Supplementary Figure Legends

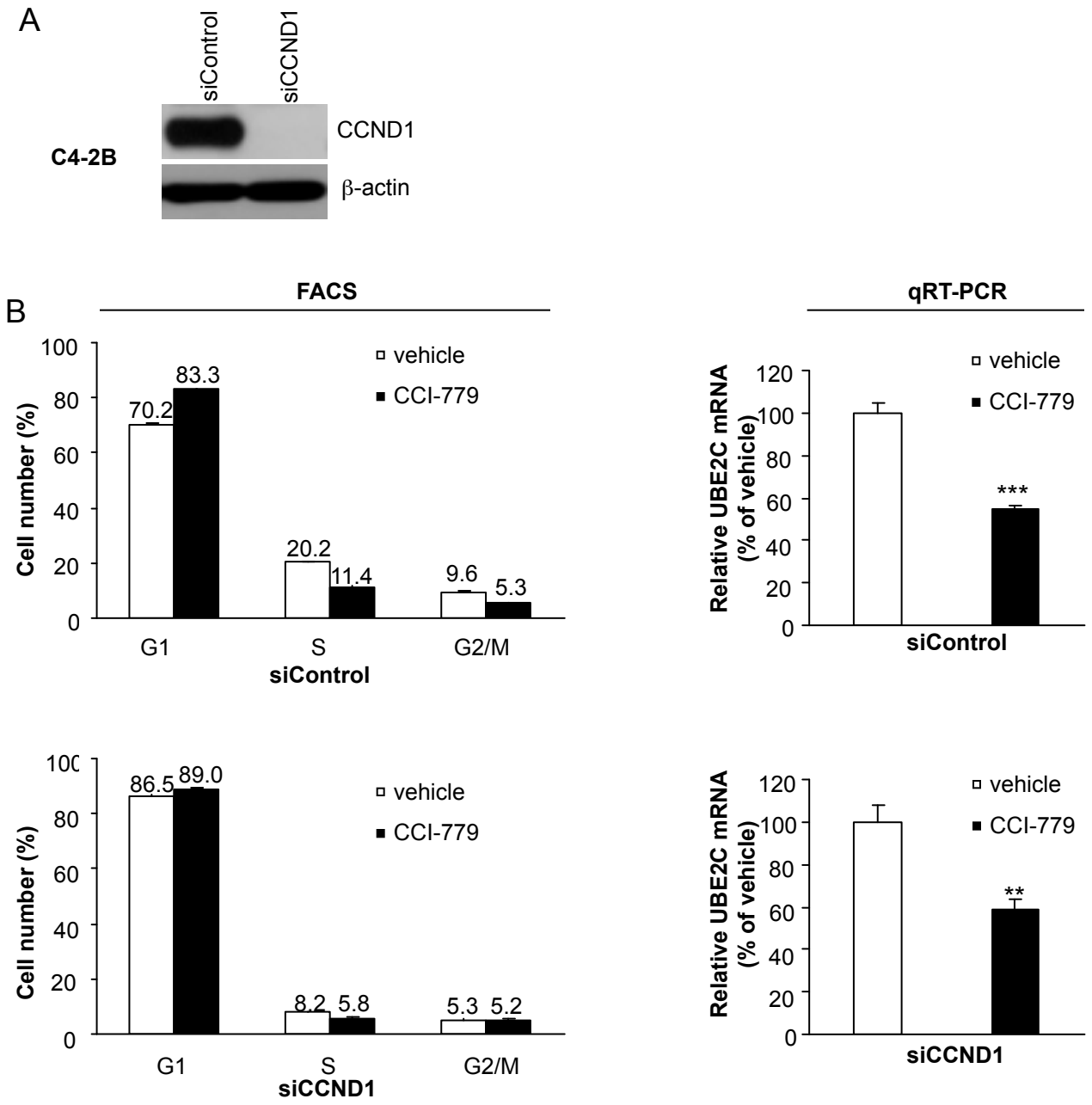
Supplementary Figure S1. CCI-779 decreases UBE2C mRNA expression in both siControl and siCCND1 transfected C4-2B cells. A, Suppression of CCND1 protein expression in C4-2B cells by RNAi. B, Left panel: FACS analyses were performed using siCCND1 or siControl transfected C4-2B cells treated with CCI-779 or vehicle for 24 hours. Right panel: Total RNA was isolated from siCCND1 or siControl transfected C4-2B cells treated with CCI-779 or vehicle for 24 hours. qRT-PCR was then performed using gene-specific primers. ** $p<0.01$, *** $p < 0.001$ as compared with the vehicle control.

