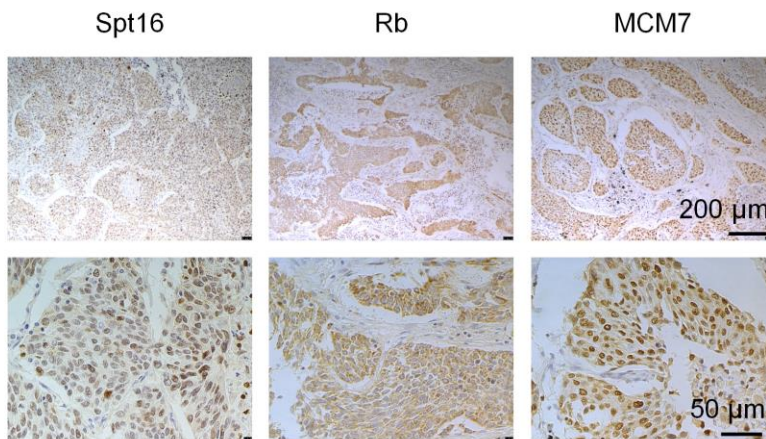


## Supplementary Materials

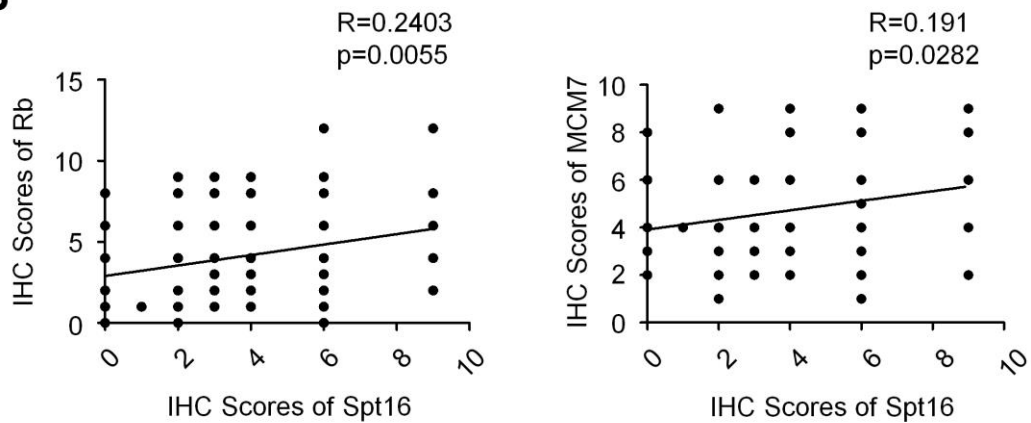
### Supplementary Figures

## Figure S1

**A**



**B**

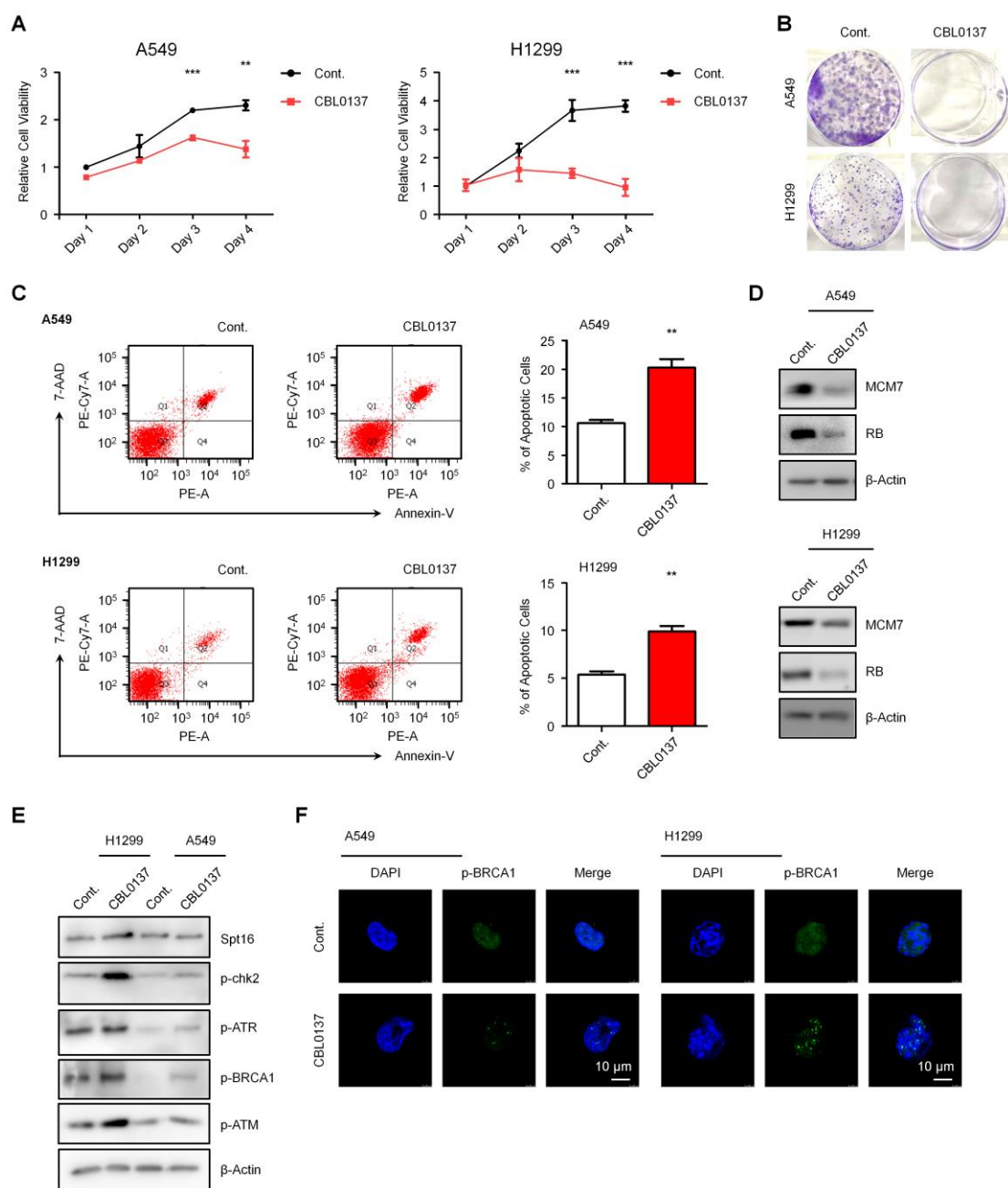


**Figure S1. The levels of Spt16, Rb, and MCM7 in human lung cancer tissues.**

**A**, IHC staining analysis for 147 human lung cancer specimens with antibodies against Spt16, Rb, and MCM7 as indicated.

**B**, The levels of Spt16, Rb, and MCM7 were quantified.

**Figure S2**



**Figure S2. Treatment with CBL0137 inhibited cell growth, stimulated apoptosis, and activated DDR in human lung cancer cells.