

Supplementary Table 1 Top 20 of identified proteins associated with KAT6A

prot_acc	prot_acc_name	gene name	prot_cover (%)
Q8NHY2	COP1_HUMAN	COP1	21
P10809	CH60_HUMAN	HSPD1	20.1
Q8NFW8	NEUA_HUMAN	CMAS	19.4
Q5QNW6	H2B2F_HUMAN	HIST2H2BF	19
P42575	CASP2_HUMAN	CASP2	18.8
Q6PJ69	TRI65_HUMAN	TRIM65	18.6
Q9BTY7	HGH1_HUMAN	HGH1	17.9
O95801	TTC4_HUMAN	TTC4	17.8
Q13362	2A5G_HUMAN	PPP2R5C	17.4
Q5T2D3	OTUD3_HUMAN	OTUD3	17.3
Q9UJU6	DBNL_HUMAN	DBNL	17.2
Q8TBX8	PI42C_HUMAN	PIP4K2C	17.1
P31939	PUR9_HUMAN	ATIC	17.1
Q9BQG2	NUD12_HUMAN	NUDT12	16.9
Q6Y288	B3GLT_HUMAN	B3GLCT	16.5
Q9Y4P1	ATG4B_HUMAN	ATG4B	16.3
Q86U42	PABP2_HUMAN	PABPN1	16.3
P35659	DEK_HUMAN	DEK	15.7
Q12874	SF3A3_HUMAN	SF3A3	15.6
P0DOX5	IGG1_HUMAN	IGG1	15.4

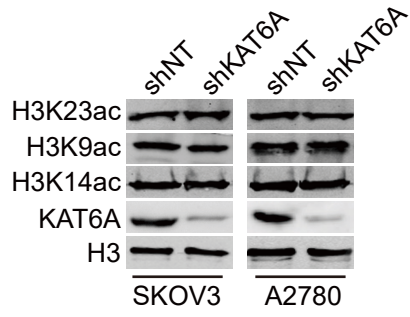


Figure S1 Western blot analysis of the effects of *KAT6A* knockdown on the H3K23ac, H3K9ac, and H3K14ac protein levels in SKOV3 and A2780 cells.

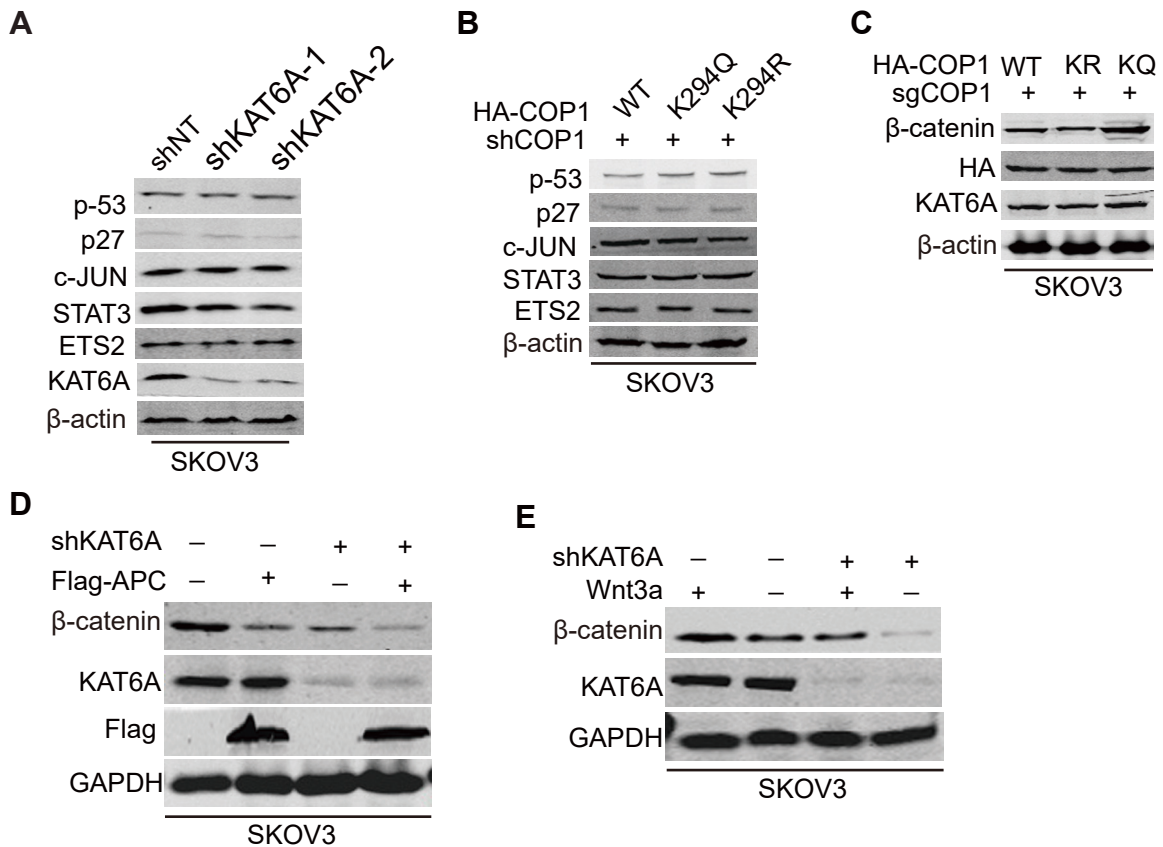


Figure S2 Effects of *KAT6A* KD or COP1 acetylation on β -catenin-targeted downstream protein expression

