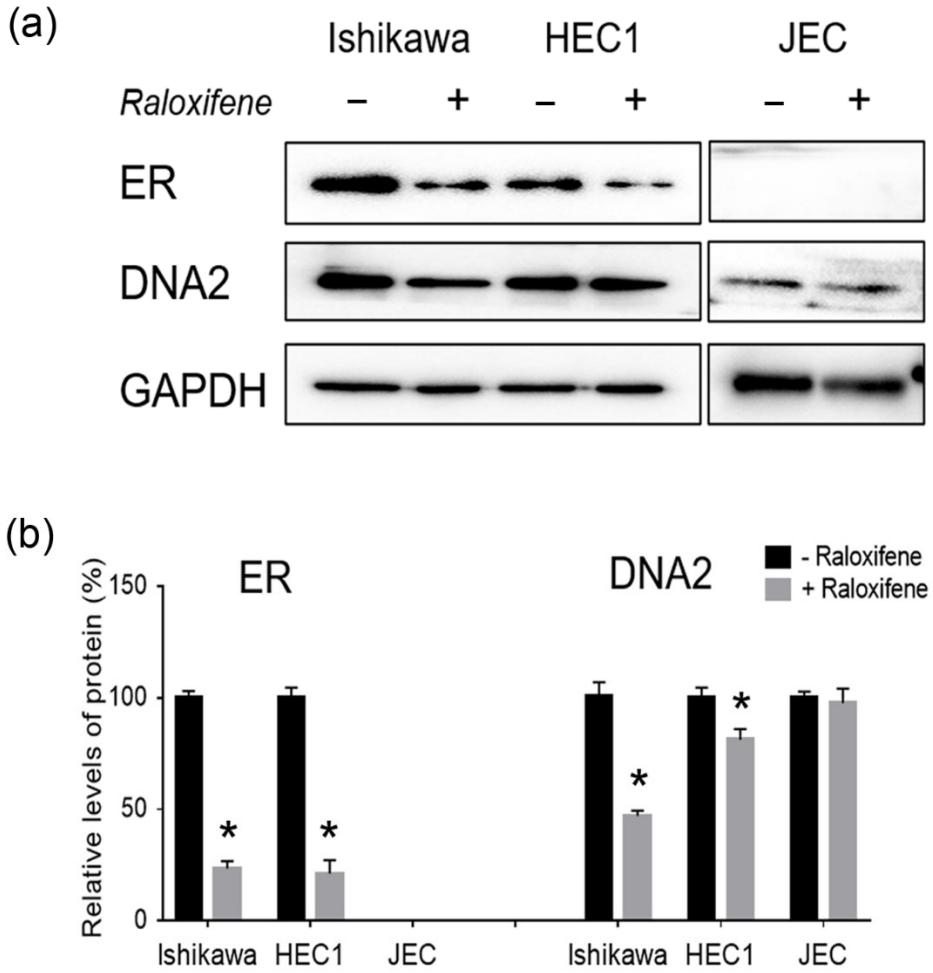

Fig. S1 ER modulator treatment influences the DNA2 expression and cell growth in endometrial cancer cells. (a) Protein expression levels of ER and DNA2 in endometrial cancer cells with or without treatment were evaluated by WB analysis. GAPDH was adopted as house-keeping control, and the quantification of bands was carried out using the ImageJ software (b). (* *P*<0.05; *n*=3).