Supplementary Figure S2. CCI-779 inhibits *in vivo* CRPC tumor growth in castrated mice through downregulation of UBE2C and CCND1. A, CCI-779 inhibits the growth of subcutaneous abl xenograft tumors in castrated mice. abl cells ($2x10^6$/flank) were bilaterally grafted into male Balb/c nude mice one week after castration and the treatments were initiated when tumor size reaches 100 mm^3 (about 1 week post inoculation). The castrated mice were i.p. injected with 10 mg/kg CCI-779 or the vehicle solution for 4 consecutive days every week for 5 weeks (Day 0~3; Day 7~10; Day 14~17; Day 21~24; Day 28~31). Tumor volume was measured twice per week and normalized to the percentage of the initial tumor size, which was assigned as 100%. Error bars=SEM. * $p<0.05$, *** $p<0.001$ as compared with control group. n =8 mice for control group; n=12 for CCI-779 treated group. B, Representative images of tumor-bearing mice (upper panel) and their tumors (lower panel) on Day 31. C, Average tumor weight for control and CCI-779–treated groups. n =8 tumors for control group; n =18 tumors for CCI-779-

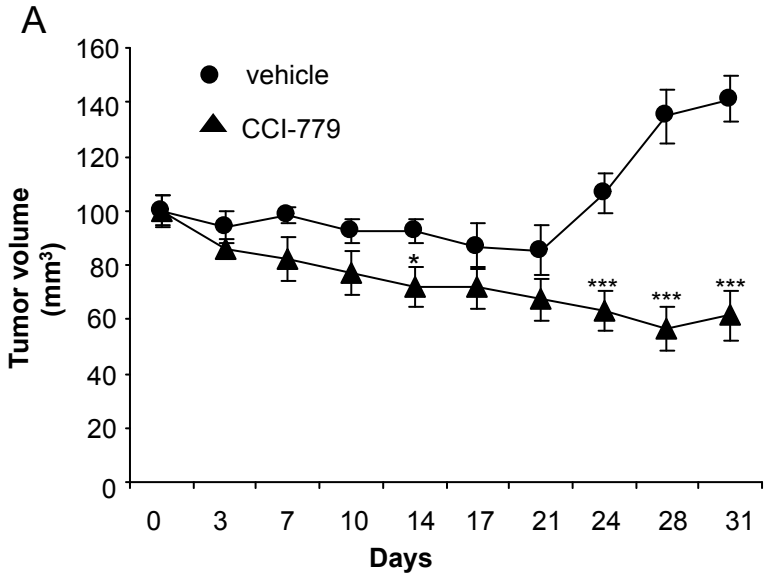
treated group. *$p<0.05$ as compared with vehicle control. D, Western blot analysis shows that CCI-779 also reduces protein expression of UBE2C and CCND1 in tumor tissues from castrate mice. β–actin is a loading control.

