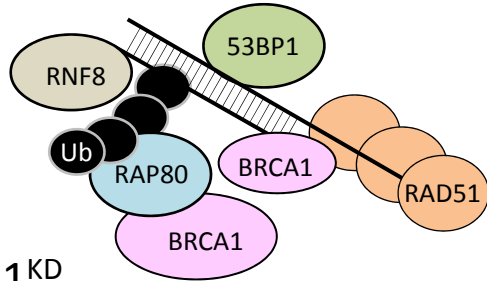
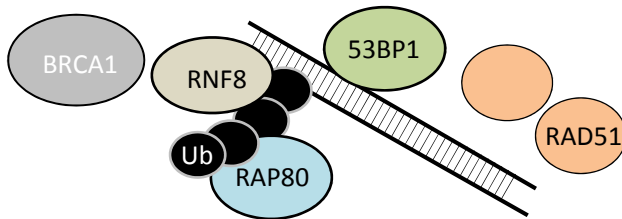


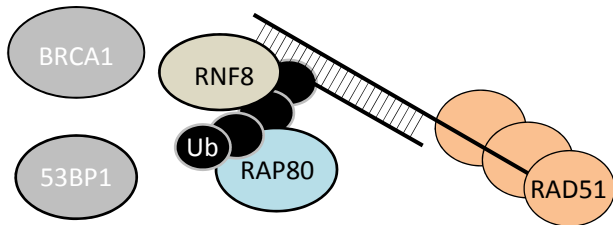
A. wild type



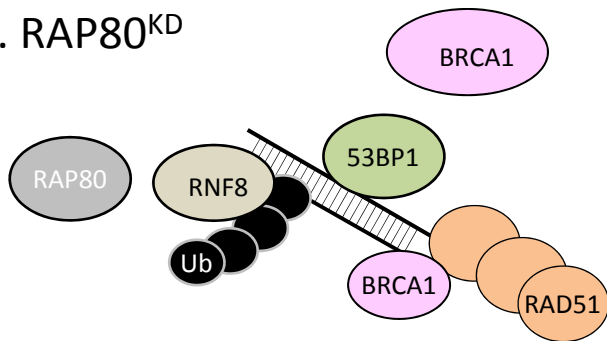
B. BRCA1^{KD}



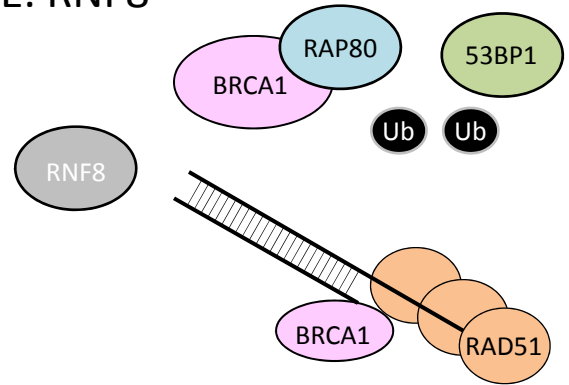
C. BRCA1^{KD}/53BP1^{KD}



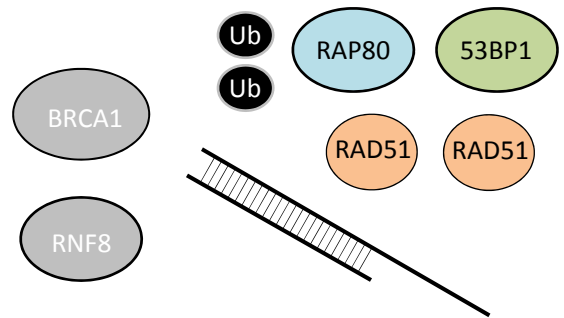
D. RAP80^{KD}



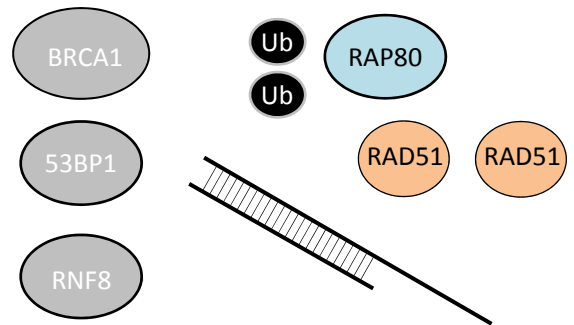
E. RNF8^{KD}



F. RNF8^{KD}/BRCA1^{KD}



G. RNF8^{KD}/BRCA1^{KD}/53BP1^{KD}



Supplementary Figure 1. A schematic of the assembly of DNA damage response-related proteins at DSB sites. **A**, Ubiquitin chain, RAP80, BRCA1, 53BP1 and RAD51 assemble at DSB sites in normal cells. **B**, The ubiquitin chain, RAP80 and 53BP1 but not RAD51 assemble at DSB sites in BRCA1-depleted cells. **C**, The ubiquitin chain, RAP80 and RAD51 assemble at DSB sites in BRCA1/53BP1-depleted cells. **D**, The ubiquitin

chain, a small subset of BRCA1 protein, 53BP1 and RAD51 assemble at DSB sites in RAP80-depleted cells. **E**, A small subset of BRCA1 protein and RAD51 assemble at DSB sites in RNF8-depleted cells. **F**, **G**, The ubiquitin chain, RAD51, BRCA1 and 53BP1 do not assemble at DSB sites in RNF8/BRCA1-depleted cells or RNF8/BRCA1 /53BP1-depleted cells.