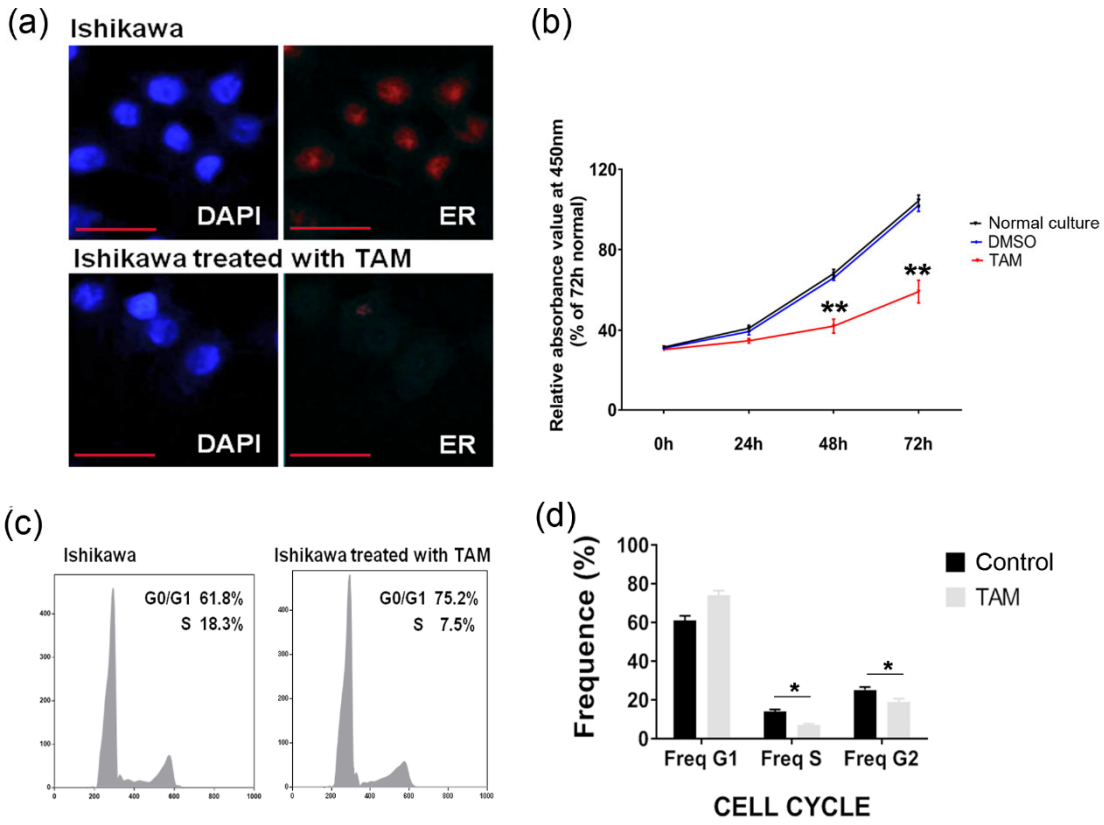

Fig. S2 TAM treatment inhibits the growth of Ishikawa cells. (a) Positive signal of ER staining was observed in normal cultured Ishikawa cells; meanwhile, the signal was relatively dim after TAM treatment. (b) The CCK8 assay showed that Ishikawa cell growth was significantly inhibited by TAM treatment. (c, d) Flow cytometry was used to detect the cell cycle. The results revealed that cells treated with TAM accumulated in the G0/G1 phase. (* *P*<0.05; ** *P*<0.01; *n*=3). Scale Bar=20 μm.

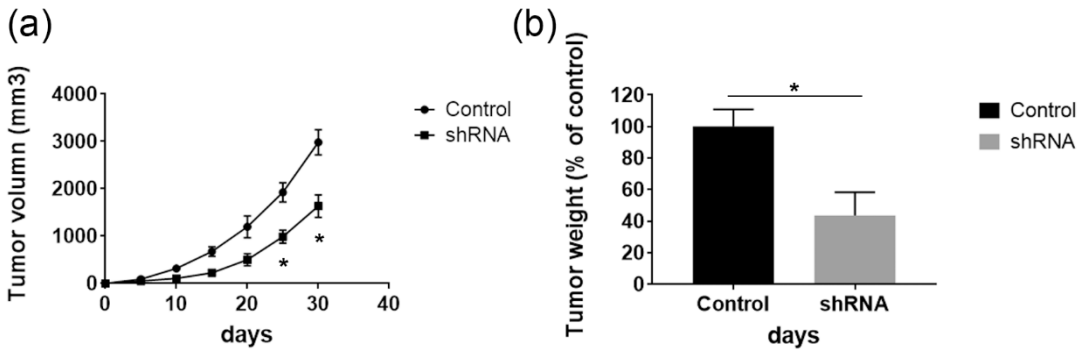

Fig. S3 DNA2 reduction significantly reduces the growth of Ishikawa endometrial cancer cells in nude mice. (a) The mean tumor volumes during the 30-day after cell implantation. (b) Bar represents the inhibition rate (% of control) of the mean tumor weight. (* *P*<0.05; *n*=3)

