

Figure S1. Silencing of LRRC8A in A2780 cells. (A and B) The protein expression level of LRRC8A and GAPDH was detected by western blotting following siRNA transfection for 24 h (n=3; ns>0.05; **P<0.01; ***P<0.001 vs. Control). LRRC8A, leucine-rich repeat-containing 8a; siRNA or si-, small interfering RNA; NC, negative control.

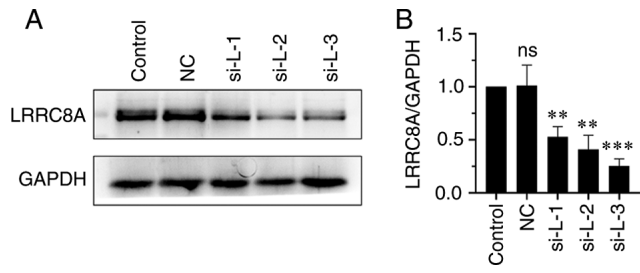


Figure S2. Mechanism diagram of paclitaxel inducing pyroptosis in ovarian cancer cells by inhibiting the volume-sensitive chloride channel LRRC8. When cells are exposed to PTX and DCPIB, from one aspect, PTX activates caspase-3 and caspase-3 cleaves GSDME. The cleaved GSDME binds to phosphoinositides in the plasma membrane and oligomerises to generate membrane pores, and LDH release. Water enters into cells to cause cell swelling. From another aspect, DCPIB inhibits the function of LRRC8A/VRAC, which leads to the loss of I_{cl} and RVD. This further leads to excessive cell swelling, membrane bubbles and rupture. LRRC8A, leucine-rich repeat-containing 8a; PTX, paclitaxel; DCPIB, 4-(2-butyl-6,7-dichloro-2-cyclopentyl-indan-1-on5-yl) oxobutyric acid; GSDME, gasdermin E; LDH, lactate dehydrogenase; VRAC, volume-regulatory anion channel; RVD, regulatory volume decrease.

