

Figure S1. siRNA targeting p300 reduces p300 but not CBP and PCAF in OS cells. OS-derived wild-type-p53 U2OS, p53-null MG-63, and p53-null Saos-2 cells were transfected with siRNA against p300 (si-p300) or a control siRNA (si-control). A total of 72 h after transfection, whole-cell lysates were prepared and analyzed for p300, CBP and PCAF by western blotting. β -actin was used as a loading control. siRNA, small interfering RNA; OS, osteosarcoma.

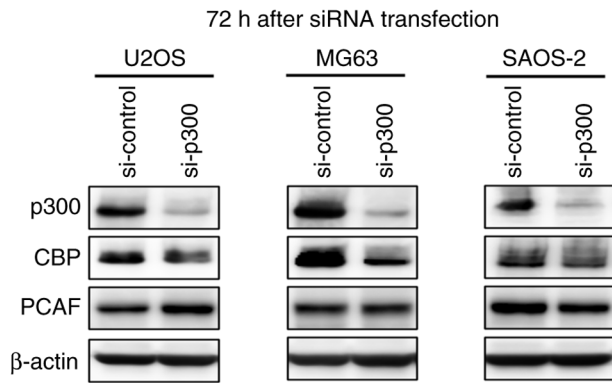


Figure S2. p300 depletion-mediated attenuation of OS cell proliferation. (A) Western blotting of the indicated OS cells transfected as in Fig. S1. A total of 72 h after transfection, whole cell lysates were prepared and analyzed for p300 by western blot. β -actin was used as a loading control. (B) Cell survival assay. The indicated OS cells were transfected as in (A) At the indicated time points after transfection, cell viability was assessed by the standard trypan blue dye exclusion assay. Plots are shown as the mean \pm SD. * p <0.05 and ** p <0.01 vs. control siRNA transfection. OS, osteosarcoma; siRNA, small interfering RNA.