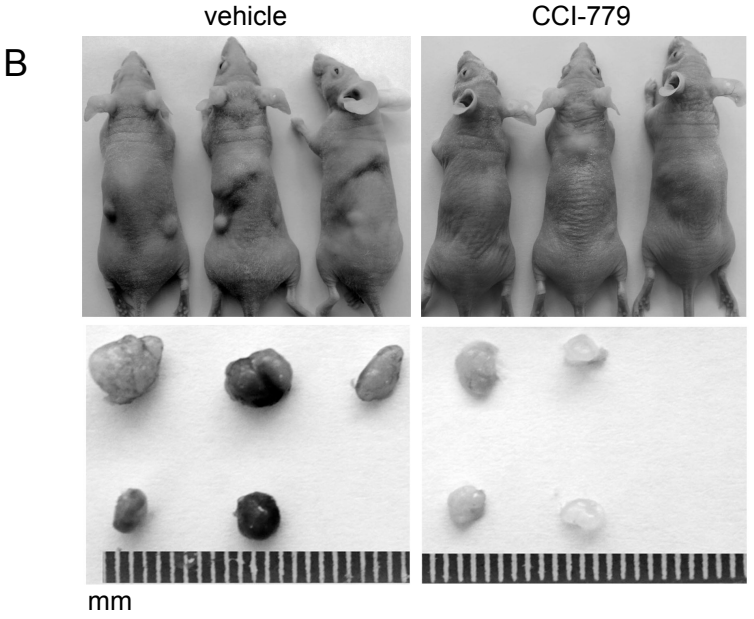
Supplementary Figure S3. Control cell proliferation assays for invasion assay. A, Effect of UBE2C silencing on cell proliferation. abl, C4-2B and LNCaP cells were transfected with siControl or siUBE2C. Forty-eight hours after transfection, cells were trypsinized and 4 x 10^5 siControl or siUBE2C transfected cells was seeded in 96-well plates. The cells were allowed to proliferate 48 hours, and cell proliferation was determined using a WST-1 kit. B, Effect of UBE2C overexpression and/or CCI-779 treatment on cell proliferation. abl, C4-2B and LNCaP cells were transfected with empty vector or UBE2C vector. Forty-eight hours after transfection, cells were trypsinized and 4 x 10^5 cells were seeded in 96-well plates in the presence and absence of CCI-779. The cells were allowed to proliferate 48 hours, and cell proliferation was measured using a WST-1 kit.

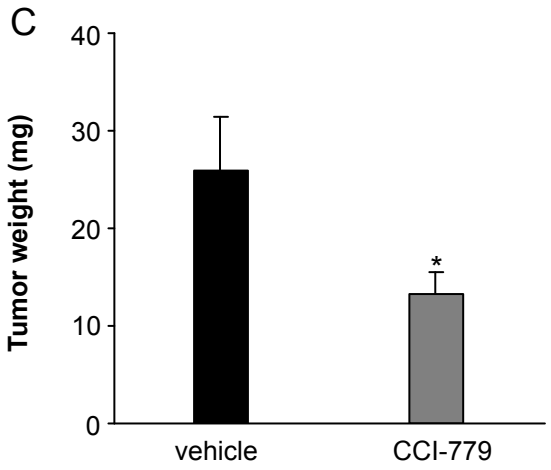
Supplementary Figure S1

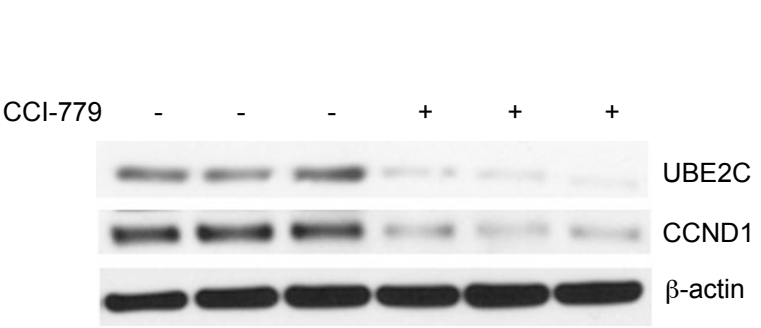


Supplement Figure S2









Supplementary Figure S3