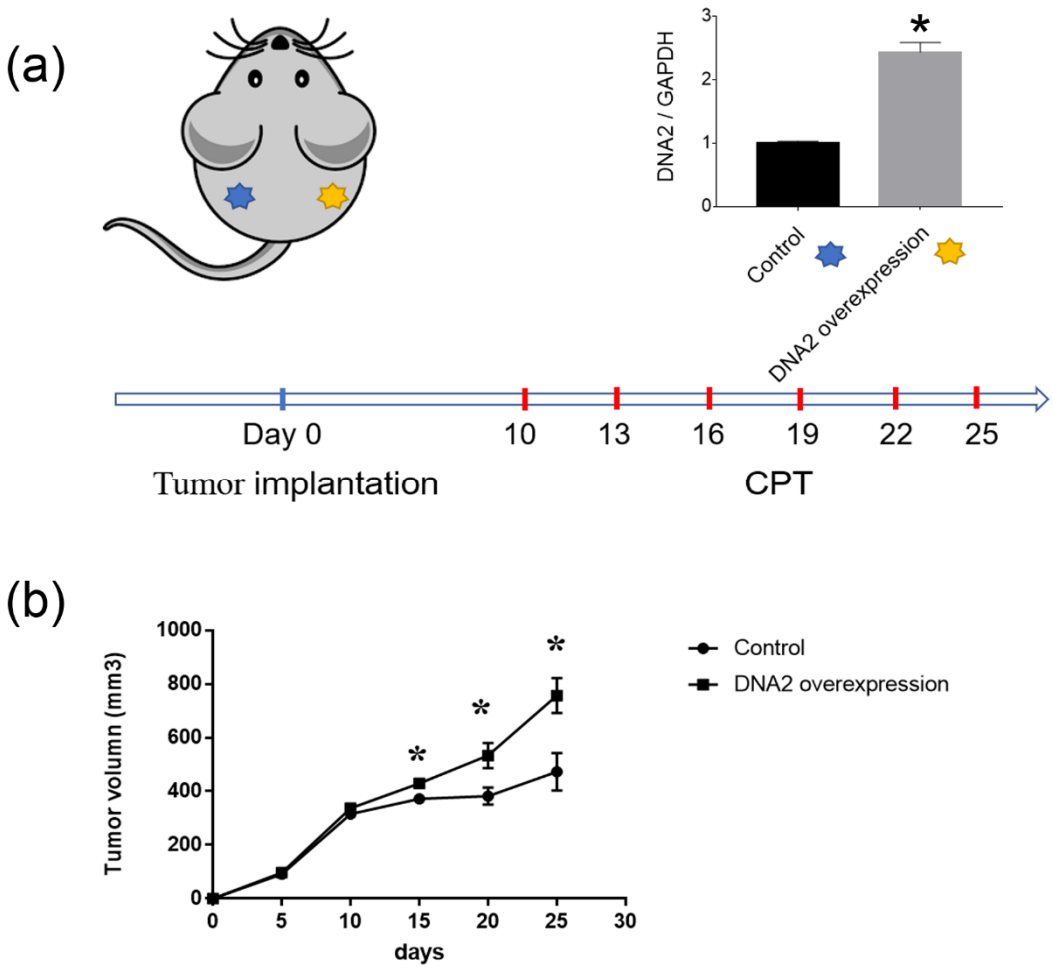

Fig. S4 Ishikawa endometrial cancer cells with overexpressed DNA2 were less sensitive to CPT in vivo. (a) Schematic diagram of the experimental process. Two million of tumor cells transfected with the empty plasmid (control) and the cells transfected with the DNA2 overexpression plasmid were subcutaneously injected on the left and right sides of the same nude mouse, respectively; Chemotherapy injections were carried out every three days started from day 10 after tumor cell implantation. (b) The mean tumor volumes during the 25-day after cell implantation.