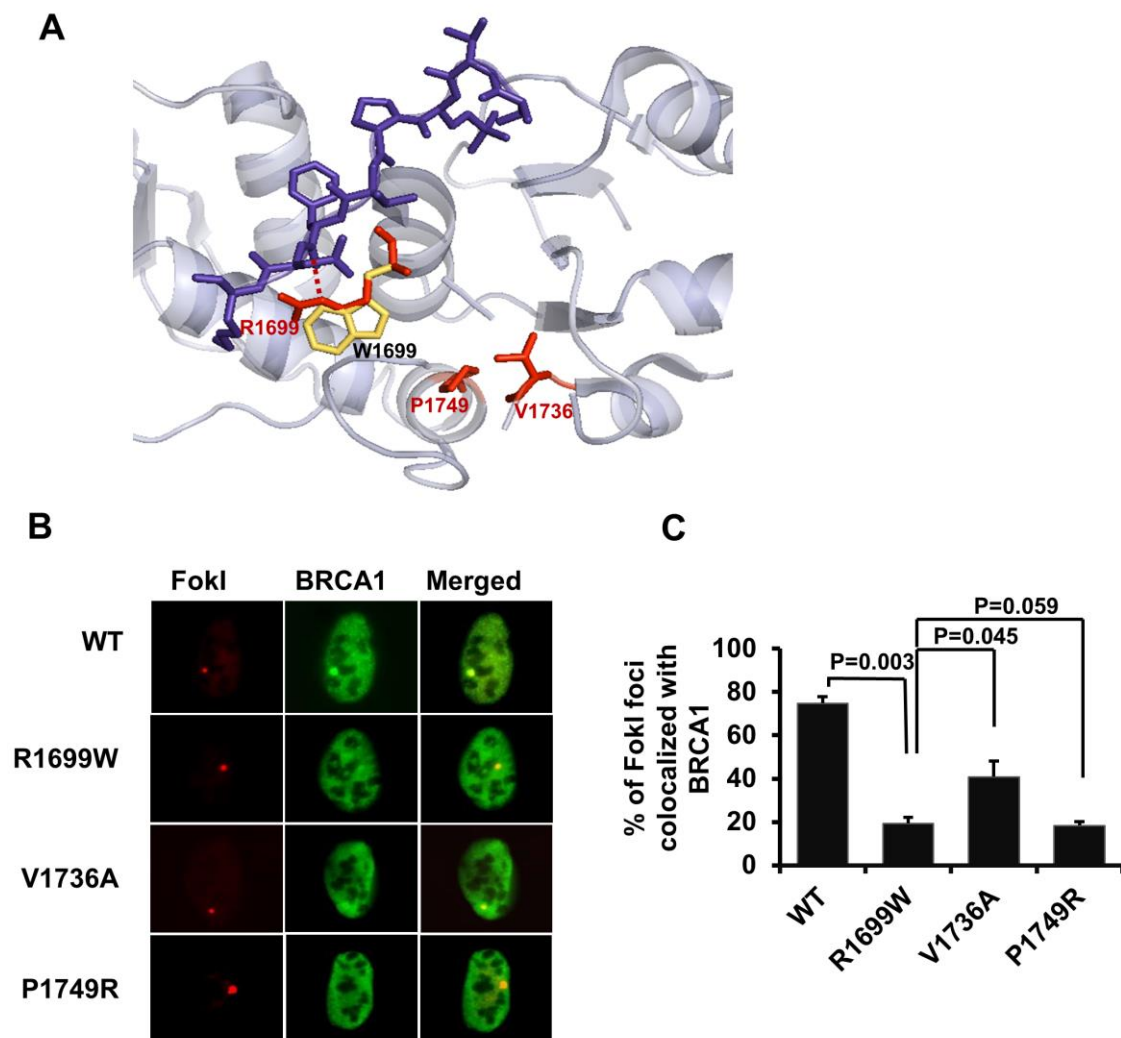


Supplement Figure 2



Supplementary Figure 2. Functional analysis of the BRCA1 (p.Arg1699Trp) mutation.

A, Structure of BRCT repeats based on modeling (protein data bank (pdb) code1t15) showing interaction between the BRCT repeats and a BRIP1/FANCD1 peptide. Arg1699 (R1699), Val1736 (V1736), Pro1749 (P1749) are shown in red. Trp1699(W1699) is yellow. The BRIP1/FANCD1 peptide is purple. **B**, Fluorescent images displaying colocalization of a C-terminal fragment of

BRCA1 containing either the wildtype (WT) or mutant BRCT repeats (BRCT- p.Arg1699Trp (R1699W), p.Val1736Ala (V1736A), p.Pro1749Arg (P1749R)) with mcherry-LaciFok1 nuclease DSBs in U2OS cells. **C**, Quantification of foci positive U2OS cells, which overexpressed pcDNA3.1-BRCA1 (BRCT- WT, R1699W, V1736A, or P1749R).