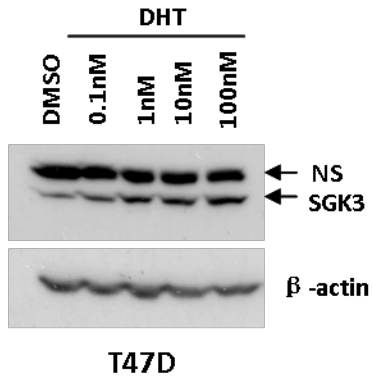


Supplementary data Wang Y., et al

A



B

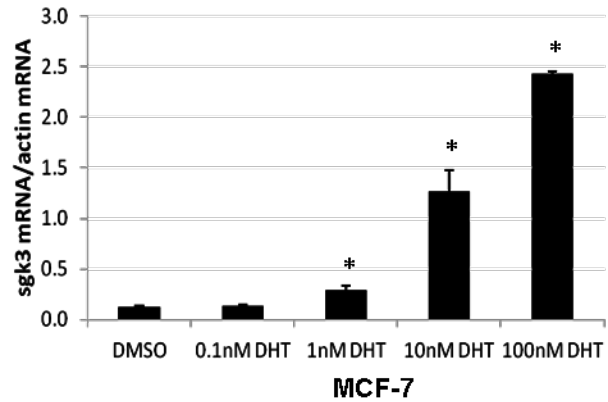


Fig. S1. DHT stimulates *sgk3* gene transcription. (A) T47D cells were hormone stripped for 48 h and then treated with increasing dosages of DHT for 24 h. Cells were harvested for Western blotting analysis. (B) MCF-7 cells were hormone stripped for 48 h and then treated with increasing dosages of DHT for 24 h. Quantitative RT-PCR was performed to measure the mRNA levels of SGK3 and β -actin. Quantitative RT-PCR was carried out in triplicate. Data were expressed as means \pm SD, * $p < 0.05$ vs DMSO control, by Student's *t*-test.

