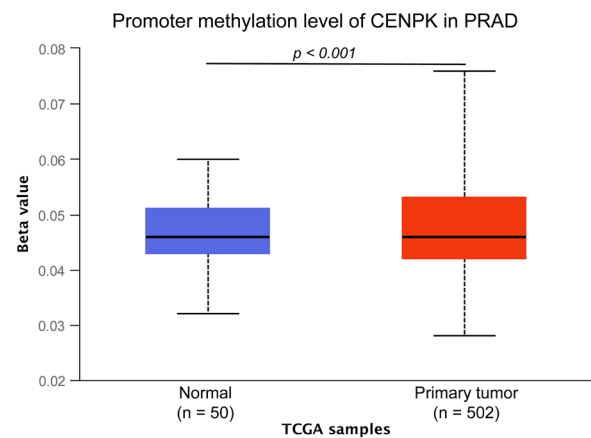
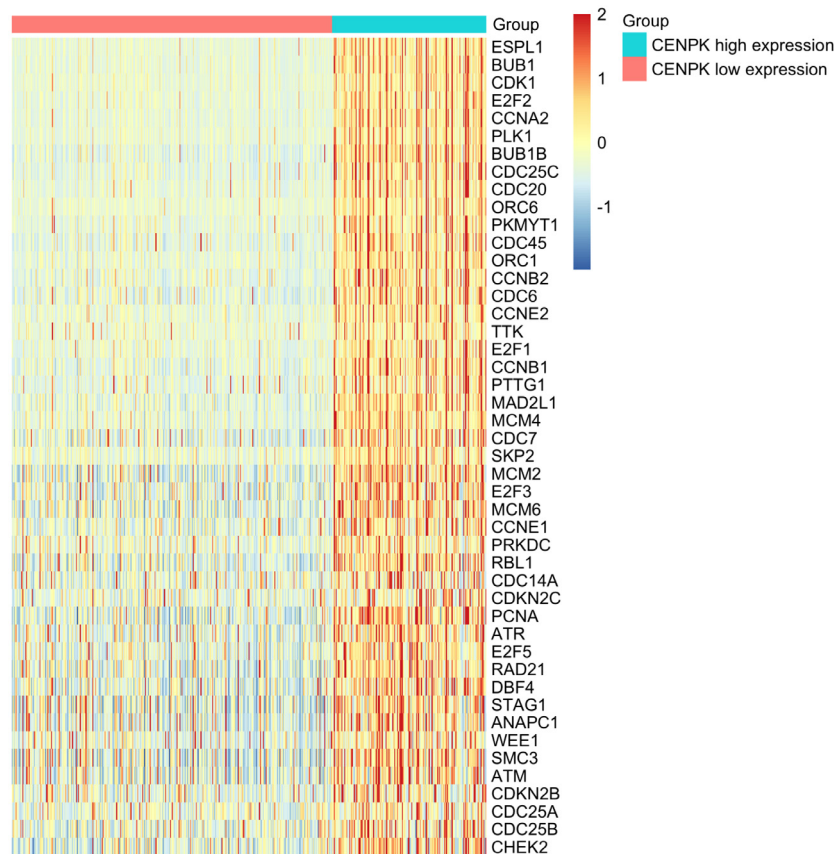


**Figure S1** qRT-PCR detection of *CENPK* and *KLK3* in LNCaP cells treated with DHT for 0, 12 and 24 h. \*,  $P < 0.05$ ; \*\*\*\*,  $P < 0.0001$ . *CENPK*, centromere protein K; DHT, dihydrotestosterone; qRT-PCR, real-time quantitative reverse transcription PCR.