**

**A**, MTT analyses in A549 and NCI-H1299 lung cancer cells treated with 0.3  $\mu$ M CBL0137 as indicated.

**B**, Colony formation assays in A549 and NCI-H1299 cells treated with 0.3  $\mu$ M CBL0137 as indicated.

**C**, Flow cytometry (FACS) analyses with Annexin-V and 7-AAD double staining in A549 and NCI-H1299 cells treated with 0.3  $\mu$ M CBL0137 for 48 h as indicated to determine the

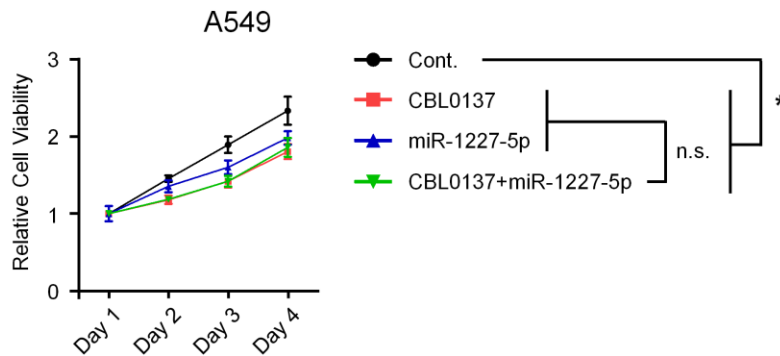
effects of CBL0137 on cell apoptosis.