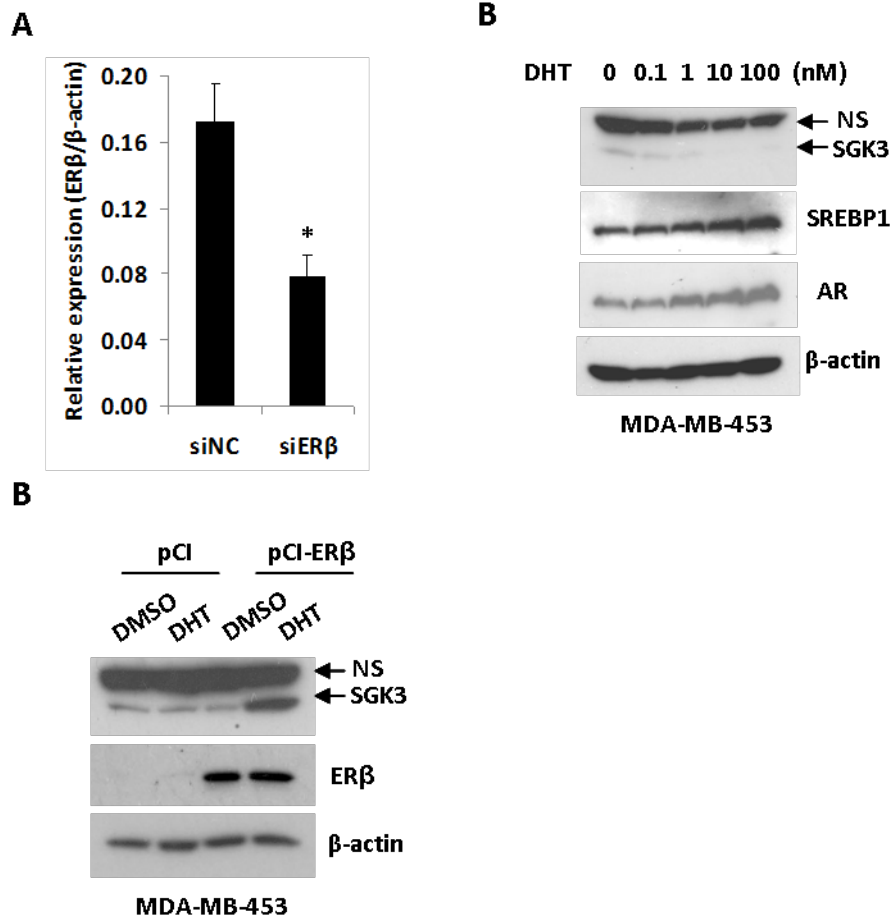


Fig. S2. Androgen/AR-dependent SGK3 transcription involves ER. (A) LNCaP cells were transfected with siRNA negative control or ERβ siRNA for 48 h. RT-qPCR was performed to evaluate the knockdown of ERβ expression. *: $p < 0.05$, by Student's *t*-test. (B) MDA-MB-453 cells were hormone stripped for 2 days and then treated with the increasing dosages of DHT as indicated. Forty-eight hours after treatment, the cells were harvested for Western blotting analysis. AR and SREBP1 serve as positive control since they are known to be up-regulated by DHT. (C) MDA-MB-453 cells were hormone stripped for 2 days and transfected with empty vector or ERβ expression vector, and then cultured in the presence or absence of 10 nM DHT for 48 h. Cell extracts were subjected to Western blotting with the relevant antibodies.

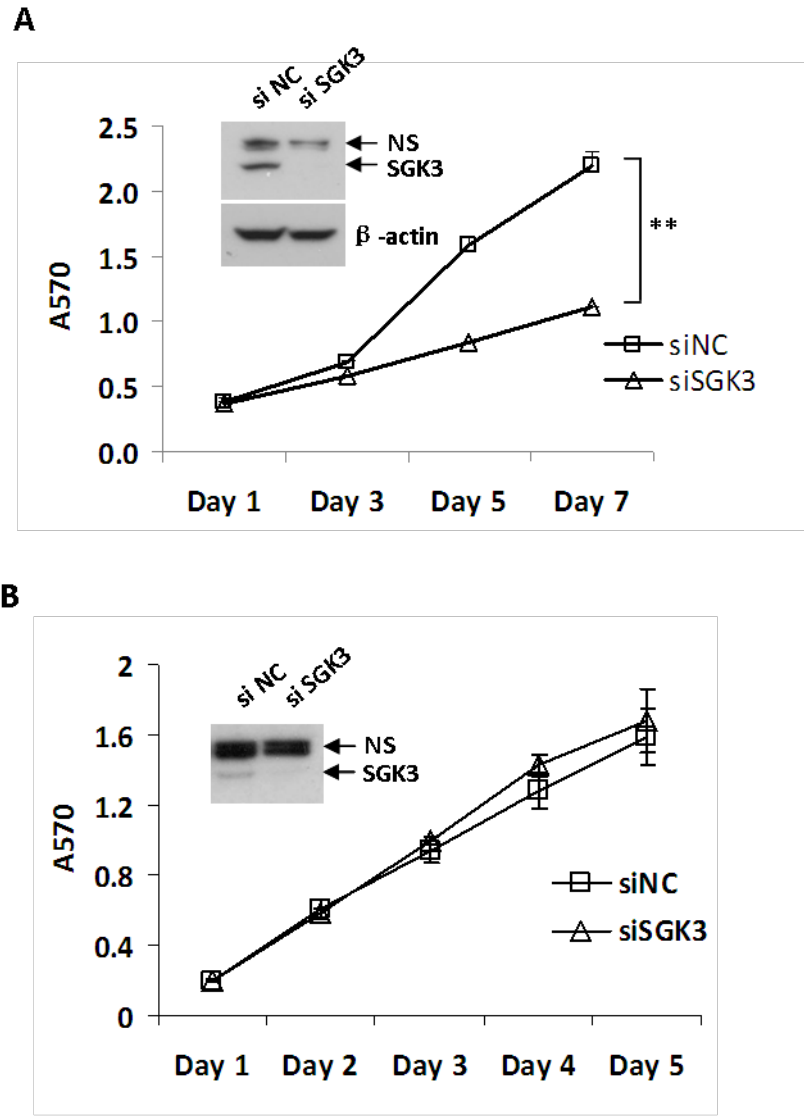


Fig. S3. Knockdown of SGK3 expression suppresses cell proliferation of LNCaP cells but not PC3 cells. (A, B) LNCaP cells (A) or PC3 cells (B) were transfected with siRNA negative control or pooled SGK3 siRNA duplexes. Western blotting (insert) was performed to examine SGK3 levels after the cells were transfected with siRNA for 72 h. MTT assay was carried out to measure cell proliferation at the indicated time after siRNA transfection. Error bars represent standard deviation of three independent. ** $p < 0.01$ by Student's *t*-test.