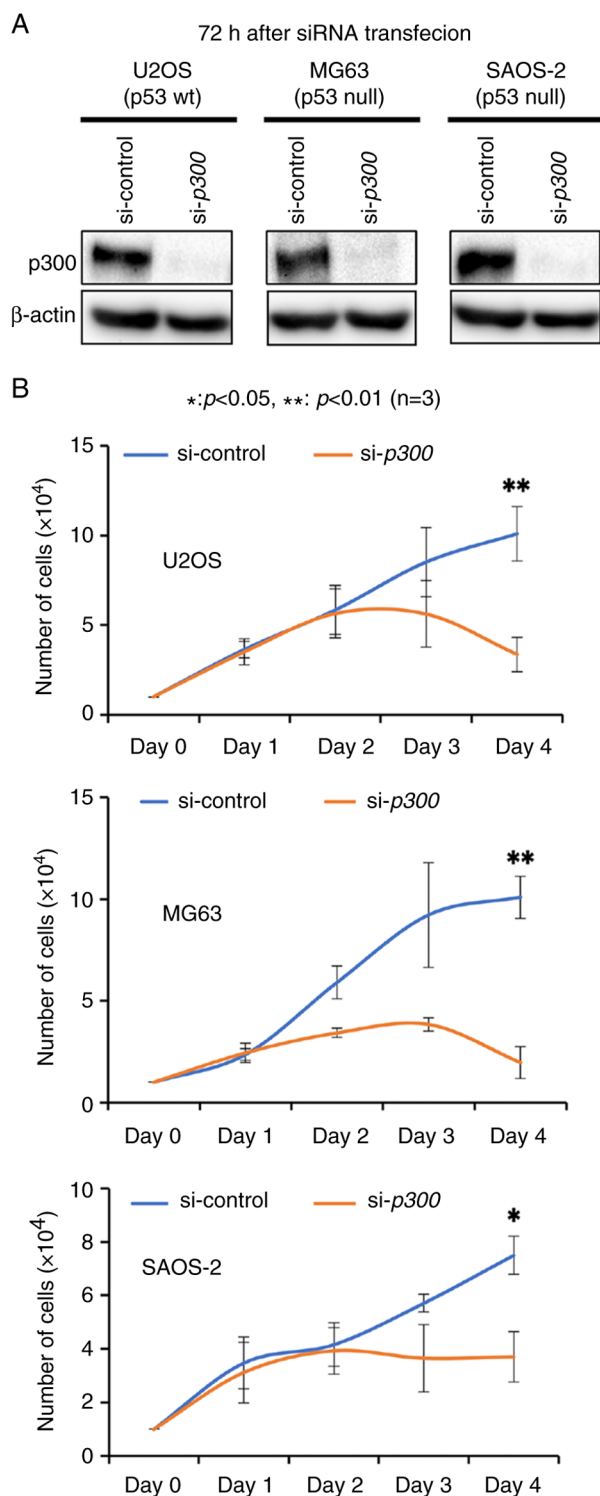


Figure S3. Induction of OS cell apoptosis by p300 knockdown. (A) The indicated OS cells were transfected as in Fig. S1. A total of 72 h after transfection, whole cell lysates were prepared and analyzed for acetylated histone H3 at Lys-27, histone H3, cleaved PARP and cleaved caspase-3 by western blotting. β -actin was used as a loading control. (B and C) p300 depletion-mediated OS cell apoptosis. The indicated OS cells were transfected as in Fig. S1. A total of 72 h after siRNA transfection, cells were simultaneously stained with annexin-V (green) and PI (red). Merged images (yellow) indicate apoptotic cells. Representative pictures are shown. The number of apoptotic cells observed in five independent fields was scored. ** $p < 0.001$ vs. control siRNA transfection (C) OS, osteosarcoma; PARP, poly (ADP-ribose) polymerase; PI, propidium iodide; siRNA, small interfering RNA.

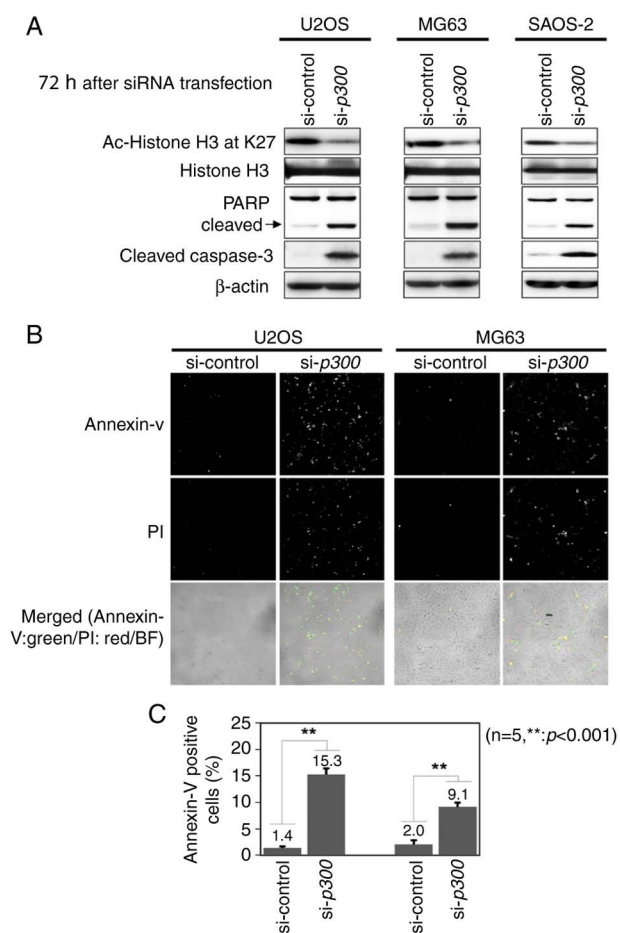


Figure S4. Docking simulation of HAT inhibitors against HAT domains of PCAF and CBP. (A and B) Calculated binding probabilities of PGV-1 and CCA-1.1 to the HAT domains of CBP and PCAF are shown. HAT, histone acetyltransferase; PGV-1, pentagamavunon-1; CCA-1.1, chemoprevention curcumin analog-1.1.

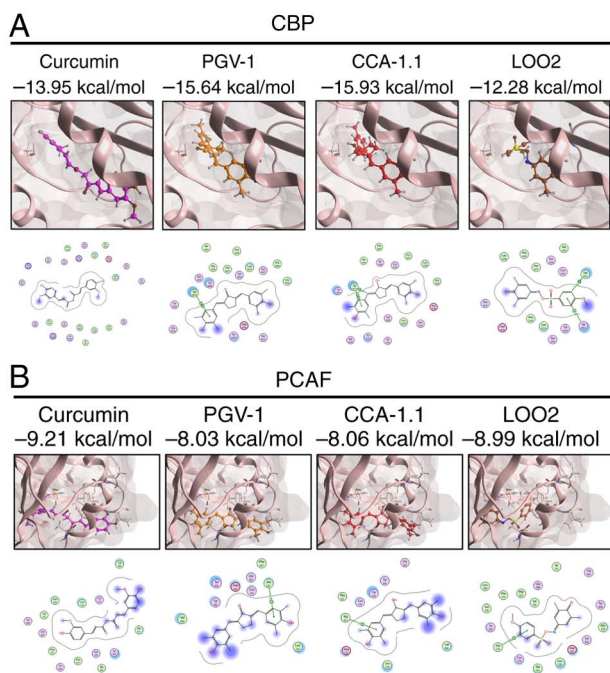


Figure S5. *In situ* hybridization analysis of MG-63 cell-derived tumors. A total of 6 days after transplantation, MG-63 cell-derived tumors that developed on the chorioallantoic membrane were stained with H&E (left) and processed for *in situ* hybridization with a human-specific probe (right).

