

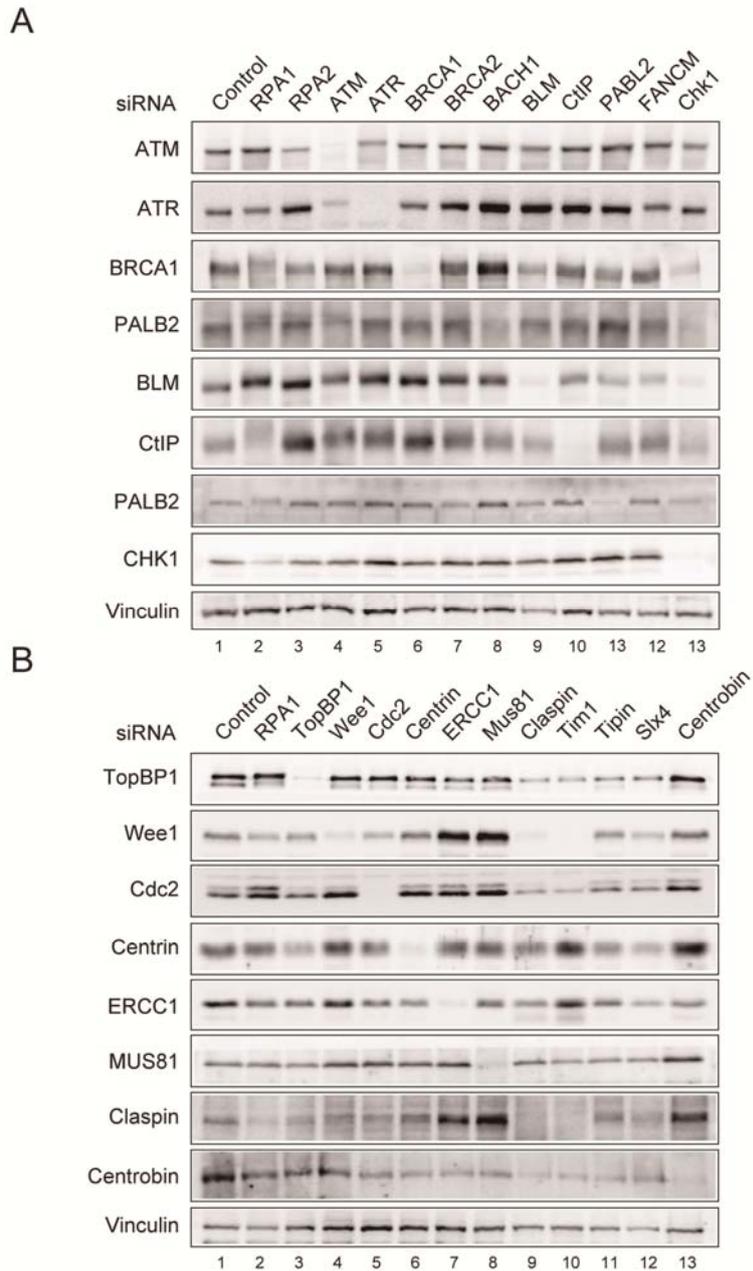
## SUPPLEMENTAL MATERIAL

**Table S1. List of siRNA sequences used in the study**

<b>Gene</b>	<b>List of siRNA sequences</b>
RPA2	5'-AAAGAGCCTGGTAGCCTTTAA-3'
BRCA1	5'-AAGGAACCTGTCTCCACAAAG-3'
BRCA2	5'-TTGAAGAATGCAGGTTTAATA-3'
BACH1	5'-AAAGCTTACCCGTCACAGCTT-3'
BLM	5'-TAAGCAGCGATGTGATTTGCA-3'
CtIP	5'-AAGCTAAAACAGGAACGAATC-3'
ERCC1	5'-AAGCCCTTATTCCGATCTACA-3'
SLX4	5'-CAGGAGAAAGGAAGACACAAA-3'
PALB2	5'-GACTTAGAAGAGGACCTTATT-3'
TopBP1	5'-AACTCACCTTATTGCAGGAGA-3'
Claspin	5'-AACCTTGCTTAGAGCTGAGTC-3'
Tim1	5'-ACAAGTCCAGGGTAGCTTAG-3'
Tipin	5'-AAGAGTCAGGAAATGGAGCAC-3'
Mus81	5'-AAGCTAAGATCCTACAGCACT-3'
Centrobin	5'-AAGGATGGTTCTAAGCATATC-3'
Centrin 2	5'-AAGAGCAAAAGCAGGAGATCC-3'
Wee1	Predesigned siRNA from Qiagen
Cdc2	Predesigned siRNA from Qiagen
Chk1	Predesigned siRNA from Invitrogen