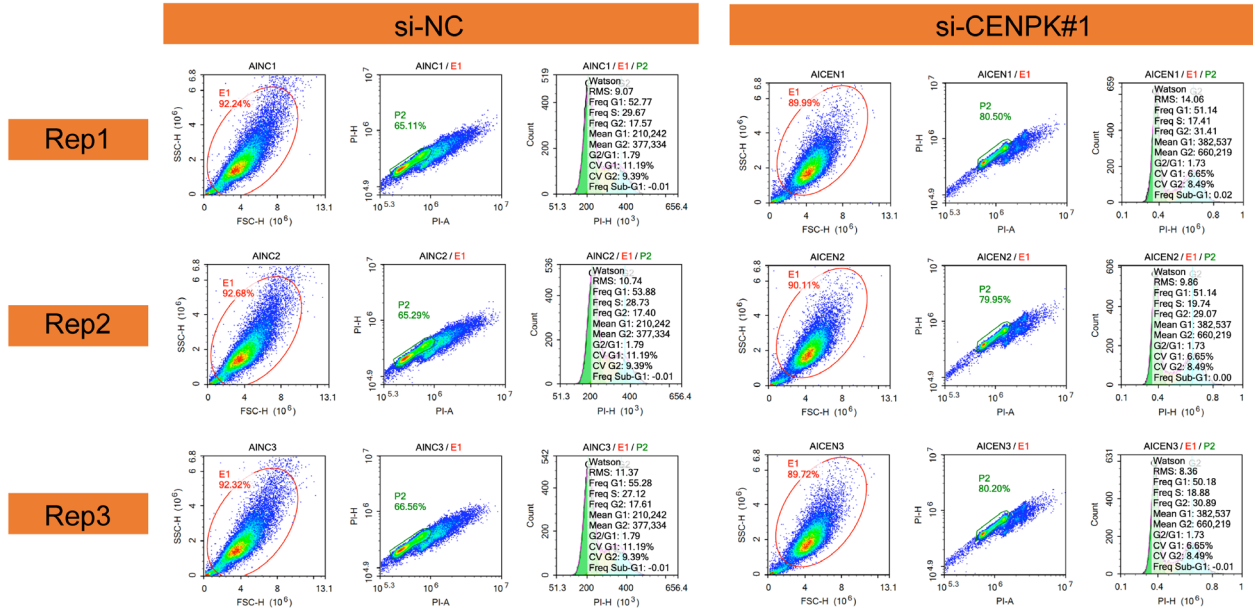


**Figure S2** Promoter methylation level of *CENPK* in the PRAD database. The beta value indicates level of DNA methylation ranging from 0 (unmethylated) to 1 (fully methylated). *CENPK*, centromere protein K; TCGA, The Cancer Genome Atlas; PRAD, prostate adenocarcinoma.

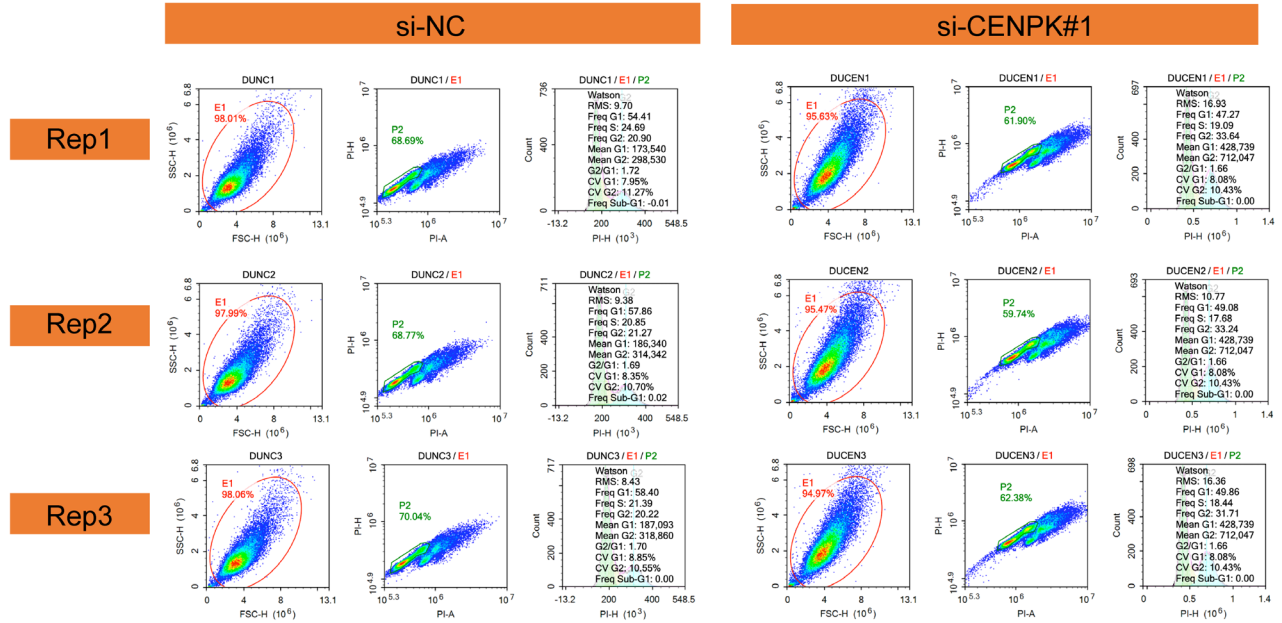


**Figure S3** Heatmap of key cell cycle-related genes correlated with the *CENPK* expression. *CENPK*, centromere protein K.

## LNCaP-AI



## DU145



**Figure S4** Flow cytometry assays of cell cycles in LNCaP-AI and DU145 cells transfected with siRNA. CV, coefficient of variation; FSC-A, forward scatter area; Freq Sub, frequency of subpopulations; FSC-H, forward scatter height; NC, negative control; PI-A, propidium iodide area; PI-H, propidium iodide height; RMS, root mean square; SSC-A, side scatter area; SSC-H, side scatter height.