**D and E**, Western blot analyses in A549 and NCI-H1299 cells treated with 0.3  $\mu$ M CBL0137 for 48 h as indicated.

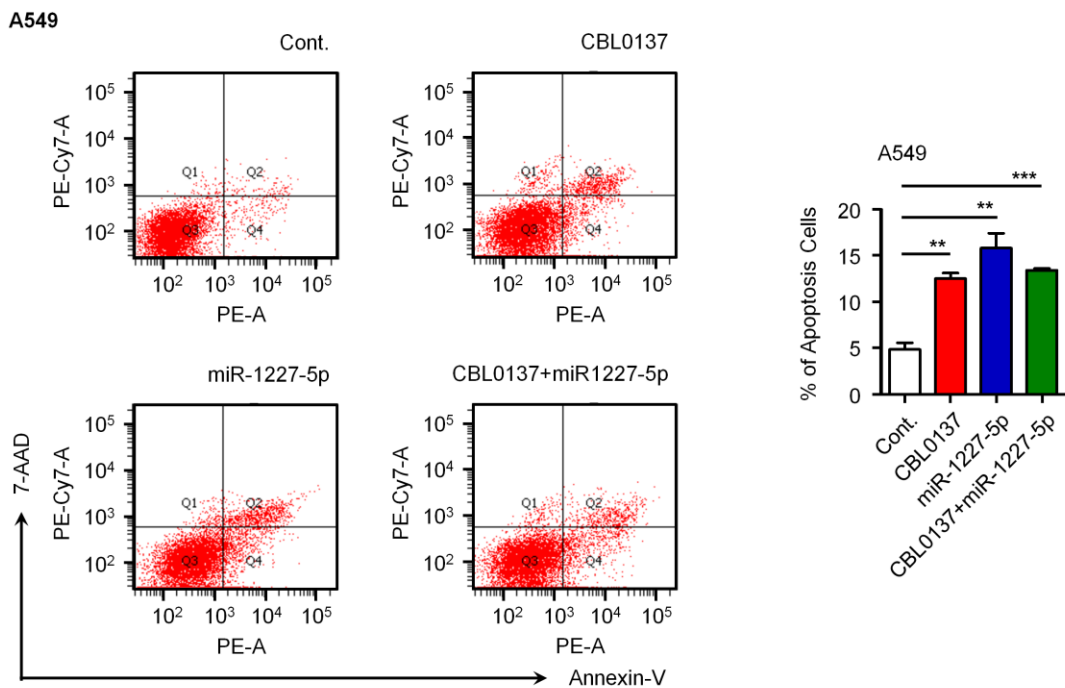
**F**, Immunofluorescence (IF) analyses with phosphorylated BRCA1 (p-BRCA1) antibodies in A549 and NCI-H1299 cells treated with 0.3  $\mu$ M CBL0137 for 48 h as indicated.

**Figure S3**

**A**



**B**



**Figure S3. The combinatorial effect of miR-1227-5p induction and CBL0317 treatment on cell growth and apoptosis.**

**A**, MTT analyses in A549 lung cancer cells treated with 0.3  $\mu$ M CBL0137, or transfected with miR-1227-5p, or combined (transfected with miR-1227-5p and treated with CBL0137) as indicated.

**B**, A549 cells treated as in A were subjected to Flow cytometry (FACS) analyses with Annexin-V and 7-AAD double staining to determine the effects of CBL0137 on cell apoptosis.

**Table S1. Sequences of siRNAs and shRNAs.**

<b>Name</b>	<b>Sequences</b>
siSpt16-#1	CGAGUGAAGAGACUGUACATT
siSpt16-#2	GAGUCAUGGAAAUAGUUGATT
shSpt16	CGAGTGAAGAGACTGTACA

**Table S2. Primer sequences used for RT-qPCR analyses.**

<b>Primer Name</b>	<b>Sequences</b>
GAPDH	Forward: CTCCTCCACCTTTGACGCTG, Reverse: TCCTCTTGTGCTCTTGCTGG.
Spt16	Forward: TCAATGGCTTCGCTTCACATCTG, Reverse: CATCCGTGTGCCGCTTCTTCC.
MCM7	Forward: GCTGATGCCGTACAAGAG, Reverse: AGCAGGGTACTGGTTCTG.
Rb	Forward: GACCAACTGATCACCTTGAATC, Reverse: ATTTCAATGGCTTCTGGGTCTG.