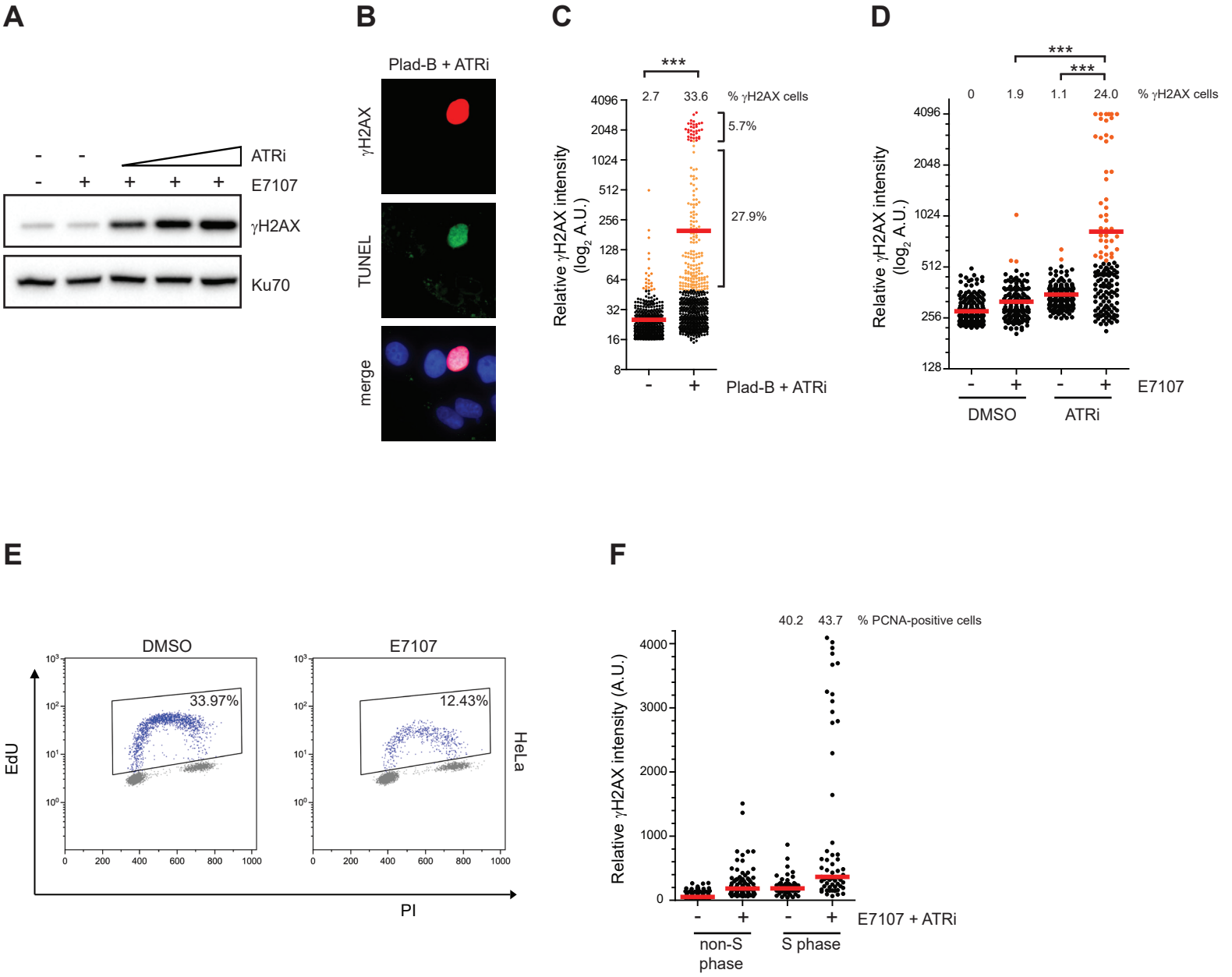
Supplementary Fig. S5



Supplementary Figure S5. RNA splicing perturbation in cells confers sensitivity to ATR inhibitors. (**A**) HeLa cells were treated with DMSO, E7107 alone, or E7107 with different ATRi concentrations (two-fold dilution, 1.25 – 5 μM) for 24h. **(B** and **C)** HeLa cells were treated with DMSO or combination of Plad-B (1 nM) and ATRi (10 μM) for 24h. Representative images are shown in **B**; In **C**, intensities of TUNEL and γH2AX staining in individual cells were analyzed by immunofluorescence. Red bars represent the mean γH2AX intensities of the indicated cell populations. Orange color indicates TUNEL-/γH2AX+ cell population, red color indicates TUNEL+/γH2AX+ cell population, orange color indicates only γH2AX+ population. ***, $p \leq 0.001$. (**D**) HeLa cells were treated with ATRi (10 μM) in the presence or absence of E7107 (1 nM) for 24h. Individual cells were analyzed by immunofluorescence using a γH2AX antibody. Intensities of γH2AX staining in individual cells were analyzed by immunofluorescence (n>300). Red bars represent the mean γH2AX intensities of the indicated cell populations. ***, $p \leq 0.001$. (**E**) HeLa cells were either DMSO or 1 nM E7107 for 24h followed by FACS analysis. (**F**) HeLa cells were either treated with DMSO or combined E7107 (1 nM) and ATRi (10 μM) for 24h, followed by immunofluorescence staining using anti-PCNA (S phase marker) and anti-γH2AX antibodies. Red bars represent the median γH2AX intensities of the indicated cell populations.