



**Fig. S5 ERCC6L2 interacts with NHEJ factors.** **a** Flag-ERCC6L2 was co-expressed with individual GFP-tagged NHEJ subunits in HEK293T cells, and immunoprecipitation (IP) was performed with an anti-GFP-nanobody. The panels show western blots with anti-Flag or anti-GFP antibodies of total extract (input) and IP samples. Arrows indicate bands of GFP-tagged NHEJ subunits. **b** IP was performed with an anti-Flag antibody. The panels show western blots with anti-Flag or anti-GFP

antibodies of input and IP samples. Arrows indicate bands of GFP-tagged NHEJ subunits. Of note, the GFP-XRCC4 band on the gel co-occurred with a non-specific band, which made it hard to visualize at left. Another repeat is showed at right to show the GFP-XRCC4 band. **c** Flag-ERCC6L2 mutants were co-expressed with HA-tagged MRI in HEK293T cells, and IP was performed with an anti-HA antibody. Arrows indicate bands of tagged proteins, and asterisk marks an unknown form of HA-MRI. Interaction is schematically illustrated at top. **d** Flag-ERCC6L2 was co-expressed with HA-tagged MRI mutants in HEK293T cells, and IP was performed with an anti-Flag-antibody. Arrows indicate bands of tagged proteins, and asterisk marks an unknown form of HA-MRI. Interaction is schematically illustrated at left. **e** Western blots of ERCC6L2-HA protein in naïve and CSR-activated *Erc6l2-HA* B cells. KU70, PARP1, beta-tubulin and GAPDH are assayed as controls.