Figure S1

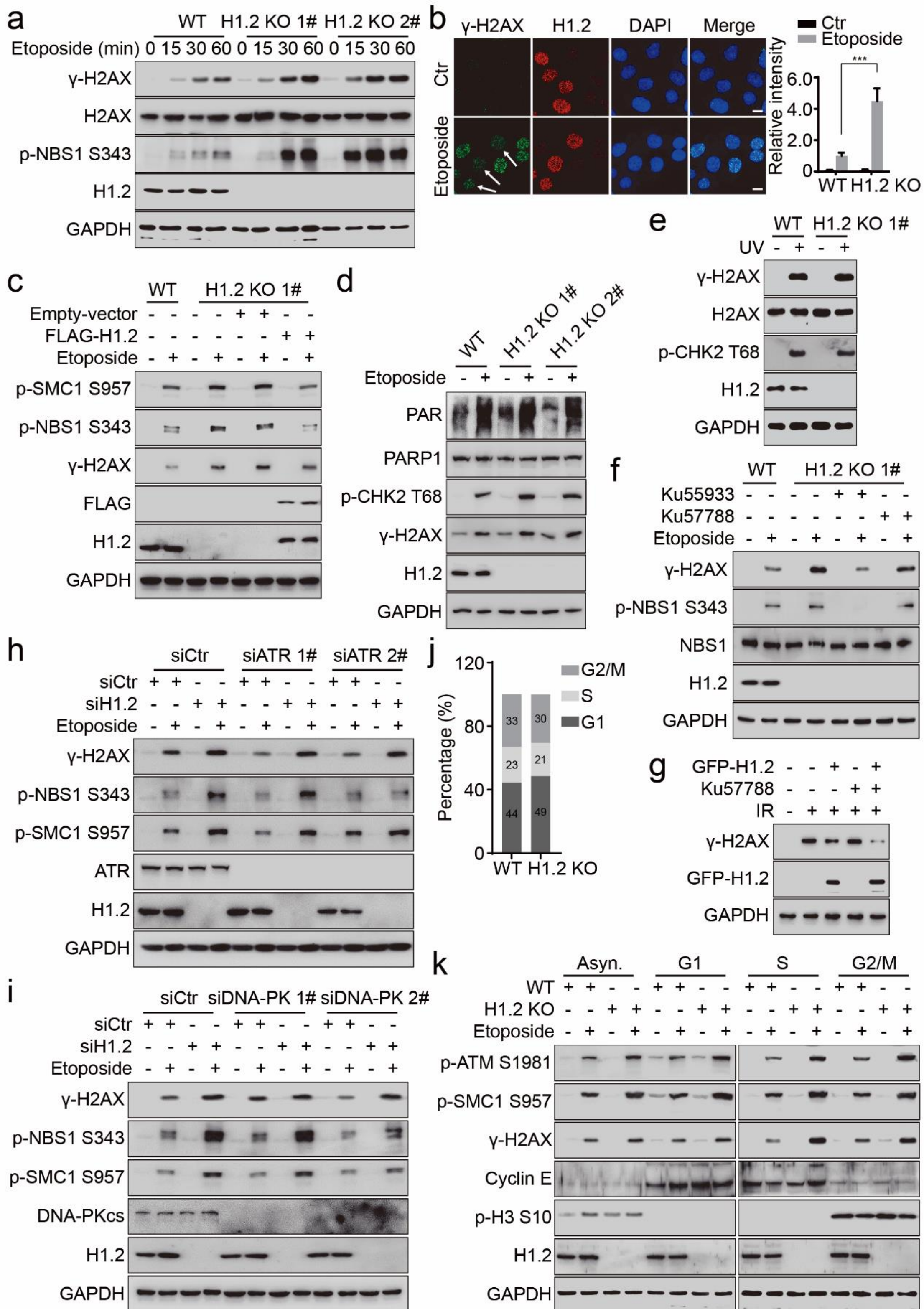

Figure S1. Linker histone H1.2 inhibits ATM-dependent DNA damage response

a WT and H1.2 KO (1# and 2#) HeLa cells were treated with 40 μM etoposide for the indicated times and analyzed by immunoblotting. **b** WT and H1.2 KO (1#) HeLa cells were mixed and treated with 40 μM etoposide for 2 h before analysis by immunofluorescence assay. The arrows indicate representative cells. The γ-H2AX intensity in the etoposide treated WT cells was normalized to 1. The data represent the mean ± SD. Scale bars, 10 μm. **c** WT and H1.2 KO (1#) HeLa cells were transfected with the indicated plasmids with or without 40 μM etoposide treatment for 1 h and analyzed by immunoblotting. **d** WT and H1.2 KO (1# and 2#) HeLa cell clones were treated with 40 μM etoposide for 15 min and analyzed by immunoblotting. **e** WT or H1.2 KO (1#) HeLa cells were exposed to 100 mJ ultraviolet light and were collected 1 h after exposure and analyzed by immunoblotting. **f** WT or H1.2 KO (1#) HeLa cells were treated with 40 μM etoposide for 1 h. H1.2 KO HeLa cells were treated with 20 μM Ku55933 or 1 μM Ku57788 for 1 h prior to etoposide treatment and analyzed by immunoblotting. **g** HeLa cells were transfected with GFP-H1.2 and exposed to 10 Gy IR with or without 2 h prior exposure to 2 μM Ku57788. Cells were collected 1 h post IR and analyzed by immunoblotting. **h**, **i** HeLa cells were transfected with the indicated siRNAs and treated with 40 μM etoposide for 1 h and then analyzed by immunoblotting. **j** WT or H1.2 KO (1#) HeLa cells were subjected to flow cytometry analysis. **k** WT or H1.2 KO (1#) HeLa cells were synchronized into different phases of cell cycle and treated with 40 μM etoposide for 1 h and analyzed by immunoblotting. Asyn. indicates cells that are asynchronized. G1, S and G2/M indicate cells that are synchronized into these cell cycle phases.