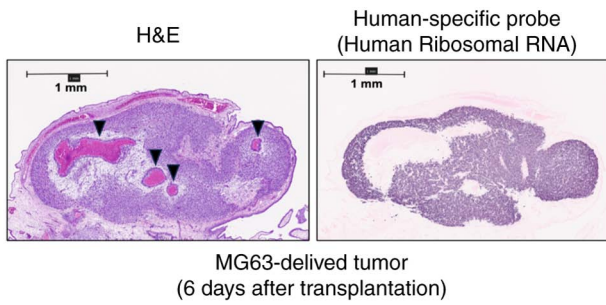
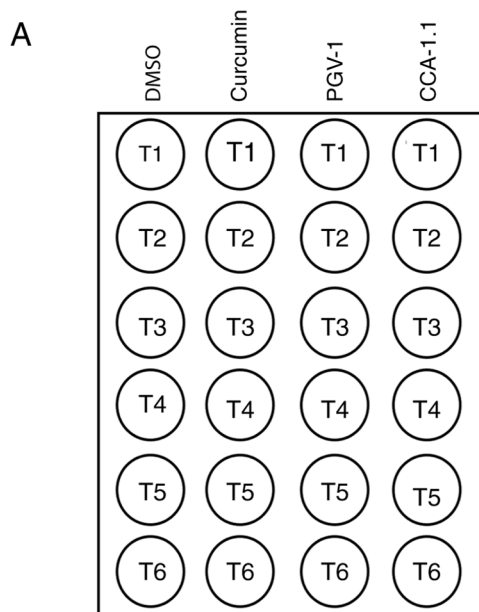


Figure S6. PGV-1 and CCA-1.1 suppress the growth of MG-63 cell-derived tumor developed on CAM. (A) CAM tumors were excised from the indicated groups (6 tumors per group) and numbered as shown. (B) After capturing the mages, their largest diameter (Long Diameter), shortest diameter (Short Diameter), volume and weight were recorded. PGV-1, pentagamavunon-1; CCA-1.1, chemoprevention curcumin analog-1.1; CAM, chorioallantoic membrane.



B

Drug	DMSO				Curcumin				PGV-1				CCA-1.1			
Item	Long Diameter (mm)	Short Diameter (mm)	Volume (mm ³)	Weight (mg)	Long Diameter (mm)	Short Diameter (mm)	Volume (mm ³)	Weight (mg)	Long Diameter (mm)	Short Diameter (mm)	Volume (mm ³)	Weight (mg)	Long Diameter (mm)	Short Diameter (mm)	Volume (mm ³)	Weight (mg)
T1	3.94	2.27	10.15	5.48	2.97	2.58	9.88	4.26	3.58	1.46	3.81	2.67	2.15	1.91	3.92	1.89
T2	3.52	1.76	5.45	4.82	3.12	2.36	8.69	5.74	2.49	1.94	4.69	1.6	2.92	1.61	3.78	1.57
T3	3.36	3	15.2	5.32	3.76	3.15	18.65	6.63	2.73	2.64	9.51	5.27	2.61	1.97	5.06	2.47
T4	3.33	2.15	7.7	5.03	3.82	3.3	20.8	9.57	3.97	1.99	7.86	4.84	3.2	2.35	8.84	3.53
T5	4.49	3.43	26.4	10.05	3.06	2.68	10.91	6.12	3.74	2.25	9.47	4.71	2.7	2.46	8.17	3.38
T6	3.7	2.33	10.04	6.06	3.21	2.61	10.9	4.07	2.76	2.12	6.2	3.68	2.36	2.24	5.92	2.32

Figure S7. PGV-1 and CCA-1.1 suppress the growth of MG-63 cell-derived tumor developed on chicken CAM. CAM tumors were resected from the indicated groups (6 tumors/group) and numbered as shown. Their images were captured under the stereomicroscope. Scale bar, 1 mm. PGV-1, pentagama-vunon-1; CCA-1.1, chemoprevention curcumin analog-1.1; CAM, chorioallantoic membrane.

