

Figure 4. Polyphyllin VII regulates the PP2A/AKT/DRP1 signaling axis in A2780 and SKOV3 cells. (A and B) A2780 and SKOV3 cells were pretreated with LB-100 for 1 h, followed by treatment with polyphyllin VII (3 μM) for 24 h. Mitochondria were extracted for western blot analysis. Western blot analysis of DRP1 and cytochrome c in A2780 and SKOV3 cells after polyphyllin VII treatment. (C) A2780 cells were pretreated with LB-100 for 1 h, followed by treatment with polyphyllin VII (3 μM) for 24 h. Co-localization (orange) of mitochondria (red) with DRP1 (green) was examined by Echo-lab Revolve microscopy (scale bar, 70 μm). (D) A2780 and SKOV3 cells were pretreated with LB-100 for 1 h, followed by treatment with polyphyllin VII (3 μM) for 24 h. Western blot analysis of p-DRP1 and p-AKT in A2780 and SKOV3 cells. (E) PP2A phosphatase activity detection after treatment. •P<0.05, •-P<0.01, •--P<0.001 vs. untreated control; #P<0.05 vs. polyphyllin VII (3 μM) group.

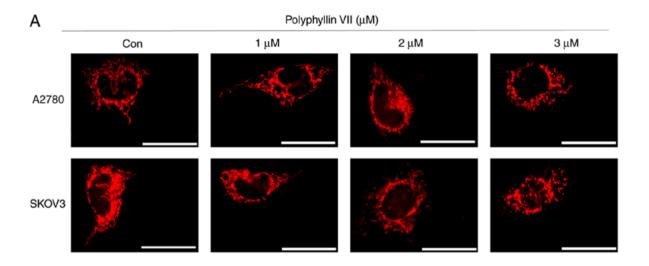


Figure 3. Polyphyllin VII intensifies DRP1-dependent mitochondrial fission. (A) A2780 and SKOV3 cells were treated with various concentrations of poly-phyllin VII for 24 h. Mito-tracker red fluorescence was used to evaluate mitochondrial fission, indicating the mitochondria in terms of the percentage of debris. Scale bar, 70 µm.