

Figure S1. Related to Figure 3 and 4. The differential effect of JQ1 on cleaved-PARP and Akt/mTOR pathway in JQ1-sensitive group and the p-Akt level after transfected AKT1 plasmid in JQ1-resistant group.

A. SKOV-3 and HEY cells were treated with 2.5  $\mu$ M JQ1, 5  $\mu$ M 3-MA or 5  $\mu$ M CQ or a combination for 48 h and examined the expression of apoptosis marker cleaved PARP p85.

B. SKOV-3 and HEY cells were treated with the indicated concentration of JQ1 for 48 h. Cell lysates were used to detect Akt (S473), mTOR (S2448), P70S6K (S424/T421), and their phosphorylated counterparts by western blot.

C. After transfection by Akt1 plasmid or control vector for 48 h, western blotting was used to identify the phosphorylated Akt (P-Akt) in A2780 and HO-8910 cell lines.

D and E. Annexin V-FITC/PI staining were used to detect the level of apoptosis after treatment with JQ1 (2.5  $\mu$ M) in combination with transfection by Akt1 plasmid or control vector for 48 h. ns means no significance.