(A) WB of the effects of *KAT6A* KD on p53, p27, ETS2, c -JUN, and STAT3 protein levels. (B) WB of the effects of COP1 acetylation on p53, p27, ETS2, c -JUN, and STAT3 protein levels. (C) Effects of overexpression of shRNA-resistant COP1-WT or COP1-K294Q/K294R mutant on β -catenin protein levels. (D and E) WB analysis of the effects of *KAT6A* KO and APC or Wnt3a (100 ng/ml) on β -catenin protein levels.

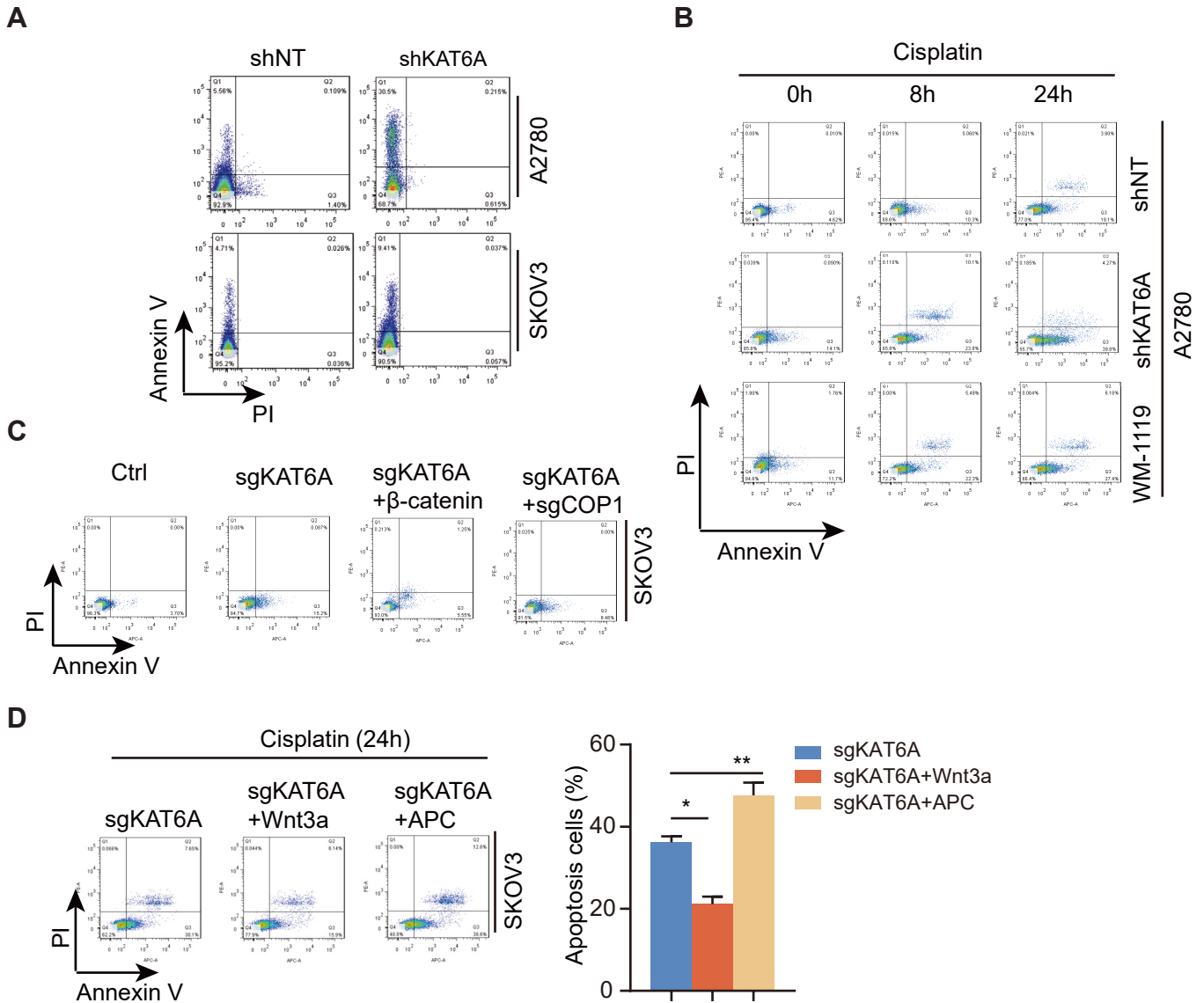


Figure S3 Effects of KAT6A KD on apoptosis

(A) Effects of *KAT6A* KD on apoptosis in SKOV3 and A2780 cells. (B) Representative images of apoptosis assays in Figure 6E. (C) Representative images of apoptosis assays in Figure 6G. (D) Representative images (left) and quantification (right) of apoptosis assays in KAT6A KO SKOV3 cells treated with cisplatin for 24 h with or without Wnt/APC. * $P < 0.05$, ** $P < 0.01$.