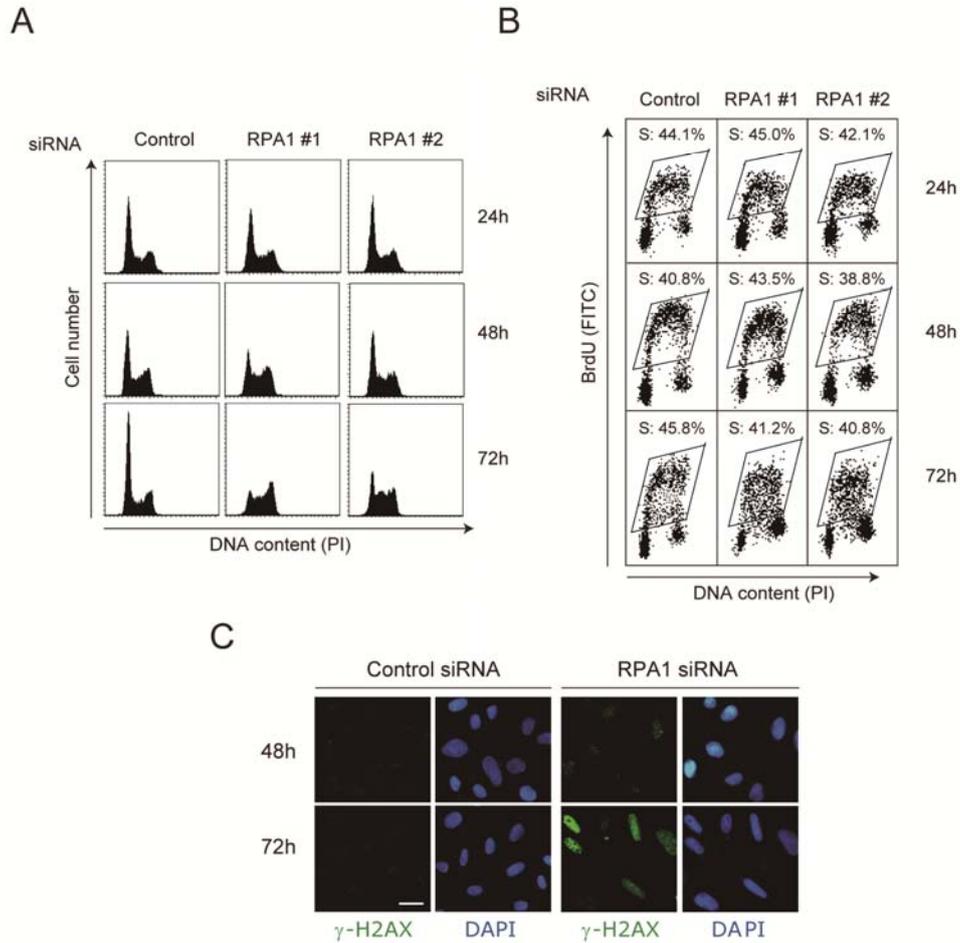
## SUPPLEMENTAL FIGURE LEGENDS

SW. Jang *et al.* Supplementary Figure S1



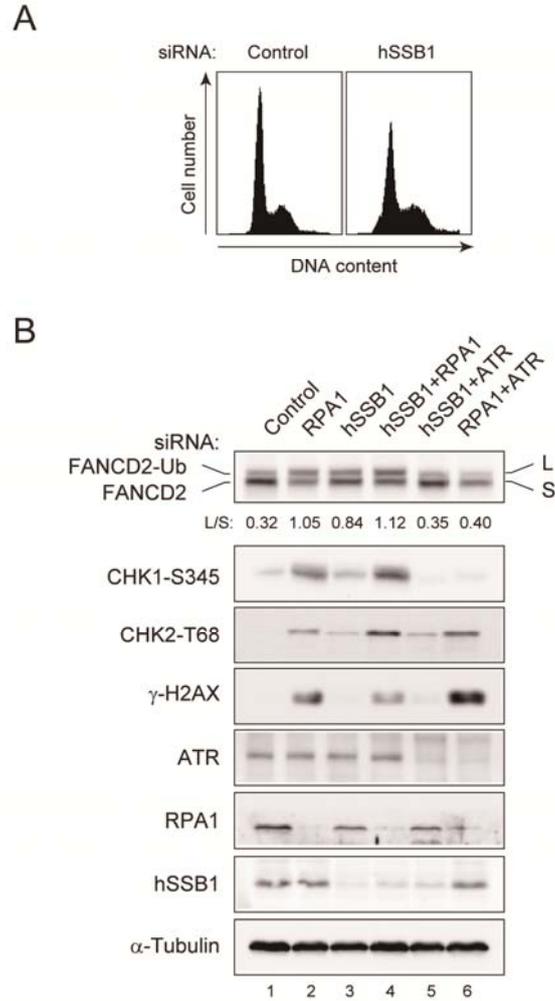
**Figure S1. Examination of knockdown efficiency after siRNA transfection.**

SiRNA-mediated knockdown of the target genes is confirmed by immunoblotting. (A-B) U2OS cells were transfected with indicated siRNAs. 72 hr after transfection, whole-cell lysates were prepared and immunoblotted using indicated antibodies.



**Figure S2. RPA1 depletion leads to defective cell cycle progression and increased  $\gamma$ -H2AX foci formation.**

U2OS cells were transfected with either control siRNA or RPA1-specific siRNAs. (A) Cells were collected at the indicated time points after siRNA transfection and subjected to propidium iodide staining for cell cycle analysis. (B) 10  $\mu$ M BrdU was added at the indicated time points after siRNA transfection for 1 h before cell fixation. The percentages of BrdU-positive (S-phase) cells are indicated. (C) Cells were immunostained with anti- $\gamma$ -H2AX antibody at 48 h and 72 hr after siRNA transfection. Representative fields are shown. Scale bars, 10  $\mu$ m.



**Figure S3. Depletion of hSSB1 shows induction of FANCD2-Ub.**

U2OS cells were transfected with either control siRNA or siRNAs specific for hSSB1 and RPA1, either individually or in combination. (A) 72 hours after transfection, cells were stained with PI and analyzed by FACS. (B) Whole-cell lysates were prepared 72 hr after transfection and analyzed with indicated antibodies. The FANCD2-Ub:FANCD2 ratios (L: S) are indicated below each sample.