Supplementary Information

Title: The K898E germline variant in the PP1-binding motif of BRCA1 causes defects in DNA Repair

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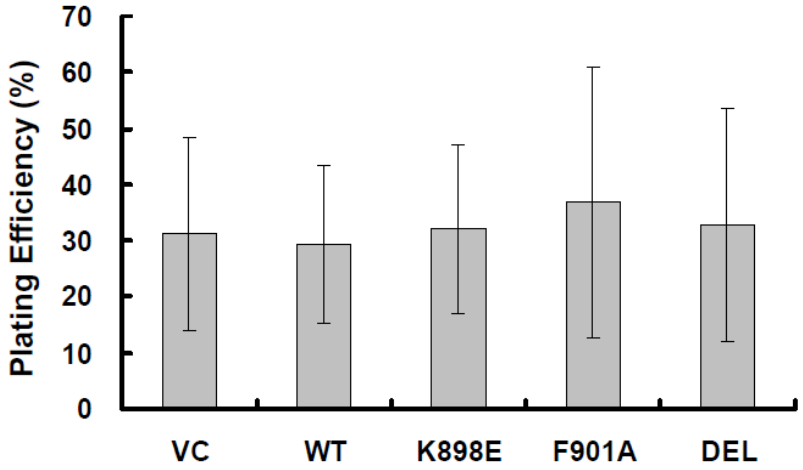
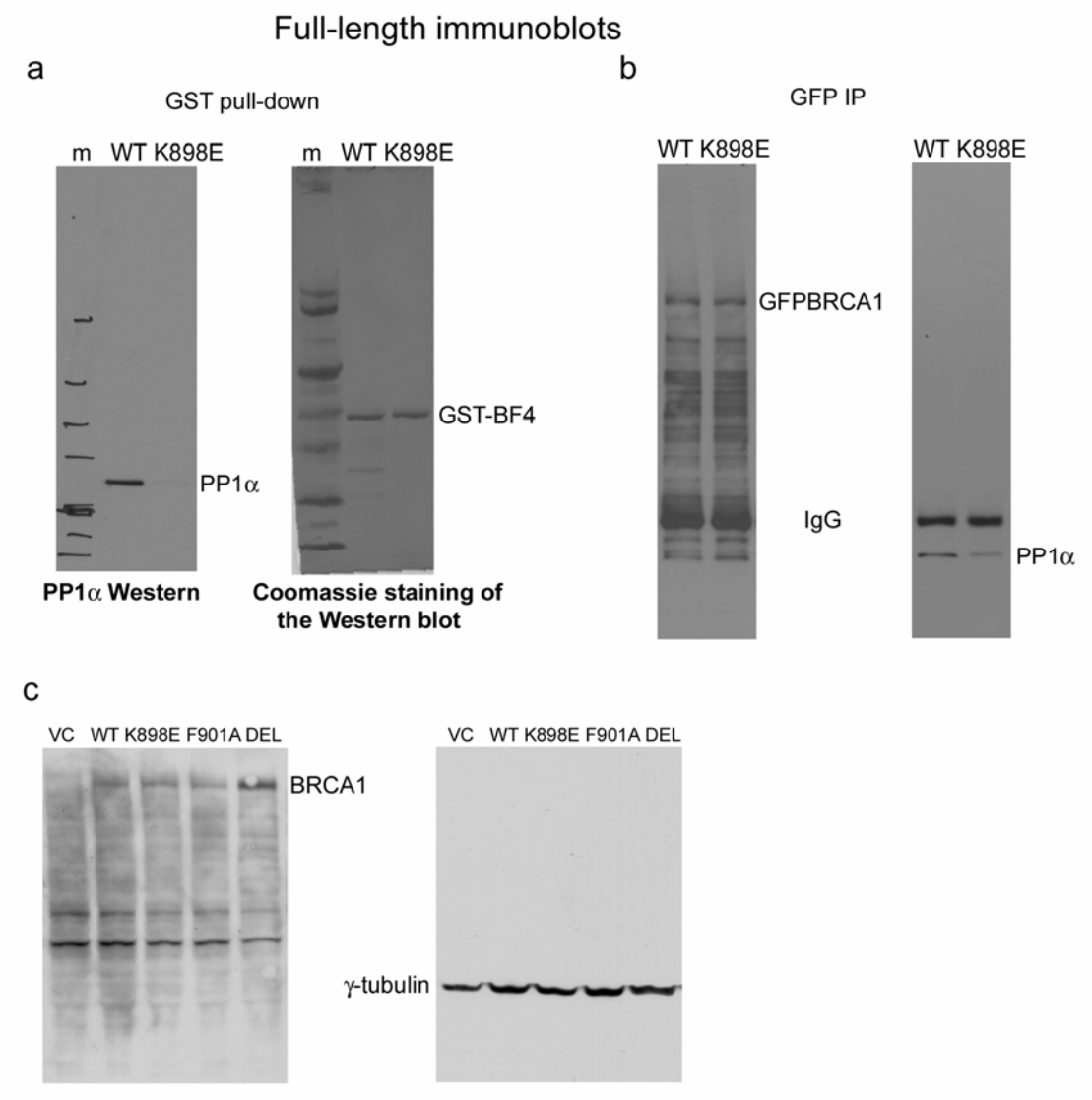
Supplementary Figures and Figure Legends



P values as compared to wild-type (WT)	0.86	–	0.77	0.56	0.75

Supplementary Figure S1. No differences in cell growth were observed between 780 cells transfected with vector control (VC), variant BRCA1 (K898E, F901A, or DEL), or wild-type BRCA1 (WT), as shown by plating efficiency. For the control samples in cell survival (colony formation) assays, 500 transfected 780 cells were plated to T25 flasks in triplicate, and were allowed to grow and form colonies for 10-12 days without undergoing irradiation. Plating efficiency was then derived by fixing and counting the colonies present and dividing colony numbers by the original number of plated cells (500). The mean plating efficiencies (mean ± SD of five independent experiments) of all transfectants were similar, and *P* values derived from a paired, two-tailed t-test did not indicate any significant differences between wild-type BRCA1 transfectants and variant BRCA1 transfectants or vector controls (from five independent experiments). The results show that no major differences in cell survival, cell growth, or the cell cycle were detected in transfectants, even after an extended period of culturing.



Supplementary Figure S2. Full-length immunoblots of data shown in Figure 1 (a, b) and Figure 2a (c).